NEXCOM

Empowering the
Mobile workforce
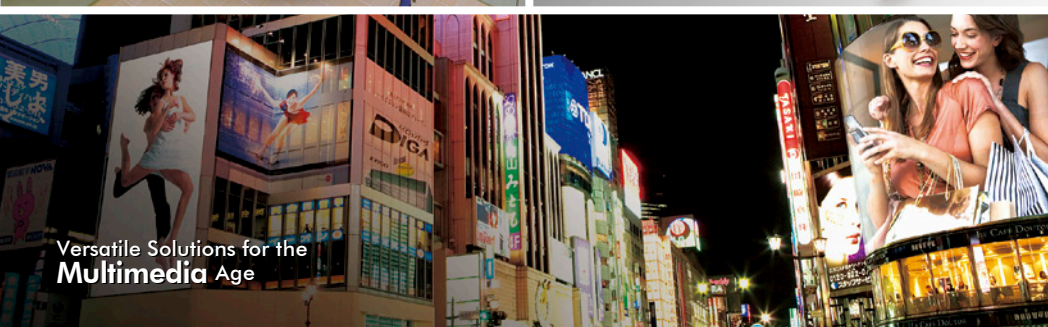
Make Your **Embedded**
Dreams Work

Intelligent **Surveillance,**
Envision the Future

Versatile Solutions for the
Multimedia Age

Quality,
the Name of Product

2012
Product Selection Book

■ Industrial Computing Solutions

■ Mobile Computing Solutions

■ Multi-Media Solutions

■ Network and Communication Solutions

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About NEXCOM

Reliable Partner for Building the Digital Infrastructure

Founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being your trustworthy partner in building the digital infrastructure. To surpass customers' expectations, NEXCOM makes the difference by utilizing its decades of industrial computing experience, a highly talented R&D team, and by providing exceptional levels of customer service. With these core strengths, NEXCOM has enabled its customers to win key projects in a diverse range of industries.

With its focus on delivering these core values to better serve customers, NEXCOM integrates its capabilities and operates four global businesses, which are Multi-Media Solutions (MMS), Mobile Computing Solutions (MCS), Industrial Computing Solutions (ICS), and Network and Communication Solutions (NCS). This strategic deployment enables NEXCOM to offer time-to-market, time-to-solution products and service without compromising cost.

In addition, the service-to-market business model gives NEXCOM core competence to build a strong world-class service network by providing customized service, global logistics, local access, and real-time support. Operating seven subsidiaries, from China, France, Germany, Italy, Japan, the United States, to the United Kingdom, NEXCOM is able to better facilitate customers' requirements as well as closely work with global partners in different regions.

Partners should also be assured that NEXCOM's Taiwan based Headquarters and subsidiary offices in China, UK and USA have obtained ISO 9001:2008 Certification.

ICS	**EBC:** Industrial Computing (Embedded Computer, Single Board Computer)
	PPC: Panel PC (Applied Panel PC, Multimedia Panel PC, Factory Panel PC, Healthcare Panel PC, Industrial Panel PC, In-Wall Panel PC)
	NISE: Industrial Fanless Computing (Fanless Computer)
	NViS: Video Analytic (Surveillance)
	POS: Point of Services

| MCS | **MCS:** Mobile Computing Solutions (Rugged Computer Devices, Rugged Mobile Computer) |
| | **VTC:** Vehicle Telematics Computer (Car PC, Train PC) |

| MMS | **MMS:** Multi-Media Solutions (Digital Signage, MOD, Streaming Server) |

| NCS | **NCS:** Network and Communication Solutions (Network Security, VoIP, IPTV, HCP, ATCA) |

Corporate Mission

- An Innovative Supplier in Vertical Application Markets
- A Quality Partner in Engineering, Manufacturing, and Services

Corporate Vision

To become the industrial leader in building the digital infrastructure, NEXCOM utilizes its industry leading technology, localized customer support and worldwide logistics services. This will be achieved by

- Great Team Work
- Cooperation with trusted partners
- Growth through innovation.

Business Strategy

Aim to better support the activities of all its partners, NEXCOM divides its sales force into four dedicated business units to target rapidly expanding vertical markets. This enhances each business unit concentrating on strategic channel accounts and on repeat order business. Moreover, NEXCOM's business units have been set up to serve the requirements of key project accounts, where product ODM and project support are frequently required.

NEXCOM is working with embedded computing solution providers to envision new opportunities for growth. We'll help you deliver reliable vertical industry platform (VIP) solutions, optimized for the next wave of low power, small footprint embedded applications.

Research and Development

Speed, Quality, Innovation and One-stop Service

Over a decade ago, NEXCOM successfully launched the PEAK series of Single Board Computers onto the IPC market, and in doing so, gained a solid reputation for product quality and innovation. In subsequent years, NEXCOM has enhanced its reputation for R&D excellence with a multitude of high-end technology products, which has cemented NEXCOM as one of the industry leaders for R&D and innovation.

The mission of NEXCOM R&D team is to design exceptional products that meet the stringent requirements of today's global markets. In order to achieve this goal, we have recruited hundreds of talented engineers who have the knowledge and expertise to make NEXCOM's products stand out in this highly competitive market.

In 2012, NEXCOM R&D will develop solutions within the following categories, fanless computers, Panel PCs, video analytic, self-service platform, vehicle telematics computers, rugged mobile tablet computers, digital signage platform solutions, and ATCA platforms for telecommunications. The team is encouraged to "Think with New Ideas" and "Know how to make it and do it right first time". In addition, the size of NEXCOM's R&D team has been expanded to over 130 members and remains as one of core competences of the company.

Versatile Design Capabilities

- Leading industrial fanless computer
- High availability network security platform, blade, and cPCI
- Rugged tablet computer and car PC
- Ultra small footprint computer-on-module
- High speed networking
- Isolated and non-isolated power system
- Isolated and non-isolated industrial I/O
- Wide range of operating temperature
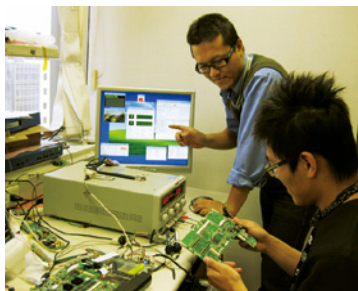
24/7 Production Line

Optimal Manufacturing Efficiency

The manufacturing of delicate products requires a high-level technology, craftsmanship, standards and time-to-market efficiency. Over years continual investment in advanced manufacturing equipment and systemic training programs has enabled NEXCOM to obtain optimal manufacturing efficiency.

To fulfill the increasing market demand for NEXCOM's products, the company has opened a 24/7 production line. This investment not only furthers the quality of products, but also reduces production lead-time for all global customers.

Quality Assurance

Under a strict Quality Assurance System, product design and reliability are controlled to support all critical solutions, and ensure Total Quality Assurance (TQA) implementation for all NEXCOM products and service. Furthermore, NEXCOM technical support team aims to provide feedback within 24 hours to ensure technical issues are resolved in the shortest possible time.
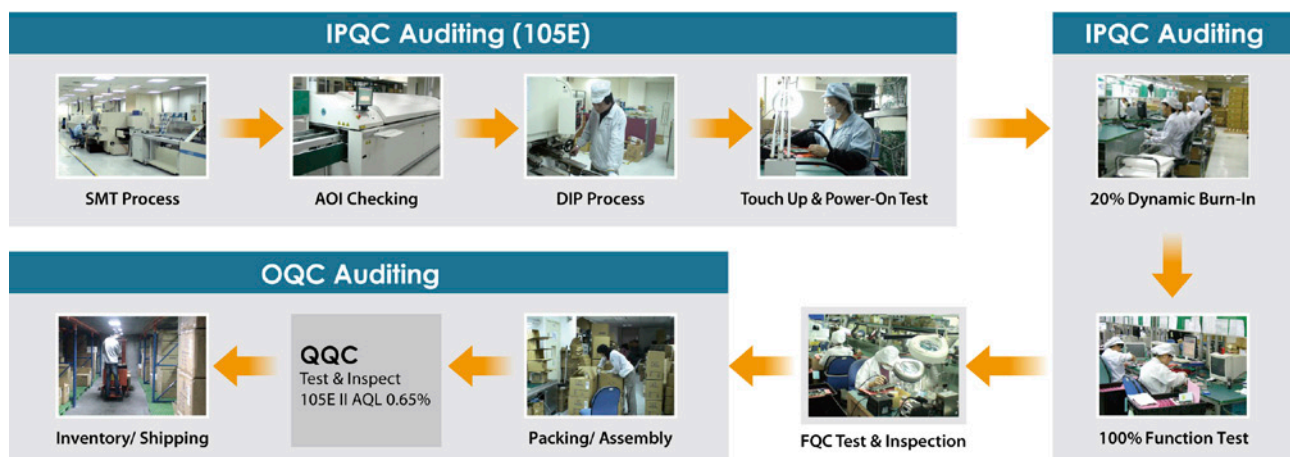
Closed-Loop Quality Assurance System

Green Policy

As a global citizen, NEXCOM is committed to providing green products and services, which are compliant with WEEE and RoHS legislation. NEXCOM continues to proactively work with industry peers and suppliers, to clarify standards, and identify compatible technologies and practices that help reduce hazardous substances from our products and manufacturing processes.

Global Fulfillment Service

Product delivery and customer support are always more effective when delivered locally. NEXCOM localizes support and provides a global customer service network to handle all aspects of global business, from presales, order taking, and system assembly to logistics. For expeditious product delivery, NEXCOM has established four regional service centers: Taiwan (for Asia), USA (for North America and South America), the United Kingdom (for Europe) and China. Therefore, NEXCOM customers benefit from quality assured product assembly and four service centers.

NEXCOM has invested heavily to establish operational infrastructures, including advanced equipment and facilities, not only at its global headquarters but also at subsidiary offices. Today, each of our service centers, with ISO 9001:2008 certification, has a purpose built assembly line, RMA/ DOA center and warehouse storage capability.

NEXCOM Global Service Network

Assembly Line Operation

NEXCOM offers custom-built products based on customers' specific requirements through the build-to-order services. A dedicated 24/7 assembly line and Quality Assurance System are installed in the services center to ensure exceptional production efficiency and superb product performance and reliability.

Service Pledge and Connection

As a reliable industrial computing platform provider for vertical markets, NEXCOM provides the very best products and the most expeditious service to help customers build the digital infrastructure. Comprehensive types of service are provided to promptly satisfy varying requirements. In addition to the headquarters in Taiwan, seven subsidiaries and distributors in strategic worldwide locations are at your service.

Service Types

Quotation	Project Consultant	Technical Support	Solution Alliance	RMA/DOA	Assembly/ Test	Global Logistics	Customization	ODM Original Design Manufacturing

Your Truly Global Information Resource

www.nexcom.com

www.nexcom.com is your one-stop platform for the latest information on all NEXCOM products and services. The rejuvenated website not only contains product relevant information and data, solutions/ products demo, up-to-date news, but incorporates online downloads, publications, and technical service supports, such as RMA/ DOA centre. Furthermore to localize service and support, seven NEXCOM sister websites remain to serve visitors in diverse geographical regions.

Get the Latest Updates Anytime, Anywhere

m.nexcom.com

At the end of the year 2011, NEXCOM launches its mobile site, m.nexcom.com. The site aims to cross time and space boundaries by allowing users to access the latest innovation and information of NEXCOM via smartphones. On this website, users will easily find our latest products, news, application stories, white papers, and videos. The mobile site now supports iOS and Android system. Please visit us at m.nexcom.com.

Design and Manufacturing Services (DMS)

Customized Service for Tailor-Made Solutions

NEXCOM provides cost-effective and time-to-market Design and Manufacturing Services (DMS). The DMS offers product customization from core modular designs to finished products based on customers' specifications in all kinds of industrial field. The levels of the service include manufacturing new CPU boards and system based products to fulfill customers' unique applications.

Unique DMS Features

With vast experience, the know-how, leading technology and innovative design capabilities, NEXCOM DMS incorporates the following features:

Prompt Time-to-Market

NEXCOM posses a dedicated project management team to monitor and ensure each DMS project is delivered on schedule. Thus, a quick time-to-market solution can be offered with time-scales varying from one-three months for the design phase, with an average six month period from design to market.

Flexible Design and Manufacturing

NEXCOM posses a complete R&D team to design and engineer the latest industrial grade products. As R&D engineers grouped into small cross-functional teams, they can develop more reliable products with flexible designs and quicker response to customers' requirements. In addition to our R&D capabilities, the state of art manufacturing facility and production lines enables NEXCOM to offer a flexible manufacturing with highly skilled factory staff.

Rigid Quality Control
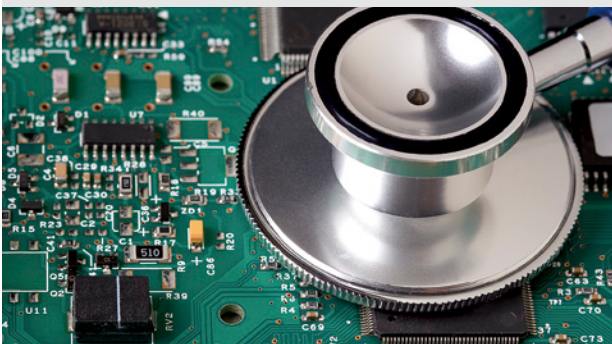
NEXCOM is pledged to deliver high quality products, from design to manufacture, and safeguard against defective products by implementing a rigid Quality Assurance System. In this system, at the end of each process, NEXCOM performs various tests to ensure that the product passes the industrial standard before it enters into next stage. Finally, additional tests are performed to ensure all board and system level products function correctly. Tests include "Failure Mode and Effects Analysis", "Vibration test", "Burn-in Chambers", "Drop test", and "AC power source test".

Extensive DMS Experience

We set higher standards! NEXCOM surpasses your tailor-made product requirements with extensive DMS experiences. We are specialized in X86 architecture and have accumulated invaluable experience and know-how in real working environments. Moreover, with a superb reputation, NEXCOM has under its belt many ODM projects in diverse fields, such as gaming, medical, POS, network security, transportation, marine, blade servers, and Linux BIOS etc.

Scope of DMS Work

■ Original Design Manufacturing Service (ODMS)

NEXCOM offers a complete ODM Service starting from the brand new product design right through to the finished product. We can design products based on the customer's unique specifications and application requirements.

■ Customization to Order Service (CTOS)

NEXCOM also provides CTOS, which is a quick-to-market solution by modifying the existing products to fit your business requirements, such as BIOS setting, component change by using current PCM layout, chassis color change, and packing accessories etc.
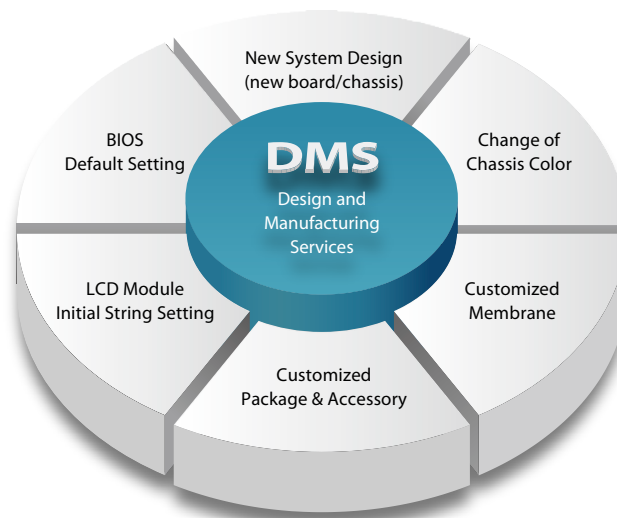
Service of DMS

With decades of industrial computing experience, NEXCOM has the capability to provide different levels of customized service to manufacture innovative products with exceptional high quality. We can assist you to differentiate from competitors, and save significant time and efforts.

Level 1	Logo Re-brand	We provide the service to change the membrane to re-brand the company logo on the front panel. Customers need to provide Membrane drawing with all color pantone number. There is a service charge involved.
Level 2	Customerized Build	Customers can change the membrane and chassis color to re-brand the packing. NEXCOM can offer dedicated part numbers and BOM. MOQ and service charge are required.
Level 3	Manufacturing Service	Contract manufacturing. The service scope includes system assembly & burn-in, software loading & testing. MOQ and manufacturing service charge are required.
Level 4	New Project	The design of new board & system is available. NRE and quantity commitment are required.

Professional Conformal Coating Solution

Get Ruggedized with NEXCOM Cost-Effective Conformal Coating Service for Hash Environment Protection

Prompt Time-to-Market

NEXCOM recognizes the harsh reality that many embedded systems find themselves operating in unusual hostile environments. When conformal coating is required to protect your application against substantial humidity, dust, chemicals or temperature extremes, we can help!

Cost Effective Service to Apply Coating Solution in Vertical Market Segments

In addition to the usual military and harsh industrial environments that demand conformal coating, NEXCOM expand our conformal coating to Vehicle Telematic Computing, outdoor traffic control/surveillance, and off-shore Marine applications. These applications demand embedded computing performance with increased reliability through conformal coating process.

To support a wide range of applications in vertical markets, NEXCOM has engineered a diverse range of platforms, which incorporate the latest.

"State of the Art" Conformal Coating Line

NEXCOM uses automated Conformal Coater equipment for applications that require a high level of accuracy and repeatability in moderate to high volume manufacturing environments. "State of the Art" coating line is a closed-loop robotic platform featuring optical encoder feedback on all axes.

Smart Masking Technology

Our smart masking technology can pin point specific area on the PCBA for coating. The green, programmable conformal coater equipment allow user to only coat the area selected, which save labor/ material costs.

De-Flux Cleaning

To prepare a PCB for conformal coating, the circuits need to be cleaned. NEXCOM uses automatic defluxing and cleanliness testing systems. The deflux system is equipped with an automatic chemical management system that automatically doses and mixes defluxing chemicals at the turn of a keyed switch.
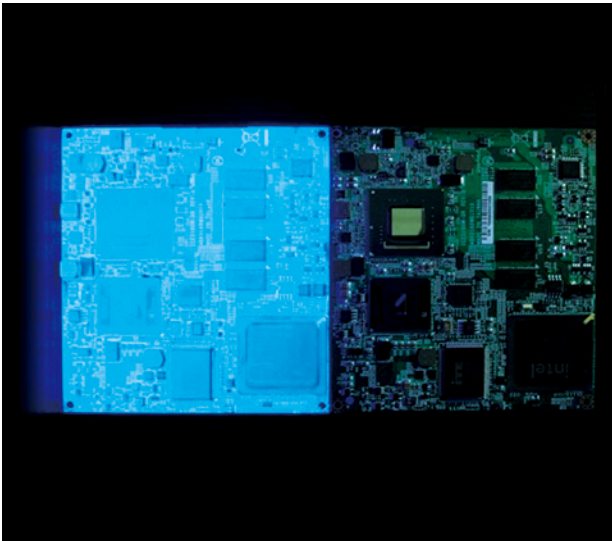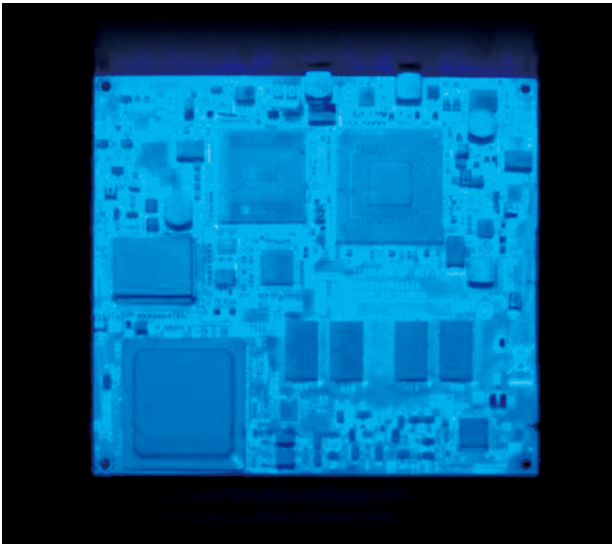
Real Time Cleanliness Testing

NEXCOM's deflux cleaning system is also equipped with an onboard cleanliness testing system which allows a user to program a desired cleanliness level. This assures that cleanliness levels will be consistent batch after batch.

De-Coating RMA Service

NEXCOM offer De-Coating RMA service upon request. This new service allows you to further cost down and generate higher ROI.

Quality Assurance Policy and Consistency Guarantee

Conformal coating inspection is a critical factor in determining successful coating application and long term reliability of PCBs. Using the IPC standards allows the coating operator to monitor the coating application performance. NEXCOM offers 100% manual screening by examining the PCB under white and UVA light and Thickness Gauge.
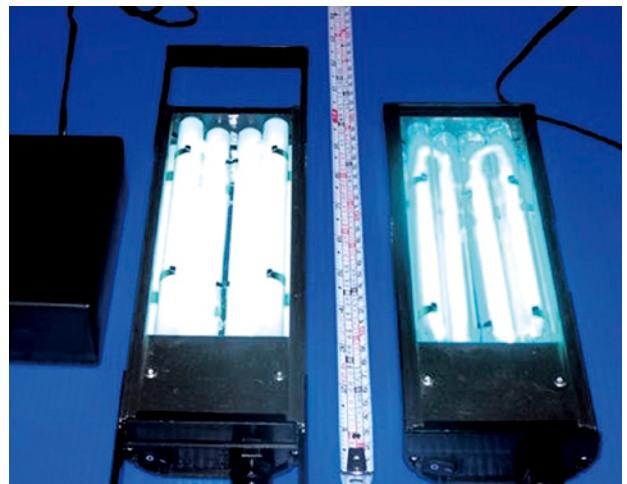
NEXCOM follows IPC-A 610, IPC-CC-830, IPC J-STD-001E regulations to generate consistent, adjustable coating thickness and cleanliness.

MMS

Multi-Media Solutions

Digital Signage Player

Bulletin Board Solutions

Central Management Appliance

Video Wall Signage Appliance

In-Vehicle Signage Solutions

All-in-One Signage Display Solutions

NDiS 111

Fanless Embedded Computer Powered by Intel® Atom™ E620

Main Features

- Intel® Atom™ E620 platform
- Ultra low power consumption
- Slim and fanless
- Hyper-threading support
- TV tuner/ WLAN support

Product Overview

Powered by Intel® Atom™ E620, NDiS 111 can play rich multi-media contents with low power consumption. NDiS 111 is enclosed in a compact chassis and can be easily integrated to display devices, such as LCD TV or PDP at site installation with DVI display, Giga LAN, TV tuner and WLAN support. NDiS 111 is suitable as an entry level digital signage player for advertising, messaging, and brand promotion.

Specifications

CPU Support
- Intel® Atom™ E620 600 MHz CPU onboard

Chipset
- Intel® EG20T PCH
- Intel® integrated graphic engine

Main Memory
- DDR2 1GB onboard

I/O Interface-Front
- 1 x LED Power-on
- 1 x LED storage
- 1 x On/Off power switch

I/O Interface-Rear
- 1 x RJ45 with LED for 10/100/1000 Mbps Ethernet
- 1 x Line-out
- 1 x DVI-D
- 2 x USB
- 2 x antenna hole for Wi-Fi and TV tuner
- 12V DC Power in

Storage
- 1 x SATA DOM socket

Expansion
- 1 x Mini-PCIe for optional TV tuner or WLAN module

Dimensions
- 179.9mm (W) x 114.9mm (D) x 37.5mm (H) w/o mounting bracket

Power Supply
- 1 x External 50W AC/ DC power adaptor
  Input: 100~240V AC
  Output: +12V DC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing

112.00

180.00

38.00
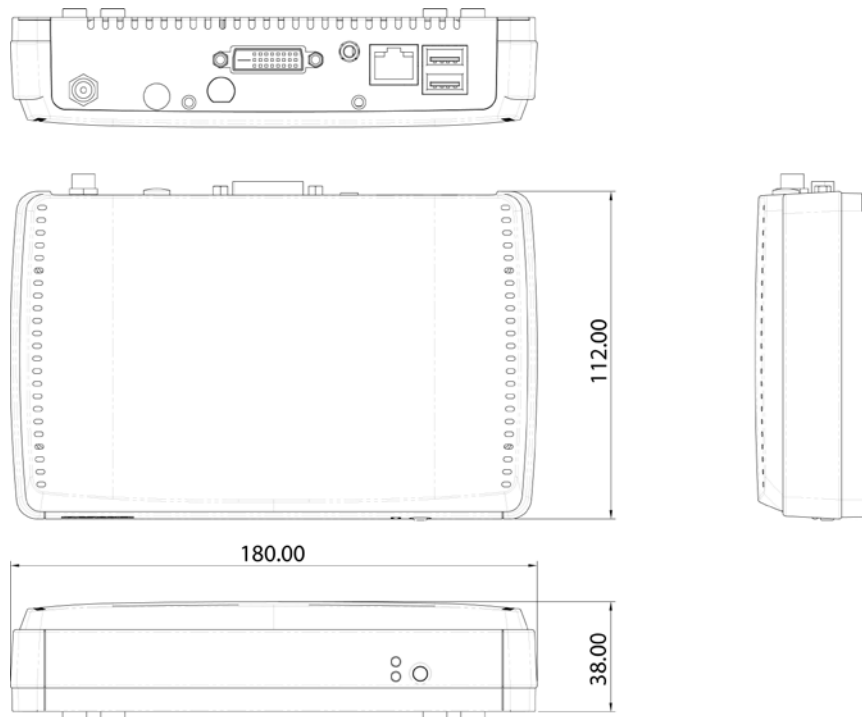
Ordering Information

• **NDiS 111 (P/N: 10W00011100X0)**
  Intel® E620 processor onboard, Intel® EG20T PCH

NDiS 120

Fanless Embedded Computer Powered by Intel® Atom™ N270

Main Features

- Intel® Atom™ N270 Platform
- Low power consumption
- Slim and fanless

- Dual independent display
- Hyper-threading support
- TV tuner/ WLAN support

Product Overview

Powered by Intel® Atom™ N270 processor, NDiS 120 can play variety of multimedia contents but consumes little power. NDiS 120 supports VGA + DVI-D 2 independent display, 4 USB 2.0 ports, Mini-PCIe socket, Giga LAN and RS-232 COM port. NDiS 120 is suitable as an entry level digital signage player for advertising, hospitability, promotion activity land digital menu applications.

Specifications

CPU Support
- Intel® Atom™ N270 1.6GHz CPU onboard

Chipset
- 945GSE + ICH7M
- Intel® GMA 950 graphic engine

Main Memory
- 1 x SO-DIMM, DDR2 400/ 533, up to 2GB

I/O Interface-Front
- 1 x LED Power-on
- 1 x LED storage

I/O Interface-Rear
- 1 x DB9 RS-232 COM port
- 1 x DB15 VGA port
- 1 x DVI-D port
- 4 x USB 2.0 port
- 1 x Line-out
- 1 x Line-in
- 1 x RJ45 with LEDS for 10/100/1000 Mbps Ethernet
- 1 x Antenna hole for Wi-Fi
- 12V DC Power in

Storage
- 1 x 2.5" SATA HDD Bay

Expansion
- 1 x Mini-PCIe for optional TV tuner or WLAN module

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H)
  (10.7" x 7.7" x 1.7") w/o mounting bracket

Power Supply
- 1 x External 60W AC/ DC power adaptor
  Input: 100~240V AC
  Output: +12V DC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C (HDD inside)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Single/ Dual Display

NEXCOM

Dimension Drawing
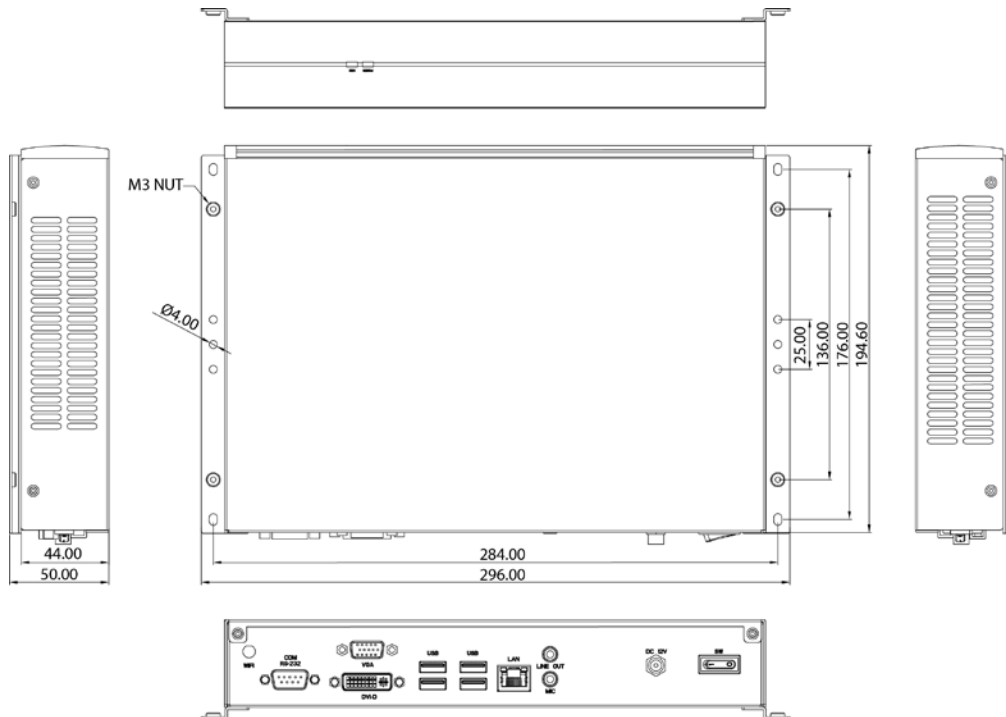
Ordering Information

• **NDiS 120 (P/N: 10W00012000X0)**

Intel® N270 processor onboard
Intel® 945GSE/ ICH7M

NDiS 122

Embedded Computer Powered by Intel® Atom™ Dual Core D525

Main Features

- Intel® Atom™ Dual Core D525 platform
- Low power consumption
- Slim and compact design

- Intel® GMA 3150 graphic engine
- Hyper-threading support
- WLAN support

Product Overview

Powered by Intel® Atom™ Dual Core D525 processor, NDiS 122 can handle very rich multimedia contents. NDiS 122 supports VGA display, 4 USB 2.0 ports, Mini-PCIe socket, Giga LAN and RS-232 COM port. NDiS 122 is ideal as entry level digital signage player for advertising, hospitality and brand promotion application.

Specifications

CPU Support
- Intel® Atom™ Dual Core D525 1.8GHz CPU onboard

Chipset
- Intel® NM10 Express Chipset
- Intel® GMA 3150 Graphic Engine

Main Memory
- 2 x DDR3 800 SO-DIMM

I/O Interface-Front
- 1 x LED Power-on
- 1 x LED storage

I/O Interface-Rear
- 1 x RS-232 COM port
- ATX Power-on switch
- 12V DC power in
- 1 x VGA
- 4 x USB 2.0
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 1 x Audio Line-out/ Line-in/ Mic-in
- 1 x Antenna hole for WLAN
- 1 x PS2 KB/ MS
- 1 x Parallel port

Storage
- 1 x 2.5" SATA HDD Bay

Expansion
- 1 x Mini-PCIe for optional WLAN module

Dimensions
- 260 mm (W) x 190 mm (D) x 50 mm(H)
  (10.2" x 7.5" x 1.96") w/o mounting bracket

Power Supply
- 1 x External 60W AC/ DC power adapter
  Input: 100~240V AC
  Output: +12V DC

Environment
- Operating Temperature: 0°C to +40°C
- Storage Temperature: -20°C to +80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing
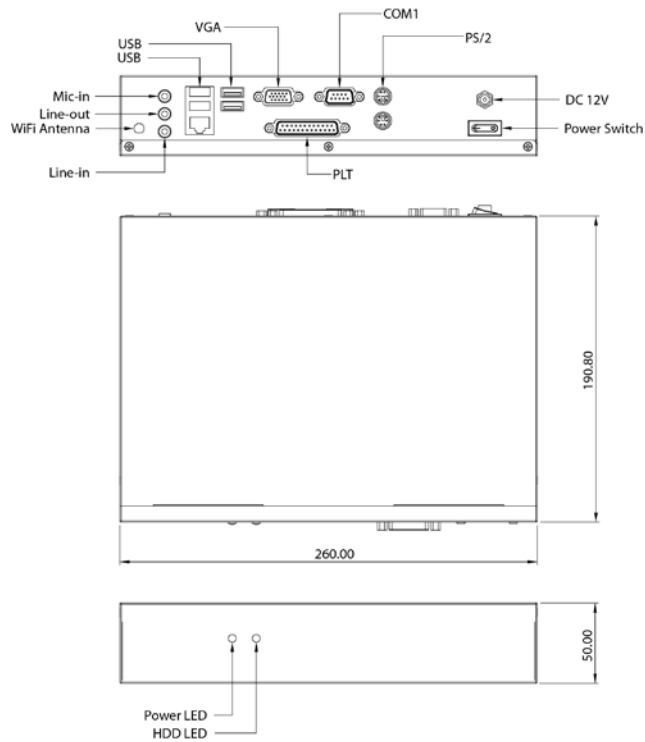
Ordering Information

- **NDiS 122 (P/N: 10W00012203X0)**
  Intel® Atom™ Dual Core D525 processor onboard
  Intel® NM10 Express chipset

NDiS 125-L

Fanless Embedded Computer Powered by Intel® Atom™ D525

Main Features

- Intel® Atom™ D525 platform
- Low power consumption
- Compact and fanless

- Powerful NVIDIA ION2 GPU
- Hyper-threading support

Product Overview

Powered by Intel® Atom™ D525 processor, NDiS 125-L can handle very rich multimedia contents. With Intel® Atom™ processor low power consumption feature, NDiS 125-L supports display output by VGA and HDMI ports. NDiS 125-L is ideal as entry level digital signage player for advertising, hospitality and brand promotion application.

Specifications

CPU Support
- Intel® Atom™ Dual Core D525 1.8GHz CPU onboard

Chipset
- Intel® NM10 Express Chipset

Graphics
- NVIDIA ION2

Main Memory
- 1 x SO-DIMM, DDR3 800, up to 4GB

I/O Interface-Front
- 2 x USB2.0

I/O Interface-Rear
- 19V DC Power in
- 1 x VGA
- 2 x USB 2.0
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 1 x Audio-out
- 1 x HDMI
- 1 x Mic-in

Storage
- 1 x 2.5" SATA HDD Bay

Dimensions
- 250 mm (W) x 194 mm (D) x 40 mm(H)
  (9.9" x 7.6" x 1.6") w/o mounting bracket

Power Supply
- 1 x External 65W AC/ DC power adapter

Expansion
- 1 x USB interface built-in 802.11 b/g/n WLAN module (optional)

**Environment**
- Operating temperature: 0°C to +40°C
- Storage temperature: -20°C to +80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

A

A1

A2

A3

A4

A5

Dimension Drawing

194.20

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250.00
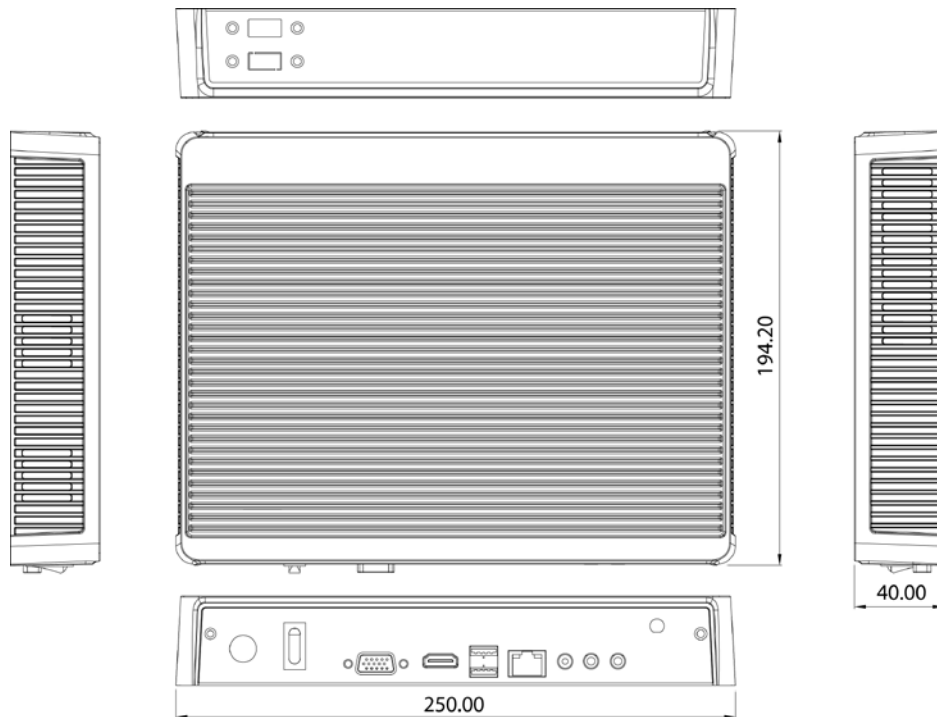
Ordering Information

* **NDiS 125-L (P/N: 10W00012501X0)**
  Intel® Atom™ Dual Core D525 processor onboard
  NVIDIA ION2 chipset

NDiS 126

Fanless Embedded Computer Powered by
Intel® Atom™ Processor D2700 Support Full HD Video Playback

Main Features

- Intel® Atom™ processor D2700
- Low power consumption
- Compact and fanless

- Dual GbE LAN
- Hyper-threading support
- Intel® GMA 3650 integrated graphic engine

Product Overview

Powered by Intel® Atom™ processor D2700, NDiS 126 has enhanced graphics capabilities to playback HD video with low power consumption. NDiS 126 provides various options of video and audio outputs, dual GbE Ethernet with optional wireless connectivity, SIM Card slot for 3.5G radio connectivity.

Compact and fanless design makes the NDiS 126 an ideal choice for digital signage platforms adapted to almost any environment. NDiS 126 works perfectly for advertising, brand promotion and digital menu board application.

Specifications

CPU Support
- Intel® Atom™ processor D2700 2.16GHz onboard

Chipset
- Intel® NM10 Express chipset
- Intel® GMA 3650 integrated graphic engine

Graphics
- NVIDIA ION2

Main Memory
- 1 x 200-pin SO-DIMM sockets, support DDR3 800/ 1067MHz SDRAM with un-buffered and non-ECC memory module up to 4GB

I/O Interface-Front
- ATX power on switch
- 1 x power status LED (green)
- 1 x HDD status LED (red)
- 4 x USB 2.0 ports
- 1 x external SIM card holder
- 1 x antenna holes
- 1 x serial port (RS-232)

I/O Interface-Rear
- +12V DC-in
- 1 x HDMI
- 1 x additional output (VGA/ HDMI)
- 2 x USB 2.0 ports
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 1 x Line-out (NDiS 126V)
- 1 x Line-in (NDiS 126V)

Storage
- 1 x SATA 2.5" HDD

Dimensions
- 185mm (W) x 147mm (D) x 48.4mm (H)
  (7.3"x 5.8"x 1.9") w/o wall mount bracket

Power Supply
- 1 x External 50W AC/ DC power adapter
 Input: 100~240VAC
  Output: +12VDC

Expansion
- 1 x Mini-PCIe for optional WLAN/ TV tuner module
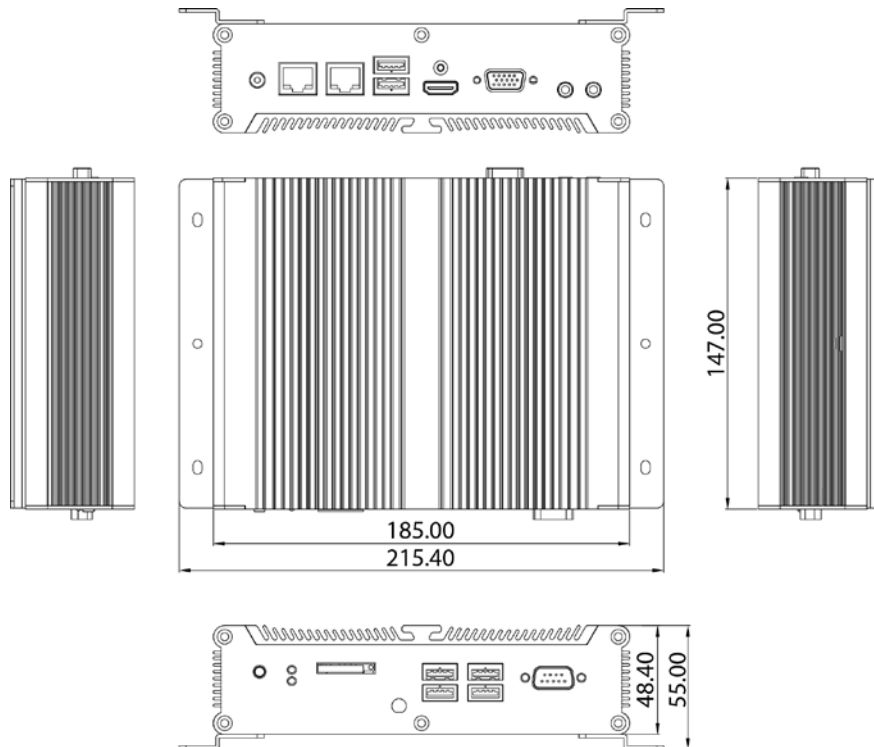
Dimension Drawing

A

A1

A2

A3

A4

A5

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **NDiS 126 (P/N: 10W00012600X0)**
  Intel® Atom™ processor D2700, Intel® NM10 Express chipset

- **NDiS 126H (P/N: 10W00126H00X0)**
  Intel® Atom™ processor D2700, Intel® NM10 Express chipset, additional HDMI output

- **NDiS 126V (P/N: 10W00126V00X0)**
  Intel® Atom™ processor D2700, Intel® NM10 Express chipset, additional VGA output

NDiS 127

Fanless Digital Sigange Player Powered by AMD G-series APU

Main Features

- AMD G-series T56N 1.65GHz Dual Core APU
- Integrated AMD Radeon™ HD6320 GPU
- Fanless and compact design
- Low power consumption
- 1 x Mini-PCIe slot for TV tuner/ WLAN support
- 6 x USB ports
- DirectX 11 support

Product Overview

Powered by AMD G-series T56N Dual Core Accelerated Processing Unit, NDiS 127 can play rich multimedia contents but consumes little power. Integrated with AMD Radeon™ HD6320 Graphic Processing Unit in APU, NDiS 127 supports 1080P video playback and DirectX 11 to demonstrate high impact contents through dual displays.

NDiS 127 is housed in a maintenance-free fanless chassis with compact size. NDiS 127 is designed to fulfill small form factors, low cost, high reliability and low power requrement in digital signage application.

Specifications

CPU Support
- AMD G-series Dual Core processor T56N 1.65GHz onboard
- AMD Radeon™ HD6320 GPU in processor

Chipset
- AMD A55E Controller Hub

Main Memory
- 1 x 200pin SO-DIMM socket, support DDR3 800/ 1067/ 1333MHz SDRAM with un-buffered and Non-ECC memory module up to 4GB

I/O Interface-Front
- ATX power on switch
- 1 x HDD status LED (yellow)
- 1 x power status LED (green)
- 2 x USB
- 2.5" HDD socket: external accessible type, screwed with HDD bracket

I/O Interface-Rear
- +12V DC-in
- 1 x DB9 for RS-232
- 4 x USB
- 1 x RJ45 Gigabit LAN connector with LED
- 1 x Line-out/ 1x Mic-in
- 1 x HDMI
- 1 x DB15 VGA
- 2 x antenna hole for Wi-Fi or TV tuner module

Storage
- 1 x SATA 2.5" HDD

Dimensions
- 185mm (W) x 147mm (D) x 48.4mm (H) (7.1"x 5.7"x 1.9") w/o wall mount bracket

Power Supply
- 1 x External 50W AC/ DC power adapter
  Input: 100~240VAC
  Output: +12VDC

Single/ Dual Display

NEXCOM

Dimension Drawing
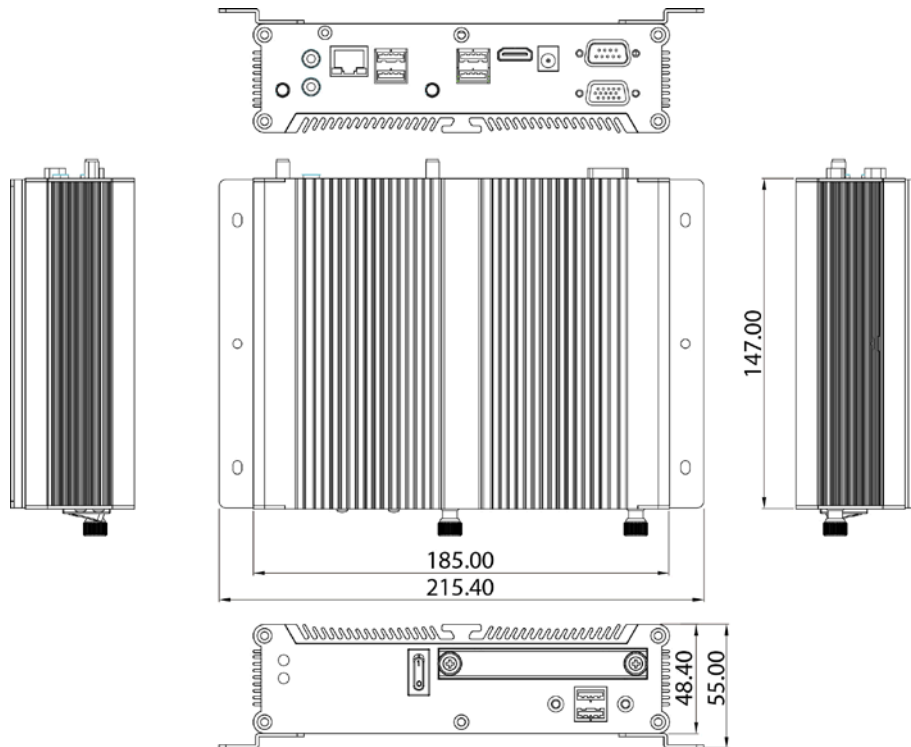
## Expansion
- 1 x Mini-PCIe for optional WLAN/ TV tuner module

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **NDiS 127 (P/N: 10W0012700X0)**
  AMD G-series Dual Core processor T56N 1.65GHz, AMD Radeon™ HD6320 GPU in processor, AMD A55E Controller Hub

NDiS 161

Main Features

- Intel® Core™ 2 Duo platform
- Compact and fanless
- S-video and composite video output

- Dual independent display
- TV tuner/ WLAN support

Product Overview

NDiS 161 is specially designed to be mounted behind the large-size display devices such as LCD TV or PDP. NDiS 161 provides Dual DVI interfaces, one GbE Ethernet, two USB 2.0 ports and 2.5" HDD drive bay for storage, optional wireless connectivity. Its Fanless thermal design can reduce the maintain cost. The stable reliability can guarantee working for 7/24 non-stop operating. NDiS 161 operates on Intel® mobile Core™ 2 Duo/ Core™ Duo/ Celeron® M processors. NDiS 161 is ideal as advanced digital signage player for advertising, hospitality, brand promotion and digital menu board application.

Specifications

CPU Support
- Intel® Core™ 2 Duo, Core™ Duo, Core™ Solo family processors with FSB 533/ 667MHz

Chipset
- Intel® 945GME/ Intel® ICH7-M

Main Memory
- 1 x DIMM socket angled 25°, support DDR2 533/ 667MHz SDRAM with un-buffered and Non-ECC memory module up to 2GB

I/O Interface-Front
- 1 x DB9 for RS-232
- 2 x LED for Power-on and dtorage
- 1 x DVI-D for DVI output
- ATX Power-on and reset button

I/O Interface-Side
- 1 x DVI-I output
- 1 x S-Video
- 1 x Compositive video
- 1 x RJ45 with LED for 10/100/1000Mbps Ethernet
- 2 x USB
- 1 x S/ PDIF
- 1 x Line-out
- 1 x Antenna hole for WLAN/ TV tuner
- +12V DC power in

Storage
- 1 x SATA 2.5" HDD Bay
- 1 x uDOC
- 1 x CF type I/II by optional

Expansion
- 1 x Mini-PCIe for optional WLAN/ TV tuner module

Dimensions
- 280mm (W) x 210mm (D) x 40.4mm (H) (11" x 8.3" x 1.6") w/o mounting bracket

Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Power Supply
- 1 x External 60W AC/ DC power adapter Input: 100~240V AC Output: +12V DC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C (HDD inside)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing

Certification
- CE approval
- FCC Class A

Ordering Information

- **NDiS 161 (P/N: 10W00016104X0)**

  Intel® Core™ 2 Duo, Core™ Duo, Celeron® M fanless barebone system
  Intel® 945GME/ ICH7M

NDiS 162

Fanless Embedded Computer Powered by AMD Athlon™ 64/64 X2

Main Features

- AMD Athlon™ 64/ 64 X2 AM2 platform
- Compact and fanless
- Dual independent display
- TV tuner/ WLAN support

Product Overview

NDiS 162 is specially designed to be mounted behind the large-size display devices such as LCD TV or PDP. NDiS 162 provides dual DVI display outputs with dual independent audio output, one GbE Ethernet with optional wireless connectivity, USB 2.0 ports and 2.5" HDD drive bay for storage. Its Fanless design can reduce the maintenance cost. The stable reliability can guarantee working for 7/24 non-stop operating. NDiS 162 operates on AMD low power Athlon™ 64 series processors. NDiS 162 is ideal as advanced digital signage player for advertising, hospitality, brand promotion and digital menu board application.

Specifications

CPU Support
- AMD AM2 socket Athlon™ 64/ 64 x 2 processor

Chipset
- AMD M690E, AMD SB600
- Integrated ATI X1270 graphic controller

Main Memory
- 1 x DIMM socket angled 25°, support DDR2 800MHz SDRAM with un-buffered and Non-ECC memory module up to 2GB

I/O Interface-Front
- 1 x DB9 for RS-232
- 1 x DVI-D connector
- 1 x Phone-jack for Line-out
- 2 x LED for Power-on and storage
- ATX Power-on and reset button

I/O Interface-Side
- 1 x DVI-I connector for CRT & DVI-D
- 1 x RJ45 with LED for 10/100/1000Mbps Ethernet
- 2 x USB
- 1 x S/ PDIF
- 1 x Line-out
- 1 x Antenna hole for WLAN or TV tuner module
- +12V DC Power in

Storage
- 1 x SATA 2.5" HDD Bay
- 1 x u-DOC
- 1 x CF type I/II by optional

Expansion
- 1 x Mini-PCIe for optional WLAN/ TV tuner module

Dimensions
- 280mm (W) x 210mm (D) x 40.4mm (11" x 8.3" x 1.6") w/o mounting bracket

Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Power Supply
- 1 x External 60W AC/ DC power adapter
  Input: 100~240V AC
  Output: +12V DC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C (HDD inside)
- Storage temperature: -20°C to 60°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing
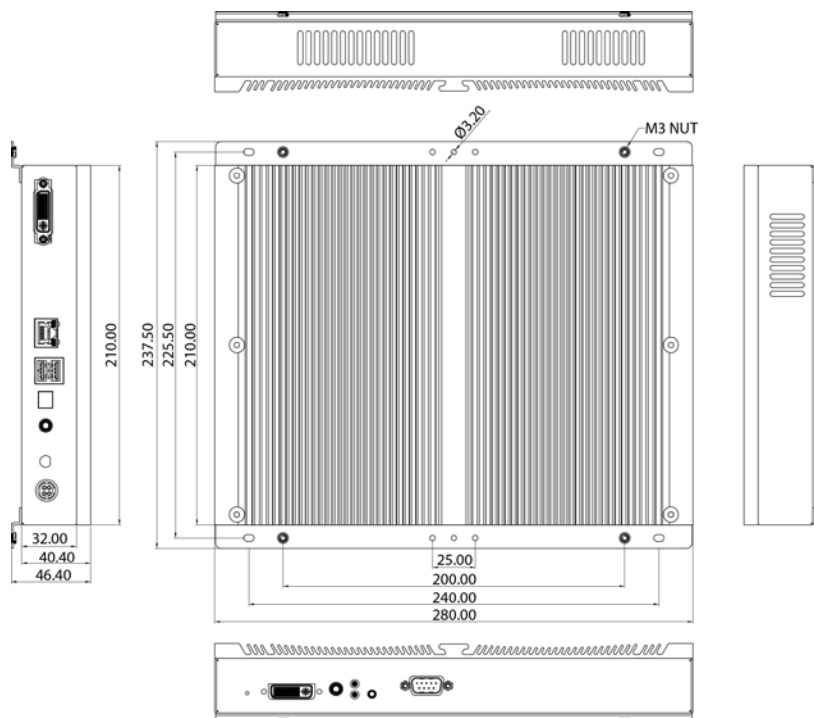
Certification
♦ CE approval
♦ FCC Class A

Ordering Information

♦ **NDiS 162 (P/N: 10W00016200X0)**
AMD Athlon™ 64/ 64 X2 fanless barebone system
AMD 690E/ SB600

NDiS 163

Fanless Embedded Computer Powered by Intel® Core™ 2 Duo/Celeron® M, Support Full HD Video Playback

Main Features

- Intel® Core™ 2 Duo/ Celeron® platform
- Intel® GM 4500MHD graphic engine
- Compact and fanless
- Dual independent display
- WLAN and TV tuner support

Product Overview

NDiS 163 is specially designed to be mounted behind the large-size display device such as LCD TV or PDP. NDiS 163 supports dual display output by DVI, HDMI or VGA. The NDiS 163 operates on Intel® Core™ 2 Duo, Celeron® family processors with 1066/667 MHz, GM45 integrated graphics controller. NDiS 163 can smoothly playback variety of Full HD video. NDiS 163 is ideal as advanced digital signage player for advertising, hospitality, brand promotion and digital menu board application.

Specifications

CPU Support
- Intel® Core™ 2 Duo/ Celeron® family processors with 1066/ 667 MHz

Chipset
- Intel® GM45
- Intel® 82801IBM I/O controller Hub

Main Memory
- 2 x 240-pin 25° angled DIMM, up to 8GB with un-buffered and Non-ECC DDR3 800/ 1066 MHz SDRAM

I/O Interface-Front
- 2 x USB 2.0
- 2 x RS-232
- GPIO terminal port (4 in, 4 out)

I/O Interface-Side
- 1 x +12V DC-in
- 2 x LED for PW & HDD
- 1 x On/Off power switch
- 1 x VGA
- 1 x DVI-D
- 1 x HDMI
- 2 x USB 2.0
- 1 x RJ45 with LED for 10/100/1000Mbps Ethernet
- 1 x SPDIF
- 1 x Line-out
- 2 x Antenna hole for Wi-Fi & TV tuner

Storage
- 1 x SATA 2.5" HDD bay
- 1 x SATA DOM socket

Expansion Slot
- 1 x Mini-PCIe for optional Wireless LAN module
- 1 x Mini-PCIe for optional TV tunner module

Dimensions
- 280mm (W) x 210mm (D) x 40.4mm (H) (11" x 8.3" x 1.6") w/o mounting bracket

Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Power Supply
- 1 x External 96W AC/ DC power adapter Input: 100~240V AC Output: +12V DC

Environment
- Operating temperatures: 0°C to 40°C
- Storage temperature: -40°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing
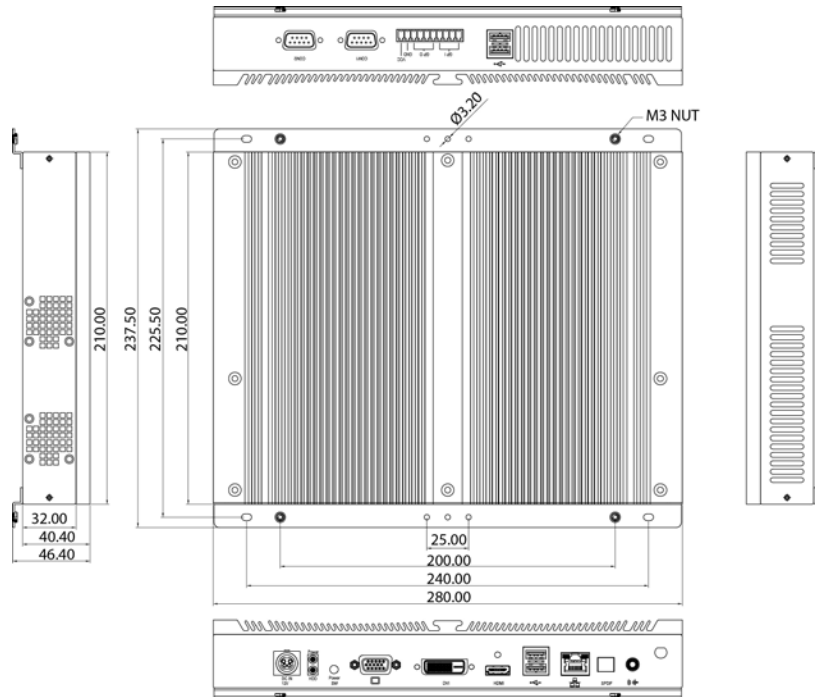
Ordering Information

• **NDiS 163 (P/N: 10W00016300X0)**

Intel® Core™ 2 Duo, Celeron® family processors
Intel® GM 45/ Intel® ICH9-M

NDiS 164

Embedded Computer Powered by AMD Athlon™ 64/ 64 X2/ Phenom™ II X4

Support Full HD Video Playback

Main Features

- AMD Athlon™ 64/ 64 X2/ Phenom™ II X4 platform
- ATI Radeon HD3200 GPU
- Slim and compact design

- Dual independent display and audio support
- TV tuner and WLAN support

Product Overview

NDiS 164 is specifically designed to be mounted behind display device such as LCD TV or PDP. NDiS 164 can smoothly playback variety of Full HD video. NDiS 164 provides two independent HDMI and Audio output, GbE Ethernet with optional wireless and TV tuner connectivity, SATA DOM and 2.5" HDD drive bay for storage. NDiS 164 operates on AMD Athlon™ 64 X2/ Phenom™ II X4 processors. Powered by ATI Intergrated GPU, NDiS 164 is ideal as an advanced digital signage player for advertising, hospitality, brand promotion and digital menu board application.

Specifications

CPU Support
- Support AMD AM2 Athlon™ 64/ 64 X2/ Phenom™ II X4 processor

Chipset
- AMD 780E/ AMD SB710
- ATI Radeon HD3200 GPU

Main Memory
- 2 x 240-pin DIMM sockets, support DDR2 800MHz SDRAM memory module up to 4GB

I/O Interface-Front
- 1 x HDD status LED (yellow)
- 1 x Power status LED (green)

I/O Interface-Rear
- +12V DC-in
- 2 x DB9 for RS-232
- 4 x COM in terminal port (TX & RX only)
- 4 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x Line-out
- 2 x HDMI
- ATX Power-on switch
- 2 x Antenna hole for Wi-Fi and TV tuner

Storage Device
- 1 x SATA 2.5" HDD
- 1 x SATA DOM

Expansion
- 1 x Mini-PCIe for optional WLAN tuner module
- 1 x Mini-PCIe for optional for TV tuner module

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.7" x 1.7") w/o rubber stand

**Power Supply**
- 1 x External AC/ DC adapter Input: 100~240V AC Output: +12V DC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C (HDD inside)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing
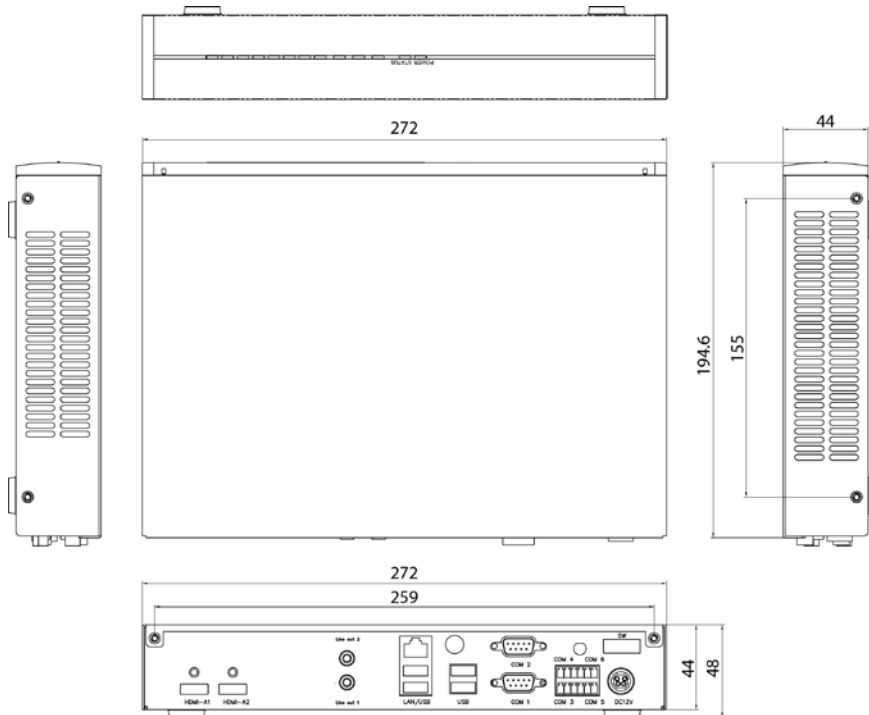
Ordering Information

* **NDiS 164 (P/N: 10W00016400X0)**
  AMD Athlon™ 64/ 64 X2 family processor
  AMD 780E/ SB710 chipset

NDiS 165

Coming Soon

Main Features

- AMD eTrinity Series Platform
- AMD Next Generation Devastator GPU
- Slim and compact design
- 3 x HDMI

- 4 x USB3.0 support
- WLAN and TV tuner support
- DirectX 11 support

Specifications

CPU Support
- AMD eTrinity Dual/ Quad processors

Chipset
- AMD Hudson-M3 A70M Fusion Controller Hub
- AMD next generation Devastator GPU

Main Memory
- 2 x SO-DIMM, support DDR3 up to 1866MHz, up to 16GB

I/O Interface-Front
- 1 x power status LED
  (power on: green, stand by: yellow, shut down: red)
- 1 x HDD status LED (blue)
- 3 x HDMI status LED (orange)
- 1 x LAN status LED (orange)
- 2 x Mini-PCIe status LED (orange)
- 1 x IR receiver

I/O Interface-Rear
- +12V DC-in
- 2 x DB9 for RS-232
- 4 x USB3.0
- 2 x USB2.0
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 1 x Line-in, 1 x Line-out
- 1 x SPDIF
- 3 x HDMI
- ATX Power-on Switch
- 1 x reset switch
- 3 x antenna hole for Wi-Fi and TV tuner

Storage Device
- 1 x SATA 2.5" HDD
- 1 x SATA DOM

Expansion
- 1 x Mini-PCIe for optional WLAN module
- 1 x Mini-PCIe for optional TV tuner module

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H)
  (10.7" x 7.7" x 1.7") w/o rubber stand

Power Supply
- 1 x External 96W AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Stroage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing
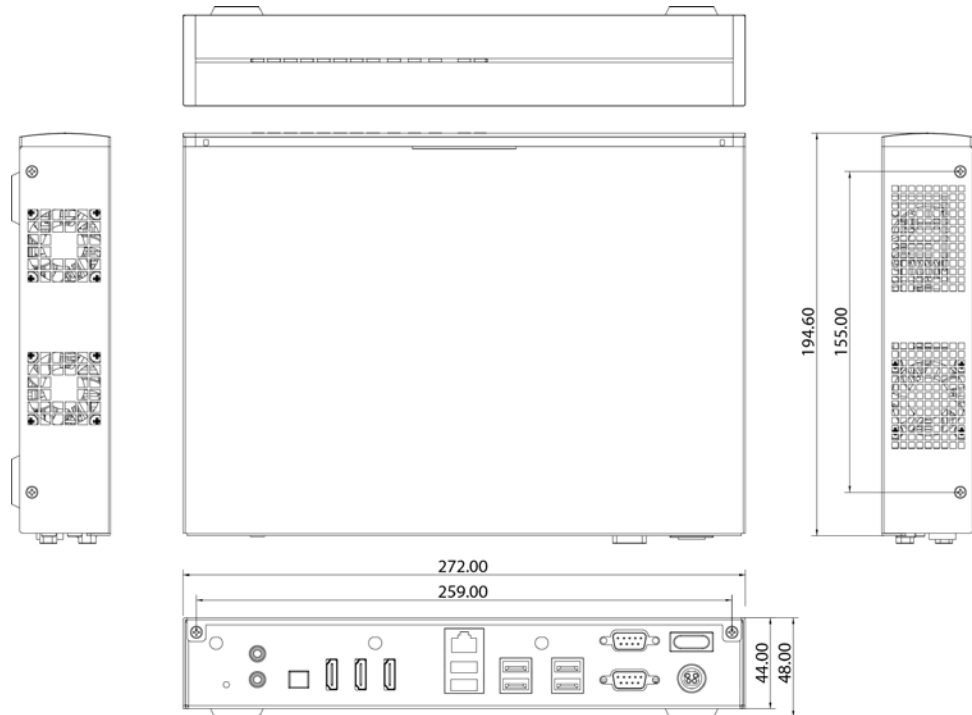
Ordering Information

• **NDiS 165 (P/N: 10W00016500X0)**
  AMD eTrinity Dual/ Quad processors, AMD Hudson-M3 A70M chipset

NDiS 166

Fanless Embedded Computer Powered by 2nd Generation Intel® Core™ Processor, Support Dual Full HD Video Playback

Main Features

- 2nd generation Intel® Core™ processor family platform
- Intel® integrated graphics engine
- Compact and fanless design
- Dual independent display
- Dual Gbe LAN
- WLAN/ TV tuner support

Product Overview

NDiS 166 is specially designed to be mounted behind the large-size display device such as LCD TV or PDP. NDiS 166 supports dual display output by DVI, HDMI or VGA. The NDiS 166 operates on 2nd generation Intel® Core™ Processor Family with QM67 integrated graphics controller. NDiS 166 can smoothly playback dual Full HD video. NDiS 166 is ideal as advanced digital signage player for advertising, hospitality, brand promotion and digital menu board application.

Specifications

CPU Support
- 2nd generation Intel® Core™ processor family

Chipset
- Intel® QM67
- Intel® integrated graphics

Main Memory
- 2 x DIMM, DDR3 1066/ 1333 MHz up to 8GB

I/O Interface-Front
- 2 x USB 2.0
- 2 x RS-232
- 1 x On/Off power switch
- 2 x LED for PW and HDD

I/O Interface-Rear
- 1 x +12V DC-in
- 1 x VGA
- 1 x DVI
- 1 x HDMI
- 2 x USB 2.0
- 2 x RJ45 with LED for 10/100/1000 Mbps Ethernet
- 1 x SPDIF
- 1 x Line-out/ 1 x Line-in
- 2 x Antenna hole for Wi-Fi and TV tuner

Storage
- 1 x 2.5" SATA HDD bay

Expansion
- 1 x Mini-PCIe for optional wireless LAN module
- 1 x Mini-PCIe for optional TV tuner module

Dimensions
- 250mm (W) x 194mm (D) x 40mm (H)
  (9.8" x 7.6" x 1.6") w/o mounting bracket

Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Power Supply
- 1 x External 96W AC/ DC power adaptor
  Input: 100~240V AC
  Output: +12V DC

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing
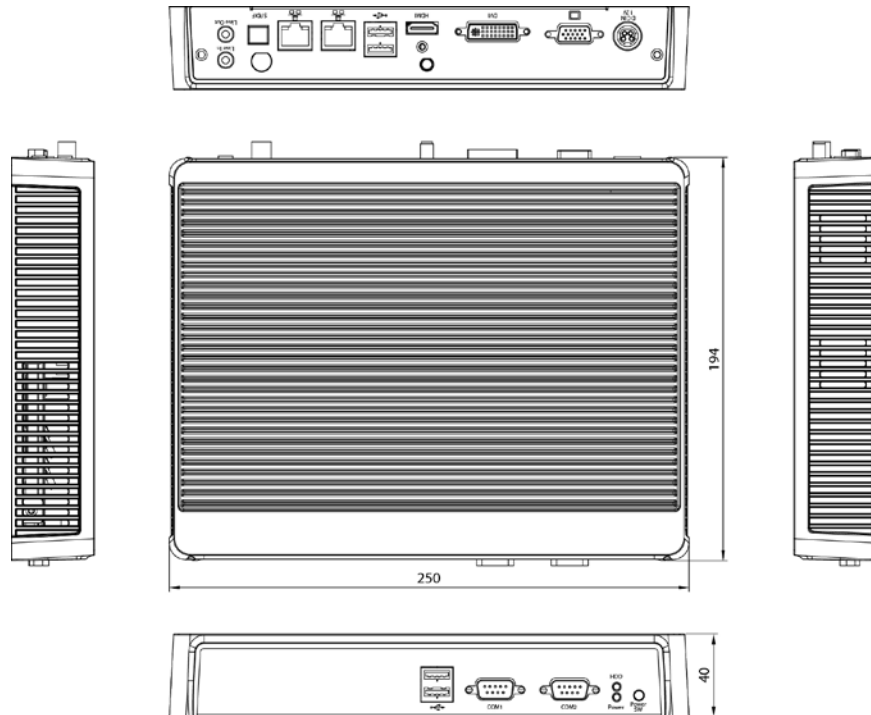
Ordering Information

- **NDiS 166 (P/N: 10W00016600X0)**
  2nd generation Intel® Core™ processor family, Intel® QM67

NDiS 167

Fanless Embedded Computer Powered by 3rd Generation Intel® Core™ Processor, Support Dual Full HD Video Playback

Main Features

- 3rd Generation Intel® Core™ processor
- Intel® integrated HD 4000 graphic engine
- Compact and fanless design

- 3 Independent display
- USB 3.0, Dual GbE LAN support
- WLAN/ TV tuner support
- DirectX 11 support

Specifications

CPU Support
- 3rd generation Intel® Core™ i5/i7 processor

Chipset
- Intel® QM77
- Intel® integrated HD4000 graphic engine

Main Memory
- 2 x DIMM socket, support DDR3 up to 1600MHz, up to 16GB

I/O Interface-Front
- 1 x power status LED
- 1 x HDD status LED
- 1 x power switch
- 1 x reset switch
- 2 x USB3.0
- 2 x DB9 for RS-232

I/O Interface-Rear
- +12V DC-in
- 1 x Display port
- 1 x VGA
- 1 x DVI-D
- 1 x HDMI
- 2 x USB3.0
- 2 x RJ45 with LED for 10/100/1000Mbs Ethernet
- 1 x SPDIF
- 1 x Line-in/ 1x Line-out
- 3 x antenna hole for Wi-Fi and TV tuner

Storage
- 1 x SATA 2.5" HDD
- 1 x SATA DOM

Expansion
- 1 x Mini-PCIe for optional WLAN module
- 1 x Mini-PCIe for optional TV tuner module

Dimensions
- 250mm (W) x 194mm (D) x 40mm (H) (9.9" x 7.6" x 1.6") w/o mounting bracket

Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Power Supply
- 1 x External 96W AC/ DC adapter Input: 100~240VAC Output: +12VDC

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing

250.00

40.00

194.20

Ordering Information

- **NDiS 167 (P/N: 10W00016700X0)**
  3rd generation Intel® Core™ processor, Intel® QM77 chipset

NDiS OPS-M50

2nd Generation Intel® Core™ -Based OPS Digital Signage Platform

Support COM Express Type II Module

Main Features

- Embedded Intel® Core™ i5-2515E Dual Core processor
- Intel® HD integrated graphics 3000
- Designed compliant with open pluggable standard
- COM Express architecture, easy scalability

- Slot-in integration, easy maintenance
- Supports HDMI, DP, UART, and USB2.0 via JAE 80-pin connector
- TV tuner/ WLAN support

Product Overview

NDiS OPS-M50 is specifically designed to be compliant with OPS (Open Pluggable Standard). NDiS OPS-M50 provides COM Express architecture slot with optional COM Express Type II module scalability, slide in 2.5" SATA Slim SSD for storage. NDiS OPS-M50 operates on high performance Intel® Core™ i5-2515E Dual Core processor. NDiS OPS-M50 is powerful media player for digital signage applications demonstrate high impact contents in compact size and perfect match with panel.

Specifications

COM Express Board
- NEXCOM ICES-267S COM Express Card

CPU Support
- Onboard Intel® Core™ i5-2515E Dual Core processor

Chipset
- Intel® QM67/ HM65 PCH

Graphic
- Intel® HD graphics 3000
- Intel dynamic video memory allocation

Main Memory
- 1 x 204 pin SO-DIMM socket, support DDR3 800/ 1066/ 1333MHz (Single channel) with un-buffered and non-ECC SDRAM up to 4GB

I/O Interface-Front
- 1 x Power status LED (Green)
- 1 x HDD status LED (Yellow)
- 1 x Power button
- 1 x Reset button
- 1 x DB9 for RS-232
- 2 x USB port
- 1 x Audio Line-in
- 1 x Audio Line-out
- 1 x VGA port (DB15)
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x Antenna hole for Wi-Fi or TV tuner module

I/O Interface-Rear (OPS Standard Signal)
- Standard connector type: JAE TX25 Plug Connector
- Power input: 12V~19V
- 1 x TMDS / 1 x UART / 3 x USB Port
- Audio: Line-out L/R
- Control signals: power status / PS_ON / PB_DET / CEC / SYS_FAN

Storage Device
- 1 x 22pin SATA right angle connector for slide in 2.5" SATA slim SSD

Expansion
- 2 x Mini-PCIe for optional WLAN/ TV tuner module
- Support wake on WLAN feature

Dimensions
- 200mm (W) x 119mm (D) x 30mm (H) (7.8" x 4.7" x 1.1")

Power Power Supply
- DC power +12V~19V from docking board
- Input: +12V DC connector for test used

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing

119.00

127.80

30.00

200.00
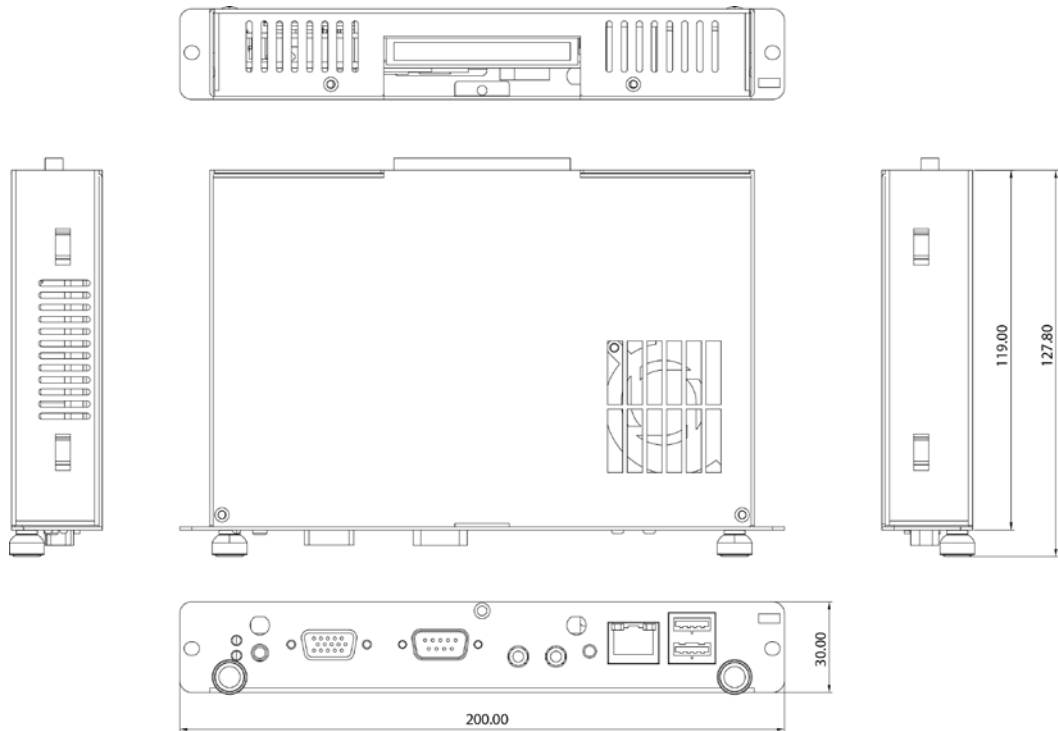
Intel® Core™ Processor Family OPS Digital Signage System

Front

Power LED   VGA   COM   Line-in   LAN   USB

HDD LED   Power Button   Line-out   Reset Button
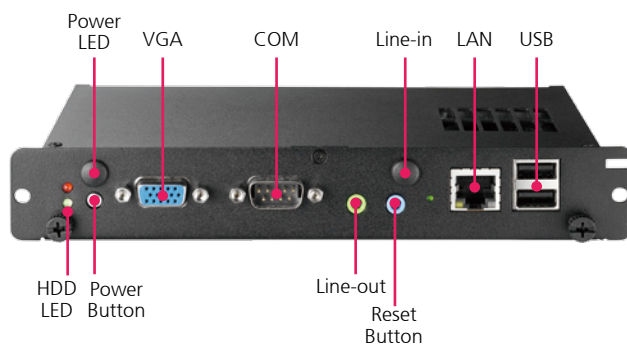
Ordering Information

- **NDiS OPS-M50 (P/N: 10W000OPS00X0)**
  NEXCOM ICES-267S COM Express card
  Onboard Intel® Core™ i5-2515E Dual Core processor
  Intel® QM67/ HM65 PCH

Rear

JAE 80-pin connector

PowerDigiS Solution Pack

We All Know Its Beauty, What Comes Next ?

In this decade, people talk about advantages and benefits of digital signage over static signs on how the content can be exchanged more easily, how attractive the animation content can be shown and so on. No doubts about power of digital signage, but do you really know how to "USE" digital signage in the most effective and attractive way? This solution pack gives you more insights on implementing digital signage in various focused applications, from why we choose this application to the benefits of digital signage in this application; from application scenario to sample layout. This solution pack is designed to evoke unlimited imagination for digital signage.

On the Scene:

Retail Stores

After realizing the advantage of digital signage versus traditional printed signs, retail business widely adopts digital signage applications. With colorful, lively content, digital signage effectively attracts eye balls. It can also inform your customers of products and features without pressure. Happy customers spend more! With digital signage, you can stream engaging and entertaining content to ensure that your customers are as happy as possible.

Benefits

- Deliver relevant content to target customer
- Increase retail business revenue & sales
- Increase marketing Speed & saving Cost
- Durable thermal design to ensure reliable playback
- All-in-one design, easy installation, plug and play

Brand Image Promotion, Advertisement & News Broad Cast

Clock · Video AD · Logo

Weather Forecast · Flash · Scrolling Ticker · Video AD

Logo · Video AD

Deliver Relevant Content · RSS news

On Sale Item Promotion
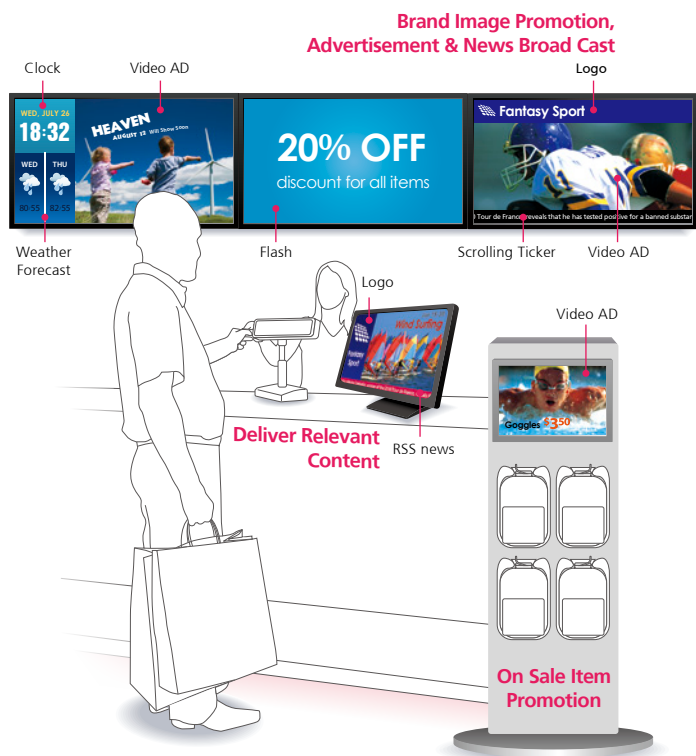
PDSB 111

- Fanless design
- Seamless hardware and PowerDigiS software integration for operation reliability
- 1 x DVI-D output
- 1 x 1080p video support
- Very cost effective

PDSB 166

- Fanless design
- Seamless hardware and PowerDigiS software integration for operation reliability
- Dual output support
- 1 x VGA, 1 x HDMI, 1 x DVI output
- 1 x 1080p or 2 x 720p video support

PDSP 2121

- 22" Panel PC with Full HD video support
- Fanless design
- Compact design and PowerDigiS software integration for operation reliability
- 1 x VGA output for another screen
- 1 x 1080p or 2 x 720p video support

On the Scene:

Quick Service Restaurants

Thanks to the attractive animation effects and rich media content, digital signage is effective and popular in public places. It is also the best solution to update the latest promotions in quick service restaurants. For example, whenever a new menu comes out, or when a new item is released, hard plastic signage board and offerings menu have to be changed strip by strip. By adopting digital signage system, the promotion streamer publish and ordering menu update will be more effective to follow up the fast pace. Digital Signage Appliances could improve meal ordering process, meet the customer's expectation and bring up sales revenue.

Benefits

- Deliver relevant content and show the information clearly
- Provide quality service while waiting
- Durable thermal design to ensure reliable playback
- Built-in wireless module eliminates the hassle of cabling
- All-in-one design, easy installation, plug and play

PDSB 125

- Fanless design
- Seamless hardware and PowerDigiS software integration for operation reliability
- 1 x VGA, 1 x HDMI output
- 1080p Full-HD video support
- Small footprint, low power design
- Standalone/ central controlled
- Optional wireless LAN or TV tuner

PDSB 542

- Multi-display embedded appliance
- PowerDigiS software integration for operation reliability
- 4 x DVI output
- Support 2x2/ 1x4/ 4x1 video wall
- Up to 2 x 1080p or 4 x 720p video zones
- Optional wireless LAN & TV tuner

PDSB 541

- Multi-display embedded appliance
- Seamless hardware and PowerDigis software integration for operation reliability
- 4 x HDMI output
- 2 x 1080p or 3 x 720p video support
- Optional wireless LAN & TV tuner

Digital Signage Player

Booming Era of Digital Signage

Digital Signage or Out of Home (OOH) Digital Media is gaining in popularity and has already penetrated a wide variety of applications. Good designed digital signage solutions can deliver effective messages to target audiences and allow updating content from anywhere in the world in real time.

Digital Signage offers good opportunities to generate revenue by promoting and advertising products to a specific targeted market on demand, and to build brand image by influencing customer behavior and catching their eyes. The majority of digital signage deployment occurs within passenger terminals, retail stores, super markets and restaurants; other applications within transportation and self service are also getting attentions.

Internet

Web User
Remote Access Control for
Scheduling and Content Changing

Firewall

Train Station / Airport

Wireless AP

LAN

ADSL/ Cable Modem

PDS Player

Passers

Satellite

Internet

CMS Server

Back-end Equipment

Shopping Mall / Hospital

Wireless AP

LAN

ADSL/ Cable Modem

PDS Player

Passers

CATV Network
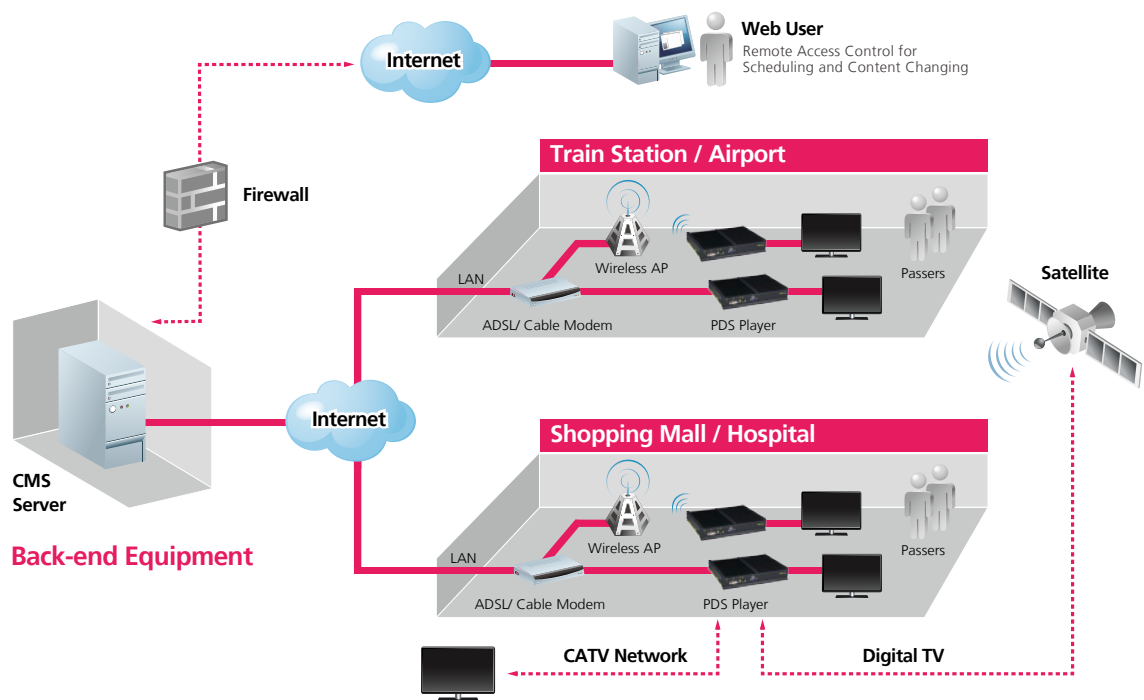
Digital TV

Applications of Digital Signage

- Dynamic Advertising
- Brand Promoting
- Real-time Messaging
- Public Information Sharing
- Corporate Messaging
- Live Entertainment
- Digital Menu/ Poster

NDiS Series, Reliable Embedded Digital Signage Player

To cope with growing digital signage application demand, NEXCOM, with decades of solid experience in industrial computing, is dedicated to providing industrial-grade and high-performance digital signage players. NEXCOM has created a full range of digital signage players, the NDiS series, to address the requirements for a broad spectrum of digital signage applications. NDiS product family covers from very low-cost, low-power consumption RISC based media player, x86 low-cost yet powerful media players, to high-end media players with multiple video outputs.

The NDiS series platform boasts all features required to build digital signage display networks that make targeted messages flexible and easy. Customers can effectively deliver messages to consumers in real time, reduce costs associated with constant ways of advertising and provide completed control along with enhanced flexibility. The messages can be updated or changed as required in real time; the technology is gaining a strong beachhead in the global market, creating a large demand for solutions which work on this principle.

Features and Benefits

- PC-based platform supporting off-the-shelf hardware and software parts
- Industrial-grade design for better reliability
- Fanless design for lower maintenance cost (selected models)
- Slim and compact dimension for easy integration with large-size display devices
- Hardware accelerated playback of wide variety of media formats to lower total cost of ownership
- Flexible display output options for VGA, DVI and HDMI, single or multiple screens support
- Optimal configuration to handle SD, HD or Full HD quality of contents

Value Proposition

NDiS fanless design cuts tremendous maintenance costs by eliminating dust accumulation. Especially when a system is located at a remote site, the fanless design provides great reliability and a low failure rate. In addition, the slim and compact enclosure makes it easy for NDiS media player to be mounted behind LCD monitors or plug into mission-critical applications.

The initial cost is a tipping point for customers' choices of digital signage. Among all components, hardware costs can be cut down

by deploying NDiS multi-output media players, which support more than two video outputs or dual independent content outputs.

With solutions ranging from powerful servers for Digital Streaming to Digital Signage Media Players that address simple and complex applications, NEXCOM continuously innovates high-performance and cost-effective solutions to give customers a competitive advantage.

Digital Signage Player

Model					
	NDiS 111	**NDiS 120**	**NDiS 122**	**NDiS 125-L**	**NDiS 126**
CPU	Intel® Atom™ E620	Intel® Atom™ N270	Intel® Atom™ D525	Intel® Atom™ D525	Intel® Atom™ D2700
Chipset	EG20T	945GSE + ICH7M	NM10	NM10	NM10
Graphic	GMA 600	GMA 950	GMA 3150	GMA 3150 NVIDIA ION2	GMA 3650
RAM	DDR2 1G,Rank On Board	DDR2 SO-DIMM, up to 2GB	DDR2 DIMM, up to 4GB	DDR2 SO-DIMM, up to 4GB	DDR3 SO-DIMM, up to 4 GB
LAN	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x2, 10/100/1000Mbps
WLAN	Optional	Optional	Optional	Optional	Optional
Hard Disk	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA
CF	N/A	N/A	N/A	N/A	N/A
Flash Storage	SATA DOM	SATA DOM	SATA DOM	N/A	N/A
Video Output	1 x DVI-D	1 x VGA, 1 x DVI-D	1 x VGA	1 x VGA1 x HDMI	1 x HDMI or 1 x HDMI + 1 x VGA or 2 x HDMI
Display Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Output Channel	1	2 Clone	1	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone
Video Capability	**Hardware decode:** MPEG1, MPEG2,VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Software decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Software decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264W **Quality:** 1 x 1080p or2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p
Graphic Capability	1920 x 1080 raster image with advanced transition/ animated effect	1280 x 720 raster image with basic transition/ animated effect	1920 x 1080 raster image with advanced transition/ animated effect	1920 x 1080 raster image with advanced transition/ animated effect	1920 x 1080 raster image withadvanced transition/ animated effect
Audio Output	1 x Line-out	1 x Line-out, 1 x Mic-in	1 x Line-out,1 x Line-in, 1 x Mic-in	1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out
TV Tuner	Optional	Optional	Optional	Optional	Optional
RS-232	N/A	1	1	WN/A	1
USB 2.0	1	4	4	4	6
USB 3.0	0	0	0	0	0
Expansion Slot	1 x Mini-PCIe	N/A	N/A	N/A	1 x Mini-PCIe
Power Type	12V DC	12V DC	12V DC	19V DC	12V DC
Dimension (mm)	114.9 x 179 x 37.5	272 x 195 x 44	272 x 195 x 44	250 x 194 x 40	185 x 147 x 48
Video File Format Support	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI,WMV, DivX,RAW DV, VOB, FLV, MOV, VC-1, H.264
OS Support	WES2009, XP, Linux	WES2009, XP, Linux	WES2009, XP, Linux	WES2009, XP, Linux, Win7	WES2009, XP, Linux, Win7

	NDiS 127	NDiS 161	NDiS 162	NDiS 163	NDiS 164	NDiS 165 (Comming Soon)
CPU	AMD G-series T56N	Intel® Core™ 2 Duo/ Celeron® M	AMD Athlon™ 64/ 64 X2	Intel® Core™ 2 Duo/ Celeron® M	AMD Athlon™ 64 X2 Phenom™ II X4	AMD eTrinity Duo/ Quad Core
Chipset	AMD A55E	945GME/ ICH7-M	M690E/ SB600	GM45/ ICH9-M	NB780E/ SB710	AMD A70M
Graphics	ATi HD6320	GMA 950	ATI X1270	GMA 4500MHD	ATI X3200	Next Generation Devastator GPU
Memory	DDR3 SO-DIMM, up to 4 GB	DDR2 DIMM, up to 2GB	DDR2 DIMM, up to 2GB	2 x DDR3 DIMM, up to 8GB	2 x DDR2 DIMM, up to 8GB	DDR3 SO-DIMM, up to8 GB
LAN	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps
WLAN	Optional	Optional	Optional	Optional	Optional	Optional
Storage	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	SATA DOM	SATA DOM	SATA DOM	SATA DOM	SATA DOM
Display Output	1 x VGA, 1 x HDMI	1 x DVI-I,1 x DVI-D, 1 x S-Video, 1 x Compositive video	1 x DVI-I, 1 x DVI-D	1 x VGA, 1 x DVI-D, 1 x HDMI	2 x HDMI	3 x HDMI
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Display Mode	2 Expanded or Clone	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone	3 Independent, Expanded or Clone
Video	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2 **Software decode:** VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2 **Software decode:** VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2,VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 2 x 1080p or 3 x 720p
Graphics Effect	1920 x 1080 raster image with advanced transition/ animated effect	2 x 1920 x 1080 raster image with advanced transition/ animated effect	2 x 1920 x 1080 raster image with advanced transition/ animated effect	2 x 1920 x 1080 raster image with sophisticated transition/ animated effect	2 x 1920 x 1080 raster image with sophisticated transition/ animated effect	3 x 1920 x 1080 raster image with sophisticated transition/ animated effect
Audio	1 x Line-in, 1 x Line-out	1 x S/PDIF, 1 x Line-out	1 x S/PDIF, 2 x Line-out	1 x S/PDIF, 1 x Line-out 1 x HDMI audio	2 x Line-out	1 x S/PDIF, 1 x Line-in, 1 x Line-out
Digital I/O	Optional	Optional	Optional	Optional	Optional	Optional
COM	1	1	1	2	6 (2 x RS232,4 for TX/RX only)	2
USB	6	2	2	4	4	2
	0	0	0	0	0	4
Expansion	1 x Mini-PCIe	1 x Mini-PCIe	1 x Mini-PCIe	2 x Mini-PCIe	2 x Mini-PCIe	2 x Mini-PCIe
Power	12V DC	12V DC	12V DC	12V DC	12V DC	12V DC
Dimension	185 x 147 x 48.4	280 x 210 x 40.7	280 x 210 x 40.7	280 x 210 x 40.7	272 x 195 x 44	272 x 195 x 44
Video Format	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264
OS	WES2009, XP, Linux, Win7	WES2009, XP, Linux, Win7	WES2009, XP, Linux, Win7	WES2009, XP, Linux, Win7	WES2009, XP, Linux, Win7	WES2009, XP, Lunix, Win 7

Model	NDiS 166	NDiS 167	NDiS 540	NDiS 541	NDiS 542	NDiS OPS-M50
CPU	Intel® Core™ i5/ i7	3rd Generation Intel® Core™	AMD Athlon™ 64/ 64 X2	AMD Athlon™ 64 X2 Phenom™ II X4	Intel® Core™ 2 Duo/ Core™ Quad	Intel® Core™ i5 2515E
Chipset	QM67	QM77	M690E/ SB600	NB 780E/ SB 710	P45/ ICH10	QM67
Graphic	HD Graphics 3000	HD Graphics 2500/ 4000	ATI X1270 + ATI E2400	ATI X3200 + ATI E2400	S3 4300E	HD Graphics 2000/ 3000
RAM	2 x DDR3 DIMM, up to 16GB	2 x DDR3 DIMM, up to 16GB	2 x DDR2 DIMM, up to 4GB	2 x DDR2 DIMM, up to 4GB	2 x DDR3 DIMM, up to 4GB	DDR3 SO-DIMM, up to 8GB
LAN	x2, 10/100/1000Mbps	x2, 10/100/1000Mbps	x2, 10/100/1000Mbps	x2, 10/100/1000Mbps	x2, 10/100/1000Mbps	x2, 10/100/1000Mbps
WLAN	Optional	Optional	Optional	Optional	Optional	Optional
Hard Disk	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA	1 x 3.5" SATA	1 x 2.5" Half-Slim
CF	N/A	N/A	CF type I/II	N/A	N/A	N/A
Flash Storage	SATA DOM	SATA DOM	SATA DOM	SATA DOM	SATA DOM	N/A
Video Output	1 x VGA, 1 x DVI-D,1 x HDMI	1 x VGA, 1 x DVI-D, 1 x HDMI, 1x DP	2 x DVI-I , 2 x DVI-D	4 x HDMI	4 x DVI-I	1 x VGA, 1x DVI (via OPS JAE interconnector)
Display Resolution	1920 x 1080	1920 x1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Output Channel	2 Independent, Expanded or Clone	3 Independent, Expanded or Clone	4 Independent, Expanded or Clone	4 Independent, Expanded or Clone	4 Independent, Expanded or Clone	2 Independent, Expanded or Clone
Video Capability	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 2 x 1080p or3 x 720p	**Hardware decode:** MPEG1, MPEG2 **Software decode:** VC1, H.264 **Quality:** 3 x 720p	**Hardware decode:** MPEG1, MPEG2,VC1, H.264 **Quality:** 2 x 1080p or3 x 720p	**Hardware decode:** MPEG1, MPEG2,VC1, H.264 **Quality:** 2 x 1080p or3 x 720p	**Hardware decode:** MPEG1, MPEG2 **Software decode:** VC1, H.264 **Quality:** 2 x 1080p or2 x 720p
Graphic Capability	4 x 1920 x 1080 raster image with sophisticated transition/ animated effect	3 x 1920 x 1080 raster image with sophisticated transition/ animated effect	4 x 1280 x 720 raster image with advanced transition/ animated effect	4 x 1920 x 1080 raster image with sophisticated transition/ animated effect	4 x 1920 x 1080 raster image with sophisticated transition/ animated effect	1920 x 1080 raster image with advanced transition animated effect
Audio Output	1 x S/PDIF, 1 x Line-in, 1 x Line-out	1 x S/PDIF, 1 x Line-in, 1 x Line-out	4 x Line-out	4 x Line-out	4 x Line-out	1 x Line-in, 1 x Line-out, 1 x Line-out (via OPSJAE interconnector)
TV Tuner	Optional	Optional	Optional	Optional	Optional	Optional
RS-232	2	2	6 (2 x RS-232, 4 for TX/ RX only)	6 (2 x RS-232, 4 for TX/ RX only)	6 (2 x RS-232, 4 for TX/ RX only)	1
USB 2.0	4	0	4	4	4	4 (2 x External, 2 x via OPS JAE interconnector)
USB 3.0	0	4	0	0	0	0
Expansion Slot	2 x Mini-PCIe	2 x Mini-PCIe	1 x Mini-PCIe	2 x Mini-PCIe	2 x Mini-PCIe	2 x Mini-PCIe
Power Type	12V DC	12V DC	12V DC	12V DC	100 ~ 240 VAC	12~19VDC (via OPS JAE interconnector)
Dimension (mm)	250 x 194 x 40	250 x 194 x 40	272 x 195 x 44	272 x 195 x 44	426.2 x 365 x 44	200 x 119 x 30
Video File Format Support	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264	MPEG 1/2/4, AVI, WMV, DivX, RAW DV, VOB, FLV, MOV, VC-1, H.264
OS Support	WES2009, XP, Linux, Win7	WES2009, XP, Lunix, Win7	WES2009, XP	WES2009, XP, Win7	WES2009, XP, Win7	WES2009, XP, Linux, Win7

Bulletin Board Solutions

Flexible and Easy to Use

The dynamic messages and full color motion videos delivered by digital bulletin board are proven to draw consumers' attentions and effectively influence their purchasing behaviors. The technology of both hardware and software in digital signage is becoming more mature and applicable. Competition and the evolution of technology have dramatically reduced the cost and hassles of keeping digital bulletin board up to date.

Applications of bulletin

- Dynamitic Advertising
- Brand Promoting
- Real-time Messaging
- Public Information Sharing
- Corporate Messaging
- Live Entertainment
- Digital Menu/ Poster

PDS Series, High Performance, Rich Features with Built-in Powerful PowerDigiS Software

To keep up with this trend, NEXCOM has released a series of technology advancing, feature-rich and cost-effective media players with seamless hardware and software integration

called PowerDigis (PDS) series. PDS series media players, which cover from very low-cost, low-power consumption RISC based appliances, x86 low cost yet powerful appliances supporting Full HD video, to dual or quad video outputs media player appliances, are ideal solutions for digital bulletin board applications.
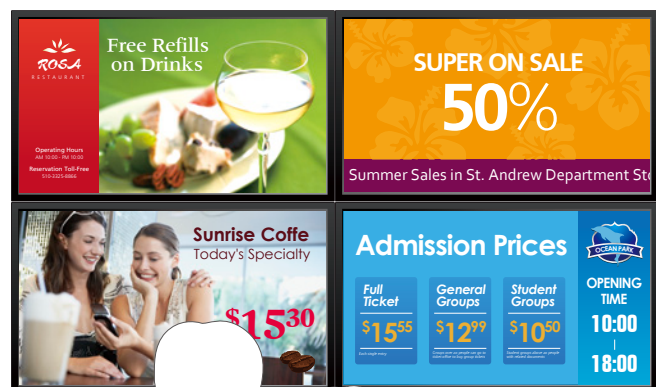
PDS comes with high performance media player system and feature-rich software tailored to handle high quality of images, videos and audio in digital signage applications. Depending on models, the media player system is equipped with options of different number of splendid video and audio interfaces, and options of different video resolutions.

The built-in powerful software in PDS series is designed to cope with the flexible multi-media content playing requirements for today's digital signage applications. PDS can support multiple layouts. Each layout can be divided into 9 zones. Each zone can individually present different content in a pre-defined sequence, including videos, flash, text, PowerPoint, banners and web pages. It is very flexible for advertisers to create eye-catching promotions.

PDS also has s spanning feature, which enables media content to span multiple displays. This feature allows PDS to support the

Each layout can be divided into max. 9 zones
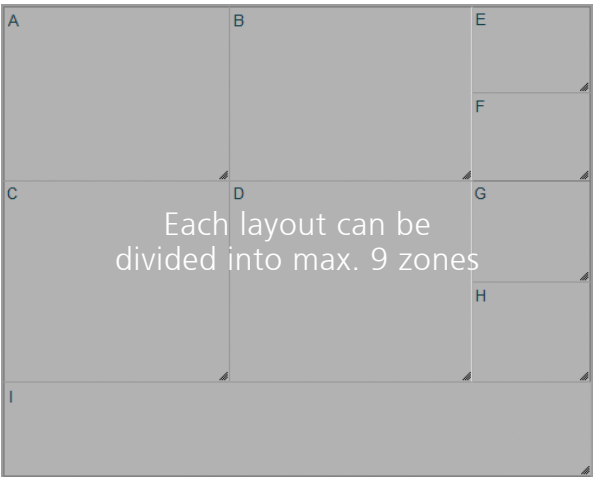
picture wall function, which enables still or motion pictures to be extended across two or four displays. Advertisers can create large promotion images by special picture wall effect with PDS multiple TV screens feature.

Features and Benefits

- Industrial-grade design for better reliability
- Fanless design for lower maintenance cost
- Slim and compact dimension for easy integration with large-size display devices
- Hardware accelerated playback of wide variety of media formats to lower total cost of ownership
- Flexible display output options for VGA, DVI, and HDMI, single or multiple screens support
- Optimal configuration to handle SD, HD, or Full HD quality of contents
- Variety of multi-media contents support
- Quick multi-media presentation design and publish
- Easy content management with Wireline or wireless LAN.
- Remote and central management support

Value Proposition

The PowerDigis solutions have been developed with customer in mind, and are, therefore, very user friendly and simple to use. Four capacities of PDS series includes:

- High flexibility to address single, dual, or multi-screen applications.
- High availability to build in automatic failover protection and automatic reboot function.
- High scalability of a fully scalable system for small and large deployment.
- High manageability to manage entire network from centralized location.

A

A1

A2

A3

A4

A5

Model	PDSB 111	PDSB 125	PDSB 127	PDSB 166	PDSB 541
Storage	160GB HDD	160GB HDD	160GB HDD	160GB HDD	160GB HDD
LAN	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps
WLAN	Optional	Optional	Optional	Optional	Optional
Video Output	1 x DVI-D	1 x VGA, 1 x HDMI	1 x VGA, 1 x HDMI	1 x VGA, 1 x DVI-D, 1 x HDMI	4 x HDMI
Display Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Output Channel	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone	2 Independent, Expanded or Clone	4 Independent, Expanded or Clone
Video Capability	Hardware decode: MPEG1, MPEG2,VC1, H.264 Quality: 1 x 1080p or 2 x 720p	Hardware decode: MPEG1, MPEG2,VC1, H.264 Quality: 1 x 1080p or 2 x 720p	Hardware decode: MPEG1, MPEG2,VC1, H.264 Quality: 1 x 1080p or 2 x 720p	Hardware decode: MPEG1, MPEG2,VC1, H.264 Quality: 2 x 1080p or 3 x 720p	Hardware decode: MPEG1, MPEG2,VC1, H.264 Quality: 2 x 1080p or 3 x 720p
Graphic Capability	1920 x 1080 raster image with advanced transition/ animated effect	1920 x 1080 raster image with advanced transition/ animated effect	2 x 1920 x 1080 raster image withsophisticated transition/ animated effect	2 x 1920 x 1080 raster image with sophisticated transition/ animated effect	4 x 1920 x 1080 raster image with sophisticated transition/ animated effect
Audio Output	1 x Line-out	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in	1 x S/PDIF, 1 x Line-out, 1 x Mic-in	4 x Line-out
TV Tuner	Optional	Optional	Optional	Optional	Optional
RS-232	N/A	N/A	2	2	6 (2 x RS232, 4 for TX/RX only)
USB 2.0	1	4	9	4	4
Power Type	12V DC	19V DC	12V DC	12V DC	12V DC
Dimension (mm)	114.9 x 179.9 x 37.5	114.9 x 179.9 x 37.5	185 x 147 x 44	250 x 194 x 40	272 x 195 x 44
Content Support	Video, Image, Flash, RSS News, Web URL, Scrolling Text, Live TV				
Multimedia Format Support	**Video:** MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb **Audio:** MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra **Flash:** SWF, FLV **Graphic:** JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF				
Streaming Protocol Support	http, mms, udp, rtp, rtsp, IPTV				
Max. Number of Zones	9	9	9	9	9
Software Package	PowerDigiS V2	PowerDigiS V2	PowerDigiS V2	PowerDigiS V2	PowerDigiS V2
Management UI	Web	Web	Web	Web	Web

Model	CMS 1100	CMS 2100
Storage	160GB HDD	320GB HDD
LAN	x4, 10/100/1000Mbps	x8, 10/100/1000Mbps
WLAN	Optional	Optional
RS-232	N/A	N/A
USB 2.0	2	2
Power Type	12V DC	110~240V AC
Dimension (mm)	272 x 195 x 44	426.2 x 365 x 44
Max. Number of Zones	100	250
Player Device Management	Add/ Remove/ Edit player or player group Start/ Stop/ Pause presentation Player/ Player Group power off/ reset	Add/ Remove/ Edit player or player group Start/ Stop/ Pause presentation Player/ Player Group power off/ reset
Presentation Distribution	Player or Player Group	Player or Player Group
Presentation Schedule	Player or Player Group	Player or Player Group
Content Management	Player or Player Group	Player or Player Group
Emergency Message	Player or Player Group	Player or Player Group
Management UI	Web	Web

PowerDigiS V2

Ride with Smarter PowerDigiS V2 to Enhance Interaction

NEXCOM offers a wide range of digital signage appliances, known as the PDS series; which integrates ultra-reliable hardware with feature-rich software. The PDS series can be applied in a number of applications including bulletin board, video wall, in-vehicle signage, Kiosk and public information. Continuing to drive technology in the digital signage market, NEXCOM introduces the next generation of PowerDigis solutions to better serve its valued customers.

Experience, engagement and interaction across a variety of media platforms with rich content are some of the key market trends in digital signage. The PowerDigis V2 is designed to support integration with interactive content and Event

Trigger methods to bring the targeted audience closer to the advertising. The following items are some key features of this new smarter software:

Touch Screen Integration

PowerDigis V2 provides user-friendly GUI for user to define active areas and corresponding actions. When user touches the touch screen, it sends a command to Player and triggers the playback of the pre-defined playlist.

GPS Integration

GPS technology is also integrated to provide excellent location-based digital signage. User can define playlists for each location on the Google map to be displayed in moving vehicles.
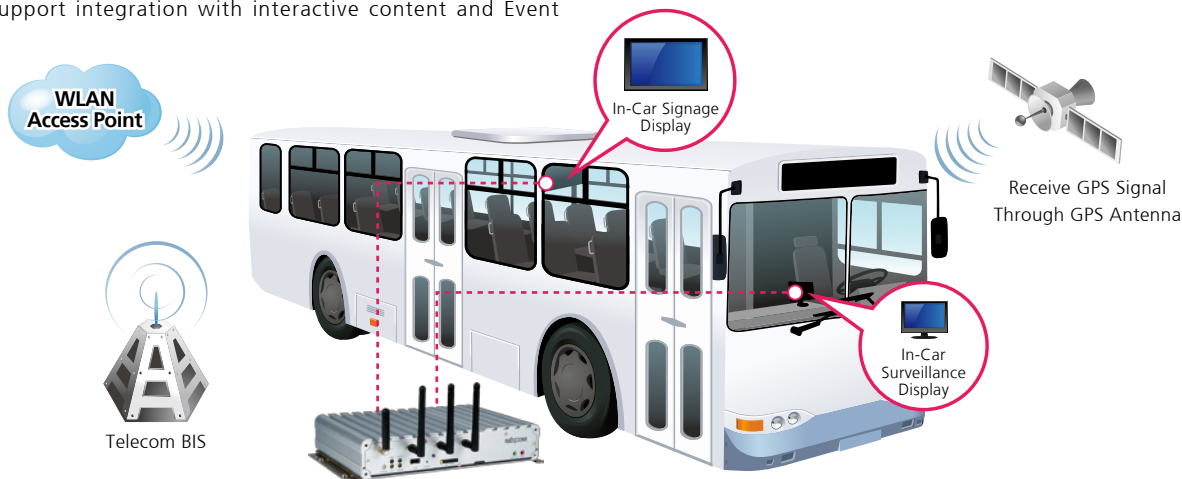
Zone Content Sync

The new PowerDigis allows you to synchronize content playback between different zones. For instance, if you play a specific product introduction video, all other relevant playlists will be played simultaneously as illustrated.

Triggers Messages

Presentation Designer

PowerDigis solution includes a web-based design tool, the PowerDigis Presentation Designer, which reside on the PowerDigis CMS and Player. Through the Presentation Designer, you can add and manage dynamic media contents, edit scenes as well as create time-based or interactive presentations for single or multiple players.

Scene Editor

Scene Editor allows you to create new layouts, draw zones and add widget as desired or simply select the default layout templates to edit scenes.
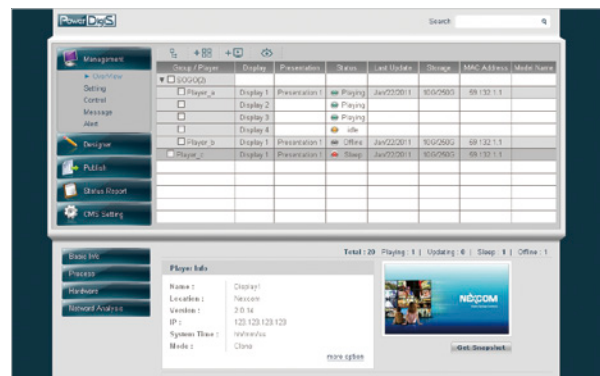
Interactive Presentation Design

The PowerDigis Event Trigger feaures multiple input interfaces to activate pre-defined contents to be displayed on the screen. User can use Presentation Designer to easily create interctive presetations based on the trigger methods.
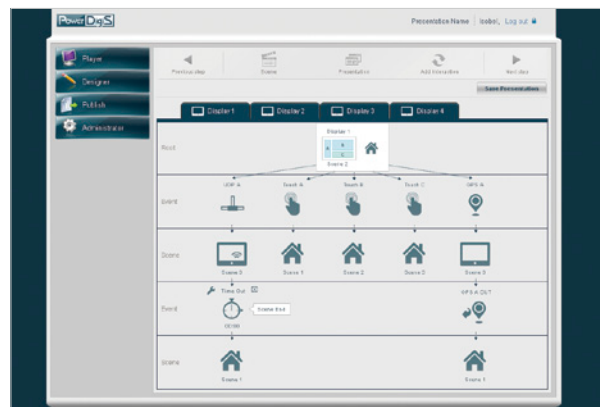
Powerful Digital Signage Management Software

This web-based media management application allows you to easily manage, schedule, and publish digital media through the CMS website or Player Web Management Console.
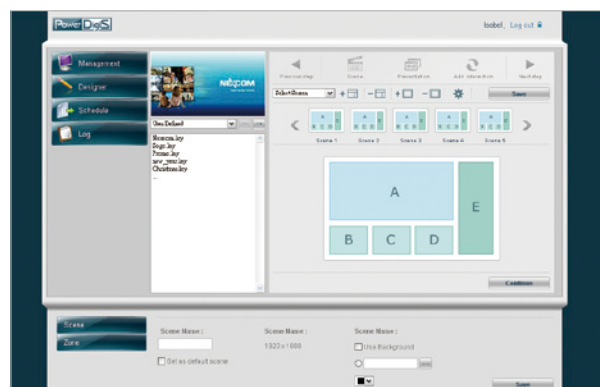
Video Wall Signage Appliance

High Impact and Cost-effective Video Wall Solutions

Display wall is a stunning visual contact facility. With Display wall solution, users can freely place numerous data, video or images on screen matrix to create dynamic presentations that will target audiences or dramatically enhance any area where display walls are showcased. Display wall is also a great solution to improve team collaboration and to focus their collective attention on the issues that matter with super large display in a control room or meeting room application.

Applications of video walls

- Dynamitic Advertising
- Brand Promoting
- Real-time Messaging
- Public Information Sharing
- Corporate Messaging
- Live Entertainment
- Digital Menu/ Poster

4 x HDMI Video Output

4 x Screen Control

PDW 165/ 542 is a cost-effective video wall controller solution targeting to manage small or medium size screen matrix for digital signage applications that need visualization across many displays.

Features and Benefits

- Industrial-grade design for better reliability
- Slim and compact dimension for easy integration with large-size display devices
- Flexible screen matrix, support non-square, portrait, landscape layouts and edge overlap processing
- Hardware accelerated upscale and downscale
- Optimal configuration to handle Full HD quality of contents
- Variety video and audio types support
- Hardware accelerated playback of wide variety of multi-media formats

Model	Comming Soon	
	PDSB 165	**PDSB 542**
Storage	320GB HDD	320GB HDD
LAN	x1, 10/100/1000Mbps	x2, 10/100/1000Mbps
WLAN	Optional	Optional
Video Output	3 x HDMI	4 x DVI-I
Display Resolution	7680 x 1080/ 3840 x 2160/ 1920 x 4320	7680 x 1080/ 3840 x 2160/ 1920 x 4320
Screen Matrix	4 Clone or 2 x 2, 1 x 4, 4 x 1	4 Clone or 2 x 2, 1 x 4, 4 x 1
Video Capability	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 2 x 1080p or 3 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 2 x 1080p or 3 x 720p
Graphic Capability	4 x 1920 x 1080 raster image with sophisticated transition/ animated effect	4 x 1920 x 1080 raster image with sophisticated transition/ animated effect
Audio Output	1 x Line-out, 1 x Line-in	4 x Line-out
TV Tuner	Optional	Optional
RS-232	2	6 (2 x RS232, 4 for TX/ RX only)
USB 2.0	2	4
Power Type	100~240V AC	100~240V AC
Dimension (mm)	272 x 195 x 44	426.2 x 365 x 44
Content Support	Video, Image, Flash, RSS News, Web URL, Scrolling Text, Live TV	
Multimedia Format Support	**Video:** MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb **Audio:** MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra **Flash:** SWF, FLV **Graphic:** JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF	
Streaming Protocol Support	http, mms, udp, rtp, rtsp, IPTV	
Max. Number of Zones	9	9
Software Package	PowerDigiS V2	PowerDigiS V2
Management UI	Web	Web

In-Vehicle Computing Solutions

Enhance Travel / Transportation Experience

Digital Signage is emerging as a useful tool of enhancing travel/ transportation experience from a customer point of view, while making the process easier for transportation conductors.

Applications of digital signage

- Brand Promoting, Dynamitic Advertising at Bus, Train, Taxi
- Real-time Messaging at Bus, Train
- Tourist Guidance at Bus, Taxi
- Public Information Sharing at Bus, Train

Hardened & Reliable PDSV Series

PDSV series, a dedicated digital signage player product line with built-in PowerDigiS software, is designed for in-vehicle working environment. PDSV is compliant to most industrial serial for in-vehicle operation, e.g. e-Mark. The ultra-reliable design enables PDSV work under wide operating temperature rang and can withstand extreme levels of shock and vibration. The power ignition function and wide voltage design enables PDSV to be directly powered from a vehicle's battery.

Preloaded and integrated with PowerDigiS, PDSV is a perfect cost-effective solution for mobile digital signage application. Specifically aimed at the growing market for in-vehicle digital signage, PDSV can support dual independent displays with DVI or VGA output and high-quality video, still or motion pictures, and dynamic messages.
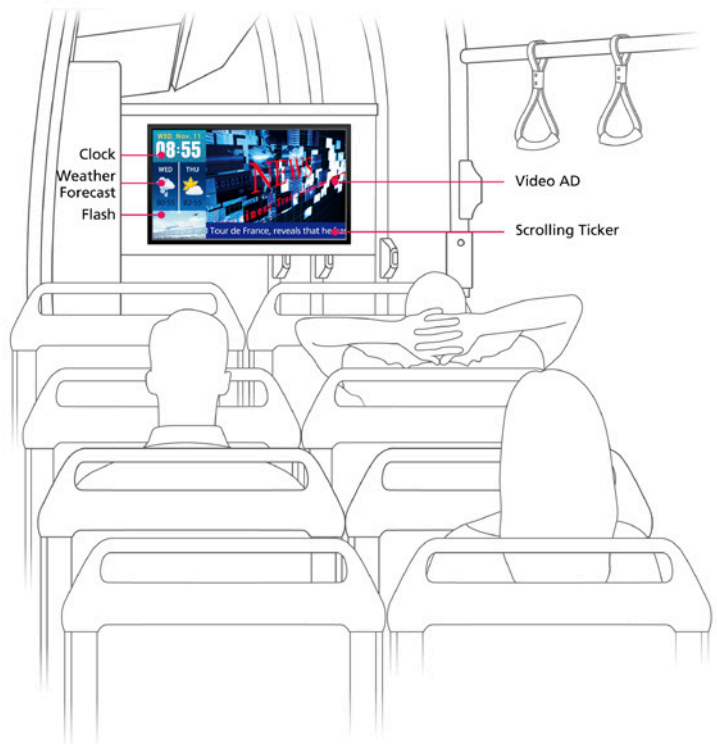
Features and Benefits

- Industrial-grade design for better reliability
- Resilience to high vibration and temperature harsh environment
- Fan-less design for lower maintenance cost
- Flexible ignition control, easy adaption to car power system
- Slim and compact dimension for easy integration in-Vehicle environment
- Compliance to e-Mark, EN50155 industrial regulation
- Hardware accelerated playback of wide variety of media formats to lower total cost of ownership
- Flexible display output options, single or multiple screens support
- Variety of multi-media contents support

- Quick multi-media presentation design and publish
- Easy content management with wireless LAN, or 3G/3.5G radio network.
- Remote and central management support

Value Proposition

The PDSV series is designed in a compact form factor, yet maintaining the industrial requirements for high availability, wide operation temperature range, and high anti-vibration protection. It is compliant to in-vehicle industrial standard, like e-Mark. The integrated power ignition functions GPS and 3.5G connectivity are one of the unique points to differentiate PDSV from other products.

Model	PDSB 1000	PDSB 6200	PDSB 6120
Storage	160GB HDD	160GB HDD	160GB HDD
LAN	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps
WLAN	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
WWLAN	built-in 3G module 1 x SIM slot	built-in 3G module 1 x SIM slot	built-in 3G module 1 x SIM slot
Video Output	1 x VGA	2 x VGA, 1 x LVDS	1 x VGA, 1 x DVI-D, 1 x LVDS
Display Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Output Channel	1	1	1
Video Capability	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2 **Quality:** 2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p
Graphic Capability	1920 x 1080 raster image with advanced transition/ animated effect	1920 x 1080 raster image with advanced transition/ animated effect	1920 x 1080 raster image with advanced transition/ animated effect
Audio Output	1 x Line-out	2 x Line-out	2 x Line-out
TV Tuner	Optional	Optional	Optional
RS-232	2	2	2
RS-485	N/A	1	1
USB 2.0	4	4	3
Power Type	Wide Range DC Input from 6~36V	Wide Range DC Input from 6~36V	Wide Range DC Input from 6~36V
Dimension (mm)	180 x 120 x 40	260 x 176 x 50	260 x 176 x 50
Content Support	Video, Image, Flash, RSS News, Web URL, Scrolling Text, Live TV		
Multimedia Format Support	**Video:** MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb **Audio:** MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra **Flash:** SWF, FLV **Graphic:** JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF		
Streaming Protocol Support	http, mms, udp, rtp, rtsp, IPTV	http, mms, udp, rtp, rtsp, IPTV	http, mms, udp, rtp, rtsp, IPTV
Max. Number of Zones	9	9	9
Software Package	PowerDigiS V2	PowerDigiS V2	PowerDigiS V2
Management UI	Web	Web	Web

All-in-one Display Solutions
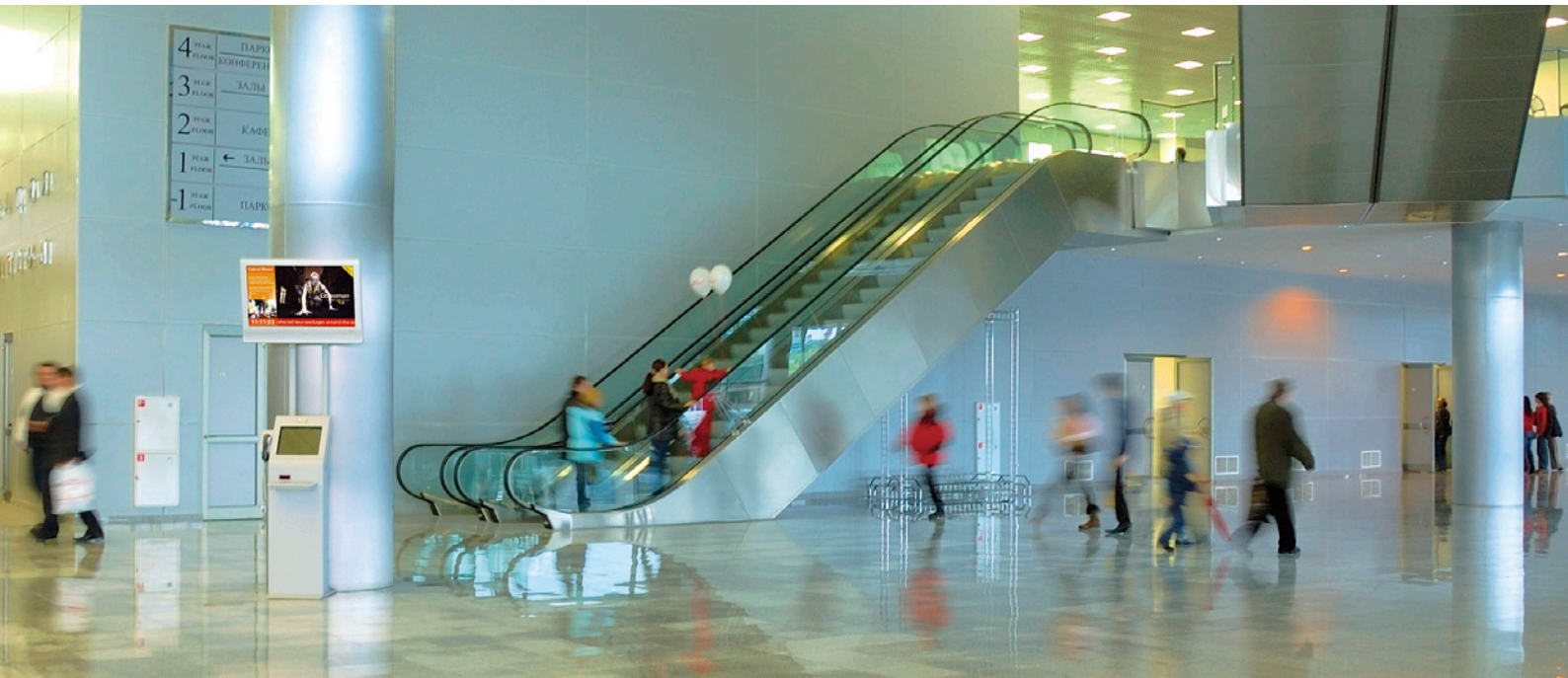
Wave Goodbye to Installation Hassle

When evaluate purchases of digital signage, all-in-one display is definitely one of good options for consideration. It can save abundant time to figure out the compatibilities among machines and different software, wave goodbye to annoying cables, and make it simple during installation.

Applications of All-in-one Display

- Dynamitic Advertising
- Brand Promoting
- Real-time Messaging
- Public Information Sharing
- Corporate Messaging
- Live Entertainment
- Digital Menu/ Poster

Plug and Play ! PDSP Series Offers Easy Installation with Integrated High Performance Hardware and Software

PowerDigiS PDSP series is a cost-effective yet high-performance digital signage player integrated with high quality LCD display designed to address a broad spectrum of digital signage applications.

PDSP is an all-in-one approach digital signage display, which seamlessly integrated with PC-base digital signage player, high quality LCD display, and digital signage software housed in a slim chassis. It is capable of playing Full HD 1080p video and variety of multi-media contents, including still, animated images, scrolling text, web page, and RSS news feed. Based on the energy-efficient and fan-less design, PDSP is made for ultra-reliable long-term operation. Equipped with feature-rich PowerDigiS digital signage software, PDSP is a powerful tool enabling designer to target specific audiences with imaginative and vibrant content. As such, PDSP can be deployed in a wide variety of applications such as public messaging, information sharing, facility guidance, and advertising in hospitality, retail, education, healthcare and transportation.

Features and Benefits

- All-in-one and industrial-grade design for better reliability

- Fan-less design for lower maintenance cost

- Slim and compact dimension for easy wall mount, shelf mount

- Hardware accelerated playback of wide variety of media formats to lower total cost of ownership

- Flexible options for display outputs, single or multiple screens support

- Optimal configuration to handle SD, HD, or Full HD quality of contents

- Variety of multi-media contents support

- Quick multi-media presentation design and publish

- Easy content management with Wireline or wireless LAN

- Remote and central management support

Value Proposition

The PDSP series digital signage display incorporates a high quality 16:9 LCD touch screen panel, a secondary monitor port, industrial motherboard, and PowerDigiS software, making it the perfect solution as digital signage display. Housed within a neat and compact chassis, the PDSP series boasts exceptional I/O connectivity and rich multi-media playing capability.

Model	PDSP 0811	PDSP 2121	PDSP 3221
Storage	160GB HDD	160GB HDD	160GB HDD
LAN	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps	x1, 10/100/1000Mbps
WLAN	Optional	Optional	Optional
Video Output	1 x VGA	1 x VGA	1 x VGA
LCD Size	8.9" 16:9	21.5" 16:9	32" 16:9
Display Resolution	1024 x 600	1920 x 1080	1920 x 1080
Pixel Pitch	0.1905mm (H) x 0.189mm (V)	0.248mm (H) x 0.248mm (V)	0.14225mm (H) x 0.0.42675mm (V)
Luminance	220 cd/m^2	300 cd/m^2	400 cd/m^2
Contrast Ratio	500	1000	4000
Viewing Angle	50 (U), 60 (D), 70 (L), 70 (R)	80 (U), 80 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	30 ms	5 ms	6.5 ms
Output Channel	2 Clone	2 Clone	2 Clone
Video Capability	**Hardware decode:** MPEG1, MPEG2 **Software decode:** VC1, H.264 **Quality:** 1 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p	**Hardware decode:** MPEG1, MPEG2, VC1, H.264 **Quality:** 1 x 1080p or 2 x 720p
Graphic Capability	1 x 1280 x 720 raster image with advanced transition/ animated effect	1 x 1280 x 720 raster image with advanced transition/ animated effect	1 x 1280 x 720 raster image with advanced transition/ animated effect
Audio Output	1 x S/PDIF, 2 x Line-out	1 x Line-in; 1 x Line-out; 1 x Mic-in	1 x Line-in; 1 x Line-out; 1 x Mic-in
TV Tuner	Optional	Optional	Optional
RS-232	2	1	2
USB 2.0	2	4	4
Power Type	12V DC	12V~ 30V DC	24V DC
Dimension (mm)	225 x 139 x 53.9	506.4 x 300.6 x 64.7	753 x 442.6 x 86.1
Touch Screen	5-wire Resistive	5-wire Resistive	5-wire Resistive
Content Support	Video, Image, Flash, RSS News, Web URL, Scrolling Text, Live TV		
Multimedia Format Support	**Video:** MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb **Audio:** MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra **Flash:** SWF, FLV **Graphic:** JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF		
Streaming Protocol Support	http, mms, udp, rtp, rtsp, IPTV	http, mms, udp, rtp, rtsp, IPTV	http, mms, udp, rtp, rtsp, IPTV
Max. Number of Zones	9	9	9
Software Package	PowerDigiS V2	PowerDigiS V2	PowerDigiS V2
Management UI	Web	Web	Web

Self-Service Signage Solutions

Quick Time to Market

Self-service stations are widely installed at shopping malls, retail stores, train stations, and hotels to provide quick service to customers. A well designed self-service station can greatly improve shopping experience and therefore gain more sales. Digital Signage has been proven as one of most effective way to promote retail sales.

As digital signage continues to be a hot market, now self-service vendors are getting into this market trend. More and more self-service stations require an integrated digital signage capability.

Applications of self-service signage

- Digital Signage integration at point-of-sale (POS) system
- Digital Signage integration at kiosk system
- Digital Signage integration at vending machine
- Digital Signage integration at self-ticking system
- Digital Signage integration at petro pump station

Reliable Integrated Digital Signage Capability from NEXCOM

NEXCOM self-service signage solution consists of selected best-of-breed hardware and signage ready kit software components. The tailored solution for self-service application is ideal building block for system integrators, who look for seamlessly integrating digital signage into POS, kiosk, and vending machine applications.
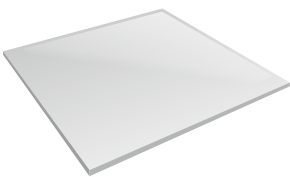
POS/Kiosk Application + Signage Ready Platform = POS/Kiosk with Digital Signage Integration

Signage Ready Kit Framework

Signage Ready Kit software is based on a layered framework. The POS, kiosk, vending machine application developer can engage digital signage thought a set of high level API, which can greatly reduce engineering effort to migrate POS or kiosk applications between different platforms.

The framework consists of :

■ POS and Kiosk application layer

■ Signage API layer

■ Operating system layer: suitable for either Windows XP and XP embedded, or Linux and Linux embedded system.

Signage Ready Hardware Platform

There are a wide range of hardware platforms available from NEXCOM for POS/kiosk applications with an integrated digital signage capability.

Signage Ready API

The following API set are available to configure the display and set signage playing mode :

■ Configure display

■ Start signage in window mode

■ Start signage in full screen mode

■ Stop signage

■ Set event to switch signage mode

The following API set are available to control the "playing" and "scheduling" of designated presentation :

■ Load and start designated presentation program

■ Load and start next presentation program

■ Pause current presentation program

■ Resume paused presentation program

■ Stop presentation program

Features and Benefits

■ Flexible options for variety of industrial-grade and fanless platforms

■ All comes in slim and compact dimension for easy integration

■ Flexible display output options for LVDS, VGA, DVI, and HDMI, single or multiple screens support

■ Optimal configuration to handle SD, HD, or Full HD quality of contents presentation

■ Variety of multi-media contents support

■ Quick multi-media presentation design and publish

■ Easy content management with Wireline or wireless LAN.

■ Remote and central management support

■ Full documentation, programming consultant, and customization support

■ Fast time to market solution for self-service application developer

2012 New Products

NDiS 126

Cost Effective Digital Signage Player

- Intel® Atom™ processor D2700
- Low power consumption
- Compact and fanless
- Dual GbE LAN
- Hyper-threading support
- Intel® GMA 3650 integrated graphic engine

NDiS 127

Cost Effective Digital Signage Player

- AMD G-series T56N 1.65GHz Dual Core APU
- Integrated AMD Radeon™ HD6320 GPU
- Fanless and compact design
- Low power consumption
- 1 x Mini-PCIe slot for TV tuner/ WLAN support
- 6 x USB ports
- DirectX 11 support

NDiS 165

High Performance Digital Signage Player

- AMD eTrinity series platform
- AMD next generation Devastator GPU
- Slim and compact design
- 3 x HDMI
- 4 x USB3.0 support
- WLAN and TV tuner support
- DirectX 11 support

Coming Soon

NDiS 167

High Performance Digital Signage Player

- 3rd generation Intel® Core™ processor
- Intel® integrated HD 4000 graphic engine
- Compact and fanless design
- 3 Independent displays
- USB 3.0, Dual GbE LAN support
- WLAN/ TV tuner support
- DirectX 11 support

NDiS OPS-M50

OPS Digital Signage Platform

- Embedded Intel® Core™ i5-2515E Dual Core processor
- Intel® HD integrated graphics 3000
- Designed compliant with open pluggable standard
- COM Express architecture, easy scalability
- Slot-in integration, easy maintenance
- Supports HDMI, DP, UART, and USB2.0 via JAE 80-pin connector
- TV tuner/ WLAN support

PDSB 127

Bulletin Board Solutions/ Media Player Appliance

- AMD G-series T56N 1.65GHz Dual Core APU
- Integrated AMD Radeon HD6320 GPU
- Fanless and compact design
- DirectX 11 support
- Seamless hardware and software integration for operation reliability
- PowerDigiS V2 software pre-installed
- 185mm (W) x 147mm (D) x 44mm (H)

PDSB 1000

In-Vehicle Signage Solutions

- Intel® Atom™ E640 1.0GHz CPU
- Intel® integrated graphic engine
- Fanless and compact design
- Built-in GPS receiver with optional dead reckoning function
- Support CAN bus
- Wide range DC input from 6~ 36V
- PowerDigiS V2 software pre-installed
- 179.9mm (W) x 114.9mm (D) x 37.5mm (H)

NDiS 540

Multi-Display Embedded Computer Powered by AMD Athlon™ 64/ 64 X2

Support 4 Independent DVI Displays and Audios

Main Features

- AMD Athlon™ 64/ 64 X2 AM2 platform
- ATI Radeon E2400 GPU
- Slim and compact design
- 4 x DVI/ 4 x audio

- Dual GbE LAN
- 6 x serial ports
- TV tuner/ WLAN support

Product Overview

NDiS 540 is specifically designed to be mounted behind the large-size display device such as LCD TV or PDP. NDiS 540 provides four independent DVI and Audio outputs, dual GbE Ethernet with optional wireless connectivity, CF and 2.5" HDD drive bay for storage. NDiS 540 operates on AMD low power Athlon™ 64 X2 series processors. NDiS 540 is ideal media player for digital signage applications demonstrate high impact contents by multiple displays.

Specifications

CPU Support
- Support AMD AM2 Socket Athlon™ 64/ 64 X2 series processor

Chipset
- AMD M690E/ AMD SB600
- ATI Radeon E2400 GPU

Main Memory
- 2 x 240-pin DIMM sockets, support DDR2 800MHz SDRAM memory module up to 4GB

I/O Interface-Front
- 1 x HDD status LED (yellow)
- 1 x Power status LED (green)

I/O Interface-Rear
- +12V DC-in
- 2 x DB9 for RS-232
- 4 x Serial ports (TX & RX only)
- 4 x USB
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 4 x Line-out
- 4 x DVI (2 x DVI-I and 2 x DVI-D)
- ATX Power-on switch
- 1 x Antenna hole for Wi-Fi or TV tuner module

Storage Device
- 1 x SATA 2.5" HDD
- 1 x CF type I/II

Expansion
- 1 x Mini-PCIe for optional WLAN/ TV tuner module

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.7" x 1.7") w/o rubber stand

Power Power Supply
- 1 x External 96W AC/ DC power adapter Input: 100~240VAC Output: +12VDC

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C (HDD inside)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Dimension Drawing
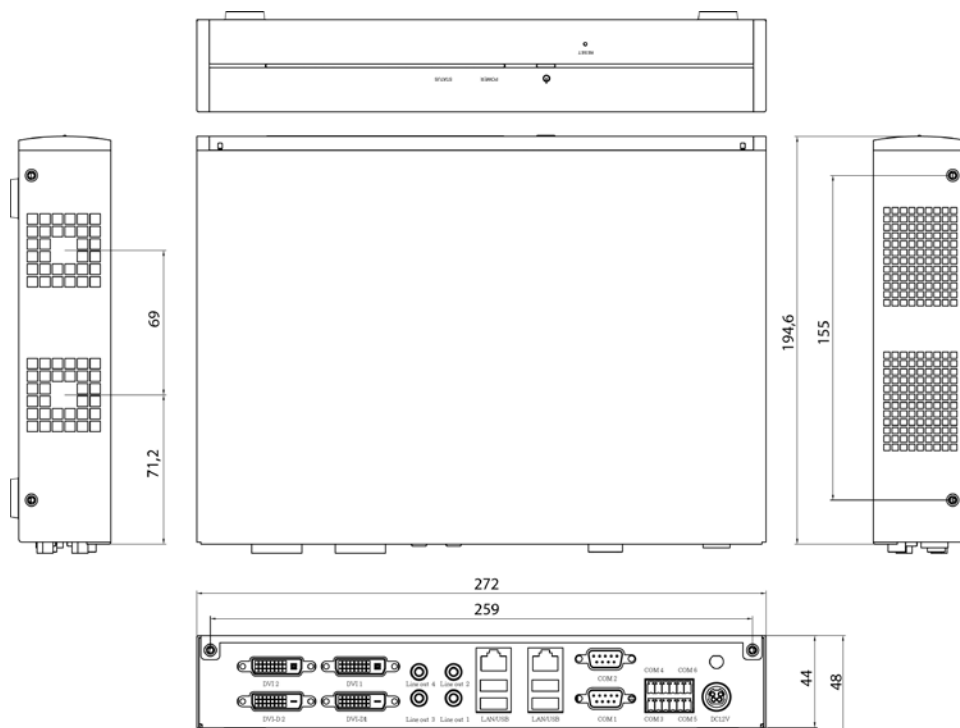
Ordering Information

- **NDiS 540 (P/N: 10W00054000X0)**

  AMD Athlon™ 64/ 64 X2 family processor
  AMD 690E/ SB600 chipset

NDiS 541

Multi-Display Embedded Computer Powered by AMD Phenom™ II X4

Support 4 Independent HDMI Displays and Audios

Main Features

- AMD Athlon™ 64/ 64 X2/ AM3/ Phenom™ II X4 platform
- ATI Radeon E2400 GPU
- Slim and compact design
- 4 x HDMI/ 4 x audio

- GbE LAN
- 6 x Serial ports
- WLAN and TV tuner support

Product Overview

NDiS 541 is specifically designed to be mounted behind the large-size display device such as LCD TV or PDP. NDiS 541 provides four independent HDMI and Audio outputs, GbE Ethernet with optional wireless and TV tuner connectivity, SATA DOM and 2.5" HDD drive bay for storage. NDiS 541 operates on AMD Athlon™ 64 X2 series processors or Phenom™ II X4 processor. Powered by ATI GPU, NDiS 541 can smoothly playback variety of high impact Full HD video. NDiS 541 is an ideal media player for digital signage application to demonstrate high impact content by multiple displays.

Specifications

CPU Support
- Support AMD AM2/ AM3 Socket Athlon™ 64/ 64 X2/ Phenom™ II X4 processor

Chipset
- AMD 780/ AMD SB710
- ATI Radeon E2400 GPU

Main Memory
- 2 x 240-pin DIMM sockets, support DDR2 800MHz SDRAM memory module up to 4GB

I/O Interface-Front
- 1 x HDD status LED (yellow)
- 1 x Power status LED (green)

I/O Interface-Rear
- +12V DC-in
- 2 x DB9 for RS-232
- 4 x Serial ports (TX & RX only)
- 4 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 4 x Line-out
- 4 x HDMI
- ATX Power-on switch
- 2 x Antenna hole for Wi-Fi and TV tuner

Storage Device
- 1 x SATA 2.5" HDD
- 1 x SATA DOM

Expansion
- 1 x Mini-PCIe for optional WLAN tuner module
- 1 x Mini-PCIe for optional TV tuner module

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.7" x 1.7") w/o rubber stand

Power Supply
- 1 x External 96W AC/ DC adapter Input: 100~240VAC Output: +12VDC

### Environment
- Operating temperature: Ambient with air flow from 0°C to 40°C (HDD inside)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (Non-condensing)

Certification
- CE approval
- FCC Class A

NEXCOM

Dimension Drawing
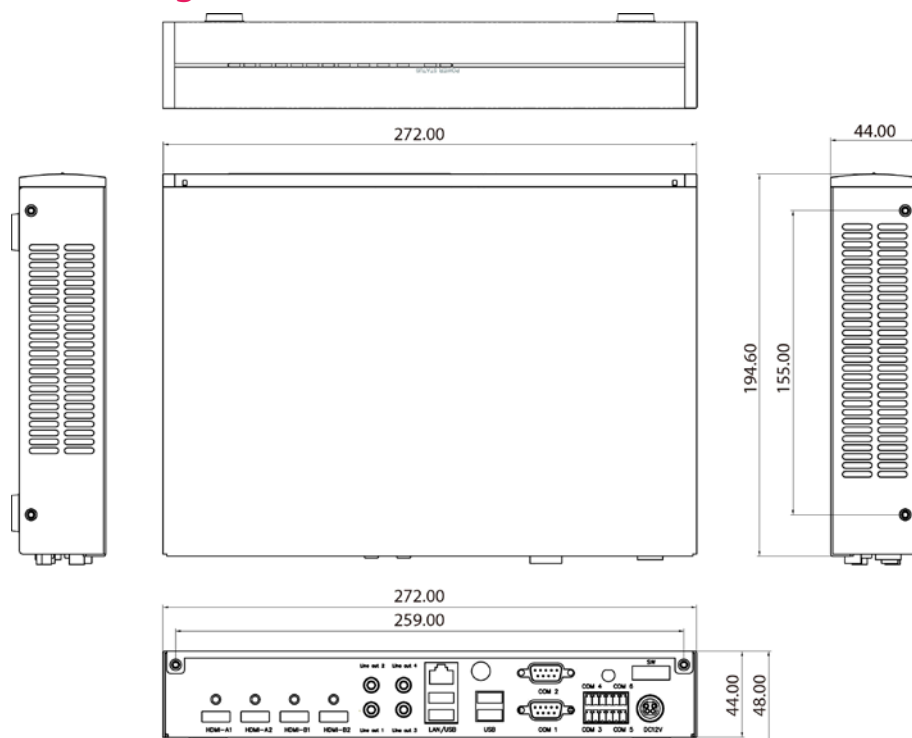
Ordering Information

- **NDiS 541 (P/N: 10W00054100X0)**

  AMD Athlon™ 64/ 64 X2/ Phenom™ II X4 processor
  AMD 780E/ SB710 chipset
  ATI E2400 GPU

NDiS 542

Multi-Display Embedded Computer Powered by Intel® Core™ 2 Quad Processor

Support 4 Independent DVI Displays and Audios on 2x2/ 1x4/ 4x1 Screen Matrix

Main Features

- Intel® Core™ 2 Duo/ Core™ 2 Quad platform
- S3 4300E GPU
- 4 x DVI/ 4 x Audio

- Dual GbE LAN
- 6 x Serial ports
- TV tuner/ WLAN support

Product Overview

NDiS 542 is specifically designed to address the need for application to present high quality contents on multiple displays. NDiS 542 provides four independent DVI and Audio outputs, dual GbE Ethernet with optional wireless connectivity, TV Tuner, and 3.5" HDD drive bay for storage. Powered by Intel® Core™ 2 Duo/ Core™ 2 Quad series processors and S3 4500E GPU, NDiS 542 can smoothly playback multiple Full HD videos. NDiS 542 is an advanced media player for any applications to demonstrate high quality and high impact contents over multiple displays.

Specifications

CPU Support
- Intel® Core™ 2 Duo/ Core™ 2 Quad series processor

Chipset
- Intel® P45+ICH10
- S3 4300E GPU

Main Memory
- 2 x 240-pin DIMM sockets, support DDR3 1066MHz SDRAM memory module up to 4GB

I/O Interface-Front
- 4 x DVI-I
- 4 x Audio Line-out
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 1 x DB9 for RS-232
- 1 x Terminal block for 4 serial ports
- 4 x USB
- 1 x Power switch
- 2 x Antenna hole for Wi-Fi and TV tuner

I/O Interface-Rear
- 1 x DB9 for RS-232
- AC power inlet

Storage Device
- 1 x SATA 3.5" HDD

Expansion
- 1 x Mini-PCIe socket for optional WLAN module
- 1 x Mini-PCIe socket for optional TV tuner module

Dimensions
- 426.2mm (W) x 365mm (D) x 44mm (H)
  (16.8" x 14.4" x 1.7") w/o rubber stand

Power Supply
- Input: 100~240VAC

### Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing
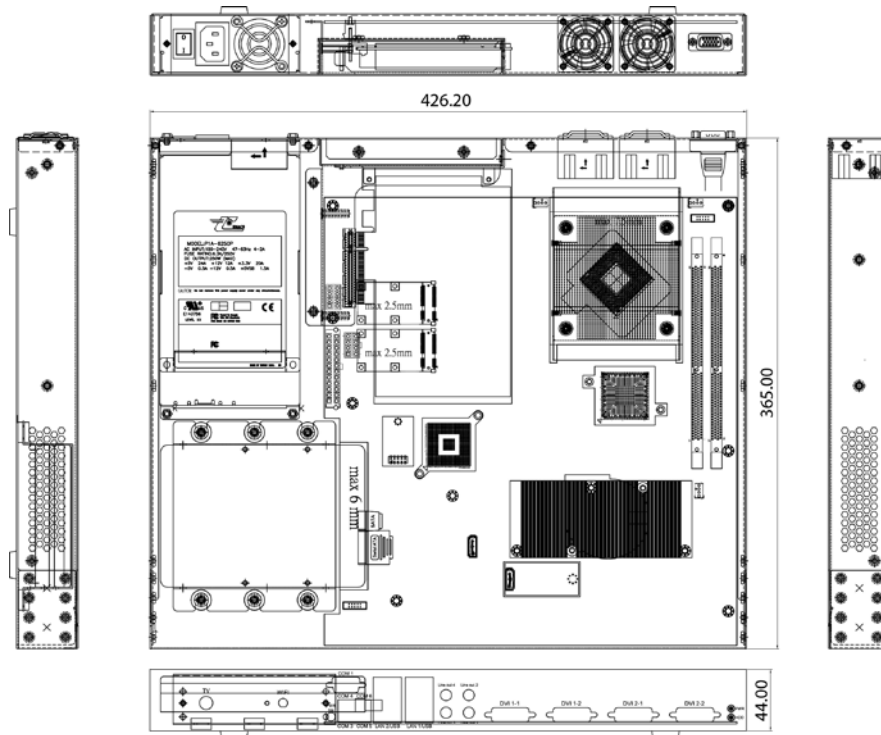
Certification

* CE approval
* FCC Class A

Ordering Information

* **NDiS 542 (P/N: 10W00054200X0)**

  Intel® Core™ 2 Duo/ Core™ 2 Quad family processor
  Intel® P45/ ICH10 chipset

PDSB 111

Product Overview

PDSB 111 is an Intel® Atom™ E620 CPU based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level digital signage applications. PDSB 111 is enclosed in a compact chassis with low power consumption and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 111 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 111 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND,M4A,AAC,wav, wma, ogg, ra

Web/ Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- 1 x HD video, 1 x picture and 1 x scrolling text zone

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 1 x DVI-D
- 1 x Audio Line-out
- 1 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet

Power Supply
- 1 x External 40W AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Dimensions
- 114.9mm (W) x 179.9mm (D) x 37.5mm (H) (4.5" x 7" x 1.5")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -40°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval

Ordering Information

- PDSB 111 (P/N: 10B00B11100X0)

PDSB 125

**Fanless Digital Signage Player Powered by
Intel® Atom™ Dual Core D525 Support Full HD Video Playback**

Product Overview

PDSB 125 is an Intel® Atom™ Dual Core D525 based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level digital signage applications. PDSB 125 is enclosed in a compact chassis with low power consumption and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 125 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 125 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND,M4A,AAC,wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, or two clone displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 2x HD video zones, or 1 x Full HD video zone, or 1 x shockwave flash zone
- Multiple pictures and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 1 x VGA; 1 x HDMI
- 1 x Audio Line-out
- 4 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet

Power Supply
- 1 x External 60W AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Dimensions
- 250.5mm (W) x 195mm (D) x 40mm (H) (9.9" x 7.7" x 1.6")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -40°C to 80°C
- Humidity: 10°C to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSB 125 (P/N: 10B00B12500X0)**

PDSB 127

Fanless Digital Signage Player Powered by AMD G-series Processor

Product Overview

PDSB 127 is an AMD G-Series processor based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for advanced digital signage applications. PDSB 127 is enclosed in a compact chassis and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 127 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 127 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, digital menu board, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND,M4A,AAC,wav, wma, ogg, ra

Web/ Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, two clone displays, or two expanded displays, or two independent displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 2 x HD video zones or 1 x Full HD video zones
- Multiple shockwave flash, pictures, and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 1 x VGA; 1 x HDMI
- 1 x Audio Line-out, 1 x Mic-in
- 6 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 for RS 232

Power Supply
- 1 x External 96W AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Dimensions
- 185mm (W) x 147mm (D) x 48.4mm (H) (7.3" x 5.8" x 1.9")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -40°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSB 127 (P/N: 10B00B12700X0)**

PDSB 166

Support Dual Full HD Video Playback Fanless Embedded Computer Powered by 2nd Generation Intel® Core™ Processor

Product Overview

PDSB 166 is an 2nd Generation Intel® Core™ processor based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level digital signage applications. PDSB 166 is enclosed in a compact chassis with low power consumption and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 166 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 166 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/ train station, schools/ universities and hospitals for dynamic message delivering, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
* Local disk or network server

Video File Format
* MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
* SWF, FLV

Picture File Format
* JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
* MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND,M4A,AAC,wav, wma, ogg, ra

Texr/ Data
* Banner
* RSS news feed

Screen Support
* Single display, or two clone displays
* Presentation can be segmented to different screen layouts
* Up to 9 display zones in each screen layout

Playing Effect
* Scrolling text
* Image transition effect
* Multiple languages

Content Throughput
* 1 x HD video, 1 x picture, and 1 x scrolling text zone

Management Function
* Web-based management with password access control
* Multilingual management interface
* Presentation management
* Presentation scheduling
* System event log
* Presentation playing log
* Presentation play/ pause/ stop control function
* System reboot, shutdown, firmware upgrade

Presentation Design
* Presentation layout and playlist editing function
* Presentation and content file preview function
* Presentation publish function

Operating System
* Ubuntu Linux

Hardware Specifications

Storage Device
* 1 x 2.5" SATA HDD Bay

Video Interface-Rear
* 1 x DB15 VGA port
* 1 x HDMI port
* 1 x DVI

Audio Interface-Rear
* 1 x Line-out/ 1 x Line-in

I/O Interface-Front
* 1 x CF card socket
* 2 x USB 2.0
* 2 x RS-232

I/O Interface-Rear
* 2 x Serial port

LAN Interface-Rear
* 1 x RJ45 with LEDs 10/100Mbps Ethernet
* 2 x Antenna hole for WLAN

Power Supply
* 1 x External 45W AC/ DC power adapter
  AC-in: 100VAC to 240VAC
  DC-out: DC+12V

Dimensions
* 250mm (W) x 195mm (D) x 40mm (H) (9.8" x 7.7" x 1.6")

Environment
* Operating temperature: 0°C to +40°C
* Storage temperature: -20°C to +80°C
* Humidity: 10 to 90% (non-condensing)

Certification
* CE approval
* FCC Class A

Ordering Information

* **PDSB 166 (P/N: 10B00B16600X0)**

PDSB 541

Multi-Display Digital Signage Player Powered by AMD Phenom™ II X4 Quad Core Processor Support 4 Channels HDMI Displays and Audios

Product Overview

PDSB 541 is an AMD Phenom™ II X4 Quad Core CPU based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for advanced digital signage applications. PDSB 541 is enclosed in a compact chassis and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 541 support multiple displays output and is capable to layout displays into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 541 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, digital menu board, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND,M4A,AAC,wav, wma, ogg, ra

Web/ Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, four independent displays, 2x2/ 1x4/ 4x1/ 1x3/ 3x1 expanded displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 4 x HD video zones or 2 Full HD video zones
- Multiple shockwave flash, pictures, and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 4 x HDMI
- 4 x Audio Line-out
- 4 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 for RS 232
- 4 x COM in terminal port (TX & RX only)
- 8 x GPIO terminal (4 in, 4 out)
- 2 x Antenna hole for Wi-Fi and TV tuner

Power Supply
- 1x External 96W AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.7" x 1.7")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 85°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSB 541 (P/N: 10B00B54100X0)**

CMS 1100

Power DigiS

Main Features

- Central digital signage player device management
- Central emergent message
- Central digital signage presentation distribution

- Central digital signage presentation scheduling
- Central content management

System Overview

CMS Series is range of central management server appliances designed to improve the operation efficiency for network based digital signage displays.

Media Player

Media Player

Media Player

Digital Signage Network

Media Player
Presentation scheduling
Presentation playing
Presentation logging

Media Player

Central Management Server
Central player management
Central presentation distribution
Central content hosting
Central emergency message

CMS 1100
CMS 2100

Management Console
Media players operating
Presentation distribution

Design Console
Presentation designing
Presentation publishing

Management Console

Design Console

Equipped with feature-rich PowerDigiS central management software, CMS 1100 is capable to handle up to 100 displays digital signage operation, including device management, presentation distribution, scheduling, and emergency message. It is a perfect solution for smaller scale digital signage display network operation within hospitality, retail, public message, education, and transportation.

Software Specifications

Player Device Management
- Add/ Remove/ Edit PowerDigiS player
- Add/ Remove/ Edit player group
- Start/ Stop/ Pause presentation
- Player/Player group power off/ reset
- Support up to 100 PowerDigiS players

Central Presentation Distribution
- Distribute presentation to player/ player group
- Support scheduled distribution or real-time distribution

Central Presentation Schedule
- Schedule player/ player group presentation playing time table

Central Content Management
- Hosting contents at central management without distribution to player
- Support video/ image/ flash content file hosting

Emergency Message
- Send emergency message to player/ player group
- Support scrolling or non-scrolling text message

Software Update
- Support player/ player group software update

Hardware Specifications

I/O Interface-Front
- Power status/ HDD status/ LAN status LEDs

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type console port
- 2 x USB 2.0 ports
- 4 x Copper LAN ports
- 1 x PCIe slot
- 1 x VGA port

Storage Device
- 1 x 2.5" 160GB HDD
- 1 x CF socket

Chassis Dimensions
- 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.7" x 1.7")

Weight
- Net: 2kg

Ordering Information

- **CMS 1100 (P/N: 10B00110000X0)**

CMS 2100

Digital Signage Central Management Server
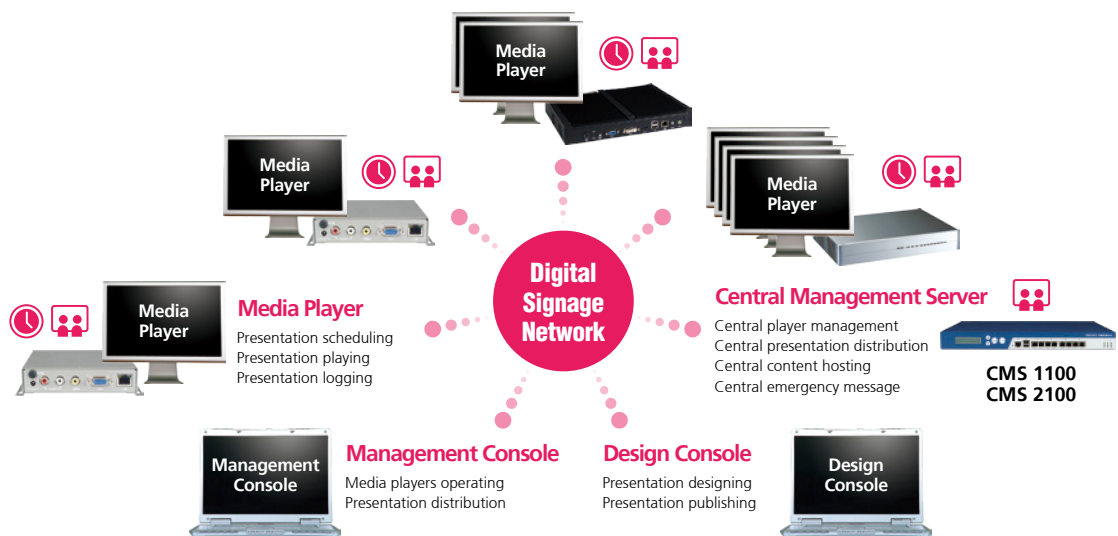
Manage up to 250 Media Players

Main Features

- Central digital signage player device management
- Central emergent message
- Central digital signage presentation distribution

- Central digital signage presentation scheduling
- Central content management

System Overview

CMS Series is range of central management server appliances designed to improve the operation efficiency for network based digital signage displays

Media Player
Presentation scheduling
Presentation playing
Presentation logging

Management Console
Media players operating
Presentation distribution

Design Console
Presentation designing
Presentation publishing

Central Management Server
Central player management
Central presentation distribution
Central content hosting
Central emergency message

CMS 1100
CMS 2100
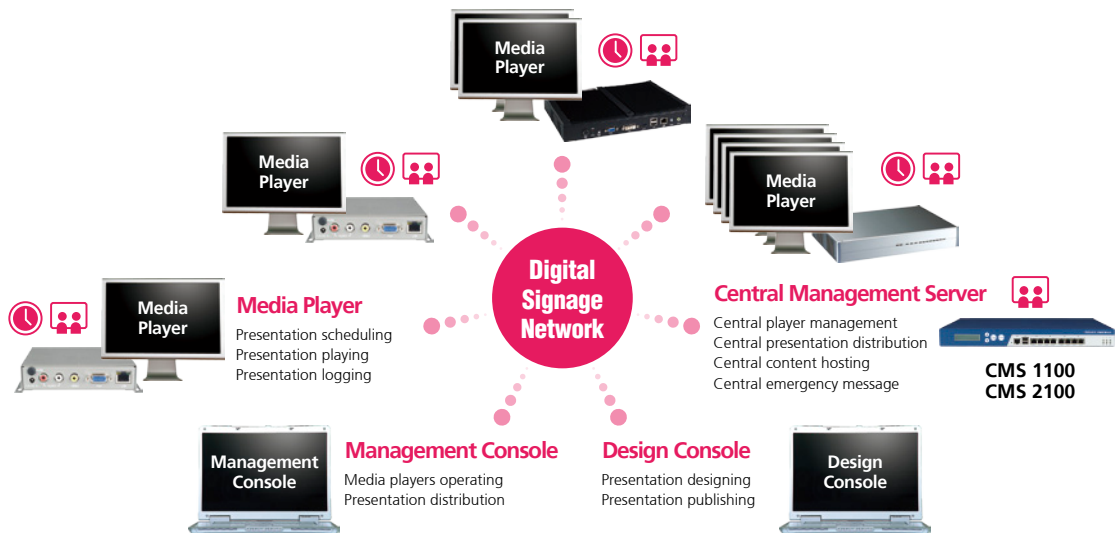
Equipped with feature-rich PowerDigiS central management software, CMS 2100 is capable to handle up to 250 displays digital signage operation, including device management, presentation distribution, scheduling, and emergency message. It is a perfect solution for middle scale digital signage display network operation within hospitality, retail, public message, education, and transportation.

Software Specifications

Player Device Management
- Add/ Remove/ Edit PowerDigiS player
- Add/ Remove/ Edit player group
- Start/ Stop/ Pause presentation
- Player/ Player group power off/ reset
- Support up to 250 PowerDigiS players

Central Presentation Distribution
- Distribute presentation to player/ player group
- Support scheduled distribution or real-time distribution

Central Presentation Schedule
- Schedule player/ player group presentation playing time table

Central Content Management
- Hosting contents at central management without distribution to player
- Support video/ image/ flash content file hosting

Emergency Message
- Send emergency message to player/ player group
- Support scrolling or non-scrolling text message

Software Update
- Support player/ player group software update

Hardware Specifications

I/O Interface-Front
- 2 x LED for power-on and HDD status
- 2 x USB 2.0 ports
- 1 x RJ45 type console port
- 1 x Software reset button
- 4 x Copper LAN ports

I/O Interface-Rear
- 1 x Expansion slot
- 1 x VGA port
- 1 x Power switch

Storage Device
- 1 x 3.5" 320GB HDD
- 1 x CF socket

Chassis Dimensions
- 426.2mm (W) x 365mm (D) x 44mm (H) (16.8" x 14.4" x 1.7")

Weight
- Net: 6.5kg

Ordering Information

- **CMS 2100 (P/N: 10B00210000X0)**

A

A1

A2

A3

A4

A5

PDSB 165

Multi-Display Digital Signage Player Powered by AMD eTrinity Dual Core Processor Support Full HD Video Playback on 1x3/ 3x1 Screen Matrix

Power DigiS

Coming Soon

Product Overview

PDSB 165 is an AMD eTrinity CPU based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for advanced digital signage applications. PDSB 165 is enclosed in a compact chassis and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 165 supports multiple displays output and is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 165 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, digital menu board, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

* Seamless hardware and software integration for operation reliability
* Flexible display configuration
* Presentation design is simple and intuitive
* Presentation publish and scheduling is easy
* Presentation content support is rich and versatile
* Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- 1x3/ 3x1 screen matrix
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 2 x HD video zones or 1 x Full HD video zones
- Multiple shockwave flash, pictures, and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ Pause/ Stop control function
- System reboot, Shutdown, Firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 3 x HDMI
- 1 x Audio Line-out, 1 x Line-in, 1 x SPDIF
- 4 x USB3.0; 2 x USB2.0
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 for RS-232
- 3 x Antenna hole for Wi-Fi and TV tuner

Power Supply
- 1 x External 96W AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H)
  (10.7" x 7.7" x 1.7") w/o mounting bracket

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 85°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSB 165 (P/N: 10B00B16500X0)**

PDSB 542

Multi-Display Digital Signage Player Powered By Intel® Core™ 2 Quad Processor

Support Full HD Video Playback on 2x2/ 1x4/ 4x1 Screen Matrix

Product Overview

PDSB 542 is an Intel® Core™ 2 Quad CPU based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for advanced digital signage applications. PDSB 542 is enclosed in a compact chassis and can be easily integrated to display device such as LCD TV or PDP at site installation. PDSB 542 support multiple displays output and is capable to layout displays into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSB 542 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, digital menu board, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, four independent displays, 2x2/ 1x4/ 4x1 expanded displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 4 x HD video zones or 2 Full HD video zones
- Multiple shockwave flash, pictures, and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ Pause/ Stop control function
- System reboot, Shutdown, Firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 320GB SATA HDD

I/O Interface
- 4 x DVI
- 4 x Audio Line-out
- 4 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 for RS-232
- 4 x COM in terminal port (TX & RX only)
- 8 x GPIO terminal (4 in, 4 out)
- 2 x Antenna hole for Wi-Fi and TV tuner

Power Supply
- Input: 100~240VAC

Dimensions
- 426.2mm (W) x 365mm (D) x 44mm (H)
  (16.8" x 14.4" x 1.7") w/o mounting bracket

Environment
- Operating temperature: Ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 85°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSB 542 (P/N: 10B00B54200X0)**

PDSB 1000

Product Overview

PDSB 1000 is an Intel® Core™ E640 based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for advanced in-vehicle digital signage applications. PDSB 1000 is enclosed in a compact chassis with low power consumption and is with special design to withstand high vibration, extreme temperature variation, and dynamic power supply voltage vehicle working environment.

PDSB 1000 is capable to layout display into multiple rectangle zones and play rich multimedia contents on each zone in accordance with user defined schedule table. PDSB 1000 integrates with state-of-art power ignition function, GSP, and optional 3.5G radio network connectivity. It works perfectly for increasing digital signage applications for dynamic message delivering, advertising, or brand promotion within vehicle cabin, such as train, bus, taxi, or subway.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment
- In-Vehicle Signage Solutions

Software Specifications

Content Source
* Local disk or network server

Video File Format
* MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
* SWF, FLV

Picture File Format
* JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
* MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
* Web URL
* Text files
* RSS news feed

Screen Support
* Single display, or two clone displays
* Portrait or Landscape orientation
* Presentation can be segmented to different screen layouts
* Up to 9 display zones in each screen layout

Playing Effect
* Scrolling text and emergency message
* Image transition effect
* Multiple languages

Content Throughput
* Up to 2 x HD video zones, or 1 Full HD video zones
* Multiple shockwave flash, pictures, and scrolling text zones

Management Function
* Web-based management with password access control
* Multilingual management interface
* Presentation management
* Presentation scheduling
* System event log
* Presentation playing log
* Presentation play/ pause/ stop control function
* System reboot, shutdown, firmware upgrade

Presentation Design
* Presentation layout and playlist editing function
* Presentation and content file preview function
* Presentation publish function

Operating System
* Ubuntu Linux

Hardware Specifications

Storage Device
* 160GB SATA HDD

I/O Interface
* 1 x VGA
* 1 x Audio Line-out, 1 x Mic-in
* 2 x USB
* 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
* 1 x DB9 for RS-232

Power Supply
* Input: +9~ 36VDC
* Output: +5V/ +12VDC
* Programmable low voltage protection threshold
* Programmable 8-level power on/off delay time

Dimensions
* 185mm (W) x 120mm (D) x 40mm (H)
  (7.3" x 4.7" x 1.6") w/o mounting bracket

Environment
* Operating temperature: ambient with air flow from -20 to 70°C
* Storage temperature: -40 to 80°C
* Humidity: 10 to 90% (non-condensing)

Certification
* CE approval
* FCC Class A
* e13 Mark

Ordering Information

* **PDSB 1000 (P/N: 10B0B100000X0)**

* **Optional Accessories**

Part No.	Description
10VK0006006X0	VTK60-WLAN-02, Mini-PCIe WLAN kit (QCOM Q802XKN, w/ antenna & cable)
10VK0006000X0	Sierra MC8790V, GPRS/ UMTS/ HSDPA, w/ internal cable and antenna with packing
10Z00330200X0	NAK 3302, GSM/ GPRS Mini-PCIe module

PDSB 6120

Product Overview

PDSB 6120 is an Intel® Core™ 2 Duo L2400 based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for advanced in-vehicle digital signage applications. PDSB 6120 is enclosed in a compact chassis with low power consumption and is with special design to withstand high vibration, extreme temperature variation, and dynamic power supply voltage vehicle working environment. PDSB 6120 is capable to layout display into multiple rectangle zones and play rich multimedia contents on each zone in accordance with user defined schedule table. Integrated with state-of-art power ignition function, GSP, and optional 3.5G radio network connectivity, PDSB 6120 works perfectly for increasing digital signage applications for dynamic message delivering, advertising, or brand promotion within vehicle cabin, such as train, bus, taxi, or subway.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, or two clone displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 2 x HD video zones, or 1 Full HD video zones
- Multiple shockwave flash, pictures, and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 1 x VGA, 1 x DVI-D, 1 x DB26 LVDS
- 2 x Audio Line-out
- 3 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 for RS-232

Power Supply
- Input: +9~36VDC
- Output: +5V/+12VDC
- Programmable low voltage protection threshold
- Programmable 8-level Power On/Off delay time

Dimensions
- 260mm (W) x 176mm (D) x 50mm (H) (10.2" x 7" x 2") w/o mounting bracket

Environment
- Operating temperature: ambient with air flow from -10°C to 45°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A
- e13 Mark

Ordering Information

- **PDSB 6120 (P/N: 10B0B612000X0)**

- **Optional Accessories**

Part No.	Description
10VK0006006X0	VTK60-WLAN-02, Mini-PCIe WLAN kit (QCOM Q802XKN, w/ antenna & cable)
10VK0006000X0	Sierra MC8790V, GPRS/ UMTS/ HSDPA, w/ internal cable and antenna with packing
10Z00330200X0	NAK 3302, GSM/ GPRS Mini-PCIe module

PDSB 6200

Product Overview

PDSB 6200 is an Intel® Atom™ D510 based digital signage player pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level in-vehicle digital signage applications. PDSB 6200 is enclosed in a compact chassis with low power consumption and is with special design to withstand high vibration, extreme temperature variation, and dynamic power supply voltage vehicle working environment. PDSB 6200 is capable to layout display into multiple rectangle zones and play rich multimedia contents on each zone in accordance with user defined schedule table. Integrated with state-of-art power ignition function, GSP, and optional 3.5G radio network connectivity, PDSB 6200 works perfectly for increasing digital signage applications for dynamic message delivering, advertising, or brand promotion within vehicle cabin, such as train, bus, taxi, or subway.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- Self-contained device for easy deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, or up to three clone displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 1 x HD video zones or 1 x shockwave flash zone
- Multiple pictures and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

I/O Interface
- 2 x VGA, 1 x DB26 LVDS
- 2 x Audio Line-out
- 4 x USB
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 for RS-232, 1 x DB9 for RS-485

Power Supply
- Input: +9~60VDC
- Output: +5V/ +12VDC
- Programmable low voltage protection
- Programmable 8-level power on/off delay time

Dimensions
- 260mm (W) x 176mm (D) x 50mm (H)
  (10.2" x 6.9" x 2.0") w/o mounting bracket

Certification
- CE approval
- FCC Class A
- e13 Mark
- EN50155

Ordering Information

- **PDSB 6200 (P/N: 10B0B620000X0)**

- **Optional Accessories**

Part No.	Description
10VK0006006X0	VTK60-WLAN-02, Mini-PCIe WLAN kit (QCOM Q802XKN, w/ antenna & cable)
10VK0006000X0	Sierra MC8790V, GPRS/ UMTS/ HSDPA, w/ internal cable and antenna with packing
10VK0006007X0	Bluetooth kit, (QCOM QBTM400-01(v7), w/ antenna & cable)

PDSP 0811

Product Overview

PowerDigiS PDSP series is cost effective yet high performance all-in-one digital signage display designed to address a broad spectrum of digital signage applications.

PDSP 0811 is an Intel® Atom™ N270 based digital signage player with built-in high quality 8.9" 16:9 LCD display pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level digital signage applications. PDSP 0811 is a self-contained digital signage display and player device enclosed in a compact chassis with low power consumption. PDSP 0811 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSP 0811 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- All-In-one design, Easy installation, Plug and play

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO,ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, or two clone displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 1 x HD video zone or 1 x shockwave flash zone
- Multiple pictures and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

Display
- TFT LCD panel 8.9" 16:9
- 1024 x 600 WSVGA resolution
- Optional touch screen

I/O Interface
- 1 x DB15 VGA
- 2 x Audio Line-out; 1 x S/PDIF
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x USB 2.0 ports
- 2 x DB9 for RS-232

Power Supply
- 1 x External AC/ DC adapter
  Input: 100~240VAC
  Output: +12VDC

Dimensions
- 225mm (W) x 53.9mm (D) x 139mm (H) (8.86" x 2.12" x 5.47")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 75°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSP 0811 (P/N: 10B0P081100X0)**

A

A1

A2

A3

A4

A5

PDSP 2121

Fanless All-in-One 21" Digital Signage Display
Powered by Intel® Atom™ D525 Processor Support Full HD Video Playback

Product Overview

PowerDigiS PDSP series is cost effective yet high performance all-in-one digital signage display designed to address a broad spectrum of digital signage applications.

PDSP 2121 is an Intel® Atom™ D525 based digital signage player with built-in high quality 21.5" 16:9 LCD display pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level digital signage applications. PDSP 2121 is a self-contained digital signage display and player device enclosed in a compact chassis with low power consumption. PDSP 2121 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSP 2121 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, advertising, or brand promotion.

Presentation Design Tool

The presentation design tool is one of the most valuable parts of the PowerDigiS software. It helps digital signage content creator on intuitive operations to ease the output of presentation to the player. The tool provides quick screen layout design function. The screen layout can be saved as template for reuse. The tool provides an easy drag and drop method to organize contents in playlist and associate playlist to each zones in the screen layout. The tool provides handy preview function for individual content files and final presentation. The presentation design tool also integrates easy upload function to publish presentation design to removable media, central management server, or player.

User's Benefits

- Seamless hardware and software integration for operation reliability
- Flexible display configuration
- Presentation design is simple and intuitive
- Presentation publish and scheduling is easy
- Presentation content support is rich and versatile
- All-In-one design, Easy installation, Plug and play

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO,ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, or two clone displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 2 x HD video zone, or 1 x Full HD video zone, or 1 x shockwave flash zone
- Multiple pictures and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

Display
- TFT LCD panel 21.5" 16:9
- 1920 x 1080 resolution
- Optional touch screen

I/O Interface
- 1 x DB15 VGA
- 1 x Audio Line-out; 1 x Line-in; 1 x Mic-in
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 4 x USB 2.0 ports
- 1 x DB9 for RS-232

Power Supply
- 1 x External AC/ DC adapter
  Input: 100~240VAC
  Output: +12V~ 30VDC

Dimensions
- 506.4mm (W) x 64.7mm (D) x 300.6mm (H) (19.9" x 2.5" x 11.8")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 75°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSP 2121 (P/N: 10B0P212100X0)**

PDSP 3221

Fanless All-in-One 32" Digital Signage Display
Powered by Intel® Atom™ D525 Dual Core Support Full HD Video Playback

Power DigiS

Product Overview

PowerDigiS PDSP series is cost effective yet high performance all-in-one digital signage display designed to address a broad spectrum of digital signage applications.

PDSP 3221 is an Intel® Atom™ D525 Dual Core based digital signage player with built-in high quality 32" 16:9 LCD display pre-loaded with user-friendly digital signage software, the PowerDigiS, targeting for entry-level digital signage applications. PDSP 3221 is a self-contained digital signage display and player device enclosed in a compact chassis with low power consumption. PDSP 3221 is capable to layout display into multiple rectangle zones and play rich multi-media contents on each zone in accordance with user defined schedule table. This makes the PDSP 3221 work perfect for increasing digital signage applications within retail outlets, department store, entertainment venues, restaurants, hotels, bus/train station, schools/universities and hospitals for dynamic message delivering, advertising, or brand promotion.

Presentation Design Tool

The tool is one of the most valuable parts of the PDS system, it helps content creator on intuitive operations to ease the output of presentation. Content files are automatically categorized by media type. The tool provides screen layout template design function and it can be saved for reuse. The tool also provides an easy drag and drop method to organize contents to playlist and associate playlist to each zones. Meanwhile, the tool provides preview function for content files and final presentation. Finally, the tool can integrate easy upload function to publish presentation to media player.

User's Benefits

- Integrated Panel PC with Impressive cost-performance ration and reliability
- Quick presentation layout and reuse
- Easy content management over local LAN and Internet
- Content deployment strategy support with scalability and flexibility
- Variety video and audio types support
- Save manpower on device deployment

Software Specifications

Content Source
- Local disk or network server

Video File Format
- MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb

Flash File Format
- SWF, FLV

Picture File Format
- JPG, BMP, PNG, ICO,ICP, GIF, TIFF, WMF

Sound Format
- MIDI, MPEG-1-Audio LayerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra

Web/Data
- Web URL
- Text files
- RSS news feed

Screen Support
- Single display, or two clone displays
- Portrait or landscape orientation
- Presentation can be segmented to different screen layouts
- Up to 9 display zones in each screen layout

Playing Effect
- Scrolling text and emergency message
- Image transition effect
- Multiple languages

Content Throughput
- Up to 2 x HD video zone, or 1 x Full HD video zone, or 1x shockwave flash zone
- Multiple pictures and scrolling text zones

Management Function
- Web-based management with password access control
- Multilingual management interface
- Presentation management
- Presentation scheduling
- System event log
- Presentation playing log
- Presentation play/ pause/ stop control function
- System reboot, shutdown, firmware upgrade

Presentation Design
- Presentation layout and playlist editing function
- Presentation and content file preview function
- Presentation publish function

Operating System
- Ubuntu Linux

Hardware Specifications

Storage Device
- 160GB SATA HDD

Display
- TFT LCD panel 32" 16:9
- 1920 x 1080 resolution
- Optional touch screen

I/O Interface
- 1 x DB15 VGA
- 1 x Audio Line-out; 1 x Line-in; 1 x Mic-in
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 4 x USB2.0 ports
- 2 x DB9 for RS-232

Power Supply
- 1 x External AC/ DC adapter
  Input: 100~240VAC
  Output: +24VDC

Dimensions
- 753mm (W) x 442.6mm (D) x 86.1mm (H) (29.6" x 17.4" x 3.4")

Environment
- Operating temperature: ambient with air flow from 0°C to 40°C
- Storage temperature: -20°C to 75°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **PDSP 3221 (P/N: 10B0P322100X0)**

MCS

Mobile Computing Solutions

Vehicle Telematics Computer

Vehicle Mount Computer

Vehicle Mount Display

Train Computer

Rugged Mobile Computer

In-Vehicle Computing Solutions

Real-time and Live Access to Information

In-vehicle computing solutions have changed business activities, engaged staff and encouraged new working practices. It allows users to focus on delivering the best service to customers by creating seamless service experience.

Applications of in-vehicle computing

- Vehicle tracking and monitoring
- Real-time voice and data Communication
- Computer-aided dispatch
- Public transportation
- Infotainment systems
- Emergency medical services
- Fleet management

Bus PC Applications
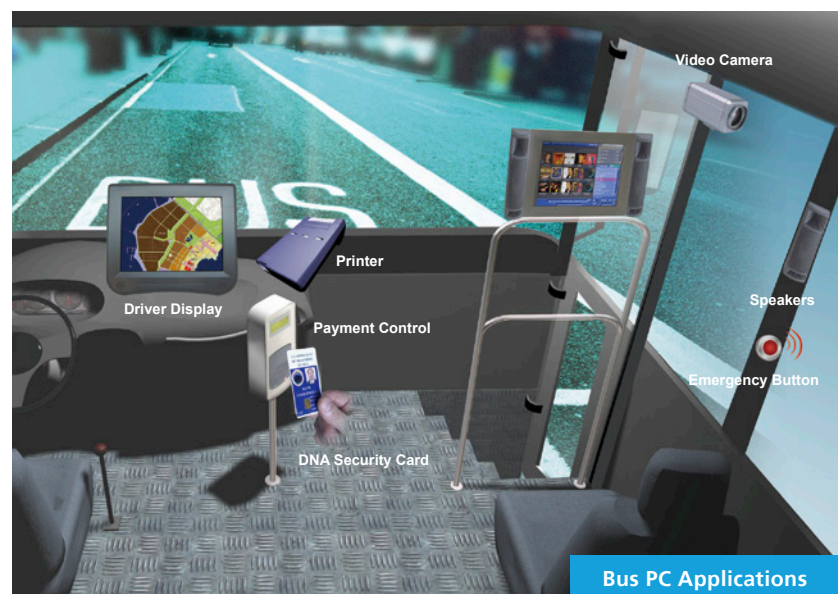
VTC Series, the Intelligent Vehicle Telematics Computer for a Mobile World

VTC series is an tailer-made in-vehicle computer which is suitable for a wide variety of applications within buses, trucks, police cars, taxi cabs and numerous other vehicles.

Based on Intel's energy efficient Atom™ CPU, the compact VTC series is fully compliant with most industry standards for in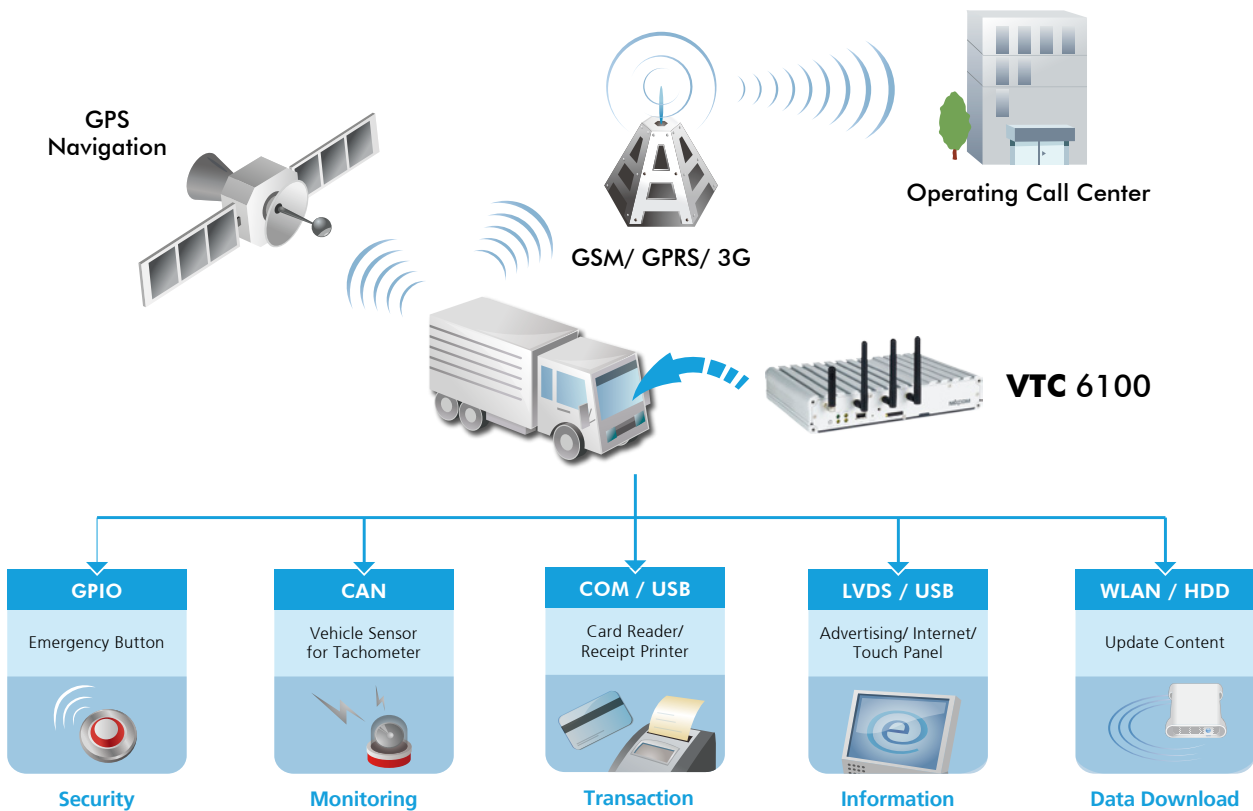-vehicle usage including e-Mark certification and EN50155 which is used in train applications. Designed for usage in even the most extreme environments, the VTC series is capable of operating at -30°C to +60°C degree, and can withstand

dramatic levels of shock and vibration up to 2G. An optional IP65 enclosure further enhances the systems ruggedness.

For in-vehicle infotainment and digital signage applications the VTC series boasts a multitude of display interface connections such as VGA, TV-out and LVDS. Other features include a PCI-104 expansion slot for CAN bus or COM expansion and optional Mini-PCI express WLAN/ 3.5G modules. And to facilitate mobile communication and navigation, the VTC series also has integrated GSM, GPRS, UMTS, HSDPA and GPS.

With built-in power ignition on/ off delay control, the VTC series can adapt to various power supply conditions within transportation environments. For increased flexibility, the series have a wide range power input with an external smart battery backup for uninterrupted power support.

GPS Navigation

Operating Call Center

GSM/ GPRS/ 3G

VTC 6100

GPIO	CAN	COM / USB	LVDS / USB	WLAN / HDD
Emergency Button	Vehicle Sensor for Tachometer	Card Reader/ Receipt Printer	Advertising/ Internet/ Touch Panel	Update Content
Security	**Monitoring**	**Transaction**	**Information**	**Data Download**

Main Features

- Fanless, compact and rugged design
- Integrated GSM/ GPRS/ UMTS/ HSDPA and GPS for mobile communication and navigation
- Wide range of Power ignition control, battery low-voltage protection

- Dual display for CRT and LVDS/ TV out outputs
- Flexible I/O connection options and PCI-104 expansion
- Optional: anti-vibration kit (VTK 33V), Back-up battery kit (VTK 61B) and IP65 kit (VTK 61P)

Rugged Mobile Computer

Managing Operations Efficiently

Mobile rugged computer provides mobility solution to enables field workers to connect to corporate systems, improves real-time communication, increases information accuracy and empowers field-based decision making.

Applications of in-vehicle computing

- Field service
- Warehouse management
- Store operations
- Stock pickup/ distribution
- Portable POS
- Mobile inspection
- Healthcare
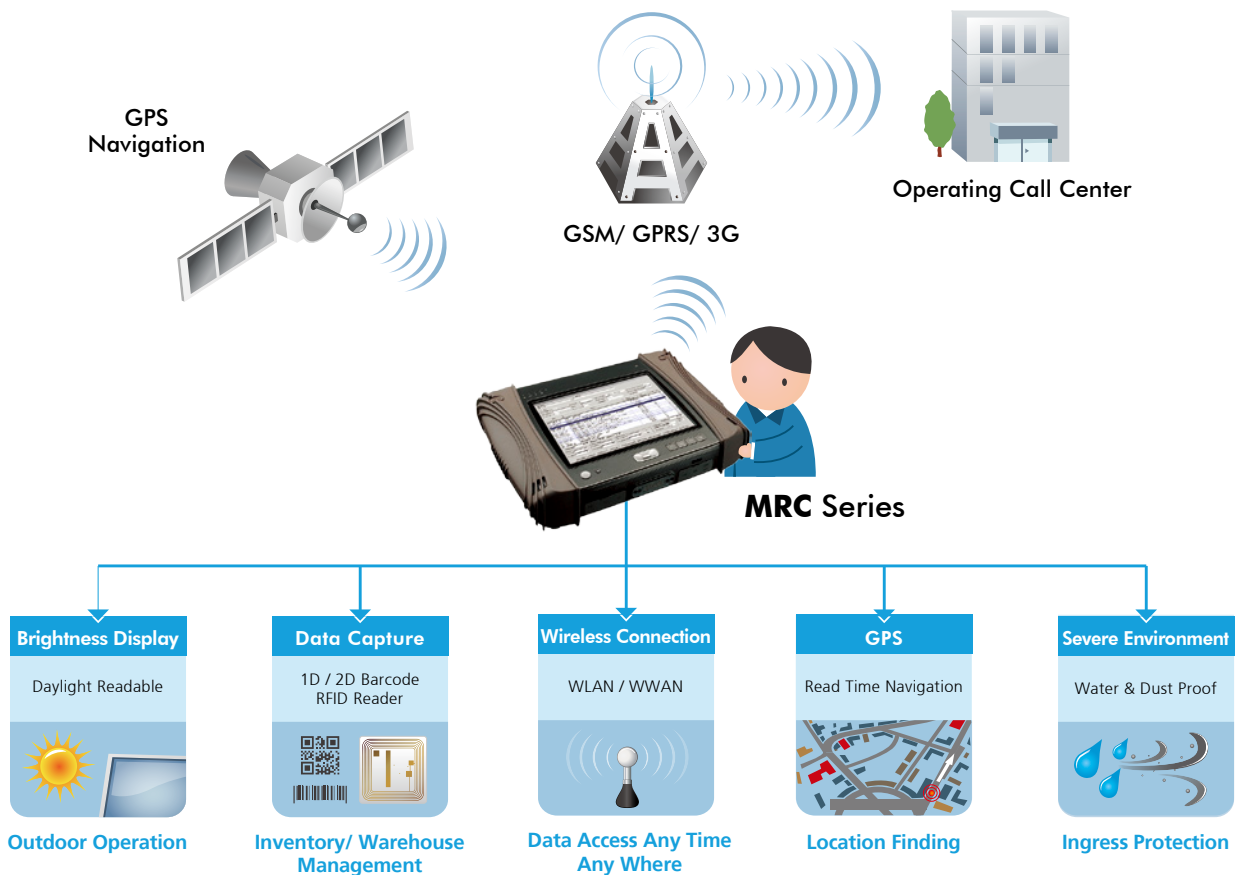- Fleet management
- Public safety

MRC Series, the Rugged Mobile Tablet Computer for Real-time Management

The MRC series is designed for mobile workers requiring real-time information who can not access desktop PC or laptop. Its integrated wireless technology enables field technicians to access job assignments, order parts, conduct research and instantly log service reports. With the powerful 3.5G mobile broadband engine, the MRC series can benefit users by efficiently utilizing existing broadband whilst expanding service coverage.

Some MRC Models also have a hot-swappable battery which further increases the battery life to extend service hours. The IP-54 rated rugged design makes the durable MRC series suitable for use in even harsh environments. For logistic and warehouse management applications, the MRC series is equipped with a built-in barcode scanner and RFID reader.

Onboard GPS and sunlight readable LCD make the MRC series ideal for outdoor applications. Typical applications include, but are not limited to asset management, building automation, mobile CRM, meter reading, on-site troubleshooting, AVL/ GIS/ mapping, field data collection, plant operations, quality control, WIP tracking, surveillance/ inspection, surveying, mobile POS, shelf labeling, fleet management, marine navigation, shipping/ receiving, health care services, etc.

GPS Navigation

GSM/ GPRS/ 3G

Operating Call Center

MRC Series

Brightness Display	Data Capture	Wireless Connection	GPS	Severe Environment
Daylight Readable	1D / 2D Barcode RFID Reader	WLAN / WWAN	Read Time Navigation	Water & Dust Proof
Outdoor Operation	**Inventory/ Warehouse Management**	**Data Access Any Time Any Where**	**Location Finding**	**Ingress Protection**

Main Features

- Daylight reliable display
- Resistive touch LCD display
- Integrated 1D/2D barcode scanner or RFID reader
- Integrated GPS, WLAN, WWAN, and Bluetooth
- Rugged design for MIL-STD810F and IP54

- Drop resistant from a height of 4 feet
- Integrated CMOS
- One navigation key and four programmable function keys
- Hot swappable battery

2012 New Products

VTC 7110
In-Vehicle Computer

- Built-in Intel® Core™ i7 2610UE 1.5GHz processor
- Support two Ethernet LAN ports
- Removal 2.5" SSD tray
- Optional CAN bus in support of SAE J1939 or J1708
- Optional isolation digital input and output
- 9~36V wide range DC power input
- Smarter ignition power on/off, delay-time and low voltage protection
- Optional 8-channel POE
- Rugged fanless design to meet MIL standard

Coming Soon

nROK 3000
Train Computer

- Built-in Intel® Atom™ D525 Dual Core 1.8GHz processor
- Fanless and rugged design
- Easy maintenance
- Rich I/O interface with secure lock
- Removable 2.5" SSD tray
- Isolation RS-232/ 422/ 485 and GPIO
- Optional 24V/ 110V DC input with isolated protection
- Compliant with IP65 design
- Certified by EN50155

VMC 1000
Vehicle Mount Computer

- 7" WVGA TFT LCD with LED backlight
- Compact and fanless design
- Built-in Intel® Atom™ E640 1.0GHz processor
- Wake on RTC/ SMS
- GPS receiver on board
- Variety wireless communication options
- Wide Range DC input from 6~36V
- Compliant with IP54
- Certified by CE/ FCC/ e13 Mark

VMD 2000
Vehicle Mount Display

- 8" SVGA TFT LCD monitor
- Automatic/ Manual brightness control
- Remote system power control
- Support USB 2.0 and card reader
- Camera sensor on front panel (Optional)
- Sunlight readable solution with 1000 nits LCD display
- Front panel compliant with IP54

Coming Soon

Vehicle Telematics Computer

Rugged and Intellignet

The VTC Series is innovative range of telematics PCs, which have been specifically designed for in-vehicle operation within trucks, buses, trains and marine vehicles. This rugged PC based series is housed in an ultra-compact aluminum chassis which has excellent resistance to shock and vibration.

Based on the energy-efficient Intel® Atom™ processor, this compact series has an extremely wide operating temperature and is compliant with most industry standards for in-vehicle operation including eMark and also EN50155.

The VTC series has intelligent ignition detection, and power on/ off delay control that enables it to adapt to various power supply conditions. Further more, power on/ off delay setting and low voltage protection setting can be controlled by software. To facilitate mobile communication, navigation and tracking, the VTC series can support GSM, GPRS, GPS, WCDMA, HSDPA, WLAN and Bluetooth. Multiple display outputs make the VTC series ideal for in-vehicle digital signage applications.

							Comming Soon
Performance				VTC 6200/6200-NI	VTC 6110	VTC 6120	VTC 7110
Extended Temperature		VTC 6100					
Entry	VTC 1000	VTC 2000	VTC 2100				
Intel® Processor	Atom™ E640	Atom™ N270	Atom™ D410	Atom™ D510	Core™ Duo	Core™ 2 Duo	Core™ i7-2610UE

Surveillance in Transit

NEXCOM VTC series has been extended with the launch of VTC 6200, a dedicated computing solution for in-vehicle surveillance applications. The VTC 6200 utilizes the powerful video processing capability of the of Intel® Atom™ Dual Core processer. With additional video capture module, VTC 6200 is the ideal solution for in-vehicle surveillance applications.
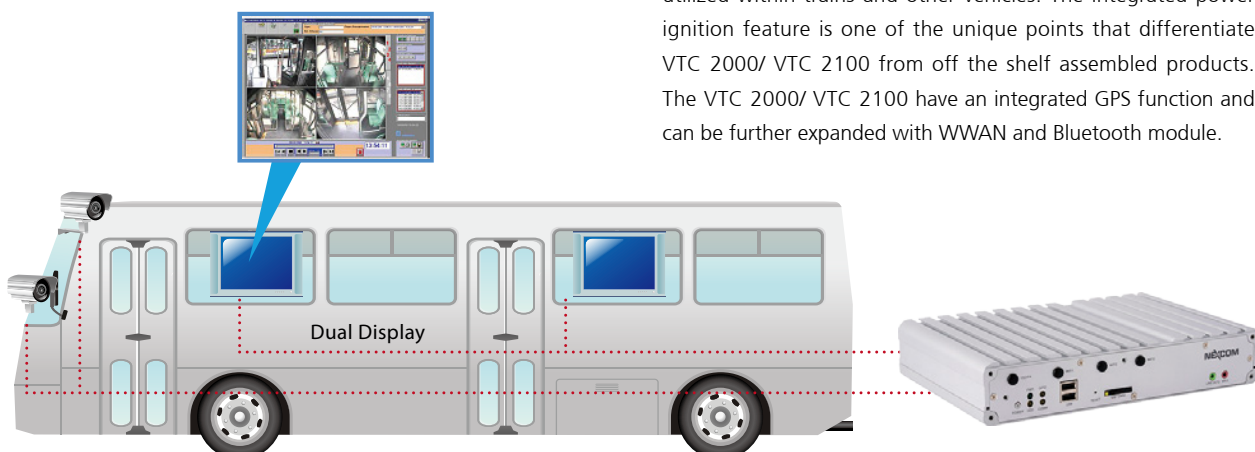
Mobile Digital Signage

VTC 2000/ VTC 2100 is designed as a low-cost, ultra reliable solution for in-vehicle digital signage applications. Based on a low power Intel® Atom™ processor, the compact VTC 2000/ VTC 2100 boasts high availability, a wide operating temperature and improved vibration protection. In addition, the design is certified to eMark and EN50155 standards enabling it to be utilized within trains and other vehicles. The integrated power ignition feature is one of the unique points that differentiate VTC 2000/ VTC 2100 from off the shelf assembled products. The VTC 2000/ VTC 2100 have an integrated GPS function and can be further expanded with WWAN and Bluetooth module.

Dual Display

In-Vehicle Computer

Model	VTC 1000	VTC 2000	VTC 2100	VTC 6100	VTC 6100-DK	VTC 6110
CPU	Intel® Atom™ E640	Intel® Atom™ N270	Intel® Atom™ D410	Intel® Atom™ N270	Intel® Atom™ N270	Intel® Core™ Duo L2400
Chipset	EG20T	945GSE+ICH-7M	ICH-8M	945GSE+ICH-7M	945GSE+ICH-7M	945GME+ICH-7M
Memory	1GB DDR2 Memory on board	DDR2 SO-DIMM up to 2GB	DDR2 667 SO-DIMM up to 2GB	DDR2 SO-DIMM up to 2GB	DDR2 SO-DIMM up to 2GB	DDR2 SO-DIMM up to 2GB
Storage	2.5" SATA SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD
Dimension (mm)	180 x 120 x 40	272 x 190 x 44	248.8 x 175.2 x 47	260 x 176 x 50	260 x 176 x 50	260 x 176 x 50
Power Input	DC 6V to 36V	DC 6V to 36V	DC 8V to 60V	DC 6V to 36V	DC 6V to 36V	DC 6V to 36V
CF Socket	No	1 (Internal)	N/A	1 (Internal)	1 (Internal)	1 (Internal)
Cfast	N/A	N/A	N/A	N/A	N/A	N/A
SATA DOM	No	No	x 1	No	No	No
Ignition Control	Yes w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting
Power Management	low voltage protection & configuration via software	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection
GPS	Internal (Sirf Star III module)	Internal (Sirf Star III module)	Internal (Sirf Star III module)	Internal (Sirf Star III module)	Internal (GPS with Dead-Reckoning)	Internal (Sirf Star III module)
Optional Communication	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA
USB	USB2.0 x 2 (Front)	USB2.0 x 3 (Rear)	USB2.0 x 2 (Front), x 2 (Rear)	USB2.0 x 1 (Front), x 2 (Rear)	USB2.0 x 1 (Front), x 2 (Rear)	USB2.0 x 1 (Front), x 2 (Rear)
COM	RS-232 x 1 (Front) RS-422/ 485 x 2 (Rear)	RS-232 x 2 RS-232/ 485 x 1	RS-232 x 2 RS-485 x 1	RS-232 x 2 RS-232/ 485 x 1	RS-232 x 1 RS-232/ 485 x1	RS-232 x 2 RS-232/485 x 1
CAN Bus	N/A	N/A	N/A	N/A	N/A	N/A
Video Out	VGA or LVDS	DVI-D, VGA	LVDS, VGA x 2	LVDS, DVI, VGA	LVDS, DVI, VGA	LVDS, DVI, VGA
PCI-104	N/A	N/A	1	1	1	1
Ethernet	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1
Audio	Mic-in x 1, Line-out x 1	Mic-in x 1, Line-out x 1	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2
BT	1	1	1	1	1	1
Suspend Mode	S4	S3, S4	S3, S4	S3, S4	S3, S4	S3, S4
Mini-Card	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1
SMBus	1	1	1	1	1	1
DC Output	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)
GPIO	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4
Certification	CE, FCC Class B, e13	CE, FCC Class A	CE, FCC Class B, e13	CE, FCC Class B, e13	CE, FCC Class B, e13	CE, FCC Class B, e13
Operation Temperature	-20℃ to 70℃	-10℃ to 45℃	-10℃ to 50℃	-30℃ to 60℃	-30℃ to 60℃	-30℃ to 50℃

VTC 6120	VTC 6200	VTC 6200-NI	VTC 6200-NI-DK	VTC 6200-VR4	VTC 6201	VTC 7110
Intel® Core™ 2 Duo SL9400	Intel® Atom™ D510	Intel® Atom™ D510	Intel® Atom™ D510	Intel® Atom™ D510	Intel® Atom™ D510	Intel® Core™ i7 2610UE
GS45 +ICH-9M SFF	ICH-8M	ICH-8M	ICH-8M	ICH-8M	ICH-8M	QM67
DDR3 SO-DIMM up to 2GB	DDR2 667 SO-DIMM up to 2GB	DDR2 667 SO-DIMM up to 2GB	DDR2 667 SO-DIMM up to 2GB	DDR2 667 SO-DIMM up to 2GB	DDR2 667 SO-DIMM up to 2GB	DDR3 SO-DIMM up to 4GB
2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD	2.5" HDD/ SSD
260 x 176 x 50	260 x 176 x 70	260 x 176 x 50	260 x 176 x 50W	260 x 176 x 50	260 x 176 x 50	260 x 176 x 50
DC 6V to 36V	DC 8V to 60V	DC 8V to 60V	DC 8V to 60V	DC 8V to 60V	DC 8V to 60V	DC 9V to 36V
1 (Internal)	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	1 (accessible)
No	x1	x1	x1	x1	x1	No
Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting	Yes, w/ 8 level delay time setting
battery deep discharge protection	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection	battery deep discharge protection
Internal (Sirf Star III module)	Internal (Sirf Star III module)	Internal (Sirf Star III module)	Internal (GPS with Dead-Reckoning)	Internal (Sirf Star III module)	Internal (Sirf Star III module)	onboard (uBlox 6Q)
GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA	GPRS/ UMTS/ HSDPA
USB2.0 x 1 (Front), x 2 (Rear)	USB2.0 x 2 (Front), x 2 (Rear)	USB2.0 x 2 (Front)R, x 2 (Rear)	USB2.0 x 2 (Front)R, x 2 (Rear)	USB2.0 x 2 (Front)R, x 2 (Rear)	USB2.0 x 2 (Front)R, x 2 (Rear)	USB2.0 x 1 (Front), x 2 (Rear)
RS-232 x 2 RS-232/ 485 x 1	RS-232 x 4 (COM1, COM2 with Isolation) RS-485 x 1 with Isolation	RS-232 x 2 RS-485 x 1	RS-232 x 1 RS-485 x 1	RS-232 x 1 RS-485 x 1	RS-232 x 2 RS-485 x 1	RS-232 x 1 RS-485/ 422 x1
N/A	N/A	N/A	N/A	N/A	N/A	optional (replace with RS232
LVDS, DVI, VGA	LVDS, VGA x 2 (Clone mode)	LVDS, VGA x 2 (Clone mode)	LVDS, VGA x 2 (Clone mode)	LVDS, VGA x 2 (Clone mode)	LVDS, VGA x 2 (Clone mode)	LVDS or DVI, VGA
1	1	1	1	1	1	1
10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 1	10/100/1000 x 3	10/100/1000 x 2
Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2	Mic-in x 2, Line-out x 2
1	1	1	1	1	1	1
S3, S4	S3, S4	S3, S4	S3, S4	S3, S4	S3, S4	S3, S4
(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1	USB x 1	(PCIe+USB) x 1, USB x 7	(PCIe+USB) x1, USB x 1
1	1	1	1	1	1	1
5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	5V (1A), 12V (1A)	12V (4A)
In x 4, Out x 4	In x 4, Out x 4 (with Isolation)	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4	In x 4, Out x 4
CE, FCC Class B	CE, FCC Class B, e13	CE, FCC Class B, e13	CE, FCC Class B, e13	CE, FCC Class B, e13	CE, FCC Class B, e13	CE, FCC Class B, e13
-30℃ to 50℃	-30℃ to 60℃	-30℃ to 60℃	-30℃ to 60℃	-30℃ to 50℃	-30℃ to 60℃	-30℃ to 60℃

Coming Soon

Vehicle Mount Computer

Model	VMC 1000	VMC 3000
		Comming Soon
LCD Size	7" TFT LCD	10.4" TFT LCD
Resolution	800 x 480	1024 x 768
Brightness	500cd/m²	400cd/m²
Contrast Ratio	600:1	500:1
View Angle	V:60/60 H:70/70	V:60/60 H:70/70
Brightness Adjustment	Auto via ligth sensor	Auto via ligth sensor
Audio	Built-in Speaker x 2	Built-in Speaker x 2
Touch Screen	4-wire antiglare	5-wire antiglare
Camera	1 (option)	N/A
Control Button	Monitor power button x 1 Brightness control x 2 Volume control x 2	Monitor power button x 1 Brightness control x 2
Mounting	VESA 75	VESA 100
Ingress Protection	IP54	IP65
Dimension (mm)	182 x 138 x 50	TDB
CPU	Intel® Atom™ E640	Intel® Atom™ D525
Chipset	EG20T	ICH8M
Memory	1GB DDR2 Memory on board	1GB DDR2 Memory on board
Storage Interface	mSATA	2.5" SATA/ Cfast
Power Input	DC 6V to 36V	DC 6V to 36V
Ignition Control	Yes w/ 8 level delay time setting	Yes w/ 8 level delay time setting
Power Management	low voltage protection & configuration via software	low voltage protection & configuration via software
GPS	uBlox6 on board	uBlox6 on board
Optional Communication	WLAN GPRS/ UMTS/ HSDPA	WLAN Bluetooth GPRS/ UMTS/ HSDPA
USB	USB2.0 x3	USB2.0 x4
COM	RS232 x 1 RS-232/ RS-422/ RS-485 x 1	RS-232 x 2 (COM1 with 0/5/12V)
CAN Bus	N/A	option
Ethernet	10/100/1000 x 1	10/100/1000 x 1
Audio	Mic-in x 1, Line-out x 1	Mic-in x 1, Line-out x 1
Suspend Mode	S4	S3, S4
Mini-Card	(PCIe+USB) x 1, USB x 1	(PCIe+USB) x 1, USB x 1
GPIO	In x 3, Out x 3	N/A
Certification	CE, FCC Class B, e13	CE, FCC Class A, e13
Operation Temperature	-20℃ to 50℃	-30℃ to 50℃

Train PC

Model	nROK 500	nROK 3000
CPU	Intel® Atom™ D525	Intel® Atom™ D525
Chipset	ICH-8M	ICH-8M
Memory	Pre-installed with DDR2 667 2G memory module	DDR3 1333 SO-DIMM up to 2GB
Storage	2.5" SATA SSD Tray	Removable 2.5" SATA SSD tray
Dimension (mm)	264mm (W) x 142mm (D) x 65mm (H)	260mm (W) x 178mm (D) x 70mm (H)
Power Input	DC 24V (w/ Isolation protection)	DC 24V (w/ Isolation protection) Optional DC 110V
CFast Socket	CF socket x 1	CFast socket x 1
Ignition Control	Yes	option
Power Management	ATX (Support WoL)	battery deep discharge protection
GPS	N/A	Internal (Sirf Star III module)
Optional Communication	GPRS/ UMTS/ HSDPA	WLAN Bluetooth GPRS/ UMTS/ HSDPA
USB	USB 2.0 x 2	USB 2.0 x 3
COM	RS232 x 1 RS232/422/485 x 1	RS232 x 1 RS422 x 1, RS485 x 2
Video Out	VGA x1	VGA x 1; DVI-D x 1
PCI-104	N/A	1
Ethernet	10/100 M12 LAN x 1	10/100/1000 x 3
Audio	Mic-in x 1, Line-out x 1	Mic-in x 1, Line-out x 1
Suspend Mode	S1, S5	S3, S4
Mini-Card	Mini-PCIe socket x 1	(PCIe+USB) x1, USB x 1
DC Output	optional, 12V	N/A
GPIO	Internal, In x 4, Out x 4	In x 4, Out x 4
Certification	EN50155	CE, FCC Class A, EN50155
Ingress protection	N/A	IP65
Operation Temperature	-25℃ to 55℃	-40℃ to55℃

Vehicle Mount Display

Model	VMD 1000	VMD 1001	Comming Soon VMD 2000	Comming Soon VMD 2001
LCD Size	7" TFT LCD	7" TFT LCD	8" TFT LCD	8" TFT LCD
Resolution	800 x 480	800 x 480	800 x 600	800 x 600
Brightness	500cd/m²	500cd/m²	400cd/m²	400cd/m²
Contrast Ratio	600:1	600:1	500:1	500:1
View Angle	V:60/60 H:70/70	V:60/60 H:70/70	V:50/70 H:70/70	V:50/70 H:70/70
Brightness Adjustment	Auto via ligth sensor	Auto via ligth sensor	Auto via ligth sensor	Auto via ligth sensor
Audio	Built-in Speaker x 2	Built-in Speaker x 2	Built-in Speaker x 2	Built-in Speaker x 2
Touch Screen	4-wire antiglare	4-wire antiglare	4-wire antiglare	4-wire antiglare
Camera	1 (option)	1 (option)	1 (option)	1 (option)
Control Button	Monitor power button x 1 Brightness control x 2 Volume control x 2	Monitor power button x 1 Brightness control x 2 Volume control x 2	Monitor power button x 1 Brightness control x 2 Volume control x 2	Monitor power button x 1 Brightness control x 2 Volume control x 2
Mounting	VESA 75	VESA 75	VESA 100	VESA 100
Ingress Protection	Front panel IP54	Front panel IP54	Front panel IP54	Front panel IP54
Dimension (mm)	182 x 138 x 36.3	182 x 138 x 36.3	207 x 173 x 36.7	207 x 173 x 36.7
Power Input	12V (via LVDS)	6 - 36V	12V (via LVDS)	6 ~ 36V
I / O	DVI connector (Integrate LVDS, USB x1, 12V x 1, 5V x 1) USB port x 1 SD/ MMC/ MS Card Reader x 1 Remote system power button (for remote power control output) Line-out x 1; Mic-in x 1(lateral side) Line-out x 1; Mic-in x 1 (buttom side; pass through)	VGA x 1 USB port x 2 SD/ MMC/ MS Card Reader x 1 Line-out x 1; Line-in x 1	DVI connector (Integrate LVDS, USB x 1, 12V x 1, 5V x 1) USB port x 1 SD/ MMC/ MS Card Reader x 1 Remote system power button (for remote power control output) Line-out x 1; Mic-in x 1(lateral side) Line-out x 1; Mic-in x 1 (buttom side; pass through)	VGA x 1 USB port x 2 SD/ MMC/ MS Card Reader x 1 Line-out x 1; Line-in x 1
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Operation Temperature	-20℃ to 70℃	-20℃ to 70℃	-20℃ to 60℃	-20℃ to 60℃

Accessories

Model	VTK 61P	VTK 61B	VTK 33V
Description	Anti-dust & waterproof kit	Backup Battery for VTC series	Anit-vibration Kit
SPEC	IP65 compliant	Input voltage: 6~36V with ignition control; Output voltage: 12V; Battery pack capacity: around 107W	2G@10~500Hz with automotive HDD; 3G@5~500Hz random with CF
Operation Temperature	-20℃ to 60℃	0℃ to 55℃	-20℃ to 60℃
Dimension (mm)	260 x 306 x 50 (containing the main device)	238 x 150 x 25	320 x 180 x 86.5

Rugged Mobile Computer

Increased Connectivity for Mobile Computing

NEXCOM Mobile Computing Solutions (MCS) product series has been introduced to focus on the mobile computing market, which is committed to enhancing the integration of wireless, portable and durable computing technologies. The NEXCOM product line up fulfills customer requirements for mobility, performance and versatility. Furthermore, to enable a broad spectrum of applications to be addressed, NEXCOM offers a wide variety of accessories including a vehicle docking station, holding bracket, desktop docking station with integrated one slot of battery charger. The MCS product series is therefore the perfect companion for field service, warehousing, logistics, and retail applications.

Environment	Energy Efficient Series Atom™ Z Series	Performance Series Atom™ N Series
Outdoor	MRC 2100-E	MRC 2300
Indoor	MRC 2000-E	MRC 2200

Various Choices for Accessories- Desktop Docking Station

The desktop docking station is equipped with 4 USB ports and 1 x Giga Ethernet port for fast internet connection. The desktop docking station is available with an integrated battery charger which enables users to charge the additional battery pack whilst working on the Tablet PC. Whilst the docking station's thoughtful adjustable docking feet enable users to view the screen at the optimum angle. This wonderful docking station makes the MRC Series suitable for both mobile and desk based applications.

The Ideal Rugged Tablet PC Designed for Mobile Applications

NEXCOM has expanded its range of Mobile Computing Solutions with the launch of the Intel® Luna Pier Refresh based MRC 2200/ 2300 Tablet PC which feature the Intel ® Atom™ N450 processor and ICH8M chipset. Featuring an 8" TFT with LED backlight, MRC 2200/ 2300 has a number of features including low power consumption, a 5-wire touch screen and outstanding endurance and reliability in any tough environment.

Specially designed for greater efficiency, MRC 2200/ 2300 supports a hot swappable battery which enables users to continue working for longer without having to power down the Tablet PC. In addition, an optional backup battery can support operation of between 6 and 8 hours. Customers can choose between MRC 2200 which is suitable for in-store/ warehouse applications and MRC 2300 which is designed for in-field/ outside use. MRC 2200 is therefore suitable for stock picking and distribution, warehouse management or in-store operations, whilst MRC 2300 contains a special sunlight readable screen, so is the ideal rugged computing solution for field service, fleet management, public safety and other external applications.

Various Choices for Accessories- Vehicle Docking Station

To enable MRC 2200/ 2300 Tablet PC to be installed into a diverse number of locations, a vehicle docking station is available which is RAM and VESA mount compatible. The docking station supports 2 x USB ports, 1 x COM and 1 x Ethernet with IP-67 sealed connectors. In addition, the docking station is equipped with 2 x SMA type RF connectors which enable the GPS signal to pass from internal antenna to external antenna for improved and accurate connection performance. An internal mini card slot for expansion and a wide range of DC power inputs from 9V to 36V, make this feature packed docking station ideal for operation within forklift trucks and other vehicles.

Model				
	MRC 2000-E	**MRC 2100-E**	**MRC 2200**	**MRC 2300**
LCD	8.4" SVGA TFT (CCFL type)	8.4" SVGA TFT (CCFL type)	8" SVGA TFT (LED type)	8" SVGA TFT (LED type)
Touch	4-wire Resistive	4-wire Resistive w/ Sunlight Readable	5-wire Resistive	5-wire Resistive w/ Sunlight Readable
CPU	Intel® Atom™Z510@1.1GHz	Intel® Atom™Z530@1.6GHz	Intel® Atom™ N450 1.6GHz	Intel® Atom™ N450 1.6GHz
Memory	1GB DDR2-667	1GB DDR2-667	1GB DDR2-667	1GB DDR2-667
Storage	8G SSD PATA interface	8G SSD PATA interface	8G SSD SATA interface	8G SSD/120G HDD SATA interface
Wireless	802.11 b/g/n Option: BT v2.0 GSM/ GPRS/ 3.5G	802.11 b/g/n BT v2.0 Option: GSM/ GPRS/ 3.5G	802.11 b/g/n Option: BT v2.0 GSM/ GPRS/ 3.5G	802.11 b/g/n BT v2.0 Option: GSM/ GPRS/ 3.5G
GPS	Option: GPS Support	Built in GPS	Option: GPS Support	Built in GPS
Battery	Removable Li-on Battery		Removable Li-on Battery/ Support swappable (Optional dual batteries)	
Optional Modules	2.0M pixel CCD at the rear	2.0M pixel CCD at the rear	Rear: 2.0M pixel CCD or Front: 2M pixel CCD (Option)	Rear: 2.0M pixel CCD or Front: 2M pixel CCD (Option)
	Barcode Scanner or RFID module/ Mobile Board Band Module			
Power	DC in 19V/ 3.42A	DC in 19V/ 3.42A	DC in 19V/ 3.42A	DC in 19V/ 3.42A
IO Interface	Mic-in/ Line-out/ 4 programming keys/ USB 2.0 x 2; USB client x 1 Finger Print		Mic-in/ Line-out/ 4 programming keys/ USB 2.0 x 3 (2 std + 1 mini type)	
IP Rating	IP54	IP54	IP54	IP54
O.P Temperature	-20℃ to 50℃ operating temperature			
Wieght	3LB w/o Rubber	3LB w/o Rubber	2.3LB w/o Rubber	2.3LB w/o Rubber

MRC Docking

Model		
	MTK-DOCK-01	**MTK-DOCK-02**
Power Input	9 ~ 36V	19V
USB 2.0	2 (IP67 & lockable connector)	4
LAN	1 10/100 base-T (IP67& lockable connector)	1 10/100/1000 base-T
COM	1	Option
Expension	1 mini card socket	1 memory card slot (option)
OP Temperature	-20℃ to 50℃	-20℃ to 50℃
Support Mounting Hole	RAM202C & VESA 75	VESA 75
Deimension (mm)	296 x 268 x 109	235.7 x 207 x 150

VTC 1000

Intel® Atom™ E640 Fanless In-Vehicle Computer

Main Features

- Compact and fanless design
- Built-in GPS receiver with pptional dead reckoning function
- Variety Wireless communication options
- Wake on RTC/ SMS via WWAN Module (Option)

- Wide range DC input from 6~ 36V
- Smart power management with Ignition on/off delay via software Control and low voltage protection
- Certified by CE/ FCC/ e13 Mark

Product Overview

VTC 1000, a compact rugged computer box, is designed for the transportation segment, especial for the vehicle with limited space to house the computer system. Same as all VTC series, the fanless and wide temperature support are reserved in VTC 1000 design. VTC 1000 adopts the Intel® latest processor, Atom™ E640 series. VTC 1000 does not compromise with its space to scarify its functional features. An advanced GPS receiver with dead reckoning is available as an option as well as the wireless communication. VTC 1000 is the best choice with the cost effective solution for your vehicle application.

Specifications

Main Chipset
- EG20T

CPU
- Intel® Atom™ E640 1.0GHz

Memory
- On-board DDR2 1GB (up to 2GB)

Expansion
- Mini-PCIe socket (PCIe + USB) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)
- 1 x Bluetooth module (optional)
- 1 x GPS module

I/O Interface-Front
- 2 x LED indicators for power status and wireless communication
- 1 x COM port (RS-232)
- 2 x USB port
- 1 x RJ45 for 10/ 100/ 1000 Ethernet
- 1 x SIM card socket
- 1 x System reset button
- 1 x Mic-in, 1 x Line-out
- 1 x Power button
- 3 x antenna hole reserved for SMA-type antenna connector (HSDPA/ WLAN/ BT)

I/O Interface-Rear
- 1 x com port (2 x RS-422; or 2 x RS-485; or 1 x RS-422 and 1 x RS-485)
- 1 x com port (2 x GPIO)
- 1 x DB15 VGA port or DB26 LVDS (with 12V for backlight & USB2.0)
- 1 x DC output (5V/1A, 12V/1A)
- 1 x DC input via 3-pin connector

Expandable Storage
- 1 x 2.5" SATA SSD Bay

Power Management
- Selectable boot-up & shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, software detectable
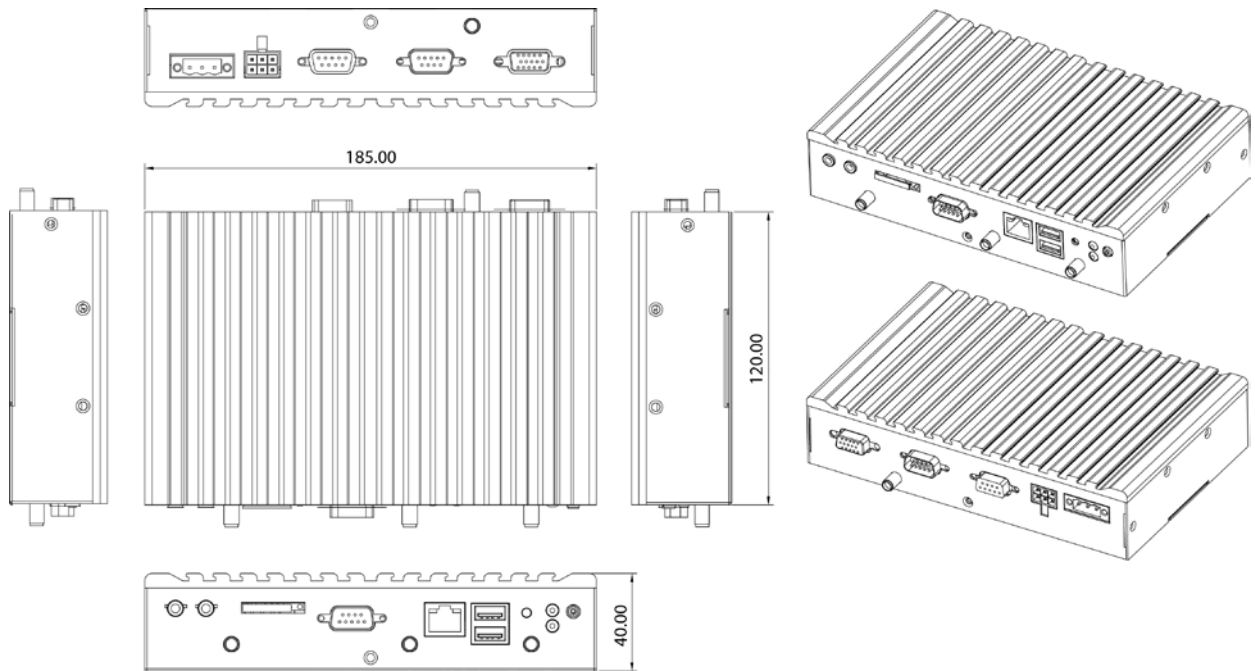- Support S4 suspend mode; wake on RTC/ SMS

Dimensions
- 185 mm (W) x 120 mm (D) x 40 mm (H) (7.3" x 4.7" x 1.6")
- 1 Kg (2.20 Lb)

Construction
- Aluminum top case with metal sheet

Dimension Drawing

Environment

- Operating temperatures
  Ambient with air: -20°C to 70°C (SSD)
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g @5~500 Hz with SSD
- Vibration:
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle – Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test

Shock

- Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers= 20g
- Crash hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment= 75g

Certifications

- CE approval
- FCC Class B
- e13 Mark

Ordering Information

- **VTC 1000 (P/N: 10V00100001X0)**
  Intel® Atom™ E640 1.0GHz processor with 1GB DDR2, GPS module and GPS antenna, and VGA output

- **VTC 1000-2G (P/N: 10V00100002X0)**
  Intel® Atom™ E640 1.0GHz processor with 2GB DDR2, GPS module and GPS antenna, and VGA output

- **VTC 1000-LV (P/N: 10V00100003X0)**
  Intel® Atom™ E640 1.0GHz processor with 1GB DDR2, GPS module and GPS antenna, and LVDS output

- **VTC 1000-DK (P/N: 10V00100004X0)**
  Intel® Atom™ E640 1.0GHz processor with 1GB DDR2, GPS module in support of dead-reckoning and GPS antenna, and VGA output

- **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0061B00X0	VTK61B, back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter: 120-AAB (N09001),120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SAM30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 2000

Intel® Atom™ N270 Fanless In-Vehicle Computer

Main Features

- Intel® Atom™ N270 processor
- Availability of GSM/ GPRS/ UMTS/ HSDPA/ GPS/ BT
- e13 certification
- Power ignition on/off and delay-time control
- Low voltage protection
- High anti-vibration performance

Product Overview

VTC 2000 is designed as a low cost, ultra reliable solution for in-vehicle digital signage applications. Based on a low power Intel® Atom™ processor, the VTC 2000 boasts high availability, a wide operating temperature and improved vibration protection. In addition, the design is certified to eMark standards enabling it to be utilized within vehicles. The integrated power ignition feature is one of the unique points that differentiate VTC 2000 from off-the-shelf assembled products. The VTC 2000 has an integrated GPS function and can be further expanded with WLAN and Bluetooth module.

Specifications

Main Chipset
- 945GSE/ ICH-7M

CPU
- Intel® Atom™ N270 1.6GHz

Memory
- DDR2 667 SO-DIMM up to 2GB

Expansion
- 1 x Bluetooth module (optional)
- 1 x GPS module
- 2 x Mini-PCIe socket (for WLAN, GPRS/ 3G modules)
- 1 x internal SIM card socket

Storage
- 1 x CF socket
- 1 x 2.5" SATA HDD bay

I/O Interface-Front
- 2 x LED for Power & HDD

I/O Interface-Rear
- 2 x RS-232
- 1 x RS-232/ 485 w/ auto flow control
- 4 x SMA-type antenna for GPS, WLAN, 3.5G/GPRS and BT
- 3 x USB2.0
- 1 x VGA
- 1 x DVI-D
- 1 x 10/ 100/ 1000 Ethernet
- 1 x Mic-in & 1 x Line-out
- 1 x GPIO (4 input & 4 output)
- 6V~36V DC thru 3-pin connector (ignition, power & ground)
- +5V/+12V DC output, SMBus
- Power button

Power Management
- Boot-up & shut-down voltage setting selectable for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

Dimensions
- 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.68" x 1.73")
- 2.2 Kg (4.85 Lb)

Dimension Drawing
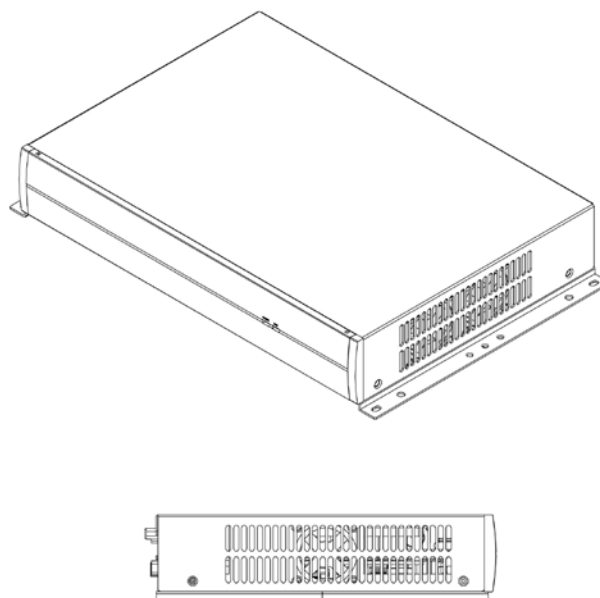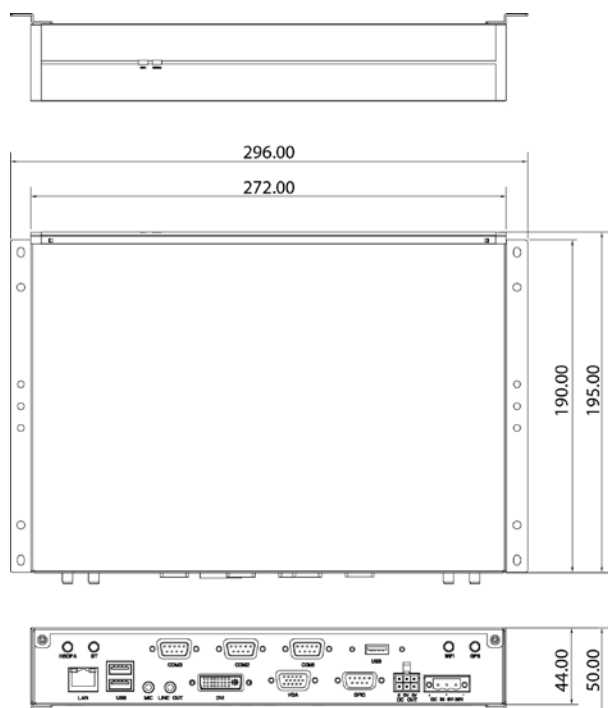
Environment
- Operating temperature:
  -10°C to +45°C
- Storage temperature:
  -20°C to +80°C@relative humidity 10% to 90% non-condensing
- Vibration (in operation):
  2G@5~500Hz random with CF/ SSD
  1G@5~500Hz random with automotive HDD

Certifications
- CE approval
- FCC class A
- e13 Mark

Ordering Information

- **VTC 2000 (P/N: 10V00200000X0)**

  Intel® Atom™ N270 1.6GHz processor, 1GB DDR2, GPS module and GPS antenna

- **Optional Accessories**

Part No.	Description
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001), 120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 2100

Intel® Atom™ D410 Fanless In-Vehicle Computer
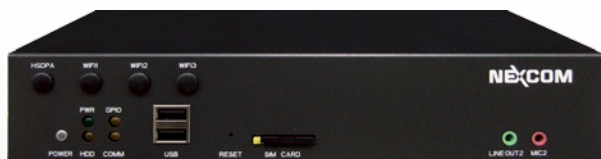
Main Features

- Build-in Intel® Atom™ D410 1.6GHz processor
- Internal wireless communication (3.5G, GSM/ GPRS, WLAN, BT)
- Smarter ignition power on/off, delay-time and low voltage protection
- PCI-104 and mini card for expansion

- 8~60V wide range DC power input
- Dual VGA output (Clone mode)
- Fanless design
- Support 2 x RS-232/ 1 x RS-485

Product Overview

The VTC 2100 is an economic version of car pc with high performace for use in transportation application. The VTC 2100 system is designed in a very compact form factor, yet maintaining the industrial requirements for high availability, wide operation temperature range, and better vibration protection. The design also follows the in-vehicle industrial standard, like eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection, SMBus connection and capture module, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS is an integrated function of VTC 2100. With expansion capability, the 3.5G, Bluetooth, etc., can be added to cover varieties of application requirements. Dual VGA display connections make the VTC 2100 an ideal choice for in-vehicle signage platforms as well.

Specifications

Main Chipset
- ICH-8M

CPU
- Intel® Atom™ D410 Single Core 1.6GHz

Memory
- DDR2 667/ 800 SDRAM one 200-pin SO-DIMM up to 2GB

Expansion
- Mini-PCIe socket (PCIe + USB) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)
- 1 x Bluetooth module (optional)
- 1 x GPS module
- PCI-104 x 1

I/O Interface-Front
- 5 x LED's for power stand-by (on power button), power status, HDD, WLAN/ HSDPA and GPIO
- Power button
- 2 x USB port
- 1 x SIM card socket
- System reset button
- 1 x Mic-in, 1 x Line-out
- 4 x SMA-type antenna hole for WLAN/ HSDPA/ BT

I/O Interface-Rear
- Mounting hole reserved:
  For RF coax to SMA bulkhead x 1 (for GPS) reference, signal connect to function board
- 8V~60V wide range DC power input, power ignition signal control
- Dual VGA output (clone mode)
- 5V/ 1A, 12V/ 1A DC power output, can be controlled by S/W
- 1 x Mic-in, 1 x Line-out
- 2 x RS-232 (COM1/ 2), 1 x RS-485 (COM3)
- 2 x USB 2.0
- 1 x LVDS (DB26 female connector with backlight power (+12V) and USB 2.0 x 1)
- 10/ 100/ 1000 Fast Ethernet, RJ45 with LED connector x 1
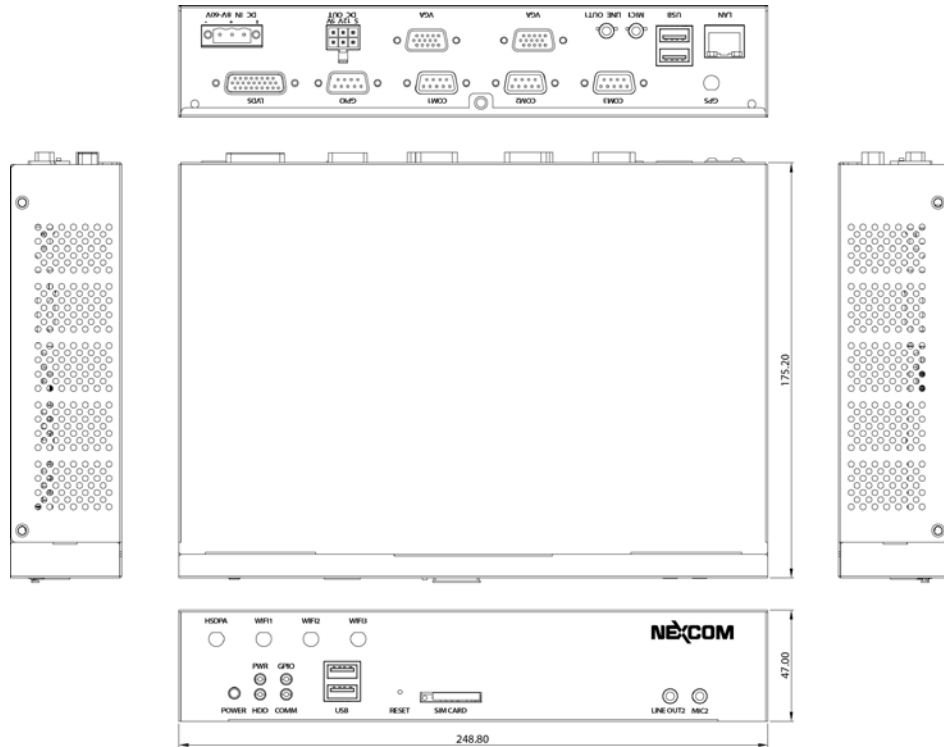- 1 x GPIO (4 input & 4 output)

Expandable Storage
- SATA 2.5" HDD Bay x 1

Power Management
- Selectable boot-up & shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, software detectable
- Support S3/ S4 suspend mode

Dimension Drawing

Dimensions
* 248.8mm (W) x 175.2mm (D) x 47mm (H) (9.8" x 6.9" x 1.85")
* 1.49 Kg (3.28 Lb)

Construction
* Fanless design

Environment
* Operating temperatures:
  Ambient with air:
  -10°C to 50°C (SSD)
  -10°C to 50°C (HDD)
* Storage temperatures: -40°C to 80°C
* Relative humidity: 10% to 90% (non-condensing)
* Vibration (random): 2g@5~500 Hz with SSD; 1g@5~500 Hz with HDD (In operation)
* Vibration:
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle – Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test
* Shock:
  Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=20g
  Crash hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

Certifications
* CE approval
* FCC Class B
* e13 Mark

Ordering Information

* **VTC 2100 (P/N: 10V00210000X0)**
  Intel® Atom™ D410 1.6GHz processor w/ 1GB DDR2, GPS module and GPS antenna

* **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0061B00X0	VTK 61B, Back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001),120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 6100

Intel® Atom™ N270 Fanless In-Vehicle Computer

VTC 6100 with optional IP65 enclosure

Main Features

- Build-in Intel® Atom™ N270 processor
- Availability of GSM/ GPRS/ WCDMA/ HSDPA/ GPS
- e13 mark certifi cation
- External smart battery back up support
- Power ignition on/off delay control

- Circuitry design for low power protection
- 6~36V DC power input
- 1 PCI-104 expansion slot
- Multiple display interface connections (VGA, DVI-D and LVDS)
- Optional IP65 enclosure

Product Overview

The VTC 6100 is an innovative in-vehicle computer for use in any car, truck, or even for maritime applications. The design itself makes the system available as a complete system allowed the user easily defi ne and build requirements. Thanks to the extremely-low power consumption nature from Intel® Atom™ processor, the VTC 6100 mechanical design is even more compact yet reach wider operating temperature range than ever. The VTC 6100 fulfills vehicle industry requirements. The design itself is in compliance with vehicle industrial standard such as eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection and SMBus connection, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS function navigates drivers to ultimate the fl eet management. Optional 802.11b/g/n, 3.5G, and Bluetooth availability make the VTC 6100 ready for wider coverage and future trend. Multiple display connections make the VTC 6100 an ideal choice for in-vehicle signage platforms as well.

Specifications

Main Chipset
- 945 GSE + ICH-7M

CPU
- Intel® Atom™ N270 1.6GHz

Memory
- DDR2 667 SO-DIMM up to 2GB

Expansion
- 1 x PCI-104
- 1 x Bluetooth module (optional)
- 2 x Mini-PCI express socket

I/O Interface-Front
- 4 x SMA Antenna holes for WLAN, HSDPA, Bluetooth
- 1 x Power button
- 1 x Reset switch
- 1 x SIM socket
- 1 x USB
- 4 x LED's for Stand-by, HDD, WLAN/ HSDPA and GPIO
- 1 x Mic-in & 1 Line-out

I/O Interface-Rear
- 2 x RS-232
- 1 x RS-232/485 w/ auto fl ow control
- 1 x DB26 LVDS (w/ +12V for backlight power & USB2.0)
- 1 x DB15 VGA
- 1 x DVI-D
- 2 x USB2.0
- 1 x 10/ 100/ 1000 Ethernet
- 1 x Mic-in & 1 Line-out
- 1 x SMA antenna hole for GPS
- 1 x GPIO (4 input & 4 output)
- 6V~36V DC thru 3-pin connector (ignition, power & ground)
- +5V/+12V DC output, SMBus
  5V DC (1A), 12V DC (1A), without VTK 33M-01
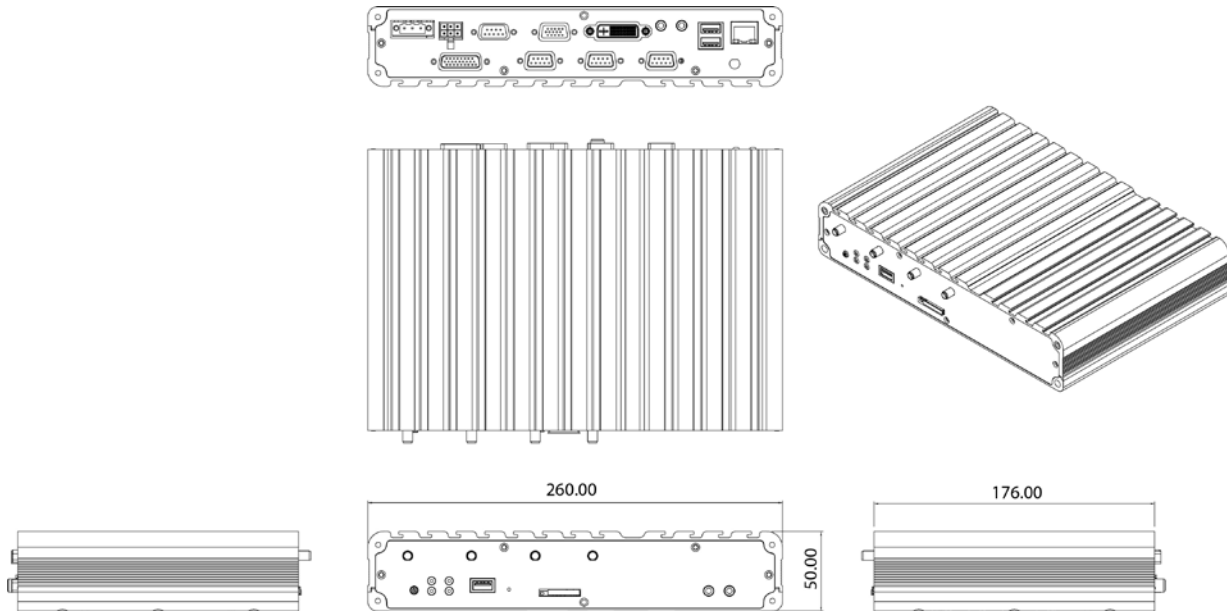 5V DC (0.5A), 12V DC (0.5A), with VTK 33M-01

Expandable Storage
- 1 x 2.5" SATA II HDD + 1 x CF

Power Management
- Boot-up & shut-down voltage setting selectable for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

NEXCOM

Dimension Drawing

260.00

50.00

176.00

IP Rating
• IP65 compliant (w/ VTK 61P)

Dimensions
• 260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
• 2.42 Kg (5.34 Lb)

Construction
• Aluminum enclosure with fanless design

Environment
• Operating temperature:
  -30°C to +60°C with CF or automotive HDD
• Storage temperature
  -40°C to +80°C@relative humidity 10% to 90% non-condensing
• Vibration (w/o vibration kit):
  2G@5-500Hz random with CF
  1G@5-500Hz random with automotive HDD
  MIL-STD-810F Method 514.5 Category 20
  Ground vehicle-highway truck (in operation)
• Shock:
  Operating: MIL-STD-810F Method 516.5, Procedure I, Trucks and semi-trailers=20g
  Non-operating: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

Certifications
• CE approval
• FCC Class B
• e13 Mark

Ordering Information

• **VTC 6100 (P/N: 10V00610000X0)**
  Intel® Atom™ N270 1.6GHz processor & 1GB DDR2 memory & GPS module & GPS antenna

• **VTC 6100-DK (P/N: 10V00610011X0)**
  Intel® Atom™ N270 1.6GHz processor, 1GB DDR2 memory, dead reckoning GPS module and GPS antenna

• **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0033V00X0	VTK 33V, anti-vibration/ fan kit
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0060P00X0	VTK 60P, IP65 protection kit for VTC 6000
10VK0061P00X0	VTK 61P, IP65 protection kit for VTC 61XX series & VTC 6200-NI
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001),120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 6110

Intel® Core™ Duo L2400 Fanless In-Vehicle Computer

VTC 6110 with optional IP65 enclosure

Main Features

- Build-in Intel® Core™ Duo L2400 processor
- Availability of GSM/ GPRS/ WCDMA/ HSDPA/ GPS
- External smart battery back up support
- Power ignition on/off delay control
- Circuitry design for low power protection

- 6~36V DC power input
- 1 PCI-104 expansion slot
- Multiple display interface connections (VGA, DVI-D and LVDS)
- Certified by AT&T
- Optional IP65 enclosure

Product Overview

The VTC 6110 is an innovative in-vehicle computer for use in any car, truck, or even for maritime applications. The design itself makes the system available as a complete system allowed the user easily define and build requirements. The VTC 6110 fulfills vehicle industry requirements. The design itself is in compliance with vehicle industrial standard such as eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection and SMBus connection, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS function navigates drivers to ultimate the fleet management. Optional 802.11b/g/n, 3.5G, and Bluetooth availability make the VTC 6110 ready for wider coverage and future trend. Multiple display connections make the VTC 6110 an ideal choice for in-vehicle signage platforms as well.

Specifications

Main Chipset
- Intel® 945GME

CPU
- Intel® Embedded LV/ ULV Processor Core™ Duo L2400

Memory
- DDR2 667 SO-DIMM up to 2GB

Expansion
- 1 x PCI-104
- 1 x Bluetooth module (optional)
- 2 x Mini-PCI express socket

I/O Interface-Front
- 4 x SMA Antenna holes for WLAN, HSDPA, Bluetooth
- 1 x Power button
- 1 x Reset switch
- 1 x SIM socket
- 1 x USB
- 4 x LED's for Stand-by, HDD, WLAN/ HSDPA and GPIO
- 1 x Mic-in & 1 x Line-out

I/O Interface-Rear
- 2 x RS-232
- 1 x RS-232/ 485 w/ auto flow control
- 1 x DB26 LVDS (w/ +12V for backlight power & USB2.0)
- 1 x DB15 VGA
- 1 x DVI-D
- 2 x USB2.0
- 1 x 10/ 100/ 1000 Ethernet
- 1 x Mic-in & 1 Line-out
- 1 x SMA antenna hole for GPS
- 1 x GPIO (4 input & 4 output)
- 6V ~ 36V DC thru 3-pin connector (ignition, power & ground)
- +5V/ +12V DC output, SMBus
  5V DC (1A), 12V DC (1A), without VTK 33M-01
  5V DC (0.5A), 12V DC (0.5A), with VTK 33M-01

Expandable Storage
- 1 x 2.5" SATA II HDD + 1 x CF

Dimension Drawing
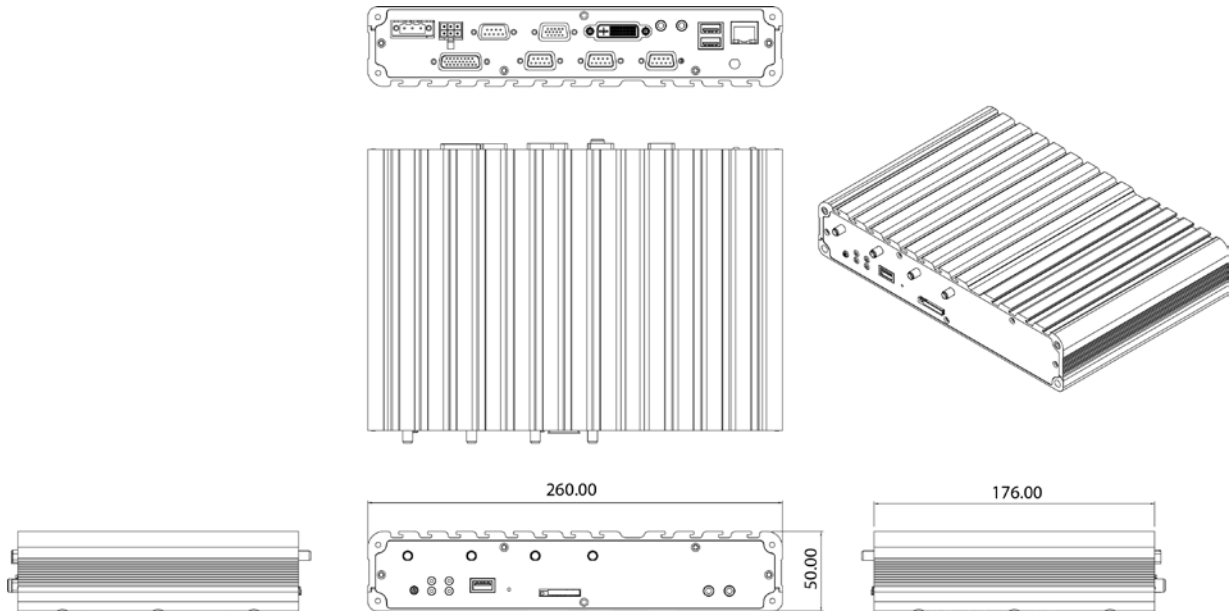
Power Management
- Boot-up & shut-down voltage setting selectable for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

IP Rating
- IP65 compliant (w/ VTK 61P)

Dimensions
- 260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
- 2.42 Kg (5.34 Lb)

Construction
- Aluminum enclosure with fanless design

Environment
- Operating temperature:
  -30°C to 50°C with CF or automotive HDD
- Storage temperature:
  -40°C to 80°C@relative humidity 10% to 90% non-condensing
- Vibration (w/o vibration kit):
  2G@5-500Hz random with CF
  1G@5-500Hz random with automotive HDD
  MIL-STD-810F Method 514.5 Category 20
  Ground Vehicle-Highway Truck (in operation)
- Shock:
  Operating: MIL-STD-810F Method 516.5, Proceure I, Trucks and semi-trailers=20g
  Non-operating: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

Certifications
- CE approval
- FCC Class B
- e13 mark

Ordering Information

- **VTC 6110 (P/N: 10V00611000X0)**

  Intel® Embedded LV/ ULV Processor Core™ Duo L2400 w/ 1GB DDR2, GPS module and GPS antenna

- **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0033V00X0	VTK 33V, anti-vibration / fan Kit
10VK0061B00X0	VTK 61B, Back-up battery kit for 4 hours in system full loading
10VK0060P00X0	VTK 60P, IP65 protection kit for VTC 6000
10VK0061P00X0	VTK 61P, IP65 protection kit for VTC 61XX series & VTC 6200-NI
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001),120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 6120

Intel® Core™ 2 Duo SL9400 Fanless In-Vehicle Computer

VTC 6110 with optional IP65 enclosure

Main Features

- Support Intel® Core™ 2 Duo SL9400 processors
- Availability of GSM/ GPRS/ WCDMA/ HSDPA/ GPS
- External smart battery back up support
- Power ignition on/off delay control
- Circuitry design for low power protection

- 6~36V DC power input
- 1 PCI-104 expansion slot
- Multiple display interface connections (VGA, DVI-D and LVDS)
- Optional IP65 enclosure

Product Overview

The VTC 6120 is an innovative in-vehicle computer for use in any car, truck, or even for maritime applications. The design itself makes the system available as a complete system allowed the user easily define and build requirements. The VTC 6120 fulfills vehicle industry requirements. The design itself is in compliance with vehicle industrial standard such as eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection and SMBus connection, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS function navigates drivers to ultimate the fleet management. Optional 802.11b/g/n, 3.5G, and Bluetooth availability make the VTC 6120 ready for wider coverage and future trend. Multiple display connections make the VTC 6120 an ideal choice for in-vehicle signage platforms as well.

Specifications

Main Chipset
- Intel® GS45 and ICH9M chipset

CPU
- Support Intel® Core™ 2 Duo SL9400 processors

Memory
- DDR3 1066/ 1333 MHz SO-DIMM up to 2GB

Expansion
- 1 x PCI-104
- 1 x Bluetooth module (optional)
- 2 x Mini-PCI express socket

I/O Interface-Front
- 4 x SMA Antenna holes for WLAN, HSDPA, Bluetooth
- 1 x Power button
- 1 x Reset switch
- 1 x SIM socket
- 1 x USB
- 4 x LED's for Stand-by, HDD, WLAN/HSDPA and GPIO
- 1 x Mic-in & 1 x Line-out

I/O Interface-Rear
- 2 x RS-232
- 1 x RS-232/485 w/ auto flow control
- 1 x DB26 LVDS (w/ +12V for backlight power & USB2.0)
- 1 x DB15 VGA
- 1 x DVI-D
- 2 x USB2.0
- 1 x 10/ 100/ 1000 Ethernet
- 1 x Mic-in & 1 x Line-out
- 1 x SMA antenna hole for GPS
- 1 x GPIO (4 input & 4 output)
- 6V ~ 36V DC thru 3-pin connector (ignition, power & ground)
- +5V/+12V DC output, SMBus
  5V DC (1A), 12V DC (1A), without VTK 33M-01
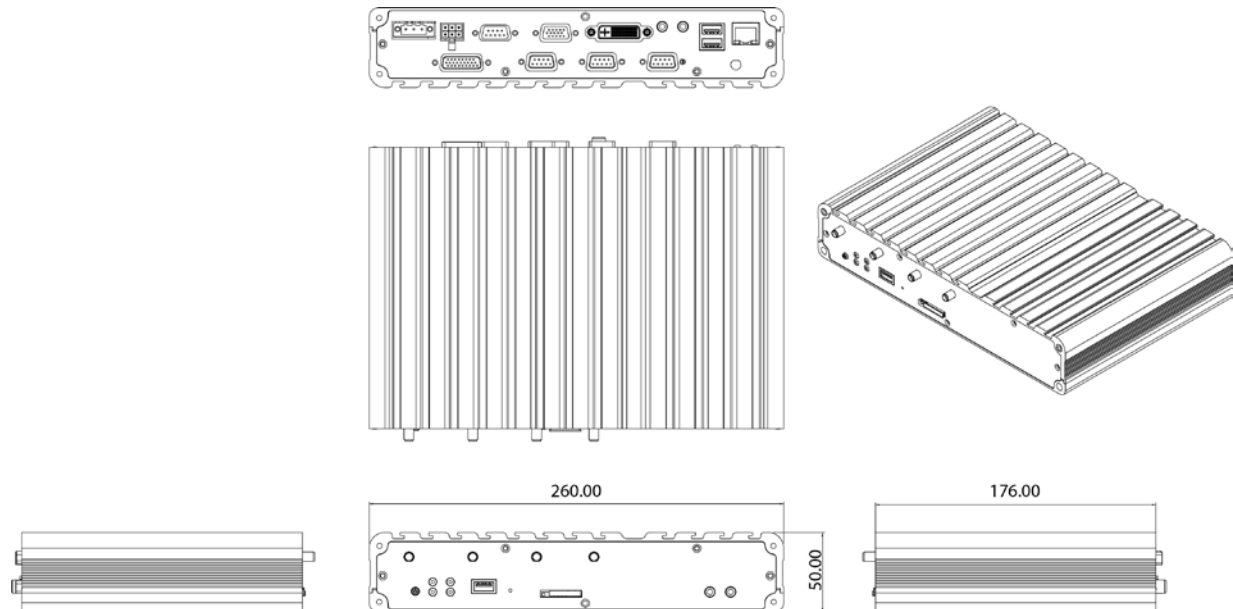 5V DC (0.5A), 12V DC (0.5A), with VTK 33M-01

Expandable Storage
- 1 x 2.5" SATA II HDD + 1 x CF

Power Management
- Boot-up & shut-down voltage setting selectable for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

Dimension Drawing

260.00

50.00

176.00

IP Rating
- IP65 compliant (w/ VTK 61P)

Dimensions
- 260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
- 2.42 Kg (5.34 Lb)

Construction
- Aluminum enclosure with fanless design

Environment
- Operating temperatures:
  -30°C to 50°C (SSD)
  -30°C to 45°C (commercial HDD)
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration
  (random) : 2g @ 5~500 Hz with SSD; 1g @ 5~500 Hz with HDD (in operation)
  (sine): 2g @ 5~500 Hz with SSD; 2g @ 5~500 Hz with HDD (non operation)
- Vibration (with SSD)
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle - Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test
- Shock (with SSD):
  Operating: MIL-STD-810F Method 516.5, Proceure I, Trucks and semi-trailers=20g
  Non-operating: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

Certifications
- CE approval
- FCC Class B
- e13 Mark

Ordering Information

VTC 6120 (P/N: 10V00612000X0)
Intel® Core™ 2 Duo SL9400 processor, 1GB DDR3, GPS module and GPS antenna

Optional Accessories

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0033V00X0	VTK 33V, anti-vibration/ fan Kit
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0060P00X0	VTK 60P, IP65 protection kit for VTC 6000
10VK0061P00X0	VTK 61P, IP65 protection pit for VTC61 XX series & VTC 6200-NI
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC 8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001), 120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 6200

Intel® Atom™ D510 Fanless In-Vehicle Computer

Main Features

- Build-in Intel® Atom™ D510 Dual Core 1.6GHz processor
- Internal wireless communication (3.5G, GSM/ GPRS, WLAN, BT)
- Smarter ignition power on/off, delay-time and low voltage protection
- PCI104, MiniPCIe socket, and proprietary PCIe module expansion
- 8~60V wide range DC power input

- Dual VGA output (clone mode)
- Rugged fanless design to meet IP65 and MIL standard
- Flexible chassis design for PCI-104 and HDD can be used at the same time
- Support 2 x isolated RS-232 ports (COM1, COM2)
- Isolated GPIO

Product Overview

NEXCOM's popular VTC Series range has been extended with the launch of VTC 6200, a dedicated computing solution for in-vehicle surveillance applications. The VTC 6200 utilizes the powerful video processing capability of the of Intel® Atom™ D510 processer which can support Dual Core technology. With additional Video Capture Module, VTC 6200 is the ideal solution for in-vehicle surveillance applications.

Specifications

Main Chipset
- ICH-8M

CPU
- Intel® Atom™ D510 Dual Core 1.6GHz

Memory
- DDR2 667/ 800 SDRAM one 200-pin SO-DIMM up to 2GB

Expansion
- Mini-PCIe socket (PCIe + USB) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)
- 1 x Bluetooth module (optional)
- 1 x GPS module
- PCI-104 x 1
- SUMIT x 1 (USB + PCIe x1)

I/O Interface-Front
- 5 x LED's for power stand-by (on power button), Power Status, HDD, WLAN/ HSDPA and GPIO
- Power button
- 2 x USB port
- 1 x SIM card socket
- System reset button
- 1 x Mic-in, 1 x Line-out
- 4 x mounting hole SMA-type for WLAN/ HSDPA/ BT

I/O Interface-Rear
- Mounting hole reserved:
  For RF Coax to SMA Bulkhead x 1 (for GPS) reference, signal connect to function board
- 8V~60V Wide Range DC power Input, power ignition signal control
- Dual VGA Output (clone mode)
- 5V/1A, 12V/1A DC power output, can be controlled by S/W
- 1 x Mic-in, 1 x Line-out
- 2 x Isolated RS-232 (COM1/2)
  2 x RS-232 (COM3/4)
  1 x Isolated RS-485 (COM5)
- 2 x USB 2.0
- 1 x LVDS (DB26 female connector with backlight power (+12V) and USB 2.0 x 1)
- 10/ 100/ 1000 Fast Ethernet, RJ45 with LED connector x 1
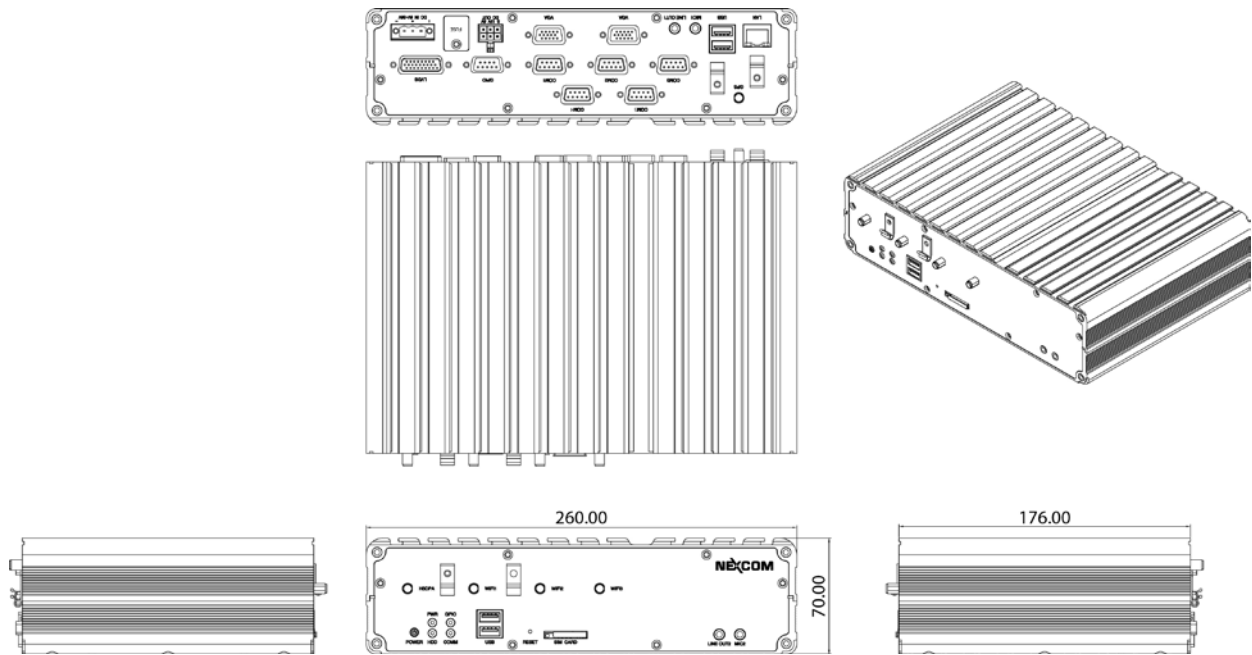- Isolated GPIO x 1 (4 input & 4 output)
- FUSE

Expandable Storage
- SATA 2.5" HDD Bay x 1 or SATA DOM x 1

Power Management
- Selectable boot-up & shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, software detectable
- Support S3/ S4 suspend mode

Dimension Drawing

Dimensions
* 260mm (W) x 176mm (D) x 70mm (H) (10.24" x 6.93" x 2.75")
  (support HDD and PCI-104 at the same time)
* 2.65 Kg (5.84 Lb)

Construction
* Aluminum enclosure with fanless design

Environment
* Operating temperatures:
  Ambient with air:
  -30°C to 60°C (SSD)
  -30°C to 50°C (HDD)
* Storage temperatures: -40°C to 80°C
* Relative humidity: 10% to 90% (Non-condensing)
* Vibration (random): 2g@5~500 Hz with SSD; 1g@5~500 Hz with HDD
  (in operation)
* Vibration:
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground
  Vehicle – Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test
* Shock:
  Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and
  semi-trailers=20g
  Crash hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground
  equipment=75g

Certifications
* CE approval
* FCC Class B
* e13 Mark

Ordering Information

* **VTC 6200 (P/N: 10V00620000X0)**
  Intel® Atom™ D510 1.66GHz processor, 1GB DDR2, GPS module and
  GPS antenna

* **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001), 120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 6200-NI

Intel® Atom™ D510 Fanless In-Vehicle Computer

Main Features

- Build-in Intel® Atom™ D510 Dual Core 1.66GHz processor
- Internal wireless communication (3.5G, GSM/ GPRS, WLAN, BT)
- Smarter ignition power on/off, delay-time and low voltage protection
- PCI-104 and mini card expansion interface

- 8~60V wide range DC power input
- Dual VGA output (clone mode)
- Rugged fanless design to meet MIL standard

Product Overview

NEXCOM's popular VTC Series range has been extended with the launch of VTC 6200-NI, a dedicated computing solution for in-vehicle surveillance applications. The VTC 6200-NI utilizes the powerful video processing capability of the of Intel® Atom™ D510 processer which can support Dual Core technology. With additional Video Capture Module, VTC 6200-NI is the ideal solution for in-vehicle surveillance applications.

Specifications

Main Chipset
- ICH-8M

CPU
- Intel® Atom™ D510 Dual Core 1.66GHz

Memory
- DDR2 667/ 800 one 200-pin SO-DIMM up to 2GB

Expansion
- Mini-PCIe socket (PCIe + USB) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)
- 1 x Bluetooth module (optional)
- 1 x GPS module
- 1 x PCI-104

I/O Interface-Front
- 5 x LED's for power stand-by (on power button), Power Status, HDD, WLAN/ HSDPA and GPIO
- Power button
- 2 x USB port
- 1 x SIM card socket
- System reset button
- 1 x Mic-in, 1 x Line-out
- 4 x SMA Antenna holes for WLAN/ HSDPA/ BT

I/O Interface-Rear
- 1 x SMA antenna hole for GPS
- 8V~60V Wide Range DC power Input, power ignition signal control (ignition, power & ground)
- Dual VGA Output (clone mode)
- 5V/ 1A, 12V/ 1A DC power output, can be controlled by S/W
- 1 x Mic-in, 1 x Line-out
- 2 x RS-232 (COM1/2)
- 1 x RS-485 (COM3)
- 2 x USB 2.0
- 1 x LVDS (DB26 female connector with backlight power (+12V) and USB 2.0 x 1)
- 10/ 100/ 1000 Fast Ethernet, RJ45 with LED connector x 1
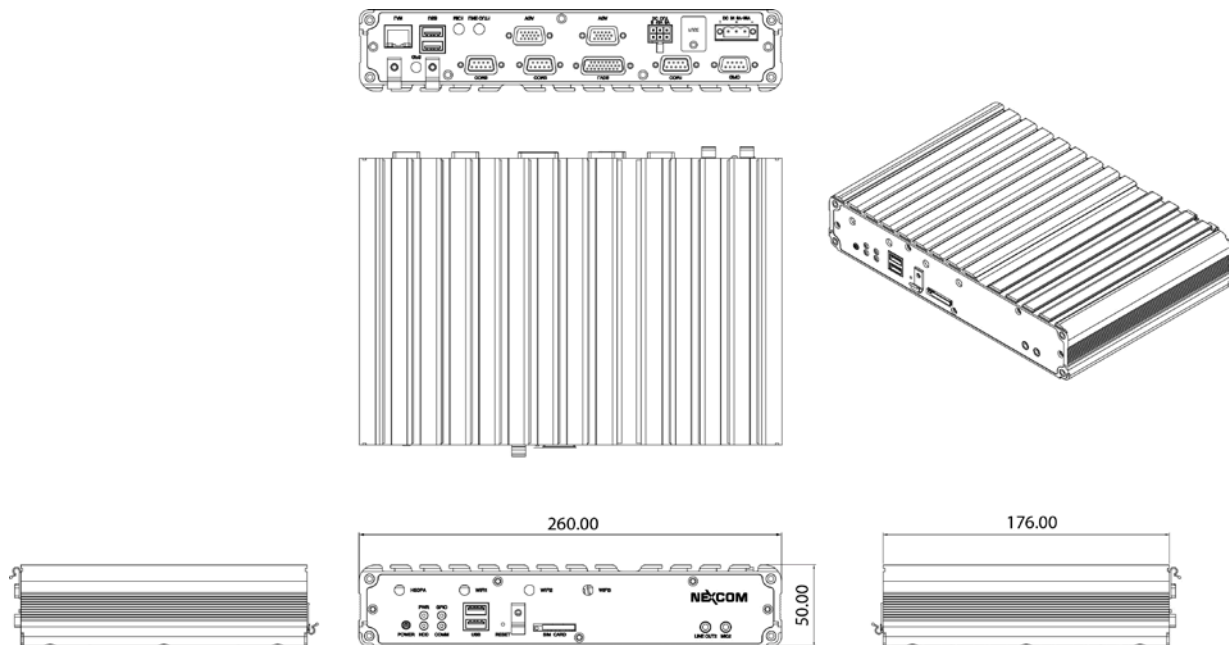- GPIO x 1 (4 input & 4 output)
- FUSE

Expandable Storage
- SATA 2.5" HDD Bay x 1 or SATA DOM x 1

Power Management
- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software
- Support S3/ S4 suspend mode

Dimension Drawing

260.00

176.00

50.00

Dimensions
- 260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
- 2.19 Kg (4.82 Lb)

Construction
- Aluminum enclosure with fanless design

Environment
- Operating temperatures:
  Ambient with air:
  -30°C to 60°C (SSD)
  -30°C to 50°C (HDD)
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)
- Vibration (random): 2g@5~500 Hz with SSD; 1g@5~500 Hz with HDD (in operation)
- Vibration (with SSD):
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle – Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test
- Shock (with SSD):
  Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=20g
  Crash hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

Certifications
- CE approval
- FCC Class B
- e13 Mark

Ordering Information

- **VTC 6200-NI (P/N: 10V00620002X0)**

  Intel® Atom™ D510 1.66GHz processor, 1GB DDR2, GPS module and GPS antenna

- **VTC 6200-NI-DK (P/N: 10V00620006X0)**

  Intel® Atom™ D510 1.66GHz processor, 1GB DDR2, dead reckoning GPS module and GPS antenna

- **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0060P00X0	VTK 60P, IP65 protection kit for VTC 6000
10VK0061P00X0	VTK 61P, IP65 protection kit for VTC 61XX series & VTC 6200-NI
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB (N09001), 120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC 7110

Intel® Core™ i7 Fanless In-Vehicle Computer

Coming Soon

Main Features

- Build-in Intel® Core™ i7 2610UE 1.5G Hz processor
- Support two Ethernet LAN ports
- Removal 2.5" SSD tray
- Optional CAN bus in support of SAE J1939 or J1708
- Optional isolation digital input and output

- 9~36V wide range DC power input
- Smarter ignition power on/off, delay-time and low voltage protection
- Optional 8-channel POE
- Rugged fanless design to meet MIL standard

Product Overview

VTC 7110, adopting the high performance processor, Intel® Core™ i7, is a new generation of VTC series. In additional to keep the advantage of existing VTC series, it offers dual LAN ports for redundancy, two high speed interface for storage, 2.5" SATA and CFast. The storage is easily accessible from the front side for maintenance concern. Furthermore, it offers the CAN bus for heavy duty truck such as SAE J1939/ J1708. The outstanding is its flexible designs to reserves the space and interface to extend the required features for application such as 8-channel POE with second storage interface. With the rich features, VTC7110 can satisfy your demand in vehicle applications.

Specifications

Main Chipset
- QM67

CPU
- Intel® Core™ i7 2610UE 1.5GHz

Memory
- One 204-pin SO-DIMM DDR3 1333 up to 4GB

Communication Expansion
- Mini-PCIe socket (PCIe + USB) x 1 (for optional WLAN module)
- Mini-PCIe socket (USB) x 1 (for optional 3.5G module)
- Optional Bluetooth module
- On board Built-in GPS module
- Optional GPS with dead reckoning feature

Features Expansion via Optional I/O Board
- 8-channel POE with one 2.5" SSD tray
- 16-channel isolation digital inputs and outputs, and one DB9 for SAE J1939 or SAE J1708

I/O Interface-Front
- 5 x LED's for power stand-by (on power button), power status, HDD, WLAN/ HSDPA and GPIO
- 1 x power button
- 2 x USB port
- 2 x SIM card socket
- 1 x system reset button
- 1 x Mic-in, 1 x Line-out
- 4 x SMA antenna holes for WLAN/ HSDPA/ BT

I/O Interface-Rear
- 2 x USB 2.0 host type A connector
- 1 x VGA
- 1 x DB26 pin connector (LVDS, USB,12V, 5V) or optional with DVI-D
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 male connector (1 x RS-232; 1x 485/422) or optional with CAN bus to replace one RS-232
- 1 x DB9 female connector for GPIO
  Input (source type; 0~30V)
  Output (sink type; 20mA max)
- 1 x Mic-in and 1 x Line-out
- 12V@4A DC output connector (TBD)
- 3 pin switch power output directly from vehicle source
- Reserved for 4 optional antenna hole for GPS/ WWAN/ WLAN
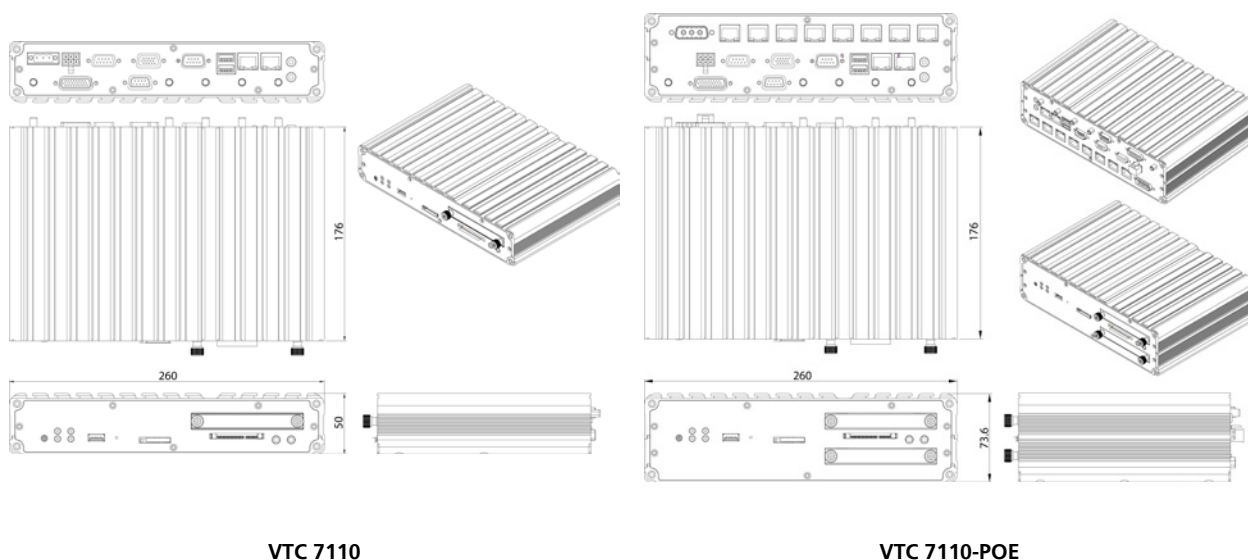- 1 x 3-pin power input connector (9~36V DC-in)

Expandable Storage
- 1 x 2.5" SATA tray
- 1 x CFast

Power Management
- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software
- Support S3/ S4 suspend mode

Dimension Drawing

VTC 7110

VTC 7110-POE

Dimensions
- VTC 7110-B:
  260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
  2.19 Kg (4.82 Lb)
- VTC 7110-POE and VTC 7110-DIOC
  260mm (W) x 176mm (D) x 73.6mm (H) (10.24" x 6.93" x 2.9")

Construction
- Aluminum enclosure with fanless design

Environment
- Operating temperatures:
  Ambient with air:
  -30°C to 60°C (SSD)
  -30°C to 50°C (HDD)
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g@5~500 Hz with SSD (in operation)
- Vibration (with SSD):
  Operating: MIL-STD-810F, Method 514.5, Category 20, ground vehicle- highway truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, integrity test
- Shock (with SSD):
  Operating: MIL-STD-810F, Method 516.5, Procedure I, trucks and semi-trailers=20g
  Crash hazard: MIL-STD-810F, Method 516.5, Procedure V, ground equipment=75g

Protection Grade
- Optional IP65 available upon request

Certifications
- CE approval
- FCC Class B
- e13 Mark

Ordering Information

- **VTC 7110-B (P/N: 10V00711000X0)**

  Intel® Core™ i7 1.5GHz processor, 2GB DDR3, built-in GPS module, DB26 for proprietary LVDS and 2 DB9 in support RS-232 and RS-485/ 422

- **VTC 7110-DIOC (P/N: TBD)**

  VTC 7110 with isolation digital inputs and outputs, and SAEJ1939 support

- **VTC 7110-POE (P/N: TBD)**

  VTC 7110 with 8-channel POE and additional one 2.5" SSD tray

- **Optional Accessories**

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01(V7), w/ antenna & cable (without assembly in NEXCOM)
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VTC Series Accessories

VTK 61B

Main Features

- Back up smart battery + charger
- Thermal control
- SMBus interface
- For VTC series

Specifications

Back up smart battery + Charger

- Battery back-up for 4 hours in system full loading (1.4A/ 12V)
- Battery status is detectable by S/ W
- 2 x LED indicators for the battery status
- Input voltage: 6-36V with ignition control
- Output voltage: 12V with ignition for VTC Series System

Operation Temperature

- 0°C to +55°C

Certification

- CE approval
- FCC

Dimensions

- 238mm (W) x 150mm (L) x 25mm (H)
- 1.75 Kg (3.86 Lb)

Ordering Information

- **VTK 61B (P/N: 10VK0061B00X0)**

VTK 33V

Main Features

- Unique 3D X-Y-Z axis anti-vibration design
- Integrated fan x 2
- For VTC 3300E, VTC 6000, VTC 6100, VTC 6110

Specifications

Vibration

- VTC 3300E, VTC 6000, VTC 6100, VTC 6110 (operating)
  2G@10~500 Hz with automotive HDD
  3G@5~500 Hz random with CF

Thermal

- 2 x fan (60 x 60mm, 12V) for lowing surface temperature of VTC series

Dimensions

- 320mm (W) x 180mm (L) x 86.5mm (H)
- 1.48 Kg (3.3 Lb)

Ordering Information

- **VTK 33V (P/N: 10VK0033V00X0)**

VTK 61P

Main Features
- IP65 compliant, anti-dust & anti-water protection kit
- Cables and antennas can be connected on VTC 6000 with external peripheral devices
- LED status is readable through window
- VTK 61P designed for VTC 6100/ VTC 6110/ VTC 6120/ VTC 6200-NI

Specifications

Dimensions
- 260mm (L) x 306mm (W) x 50mm (H)
- 2.8 Kg (6.18 Lb)

Ordering Information

- **VTK 61P (P/N: 10VK0061P00X0)**

VMC 1000

Main Features

- 7" WVGA TFT LCD with LED backlight
- Compact and fanless design
- Built-in Intel® Atom™ E640 1.0GHz processor
- Wake on RTC/ SMS
- GPS receiver on board

- Variety wireless communication options
- Wide Range DC input from 6~36V
- Compliant with IP54
- Certified by CE/ FCC/ e13 Mark

Product Overview

VMC 1000, a 7-inch all in one vehicle computer, is designed for the transportation application. Adopting the latest low power consumption processor, Intel® Atom™ E640, it integrates the high resolution LCD with the brightness of 400 nits and 4-wire resistive touch sensor. VMC 1000 does not compromise with its space to scarify its functional features. It provides RS-232/422/485, USB 2.0, GPIO and LAN signal via DB37 connector to secure the cable simultaneously in the vehicle vibration. Its mounting hole is compatible with VESA75 and can be installed in the vehicle with limited space via RAM mount kits.

Specifications

LCD Panel
- 7-inch TFT LCD Panel with LED Backlight
- 800 x 480 pixels (WVGA)
- Brightness: 500 cd/m² (typical)
- Contrast ratio: 600:1 (typical)

Touch Screen Sensor
- 4-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 82 ± 3%

CPU & Chipset
- Intel® Atom™ E640 1.0GHz
- EG20T

Memory
- On-board DDR2 1GB

Storage Interface
- 1 x mSATA

Expansion
- Mini-PCIe socket (PCIe + USB + SATA) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)

Front Side
- 5 x Control buttons
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
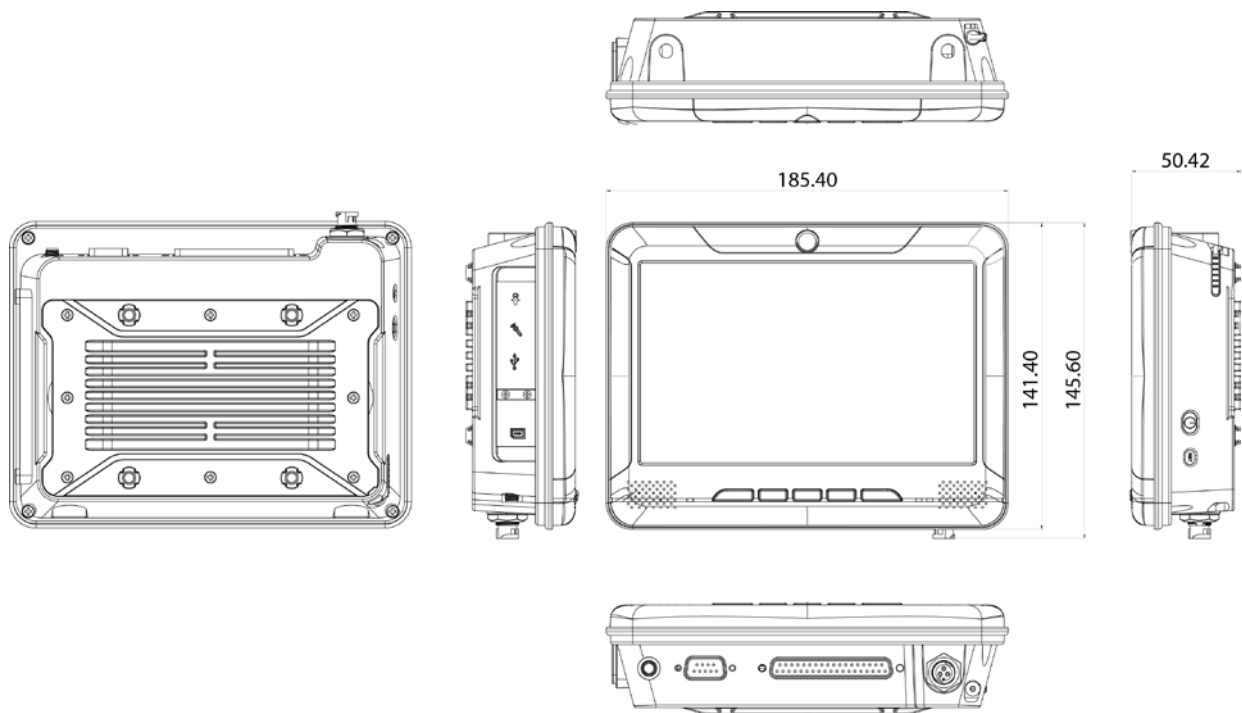- Light Sensor
- 2 x LED indicators
- 2 x Built-in speakers (1W)

Lateral Side I/O
- 1 x Line-in
- 1 x Line-out
- 1 x USB
- 1 x SIM slot
- 1 x Power button
- 1 x Reset button

Bottom Side
- 1 x DB9 male connector (RS-232)
- 1 x DB37 female connector
  (1 x LAN; 2 x USB; 1x RS-232; 1 x RS422/ 485; 6 x GPIO)
- 6~36V wide range DC power input
- 1 x SMA connector for GPS antenna

NEXCOM

Dimension Drawing

185.40

50.42

141.40

145.60

Optional Communication Module

- 1 x Wireless LAN 802.11 b/g/n
- 1 x WWAN module
- 1 x Bluetooth module

Power Management

- Selectable boot-up & shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, software detectable
- Support S4 suspend mode; wake on RTC/ SMS

Dimensions

- 185.4mm (W) x 141.4mm (D) x 50.42mm (H) (7.3 " x 5.57 " x 1.99 ")
- 1 Kg (2.20 Lb)

Housing

- Plastic case with aluminum die casting heatsink
- Compliant with IP54

Environment

- Operating temperatures ambient with air: -20°C to 50°C
- Storage temperatures: -30°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g @5~500Hz
- Vibration
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle – Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test

Shock

- Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers= 20g
- Crash hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment= 75g

Certification

- CE approval
- FCC Class B
- e13 Mark

Ordering Information

- **VMC 1000 (P/N: 10VC0100000X0)**

  7-inch all-in-one vehicle mount computer with touch screen and smart brightness control and Intel® Atom™ E640 1.0GHz processor with 1GB DDR2, GPS module and GPS antenna

- **Optional Accessories**

Part No.	Description
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01(V7), w/ antenna & cable (without assembly in NEXCOM)
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SAM30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

VMC 3000

Coming Soon

Main Features

- 10.4" XGA TFT LCD monitor
- Compact and fanless design
- Built-in Intel® Core™ i7-2610UE processor
- Automatic/ manual brightness control
- Wake on RTC/ SMS
- Variety wireless communication options

- On screen F1~F10 function key
- Wide range DC input from 8~60V
- Optional sunlight readable solution with 1000nits
- Robust design with Die-cast aluminum front panel
- All enclosure compliant with NEMA4/ IP65

Product Overview

VMC 3000, 10.4-inch all in one robust vehicle mount computer, is designed for the transportation, warehouses and material handling application. Adopting the latest high performance processor Intel® Core™ i7, it integrates the high resolution LCD with the brightness of 400 nits and 5-wire resistive touch sensor.

VMC 3000 is extreme ruggedness, the aluminum enclosure compliant with NEMA4/ IP65 is designed against vibration, dust, moisture and chemical impacts. It does not compromise with its space to scarify its functional features. It provides RS-232, USB 2.0, CFast, LAN and two Mini-PCIe extensions for variety communication options.

The latitude of mounting methods offers easy installation in the vehicles. Thus, the VMC 3000 is an ideal solution for vehicle terminal on forklifts, straddle carriers, truck, mining vehicles, construction machines and marine.

Specifications

LCD Panel
- 10.4-inch TFT LCD panel with LED backlight
- 1024x 768 pixels (XGA)
- Brightness: 400 cd/m² (typical)
- Contrast ratio: 500:1 (typical)

Touch Screen Sensor
- 5-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 89 ± 3%

CPU & Chipset
- Intel® Core™ i7-2610UE
- QM67

Memory
- Support DDR3 1333MHz SODIMM 2GB (up to 4GB)

Storage Interface
- 1 x CFast
- 1 x 2.5" SATA HDD/ SSD

Expansion
- Mini-PCIe socket (PCIe + USB + SATA) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)

Front Side
- On screen display buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- LED indicators x 3
- F1~ F10 functions key

Rear Side
- Built-in speakers (2W) x 2
- Reserved for 4 optional antenna of BT/ Wi-Fi / WWAN / GPS, SMA Type

Dimension Drawing

Coming Soon

Lateral Side I/O
- 1 x CFast card slot

Bottom Side
- M12 connector 3-pin. (power, ignition, ground)
- 2 x RS-232
  COM1 with either 0, 5 or 12V on pin 9 for external devices
- USB2.0/1.1 x 4 (host)
- 1 x 10/100/1000Base-T
- 1 x Mic-in
- 1 x Line-out
- 2 x 2W speaker
- SMBus to support VTK 61B back up smart battery with charger
- Reset button

Optional Communication Module
- 1 x Wireless LAN 802.11 b/g/n
- 1 x WWAN module
- 1 x Bluetooth module

Optional Function
- Sunlight-readable touch screen (high brightness with 1000cd/m²)
- Support VESA mount kit

Power Management
- Selectable boot-up & shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, software detectable
- Support S4 suspend mode; wake on RTC/ SMS

Dimensions
- TBD

Environment
- Operating temperatures ambient with air: -30°C to 60°C
- Storage temperatures: -30°C to 70°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g @5~500Hz
- Vibration
  Operating: MIL-STD-810G, 514.6C Procedure 1, Category 4
  Storage: MIL-STD-810G, 514.6E Procedure 1, Category 24

Shock
- Operating: MIL-STD-810G, Method 516.6, Procedure I, trucks and semi-trailers= 20g
- Crash hazard: MIL-STD-810G, Method 516.6, Procedure V, ground equipment= 75g

Operating System
- Windows XP professional for embedded
- WES 7P
- Linux (Kernel 2.6.X)

Standards/ Certifications
- CE approval
- FCC Class B
- Meet Energy Star design

Ordering Information

- **VMC 3000 (P/N: TBD)**
  10.4-inch rugged vehicle mount computer with touch screen and smart brightness control

VMD 1000

7″ WVGA Vehicle Mount Display with

Touch Screen and LVDS Interface

Main Features

- 7″ WVGA TFT LCD monitor
- Automatic/ manual brightness control
- Remote system power control
- On screen control buttons

- Support USB 2.0 and card reader
- Camera sensor on front panel (Optional)
- Optional sunlight readable touch support
- Front panel compliant with IP54

Product Overview

VMD 1000 is a 7-inch TFT LCD monitor with 4 wire resistant touch screen sensor. With the high brightness display and automatically brightness control, it is designed for in-vehicle application. It also provides USB and card reader features, and reserves camera sensor as an option. Those friendly interfaces benefit the technicians during maintenances. Its front panel is compliant to IP54 to meet with industrial application. VMD 1000 can perfectly match with any VTC series devices via the 26-pin LVDS cable.

Specifications

LCD Panel
- 7-inch TFT LCD panel with LED backlight
- 800 x 480 pixels (WVGA)
- Brightness: 500 cd/m² (typical)
- Contrast ratio: 600:1 (typical)

Touch Screen Sensor
- 4-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 82 ± 3%

Front Panel
- Control buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- LED indicators x 2
- Built-in speakers (1W) x 2

Rear Side I/O
- 1 X SD/ MMC/ MS Card Reader
- LVDS connector (Integrating LVDS, USB x 1 and 12Vdc x 1)
- Stereo audio (Line-out) x 1 (automatic detection/ switch to external speaker)
- 1 x Mic-in
- 1 x Min-out
- 1 x Audio input
- 1 x USB
- Remote system power on/off button

Optional Features
- 2.0M pixels CCD camera on front panel
- Sunlight-readable touch screen (4 wires resistive w/ anti-glare coating)
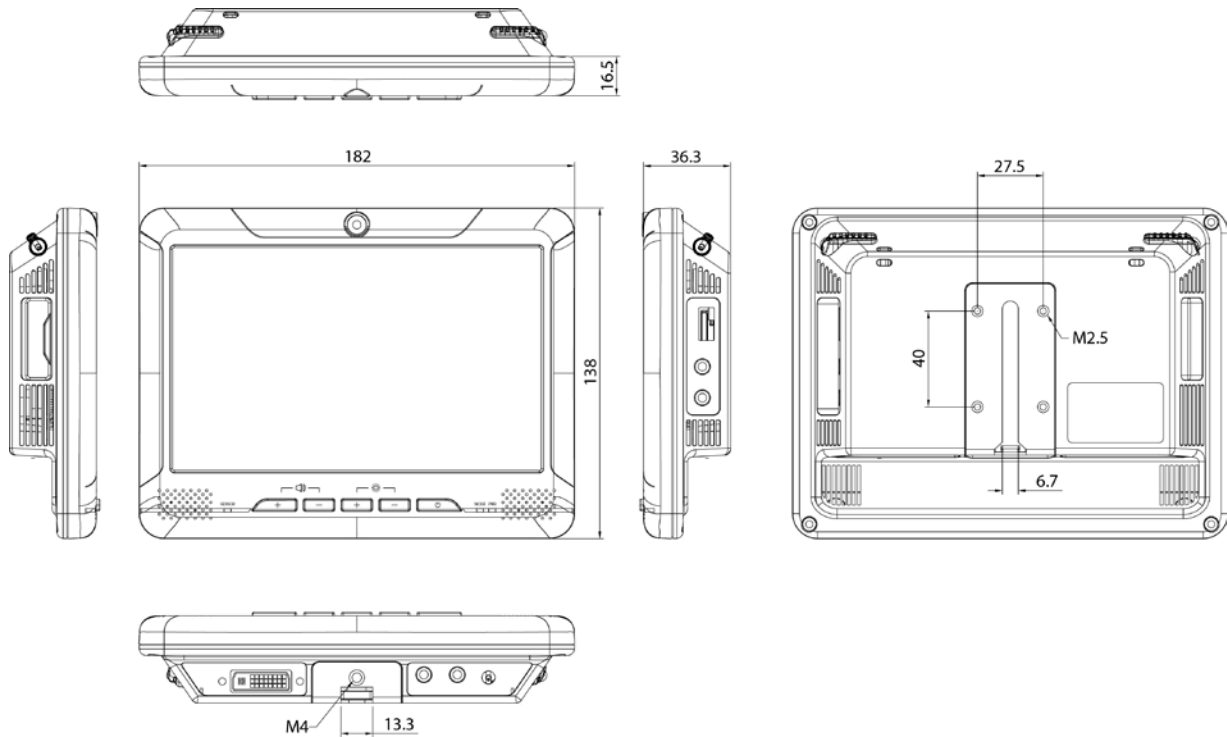- Support VESA mount kit

Dimensions
- 182mm (W) x 138mm (H) x 36.3mm (D)
- 0.45 Kg (0.99 Lb)

Environment
- Operating temperature: -20°C to 70°C
- Storage temperature: -30°C to 80°C

Dimension Drawing

Certifications

- CE approval
- FCC Class B

Ordering Information

- **VMD 1000-B (P/N: 10VD0100000X0)**

  7" WVGA vehicle mount display with touch screen and LVDS interface

- **VMD 1000-BS (P/N: TBD)**

  7" WVGA vehicle mount display with touch screen, LVDS and sunlight readable

- **VMD 1000-P (P/N: TBD)**

  7" WVGA vehicle mount display with touch screen, LVDS and CCD camera

- **VMD 1000-PS (P/N: TBD)**

  7" WVGA vehicle mount display with touch screen, LVDS, CCD camera and sunlight readable

- **Bundle Accessories**

  LVDS cable (1.5M)

  Metal stand kit

  Cable fastener

  CD-ROM x 1

B

B1

B2

B3

B4

B5

VMD 1001

Main Features

- 7" WVGA TFT LCD monitor
- Automatic/ manual brightness control
- Wide range DC input from 6~36V
- Direct VGA input interface

- Support USB 2.0 and card reader
- Camera sensor on front panel (Optional)
- Optional sunlight readable touch support
- Front panel compliant with IP54

Product Overview

VMD 1001 is a 7-inch TFT LCD monitor with 4 wire resistant touch screen sensor. With the high brightness display and automatically brightness control, it is designed for in-vehicle application. In support of standard VGA interface, it can be configured to link to the most of vehicle computers. It also provides USB and card reader features, and reserves camera sensor as an option. Those friendly interfaces benefit the technicians during maintenances. Its front panel is compliant to IP54, and wide range power input and operating temperature to meet with industrial application.

Specifications

LCD Panel
- 7-inch TFT LCD panel with LED backlight
- 800 x 480 pixels (WVGA)
- Brightness: 500 cd/m² (typical)
- Contrast ratio: 600:1 (typical)

Touch Screen Sensor
- 4-wire resistant touch
- Anti-glare coatingsurface
- Transmission rate: 82 ± 3%

Front Panel
- On screen display buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- LED indicators x 2
- Built-in speakers (1W) x 2

Rear Side I/O
- 1 x VGA
- 1 x Line-in
- 1 x Line-out (automatic detection/ switch to external speaker)
- 2 x USB
- 1 X SD/ MMC/ MS card reader
- 6~36V wide range DC power input

Optional Features
- 2.0M pixels CCD camera on front panel
- Sunlight-readable touch screen (4 wires resistive w/ anti-glare coating)
- Support VESA mount kit

Dimensions
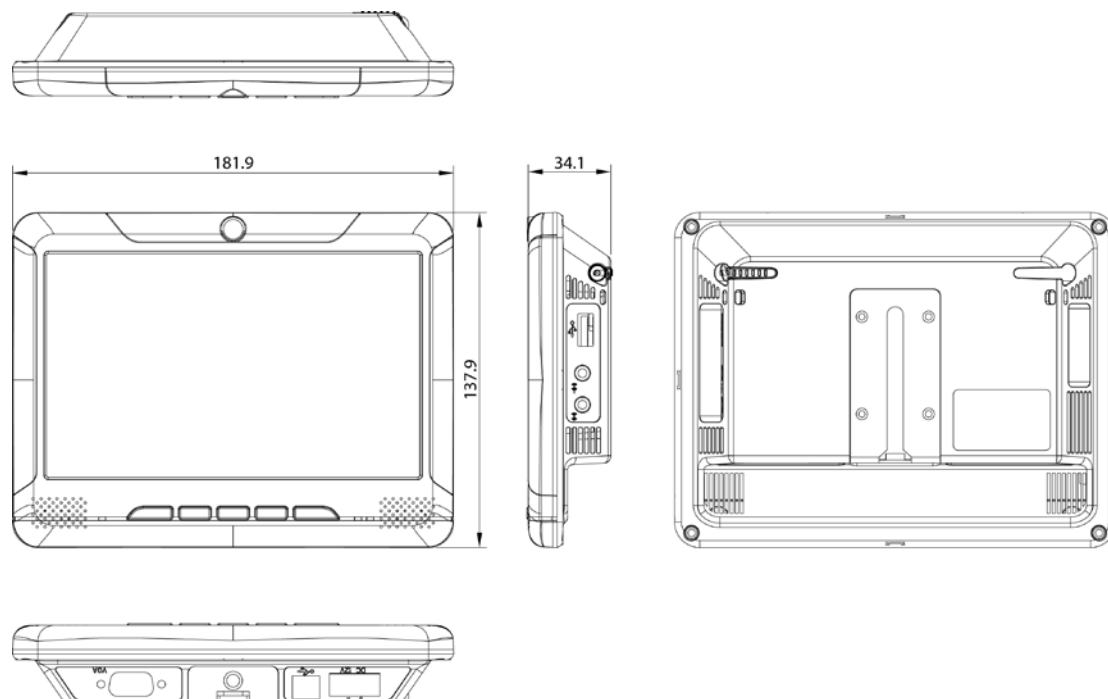- 182mm (W) x 138mm (H) x 36.3mm (D)
- 0.45 Kg (0.99 Lb)

Environment
- Operating temperature: -20°C to 70°C
- Storage temperature: -30°C to 80°C

Certifications
- CE approval
- FCC Class B

Dimension Drawing

181.9

34.1

137.9

Ordering Information

• **VMD 1001 (P/N: 10VD0100101X0)**
7" WVGA vehicle mount display with touch screen and VGA interface

• **VMD 1001-BS (P/N: TBD)**
7" WVGA vehicle mount display with touch screen, VGA and sunlight readable

• **VMD 1001-P (P/N: TBD)**
7" WVGA vehicle mount display with touch screen, VGA and CCD camera

• **VMD 1001-PS (P/N: TBD)**
7" WVGA vehicle mount display with touch screen, VGA, CCD camera and sunlight readable

• **Bundle Accessories**
VGA cable (1.5M)
USB cable (1.5M)
Metal stand kit
Cable fastener
CD-ROM x 1

VTK 33M-01

8.4" SVGA LCD with Touch Screen
Sunlight-Readable, Smart Brightness Control

Main Features

- 8.4" SVGA industrial-grade LCD display LVDS LCD monitor
- Sunlight-readable, touch screen
- OSD control button on front panel

- Support automatic brightness control
- Front panel compliant with IP54
- Remote system power control

Product Overview

VTK 33M-01 is designed to be a commander of our transportation PC in vehicles or vessels. It connects to our VTC Series with only a single cable that integrates LVDS signal, USB and 12V DC power. Through this connection, VTK 33M-01 can power on/off VTC Series, while many functions of the VTC Series can be controlled via the touch screen.

Brightness of the LCD can be adjusted manually or automatically. The user can control the volume for GPS vocal navigation. Designed to be rugged, VTK 33M-01 has IP54 protection on the front panel and has metal enclosure against harsh environment.

Specifications

LCD Panel
- 8.4" Industrial-grade LVDS panel with CCFL backlight
- Resolution: 800 x 600 SVGA
- Brightness: 400 cd/m²
- Contrast ratio: 500:1

Control Button and LED Indicators on Front Panel
- Power on/off (for VTK33M-01 Monitor)
- Volume control
- Brightness control (manual/ automatic)
- Light sensor
- PWR LED (indicating monitor power)
- MODE LED (indicating the mode of brightness control)

I/O Interface-Rear
- LVDS Connector (integrating LVDS, USB x 1 and 12Vdc x 1)
- 1 x Audio-in
- 1 x Mic-in, 1 x Mic-out
- 2 x USB
- Remote system power on/off button

Other Features
- Sunlight-readable touch screen (4 wires resistive w/ anti-glare coating)
- 2 x speaker (2W)
- Power: 12Vdc
- VESA 75mm mounting holes
- Rubber protection for the 4 corners

Dimensions
- 238mm (W) x 196mm (H) x 35mm (D) (w/o protection kit)
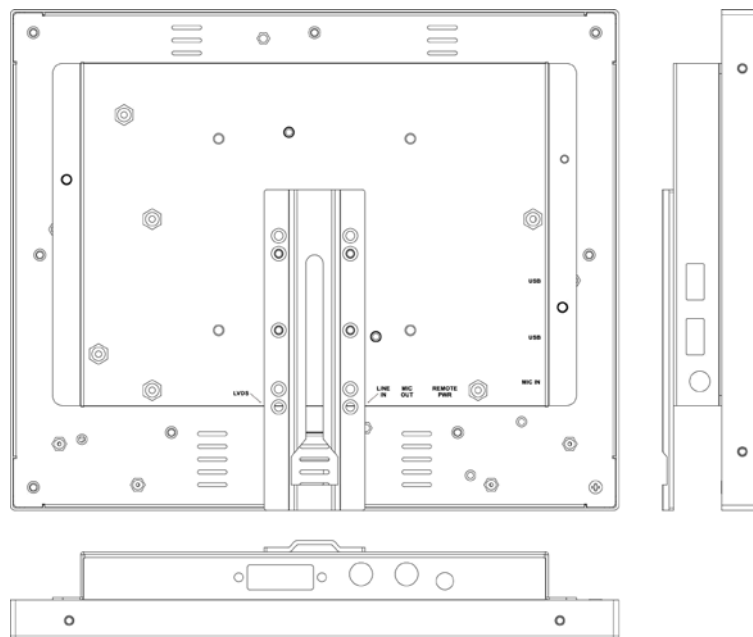- 244mm (W) x 202mm (H) x 38.3mm (D) (w/ protection kit)
- 1.06 Kg (2.35 Lb)

Environment
- Operating temperature: -20°C to 60°C

Certifications
- CE approval
- FCC

Dimension Drawing

Ordering Information

- **VTK 33M-01 (P/N: 10VK33M0100X00)**

  8.4" (800 x 600) LVDS with touch screen, sunlight-readable, smart brightness control

- **Bundle Accessories**

  LVDS cable (1.5M)
  Metal mounting kit
  Rubber protector x 4
  Cable fasterner
  CD-ROM x 1

VMD 2000

Coming Soon

Main Features

- 8" SVGA TFT LCD monitor
- Automatic/ Manual brightness control
- Remote system power control
- On screen control buttons

- Support USB 2.0 and card reader
- Camera sensor on front panel (Optional)
- Sunlight readable solution with 1000cd/m² high brightness support
- Front panel compliant with IP54

Product Overview

VMD 2000 is an 8-inch TFT LCD monitor with 4 wire resistant touch screen sensor. With the high brightness display and automatically brightness control, it is designed for in-vehicle applications. It also provides USB and card reader features, and reserves camera sensor as an option. Those friendly interfaces benefit the technicians during maintenances. Its front panel is compliant to IP54 to meet with industrial applications. VMD 2000 can perfectly match with any VTC series devices via the 26-pin LVDS cable.

Specifications

LCD Panel
- 8-inch TFT LCD panel with LED backlight
- 800 x 600 pixels (SVGA)
- Brightness: 500 cd/m² (typical)
- Contrast ratio: 500:1 (typical)

Touch Screen Sensor
- 4-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 82 ± 3%

Front Panel
- Control buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- LED indicators x 2
- Built-in speakers (1W) x 2

Rear Side I/O
- 1 x SD/ MMC/ MS card reader
- LVDS connector (integrating LVDS, USBx 1 and 12Vdc x 1)
- Stereo audio (Line-out) x 1 (automatic detection/ switch to external speaker)
- 1 x Mic-in
- 1 x Min-out
- 1 x Audio input
- 1 x USB
- Remote system power on/off button

Optional Features
- 2.0M pixels CCD camera on front panel
- Sunlight-readable touch screen (1000 cd/m² high brightness)
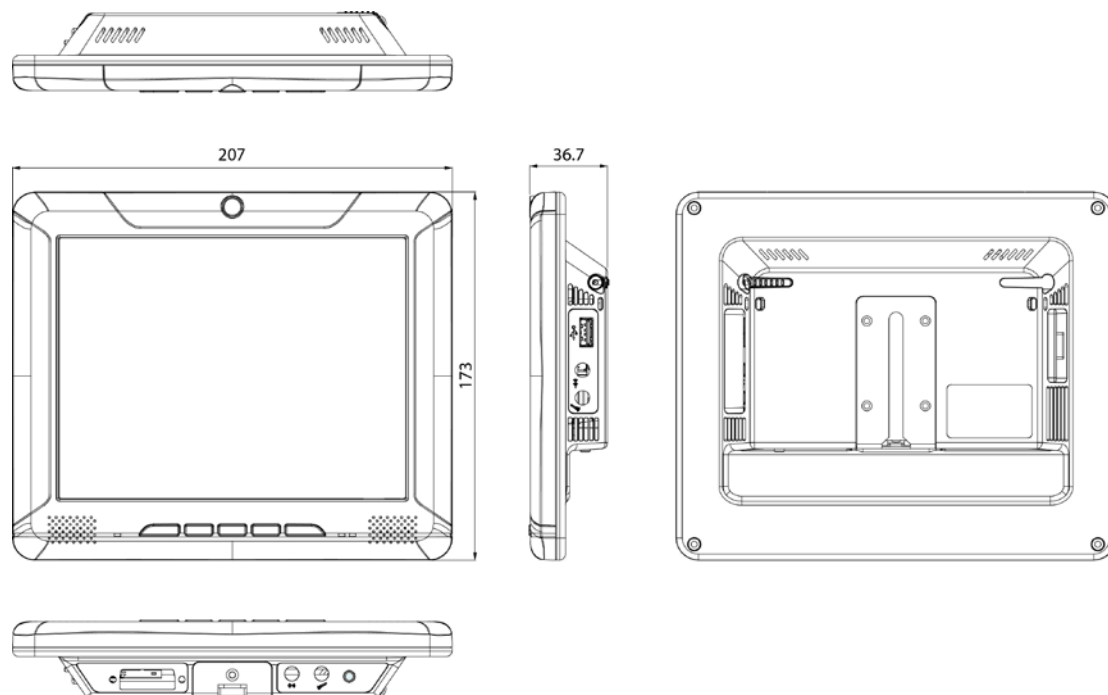- Support VESA mount kit

Dimensions
- 207mm (W) x 173mm (H) x 36.7mm (D)
- 0.7 Kg (1.54 Lb)

Environment
- Operating temperature: -20°C to 60°C
- Storage temperature: -30°C to 70°C

Dimension Drawing

Certifications

- CE approval
- FCC Class B

Ordering Information

- **VMD 2000 (P/N: 10VD0200000X0)**

  8" SVGA vehicle mount display with touch screen and LVDS interface

- **VMD 2000-BS (P/N: TBD)**

  8" SVGA vehicle mount display with touch screen, LVDS and sunlight readable

- **VMD 2000-P (P/N: TBD)**

  8" SVGA vehicle mount display with touch screen, LVDS and CCD camera

- **VMD 2000-PS (P/N: TBD)**

  8" SVGA vehicle mount display with touch screen, LVDS, CCD camera and sunlight readable

- **Bundle Accessories**

  LVDS cable (1.5M)

  Metal stand kit

  Cable fastener

  CD-ROM x 1

VMD 2001

8" SVGA Vehicle Mount Display with Touch Screen and VGA Interface

Coming Soon

Main Features

- 8" SVGA TFT LCD Monitor
- Automatic/ Manual brightness control
- Wide range DC input from 6~36V
- Direct VGA input interface

- Support USB 2.0 and card reader
- Camera sensor on front panel (Optional)
- Sunlight readable solution with 1000cd/m² high brightness support
- Front panel compliant with IP54

Product Overview

VMD 2001 is an 8-inch TFT LCD monitor with 4 wire resistant touch screen sensor. With the high brightness display and automatically brightness control, it is designed for in-vehicle applications. In support of standard VGA interface, it can be configured to link to the most of vehicle computers. It also provides USB and card reader features, and reserves camera sensor as an option. Those friendly interfaces benefit the technicians during maintenances. Its front panel is compliant to IP54, and wide range power input and operating temperature to meet with industrial applications.

Specifications

LCD Panel
- 8-inch TFT LCD panel with LED backlight
- 800 x 600 pixels (SVGA)
- Brightness: 500 cd/m² (typical)
- Contrast ratio: 500:1 (typical)

Touch Screen Sensor
- 4-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 82 ± 3%

Front Panel
- Control buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- LED indicators x 2
- Built-in speakers (1W)x 2

Rear Side I/O
- 1 x VGA
- 1 x Line-in
- 1 x Line-out (automatic detection/ switch to external speaker)
- 2 x USB
- 1 x SD/MMC/MS card reader
- 6~36V wide range DC power input

Optional Features
- 2.0M pixels CCD camera on front panel
- Sunlight-readable touch screen (1000 cd/m² high brightness)
- Support VESA mount kit

Dimensions
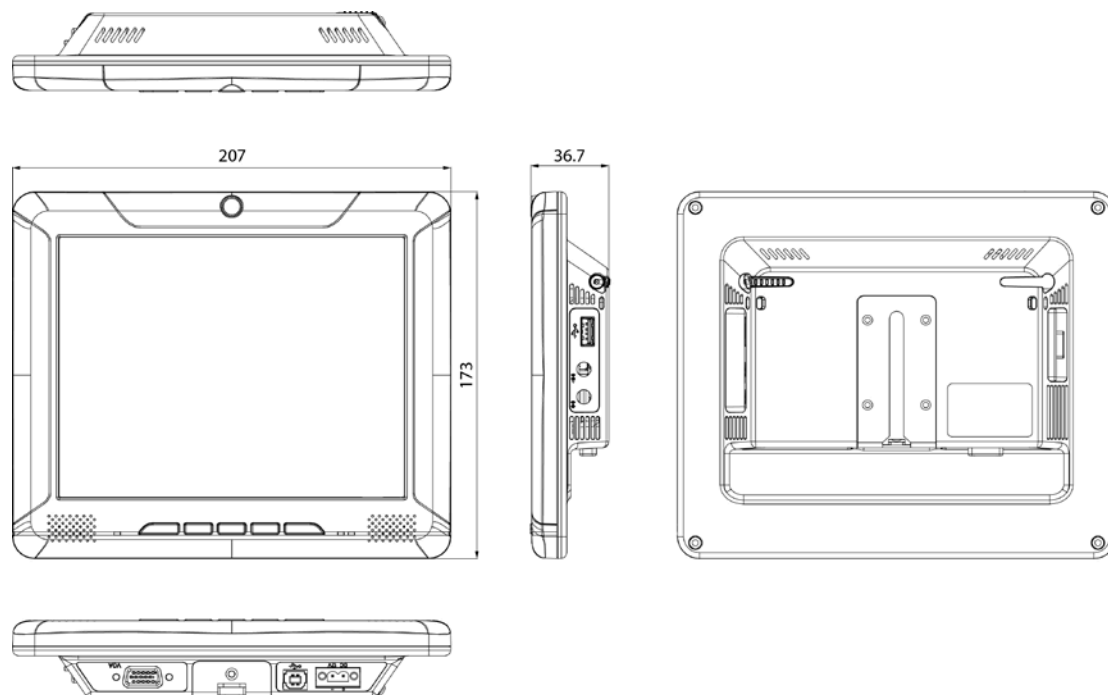- 207mm (W) x 173mm (H) x 36.7mm (D)
- 0.7 Kg (1.54 Lb)

Environment
- Operating temperature: -20°C to 60°C
- Storage temperature: -30°C to 70°C

Certifications
- CE approval
- FCC Class B

Dimension Drawing

Ordering Information

- **VMD 2001 (P/N: 10VD0200100X0)**

  8" SVGA vehicle mount display with touch screen and VGA interface

- **VMD 2001-BS (P/N: TBD)**

  8" SVGA vehicle mount display with touch screen, LVDS and sunlight readable

- **VMD 2001-P (P/N: TBD)**

  8" SVGA vehicle mount display with touch screen, LVDS and CCD camera

- **VMD 2001-PS (P/N: TBD)**

  8" SVGA vehicle mount display with touch screen, LVDS, CCD camera and sunlight readable

- **Bundle Accessories**

  VGA cable (1.5M)

  USB cable (1.5M)

  Metal stand kit

  Cable fastener

  CD-ROM x 1

VMD 3000

Coming Soon

Main Features

- 10.4" XGA TFT LCD monitor
- Automatic/ manual brightness control
- Remote system power control
- On screen control buttons

- Support USB 2.0 and card reader
- Sunlight readable solution with 1000cd/m² high brightness support
- Robust design with die-cast aluminum front panel
- Front panel compliant with NEMA4/ IP65

Product Overview

VMD 3000 is a 10.4-inch TFT LCD monitor with 5 wire resistant touch screen sensor. With high brightness display and automatically brightness control, it is designed for in-vehicle applications. It also provides USB and card reader features, and reserves camera sensor as an option. These friendly interfaces benefit the technicians during maintenances. Its front panel is compliant with IP65 to meet with industrial applications. VMD 3000 can perfectly match with any VTC series devices via the 26-pin LVDS cable.

Specifications

LCD Panel
- 10.4-inch TFT LCD panel with LED backlight
- 1024 x 768 pixels (XGA)
- Brightness: 400 cd/m² (typical)
- Contrast Ratio: 500:1 (typical)

Touch Screen Sensor
- 5-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 89 ± 3%

Front Panel
- On screen display buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- LED indicators x 2
- Built-in speakers (2W) x 2

Rear Side I/O
- 1 x SD/ MMC/ MS card reader
- LVDS connector (integrating LVDS, USB x 1 and 12Vdc x 1)
- Stereo audio (Line-out) x 1 (automatic detection/ switch to external speaker)
- 1 x Mic-in
- 1 x Min-out
- 1 x audio input
- 1 x USB
- Remote System Power on/off Button

Optional Features
- Sunlight-readable touch screen (4 wires resistive w/ anti-glare coating)
- Support VESA mount kit

Dimensions
- TBD

Environment
- Operating temperature: -20°C ~ 60°C
- Storage temperature: -30°C~70°C

Certifications
- CE approval
- FCC Class B

Dimension Drawing

Coming Soon

Ordering Information

- **VMD 3000 (P/N: TBD)**
  10.4" XGA vehicle mount display with touch screen and LVDS interface

- **Bundle Accessories**
  LVDS cable (1.5M)
  Metal stand kit
  Cable fastener
  CD-ROM x 1

nROK 500

Intel® Atom™ D525 1.8GHz Fanless Railway System

Main Features

- On-board Intel® Atom™ Dual Core D525 processor
- One DDR2 SO-DIMM socket, DDR2 800 2G memory module support max.
- 1 x M12 LAN port
- 2 x USB2.0/ 1 x VGA/ 2 x RS-232

- 1 x external CF socket and one external SIM card holder
- 24V DC input with 500V isolated protection
- Support ignition signal for delay-time control
- Support WoL & PXE function

Product Overview

nROK 500 fanless computer with EN50155 certified is specially designed for transportation computing solution especially in railway related applications. Based on Intel® Atom™ D525 processor, nROK 500 is designed with isolated DC input protection to ensure stable operation in harsh environments. Adopting lock concept, all connectors, for example M12 Ethernet connector, on nROK 500 are designed against vibration. Equipped with a SIM card holder, CF socket and mini-PCIe socket for optional 3G wireless module, nROK 500 allows data to be transmitted over network and stored in a convenient SSD (Solid-State Drive) or CF card for better vibration and shock protection. EN50155 certified nROK 500 is a reliable accredited solution for railway applications.

Specifications

Main Board
- Onboard Intel® Atom™ Dual Core D525 1.8GHz processor, 1M Cache
- Chipset: Intel® ICH8M chipsets

Main Memory
- 1 x DDR2 SO-DIMM socket, support 2G DDR2 667 and 800 MHz memory max., unbuffered and non-ECC
- Pre-Install with one DDR2 667 2G SO-DIMM memory in nROK500 system

Storage
- CF Card socket: External accessible type, screwed with CF card cover
- 1 x 2.5" SSD drive bay for optional SSD

Expansion
- 1 x Mini-PCIe socket (for optional 3G/ 3.5G Mobile wireless module)

I/O Interface-Front
- 1 x VGA Output
  DB15 x 1, support analog monitor with pixel resolution up to 2048 x 1536@75 Hz
- 2 x RS-232 COM Port
  DB9 x 2, support 115.2 Kbps baud rate
- 2 x USB Port
  2 x USB 2.0 ports, 500mA per port, covered with plastic cover to against the dust

- 1 x Mic-in & 1 x Speaker-out
  · Audio controller: High definition audio controller, Realtek: ALC888-GR
  · 1 x Speaker-out, Dia. 3.5mm phone jack, covered with plastic cover to against the dust
  · 1 x Mic-in, Dia. 3.5mm phone jack, covered with plastic cover to against the dust
- 1 x 10/ 100 M12 LAN Port
  · LAN Controller: Intel® WG82574L LAN controller x 1
  · Support wake on LAN and boot from LAN function
- Wireless communication
  · 1 x External accessible SIM card socket
  · 1 x Mic-in for wireless communication use
  · 1 x Speaker-out for wireless communication use
  · 2 x Antenna holes (for 3G/ 3.5G mobile wireless module)
- LEDs
  · 1 x LED for power status
  · 1 x LED for HDD status
  · 1 x LED for 10/ 100 LAN link
  · 1 x LED for 10/ 100 LAN active
- DC Input
  · Nominal Voltage: 24V (Range: 16.8V ~ 30V)
  · Ignition signal input (24V, nominal; 0~10.5V = off, rest = on)
  · 500V Isolated design on DC Input
  · 1 x External fuse

Dimension Drawing
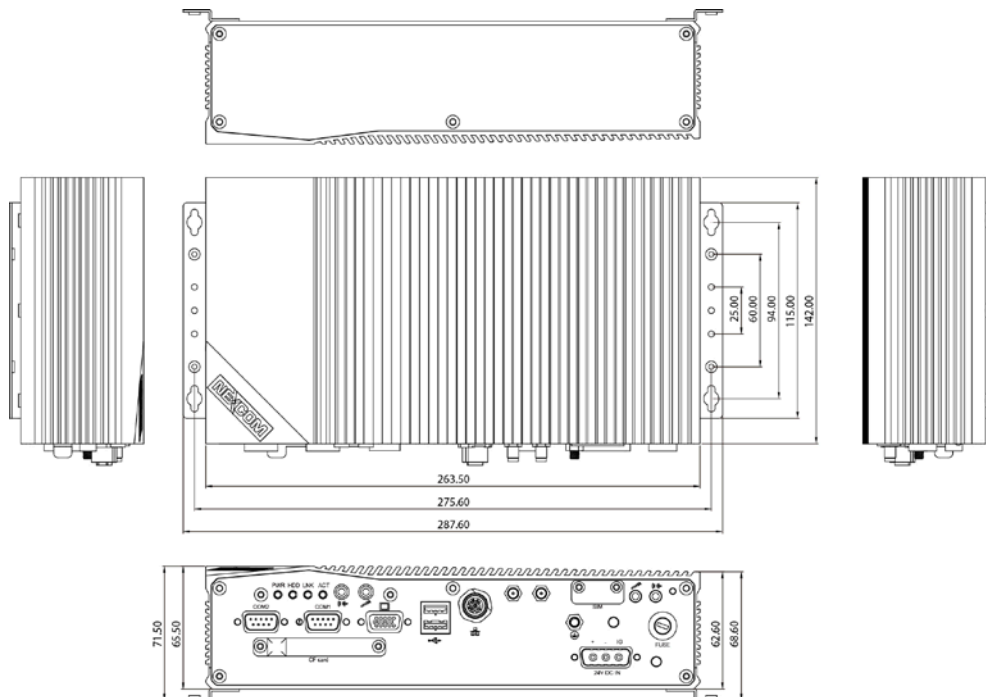
Validated Embedded OS
* Windows Embedded Standard 2009
* Windows Embedded Standard 7

System Dimension
* 264mm (W) x 142mm (D) x 65.5mm (H)

Environment
* Operating temperature
  Ambient with air: -25°C to 55°C (EN50155 Class T1)
* Storage temperature: -40°C to 80°C
* Damp heat test: 95% at 55 °C, compliance with EN50155
* Relative humidity: 0% to 90% (non-condensing)
* Vibration (Random): Compliance with EN61373 Category 1, Class B
* Shock: Compliance with EN61373 Category 1, Class B

Protection Grade
* IP52

Certifications
* CE
* EN50155

Ordering Information

* **nROK 500 (P/N: 10A00050000X0)**
  Intel® Atom™ D525 1.8GHz Fanless Railway Computer with 2G memory pre-installed and Isolated 24VDC Input

nROK 3000

Intel® Atom™ D525 Fanless Railway Computer

Main Features

- Built-in Intel® Atom™ D525 Dual Core 1.8GHz processor
- Fanless and rugged design
- Easy maintenance
- Rich I/O interface with secure lock
- Removable 2.5" SSD tray

- Isolation RS-232/ 422/ 485 and GPIO
- Optional 24V/ 110V DC input with isolated protection
- Compliant with IP65 design
- Certified by EN50155

Product Overview

The latest transportation computing solution nROK 3000 fanless computer certified with EN50155 is specially designed for railway related applications. Based on Intel® Atom™ D525 processor, nROK 3000 is designed with isolated DC input protection to ensure stable operation in harsh environments. Adopting lock concept, all connectors, such as M12 Ethernet connector on nROK 3000, are designed for anti-vibration. Equipped with a SIM card holder, CFast socket and mini-PCIe socket for optional 3G wireless module, nROK 3000 allows data to be transmitted over network and stored in a convenient SSD (Solid-State Drive) or CFast card for better vibration and shock protection. The EN50155-certified nROK 3000 is a reliable solution for railway applications.

Specifications

Main Chipset
- ICH-8M

CPU
- Intel® Atom™ D525 Dual Core 1.8GHz

Memory
- 1GB DDR3 1333MHz SODIMM (up to 4GB)

Expansion
- 1 x Mini-PCIe socket (PCIe + USB) for WLAN option
- 1 x Mini-PCIe socket (USB) for 3.5G module option
- 1 x GPS module

I/O Interface-Front
- 1 x DVI-I connector with DVI-D and VGA output
- 1 x 26-pin circular connector in support of RS232/ 422/ 485 with isolation, 4-channel digital input and 4-channel digital output
- 1 x USB 2.0 with M12 connector
- 1 x Mic-in & 1 x Line-out
- 3 x 10/ 100 Ethernet with M12 connector
- Wireless communication
  1 x External accessible SIM card socket
  3 x Antenna holes for WWAN/ WLAN/ GPS
- 4 x LED for power, SSD, WWAN and WLAN
- DC Input
  24V with 500V isolated (range: 16.8V ~ 30V)
  Optional: 110V with 1.5KV isolation (range: 66V ~ 154V)

I/O Interface-Rear
- SSD accessible
- 2 x USB 2.0

Expandable Storage
- 1 x 2.5" SATA SSD tray
- 1 x CFast slot with protection cover

Power Management
- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

Validated Embedded OS
- Windows Embedded Standard 2009
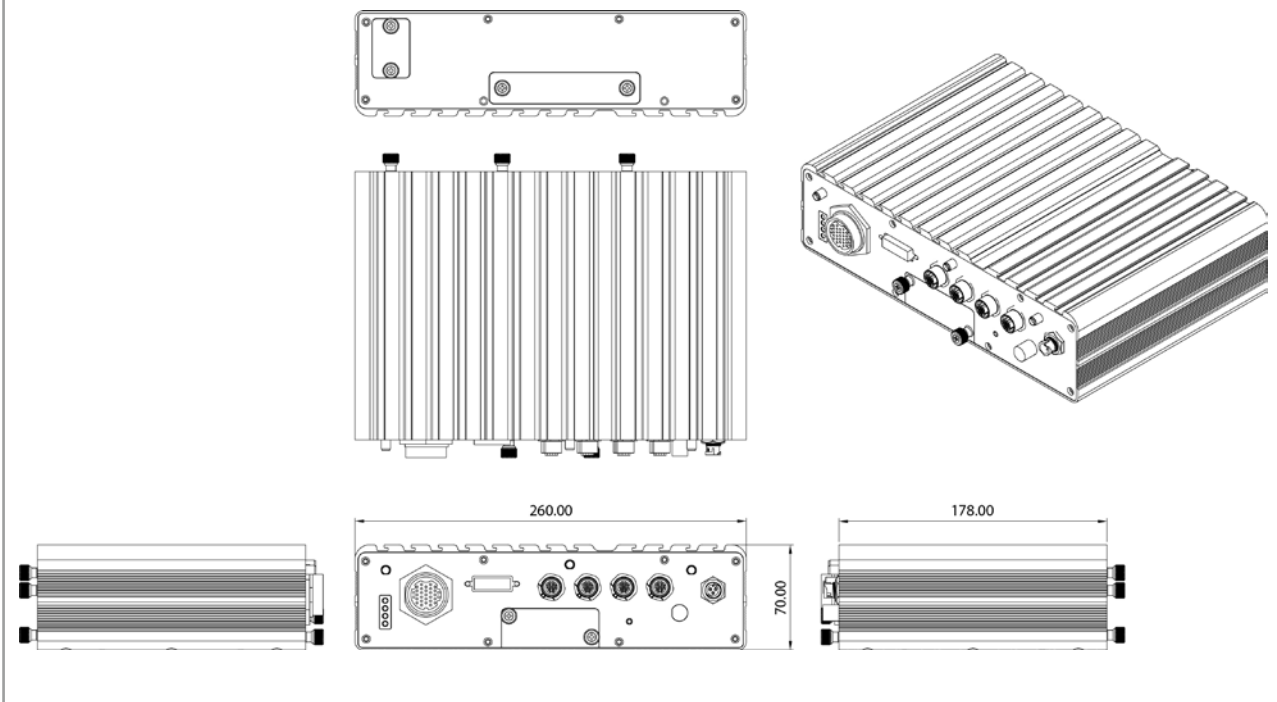- Windows Embedded Standard 7
- Linux (kernel 2.6.X)

System Dimension
- 260mm (W) x 178mm (D) x 70mm (H) (10.24"x 7"x 2.76")

Construction
- Aluminum enclosure with fanless design

Dimension Drawing

260.00

178.00

70.00

Environment
- Operating temperatures
  Ambient with air: -40°C to 55°C (EN50155 Class T2)
- Storage temperatures: -40°C to 80°C
- Damp heat test: 55°C, 95% RH (non-operating, EN 50155)
- Relative humidity: 0% to 90% (non-condensing)
- Vibration (random):
  Compliance with EN61373 Category 1 Class B
- Shock:
  Compliance with EN61373 Category 1 Class B

Protection Grade
- IP65 rating

Standards/ Certifications
- CE
- FCC Class A
- Compliance with EN50155

Ordering Information

- **nROK 3000 (P/N: 10T00300000X1)**

  Intel® Atom™ D525 fanless railway computer with 24VDC isolation power input

- **Optional Accessories**

Part No.	Description
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01 (V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100

MRC 2000-E

Main Features

- Fanless design with low power consumption processor
- Automatic backlight adjustment via light sensor
- Built-in 1D/ 2D lase barcode scanner or RFID (Optional)
- Variety Wireless connectivity (Bluetooth/ WLAN/ WWAN)

- Rugged design to withstand shock and vibration
- Compliant with MIL-STD-810F
- Dust and water protection for IP54 compliance

Product Overview

The MRC 2000-E is an 8.4" semi-rugged tablet PC with low power consumption processor. Its fanless design with IP54 rating sustains the system more durable in harsh environment. The system with built-in camera and optional to equip with RFID reader and barcode engine is suitable to apply in the service field such as warehouse management and factory process management. With these data capture features, it can assist in improving the efficiency to increase productivity.

Specifications

CPU Support
- Intel® Atom™ processor 1.1 GHz with 512 KB on-die L2 cache, 400MHz/ 533MHz FSB

Chipset
- Intel® System Controller Hub US15W (single chip integrated graphics and I/O controller)

Memory
- 1GB DDR2 SODIMM 667Mhz support up to 2GB (optional)

Storage
- 8GB Solid State Drive/ SATA interface, up to 64GB (optional)

Audio
- ALC888-VC2-GR HD codec
- AC '97 compatible
- 2 x 2w built-in speaker
- 1 x external Mic-in and 1 x external Line-out

Display
- 8.4" transmissive TFT LCD with CCFL backlight support 800 x 600 SVGA or 1024 x 768 resolution via driver (virtual mode)
  Resolution: 800 x 600 (SVGA)
  Luminance: 400 nits
  Contrast ratio: 500:1
- Touch screen: analog resistive 4 wire touch screen
- Auto dimming via ambient light sensor

I/O
- 2 x USB 2.0 port; 1 x Mini USB (client)
- 1 x Finger printer sensor
- 1 x Mic-in and 1x Line-out
- 1 x 19V DC power input

Communication
- IEEE 802.11 b/g/n Wi-Fi module with built-in antenna
- Bluetooth module class 2 v2.1 + EDR (optional)
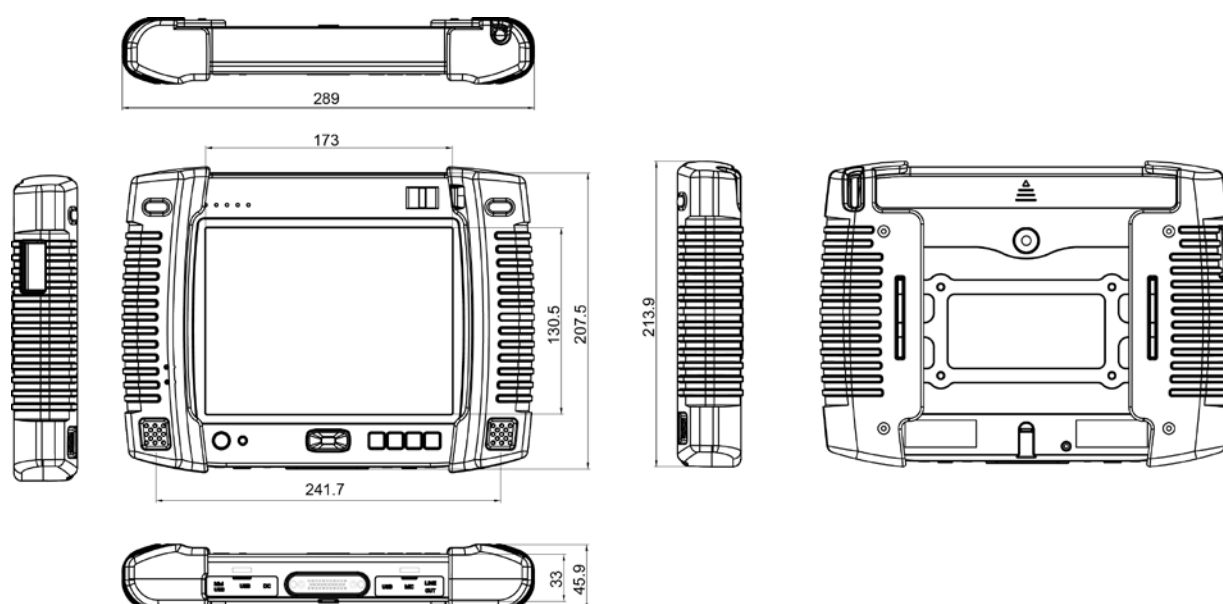- WWAN support of GSM/ GPRS/ HSDPA/ WCDMA (optional)

Data Capture
- GPS receiver with built-in internal antenna (optional)
- 2M pixel CMOS camera
- HF RFID reader compliant with ISO14443A/ B and ISO 15693 (optional)
- 1D/ 2D laser barcode engine (optional)
- Fingerprint sensor

Indicators and Buttons
- Four LED indicator - power on/off, battery, WLAN and HDD
- Four programmable function keys
- Five Buttons – navigation key, power button, wireless switch button, camera shot button and barcode scanner button

Dimension Drawing

Power Input
- Power input voltage: DC 19V/3.42A
- Power output: 65W (Max)
- Rechargeable lithium ion smart battery pack: 2600 mAh@11.1V, 28.86W

Dimensions
- 289mm (W) x 214mm (H) x 46mm (D) with rubber
  280mm (W) x 205mm (H) x 37mm (D) without rubber
- Weight: 1.65Kg with rubber; 1.35Kg without rubber

Enclosure
- Plastic housing (ABS + PC)
- Color: black

Environment
- Operating temperature: -20°C to 50°C
- Storage temperature: -30°C to 60°C
- Rel. humidity: 5% to 95%

Rugged Grade
- IP 54
- 4-feet drop to polywood
- compliance with MIL-STD-810F

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MRC 2000-E (P/N: 10U00200001X0)**
  8.4" fanless rugged tablet PC with Intel® Atom™ 1.1GHz processor/ 8GB SSD/ 1GB memory/ touch screen/ Wi-Fi

- **Optional Features for MRC 2000-E**
  1D Laser Barcode Scanner-Opticon (P/N: 88U00210004X0)
  2D Laser Barcode Scanner-Opticon (P/N: 88U00210010X0)
  HF RFID Reader 13.56MHz (P/N: 88U00210003X0)
  WWAN Module with internal antenna: Sierra MC8790V (P/N: 88U00210006X0)
  Bluetooth Pack w/ Antenna (P/N: 88U00210007X0)
  GPS Pack w/ Antenna (P/N: 88U00200000X0)
  Windows XP Pro for Embedded Software Kit (P/N: 88U00210008X0)
  Windows XP Embedded Software Kit (P/N: 88U00210009X0)
  Windows Embedded Standard 2009 Software Kit (P/N: 88U00200001X0)

- **Optional Accessories for MRC 2000-E**
  Vehicle Docking Station (P/N: 10UK0DOCK00X0)
  Desktop Docking Station (P/N: 10UK0DOCK02X0)
  Holding Bracket (P/N: 50501A0325X00)
  4 Slots Battery Charger (P/N: 10UK0BATT00X0)
  Carry Case (P/N: 6019900015X00)
  Spare Battery Pack (3S1P) (P/N: 4ZTSS26301X00)
  Vehicle Cigarette Adaptor Charger (P/N: 7400060010X00)
  USB to VGA Adaptor (P/N: 7500VGA004X00)
  Power Cable (US) (P/N: 60233POW38X00)
  Power Cable (EU) (P/N: 60233POW39X00)
  Power Cable (UK) (P/N: 60233POW40X00)

MRC 2100-E

8.4" Rugged Tablet PC with Intel® Atom™ Processor/ Daylight Readable Display/ Touch Screen/ Wi-Fi/ Bluetooth/ GPS

Main Features

- Fanless design with low power consumption processor
- Daylight readable display with auto dimming
- Dust and water protection for IP54 compliance
- Integrated GPS module

- Built-in 1D/ 2D laser barcode scanner or RFID (Optional)
- Compliant with MIL-STD-810F
- Variety Wireless connectivity (Bluetooth/ WLAN/ WWAN)

Product Overview

The MRC 2100-E, an 8.4" semi-rugged tablet PC, provides a daylight readable display and built-in GPS receiver. The display with low reflection touch increases its readability during the daylight. With along GPS receiver and optional 3.5G WWAN module built-in together, the MRC 2100-E extremely fit for the outdoor application. The system can also be utilized in fleet management and logistical management via variety vehicle mount.

Specifications

CPU Support
- Intel® Atom™ processor 1.1GHz/ 1.6GHz with 512 KB on-die L2 cache, 400MHz/ 533MHz FSB

Chipset
- Intel® System Controller Hub US15W (single chip integrated graphics and I/O controller)

Memory
- 1GB DDR2 SODIMM 667MHz, support up to 2GB (optional)

Storage
- 8GB solid state drive/ SATA interface, up to 64GB (optional)

Audio
- ALC888-VC2-GR HD codec
- AC '97 compatible
- 2 x 2w built-in speaker
- 1 x external Mic-in and 1 x external Line-out

Display
- 8.4" TFT LCD with CCFL backlight
  Resolution: 800 x 600 (SVGA)
  Luminance: 400 nits
  Contrast ratio: 500:1
- Touch screen: analog resistive 4 wire daylight readable touch screen
- Auto dimming via ambient light sensor

I/O
- 2 x External USB 2.0 port; 1 x Mini USB (client)
- 1 x Mic-in and 1 x Line-out
- 1 x 19V DC power input

Communication
- Bluetooth module class 2 V 2.1 + EDR
- IEEE 802.11 b/g/n Wi-Fi module with built-in antenna
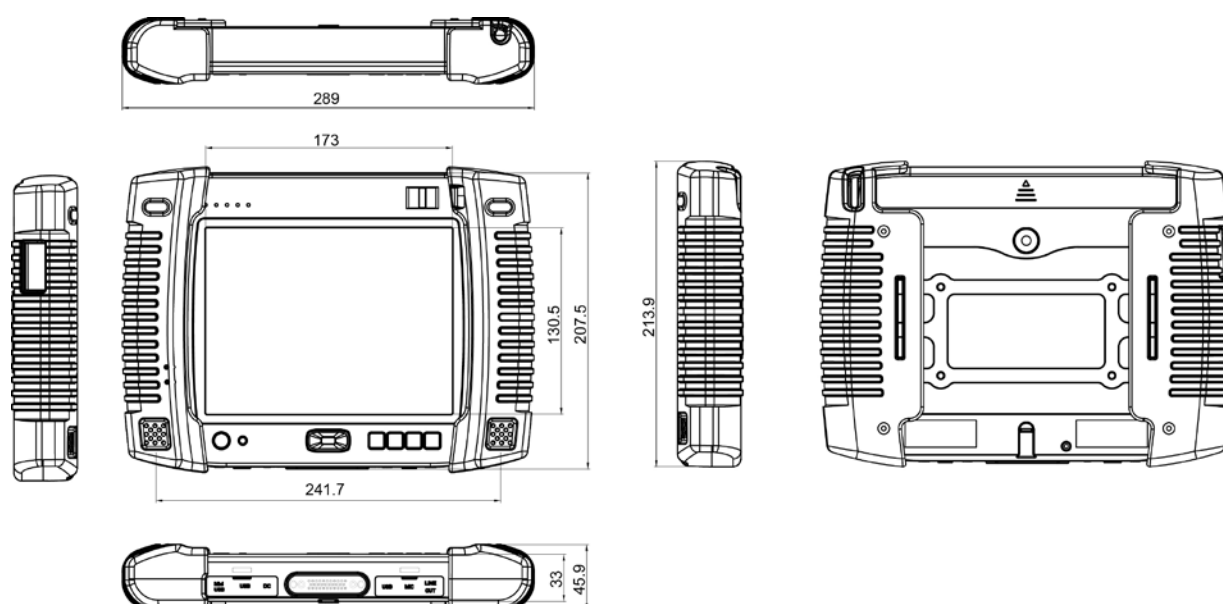- WWAN module support of GSM/ GPRS/ HSDPA/ WCDMA (optional)

Data Capture
- GPS receiver with built-in internal antenna
- 2M pixel CMOS camera
- HF RFID reader compliant with ISO14443A/B and ISO 15693 (optional)
- 1D/ 2D laser barcode engine (optional)
- Fingerprint sensor

Indicators and Buttons
- Four LED indicator - power on/off, Battery, WLAN and HDD
- Four programmable function keys
- Five buttons – navigation key, power button, wireless switch button, camera shot button and barcode scanner button

NEXCOM

Dimension Drawing

Power Input
- Power input voltage: DC 19V/ 3.42A
- Power output: 65W (Max)
- Rechargeable lithium ion smart battery pack: 2600 mAh@11.1V, 28.86W

Dimensions
- 289mm (W) x 214mm (H) x 46mm (D) with rubber
  280mm (W) x 205mm (H) x 37mm (D) without rubber
- Weight: 1.65Kg with Rubber; 1.35Kg without rubber

Enclosure
- Plastic housing (ABS + PC)
- Color: black

Environment
- Operating temperature: -20°C to 50°C
- Storage temperature: -30°C to 60°C
- Rel. humidity: 5% to 95%

Rugged Grade
- IP54
- 4 feet drop to polywood
- Compliant with MIL-STD-810F

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MRC 2100-E51H (P/N: 10U00210007X0)**
  8.4" Rugged tablet PC with Intel® Atom™ 1.1GHz processor/ 60GB HDD/ 1GB memory/ daylight readable touch screen/ GPS/ Wi-Fi/ Bluetooth

- **MRC 2100-E51S8 (P/N: 10U00210008X0)**
  8.4" Rugged tablet PC with Intel® Atom™ 1.1GHz Processor/ 8GB SSD/ 1GB memory/ daylight readable touch screen/ GPS/ Wi-Fi/ Bluetooth

- **MRC 2100-E53S8 (P/N: 10U00210009X0)**
  8.4" Rugged tablet PC with Intel® Atom™ 1.6GHz processor/ 8GB SSD/ 1GB memory/ daylight readable touch screen/ GPS/ Wi-Fi/ Bluetooth

- **Optional Features for MRC 2100-E**
  1D Laser Barcode Scanner-Opticon (P/N: 88U00210004X0)
  2D Laser Barcode Scanner-Opticon (P/N: 88U00210010X0)
  HF RFID Reader 13.56MHz (P/N: 88U00210003X0)
  WWAN Module with internal antenna: Sierra MC8790V (P/N: 88U00210006X0)
  Windows XP Pro for Embedded Software Kit (P/N: 88U00210008X0)
  Windows XP Embedded Software Kit (P/N: 88U00210009X0)
  Windows Embedded Standard 2009 Software Kit (P/N: 88U00200001X0)

- **Optional Accessories for MRC 2100-E**
  Vehicle Docking Station (P/N: 10UK0DOCK00X0)
  Desktop Docking Station (P/N: 10UK0DOCK02X0)
  Holding Bracket (P/N: 50501A0325X00)
  4 slots Battery Charger (P/N: 10UK0BATT00X0)
  Carry Case (P/N: 6019900015X00)
  Spare Battery Pack (3S1P) (P/N: 4ZTSS26301X00)
  Vehicle Cigarette Adaptor Charger (P/N: 7400060010X00)
  USB to VGA Adaptor (P/N: 7500VGA004X00)
  Power Cable (US) (P/N: 60233POW38X00)
  Power Cable (EU) (P/N: 60233POW39X00)
  Power Cable (UK) (P/N: 60233POW40X00)

MRC 2200

8" Rugged Tablet PC with Intel® Atom™ Processor/

5-Wires Resistive Touch Screen/ Wi-Fi

Main Features

- 8" LCD with 5-wires resistive touch screen
- Intel® Atom™ N450 1.6GHz processor
- Wireless LAN support Wi-Fi 802.11 b/ g/ n
- WWAN support GSM/ GPRS/ HSDPA/ WCDMA (Optional)

- Integrated GPS module (Optional)
- Integrated laser barcode scanner (1D/ 2D) or HF type RFID (Optional)
- Integrated 2M pixel camera in rear or in front bezel (Optional)
- Compliant with IP54 and MIL-STD-810F

Product Overview

The MRC 2200 is an 8" semi-rugged tablet PC with low power consumption processor. Based on the fanless design and IP54 rating, it can survive in the industrial environment. It retains the same features as MRC 2200 provides but improves the battery design. No need to completely power off the system, while replacing the battery. It means you can replace the battery through stand by. Moreover, there is one option for battery hot swap. It is right for the mobile worker to easily replace the battery pack without screw. With these two more features, the MRC 2200 can be applied in the field service for mobile engineers.

Specifications

CPU Support
- Intel® Atom™ N450 1.6GHz processor
- 667MHz FSB

Chipset
- Intel® System Controller Hub ICH8M

Memory
- 1GB DDR2 SDRAM- 667MHz, support up to 2GB (optional)

Storage
- 8GB Solid State Drive/ SATA interface, support up to 64GB

Audio
- Intel® high definition audio
- AC '97 compatible
- 2 x 2W built-in speakers
- 1 x external Mic-in and 1 x external Line-out
- 1 x Internal microphone

Display
- 8" TFT LCD with LED backlight
  Resolution: 800 x 600 pixels (SVGA)
  Luminance: 320nits
  Contrast ratio: 500:1
- 5-wries resistant touch screen
- Auto dimming via ambient light sensor

I/O Interface
- 2 x USB 2.0 type A port; 1 x mini USB connector
- 1 x MIC-in
- 1 x Line-out
- 1 x 19V DC power input
- 1 x Docking connector

Communication
- IEEE 802.11 b/g/n Wi-Fi module with built-in antenna
- Bluetooth module class 2 v2.1 + EDR (optional)
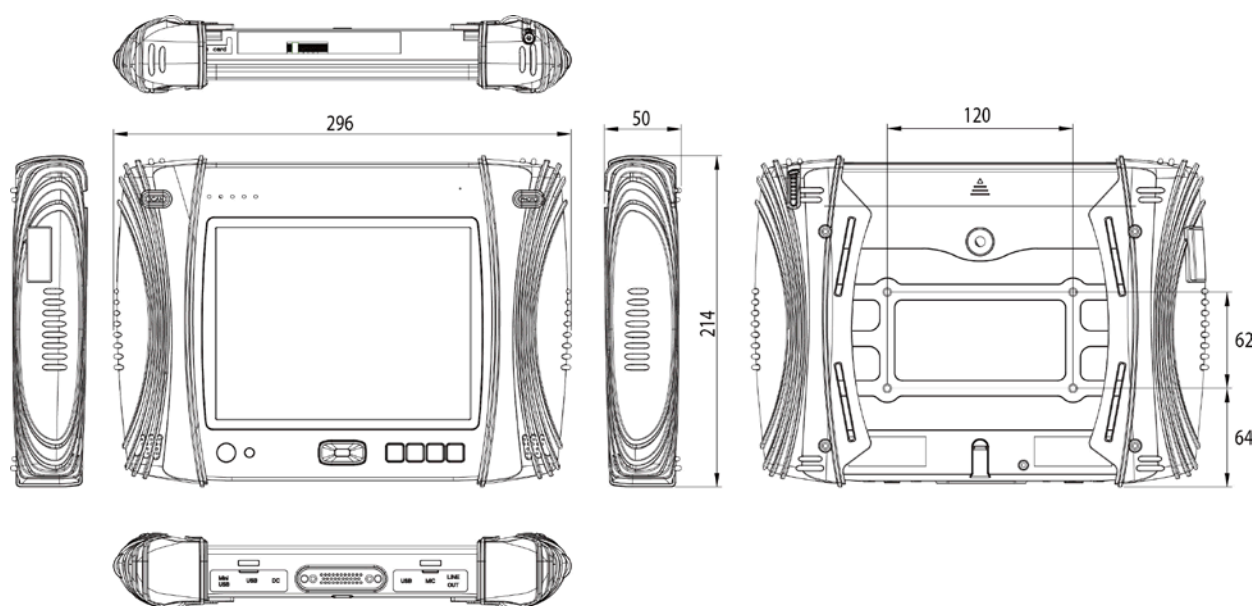- WWAN support of GSM/ GPRS/ HSDPA/ WCDMA (optional)

Data Capture
- GPS receiver with built-in internal antenna (optional)
- 2M pixel CMOS camera
- HF RFID reader compliant with ISO14443A/B and ISO 15693 (optional)
- 1D/ 2D laser barcode engine (optional)

Indicators and Buttons
- Four color LED indictors - power on/off, battery, WLAN and HDD
- Four programmable function keys
- Five buttons – navigation key, power button, wireless switch button, camera shot button and barcode scanner button

Dimension Drawing

Power Input
- Power input voltage: DC 19V/ 3.42A
- AC adapter: 100V-240V AC, 50Hz/60Hz
- Rechargeable lithium ion smart battery pack: 2600 mAh@11/1V, 28.86W/hr; support hot swap (optional)

Dimensions
- 296mm (W) x 214mm (H) x 50mm (D) with rubber
- 280mm (W) x 205mm (H) x 37mm (D) without rubber
- Weight: 1.44Kg with rubber; 1.2Kg without rubber

Enclosure
- Plastic housing (ABS + PC)
- Color: black

Environment
- Operating temperature: -20°C to 50°C
- Storage temperature: -30°C to 60°C
- Rel. humidity: 0% to 95%

Rugged Grade
- IP 54
- Compliance with MIL-STD-810F

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MRC 2200 (P/N: 10U00220000X0)**

  8" Rugged tablet PC with Intel® Atom™ 1.6GHz processor/ 8GB SSD/ 1GB memory/ 5-wires touch screen/ Wi-Fi

- **Optional Features for MRC 2200**

  1D Laser Barcode Scanner: RIOTEC (P/N: 88U00220001X0)

  2D Laser Barcode Scanner: Opticon (P/N: 88U00220003X0)

  WWAN Module with internal antenna: Sierra MC8790V (P/N: 88U00210006X0)

  HF RFID Reader 13.56MHz (P/N: 88U00220002X0)

  Bluetooth Pack w/ Antenna (P/N: 88U00210007X0)

  GPS Pack w/ Antenna (P/N: 88U00220000X0)

  Windows XP Pro for Embedded Software Kit (P/N: 88U00220004X0)

  Windows Embedded Standard 2009 Software Kit (P/N: 88U00220005X0)

- **Optional Accessories for MRC 2200**

  Vehicle Docking Station (P/N: 10UK0DOCK00X0)

  Desktop Docking Station (P/N: 10UK0DOCK02X0)

  Holding Bracket (P/N: 50501A0325X00)

  4 Slots Battery Charger (P/N: 10UK0BATT00X0)

  Carry Case (P/N: 6019900015X00)

  Spare Battery Pack (3S1P) (P/N: 4ZTSS26301X00)

  Vehicle Cigarette Adaptor Charger (P/N: 7400060010X00)

  USB to VGA Adaptor (P/N: 7500VGA004X00)

  Power Cable (US) (P/N: 60233POW38X00)

  Power Cable (EU) (P/N: 60233POW39X00)

  Power Cable (UK) (P/N: 60233POW40X00)

MRC 2300

8" Rugged Tablet PC with Intel® Atom™ Processor/ Daylight Readable Display/ 5-Wires Resistive Touch Screen/ Wi-Fi/ Bluetooth/ GPS

Main Features

- Fanless Design with low power consumption processor
- Daylight readable display
- Wireless connectivity of WLAN/ WWAN/ Bluetooth
- WWAN support GSM/ GPRS/ HSDPA/ WCDMA (Optional)
- Integrated GPS receiver with built-in antenna

- Integrated laser barcode scanner (1D/ 2D) or HF RFID (Optional)
- Optional battery hot swap support
- IP54 compliance for dust and water protection
- Compliant with MIL-STD-810F

Product Overview

The MRC 2300, an 8" semi-rugged tablet PC, is an advance version of the MRC 2300. The MRC 2300 adapts the low power consumption processor, Intel® N450, and integrates an 8" daylight readable display and GPS receiver. It also provides the easy access of battery pack without screw and an option for battery hot swap. The MRC 2300 can be applied not only in logistical management and vehicle application, but also suits for the mobile engineers working at outdoor through vary wireless connectivity. It is built with the rugged design, compliant with MIL-STD-810F and IP54 rating, to withstand in the harsh environment.

Specifications

CPU Support
- Intel® Atom™ N450 1.6GHz processor 667MHz FSB

Chipset
- Intel® System Controller Hub ICH8M

Memory
- 1GB DDR2 SODIMM 667MHz, support up to 2GB (optional)

Storage
- 8GB solid state drive/SATA interface, support up to 64GB or 120GB 1.8" HDD/ SATA interface

Audio
- Intel® high definition audio
- AC '97 Compatible
- 2 x 2W built-in speakers
- 1 x external Mic-in and 1 x external Line-out
- 1 x Internal microphone

Display
- 8" TFT LCD with LED backlight
  Resolution: 800 x 600 pixels (SVGA)
  Luminance: 400 nits
  Contrast ratio: 500
- 5-wries resistant touch screen
- Daylight readable display
- Auto dimming via ambient light sensor

I/O
- 2 x USB 2.0 type A port, 1x mini USB 2.0 connector
- 1 x Mic-in
- 1 x Line-out
- 1 x 19V DC power input
- 1 x Docking connector

Communication
- IEEE 802.11 b/g/n Wi-Fi module with built-in antenna
- Bluetooth module class 2 v2.1 + EDR
- WWAN support of GSM/ GPRS/ HSDPA/ WCDMA (optional)

Data Capture
- GPS receiver with built-in internal antenna
- 2M pixel CMOS camera
- HF RFID reader compliant with ISO14443A/B and ISO 15693 (optional)
- 1D/ 2D laser barcode engine (optional)

Indicators and Buttons
- Four color LED indictors - power on/off, Battery, WLAN and HDD)
- Four programmable function keys
- Five buttons – navigation key, power button, wireless switch button, camera shot button and barcode scanner button

Power Input
- Power input voltage: DC 19V/3.42A
- AC adapter: 100V-240V AC, 50Hz/60Hz
- Rechargeable lithium ion smart battery pack: 2600 mAh@ 11.1V, 28.86W; support hot swap (optional)
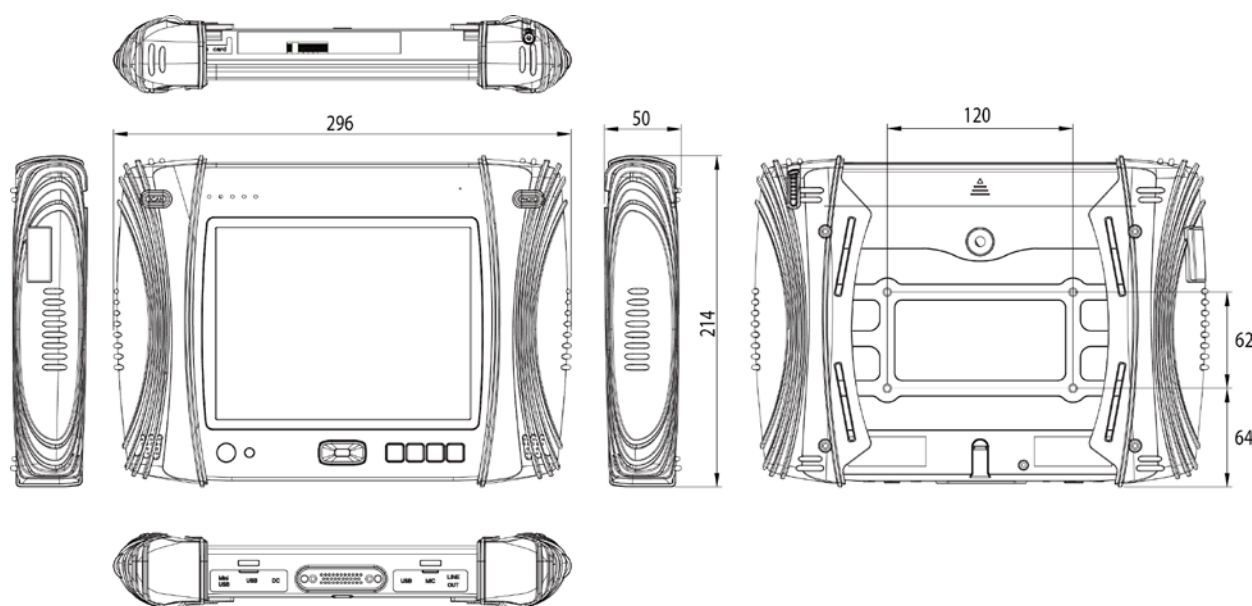
NEXCOM

Dimension Drawing

Dimensions
- 296mm (W) x 214mm (H) x 50mm (D) with rubber
- 280mm (W) x 205mm (H) x 37mm (D) without rubber
- Weight: 1.44Kg with rubber; 1.2Kg without rubber

Enclosure
- Plastic housing (ABS + PC)
- Color: black

Environment
- Operating temperature: -20°C to 50°C
- Storage temperature: -30°C to 60°C
- Rel. humidity: 5% to 95%

Rugged Grade
- IP 54
- Compliance with MIL-STD-810F

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MRC 2300-H (P/N: 10U00230000X0)**

  8" Rugged tablet PC with Intel® Atom™ 1.6GHz processor/ 120GB HDD/ 1GB memory/ daylight readable touch screen/ GPS/ Wi-Fi/ Bluetooth

- **MRC 2300-S (P/N: 10U00230001X0)**

  8" Rugged tablet PC with Intel® Atom™ 1.6GHz processor/ 8GB SSD/ 1GB memory/ daylight readable touch screen/ GPS/ Wi-Fi/ Bluetooth

- **Optional Features for MRC 2300**

  1D Laser Barcode Scanner: RIOTEC (P/N: 88U00220001X0)
  2D Laser Barcode Scanner: Opticon (P/N: 88U00220003X0)
  WWAN Module with internal antenna: Sierra MC8790V (P/N: 88U00210006X0)
  HF RFID Reader 13.56MHz (P/N: 88U00220002X0)
  Windows XP Pro for Embedded Software Kit (P/N: 88U00220004X0)
  Windows Embedded Standard 2009 Software Kit (P/N: 88U00220005X0)

- **Optional Accessories for MRC 2300**

  Vehicle Docking Station (P/N: 10UK0DOCK00X0)
  Desktop Docking Station (P/N: 10UK0DOCK02X0)
  Holding Bracket (P/N: 50501A0325X00)
  4 slots Battery Charger (P/N: 10UK0BATT00X0)
  Carry Case (P/N: 6019900015X00)
  Spare Battery Pack (3S1P) (P/N: 4ZTSS26301X00)
  Vehicle Cigarette Adaptor Charger (P/N: 7400060010X00)
  USB to VGA Adaptor (P/N: 7500VGA004X00)
  Power Cable (US) (P/N: 60233POW38X00)
  Power Cable (EU) (P/N: 60233POW39X00)
  Power Cable (UK) (P/N: 60233POW40X00)

MTK-DOCK-01

* note

Main Features

- Wide range voltage support from 9~36V for vehicle application
- Support USB 2.0 x 2, COM x 1, and Ethernet LAN 10/100
- IP67 Water Proof I/O Connectors Cover Tough Environment Application

- Support VESA Mount for Variety Installation

- * Note: This photo is for illustration only. The dock does NOT contain the terminal and RAM mount kit.

Specifications

I/O Ports
- 2 x USB 2.0 (IP67 & lockable connector)
- 1 x RS232
- 1 x LAN 10/100 base-T port (IP67 & lockable connector)
- 1 x internal mini card socket
- DC-in 9-36V power input (IP67 & lockable connector)
- 32-pin PoGo connector
- 2 x antenna hole (reserved for SMA type connectors)

LED Indicators and Switch
- 5 LED indicators for power, LAN connection, LAN access, WLAN, and Lock
- Two switch to lock/ unlock the system to dock

Mounting Hole
- RAM-202 bases with C size (1.5" diameter) ball, standing up to 4.5 kgs
- VESA 75 (75mm x 75mm)

Dimensions
- 296mm x 268mm x 109mm
- Weight: 2.5Kg

Enclosure
- Plastic (ABS+PC)
- Aluminum Alloy (ADC-12)

Environment
- Operating temperature: -20°C to 50°C
- Relative humidity: 5% to 95% (non-condensing)

Certifications
- CE approval
- FCC Class B

Ordering Information
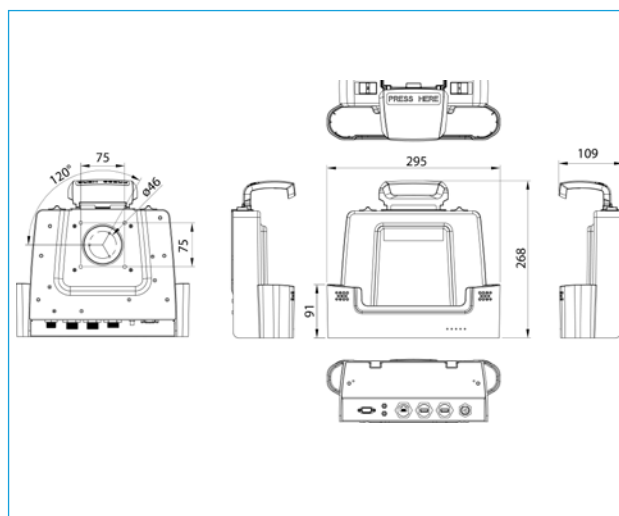
- **MTK-DOCK-01 (P/N: 10UK0DOCK00X0)**

  Vehicle docking station with USB/ RS232/ LAN/ Mini Card/ Expansion I/O (RAM/ VESA Mount and Tablet PC need to purchased separately)

  IP 67 RJ45 Plug (Ass'y Type) (P/N: 5060900156X00)

  IP 67 USB Plug (1M Cable) (P/N: 60233USB72X00)

NEXCOM

MTK-DOCK-02

Desktop Docking Station

Main Features

- Providing 4 x USB Ports, you can connect to your favorite peripherals
- support 1 x Giga Ethernet
- A rear loading battery charger enables charging MRC series and additional battery pack x 1 at the same time

- Adjustable rubber feet of Cradle ensure the optimal viewing angle
- Providing flexible optional I/O, e.g memory card slot or COM port to fulfill various applications

Specifications

I/O Ports
- 4 x USB 2.0 ports (Max.)
- 1 x LAN 10/100/1000 base-T Port
- 1 x Memory card slot, support SD, xD, MS and SM (optional)*
- 1 x RS232 (optional)*
  * Occupy 1 x USB2.0 port; system USB port (rear side)

Power Input
- Power input voltage: DC19V/ 3.42A
- Batteries charger: enable charging both MRC series and additional battery pack (3S1P) at the same time
  Support 1 slot battery charging

5 LED Indicators
- Power LED
- Plug-in LED
- LAN link
- LAN access
- Battery status LED

Dimension
- 235.7mm x 207mm x 150mm

Enclosure
- Plastic (ABS+PC)
- Metal (SECC)

Environment
- Operating temprature: -20°C to 50°C
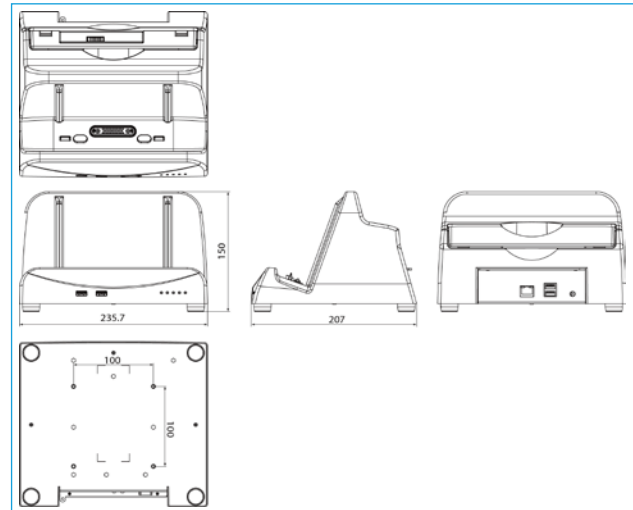- Relative humidity: 5% to 95% RH non-condensing

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MTK-DOCK-02 (P/N: 10UK0DOCK02X0)**
  Desktop docking station with USB/ Giga Ethernet

MTK-BATT-01

4 Slots Battery Charger

Main Features

- Multiple Charger for 4-slots Batteries
- Fast Charging within 3 Hours

Specifications

Battery Slot
- 4 slots

Charging Time
- Within 3 hours (3S1P)

Battery Indicator
- charging: solid orange
- Full charged: solid green
- While battery has defect/ problem: flash orange

Input Power
- 65V

Adapter
- 90W, 19V

Weight
- 0.53Kg

Dimensions
- 175mm (W) x 160mm (H) x 50.2mm (D)
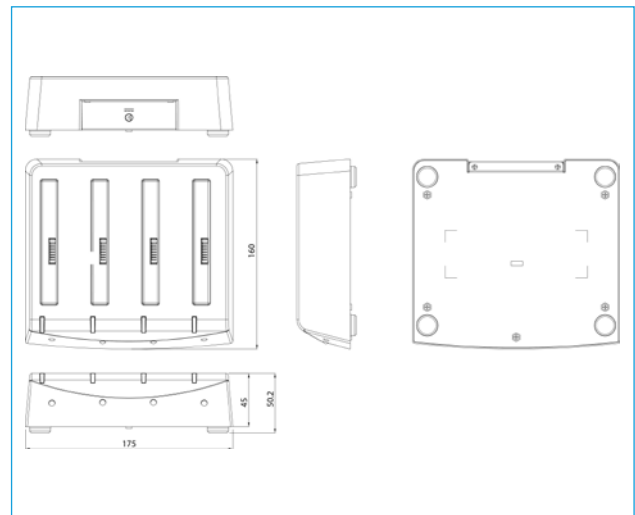
Color
- Black paint

Environment
- Operating temperature: 0°C to 45°C
  Storage temperature: -10°C to +60°C
- Humidity: 5% to 95% RH non-condensing at 40°C

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MTK-BATT-01 (P/N: 10UK0BATT00X0)**

MRC Series Optional Accessories

Model / Part Number	Description
MTK-DOCK-01 P/N: 10UK0DOCK00X0	Vehicle docking station, 2 x USB, 1 x LAN, 1 x RS232, 1 x DC-in (9~36V)
MTK-DOCK-02 P/N: 10UK0DOCK02X0	Desktop docking station, 4x USB, 1x LAN, 1 x DC-in, 1 x memory card slot
MTK-DOCK-03 P/N: 50501A0325X00	Holding bracket
MTK-BATT-01 P/N: 10UK0BATT00X0	Battery charger with four bays, charging 4 battery pack (max) together less than 3 hours
P/N: 4ZTSS26301X00	Spare battery pack, 2600mAh @ 11.1V rechargeable lithium ion smart battery pack
P/N: 6019900015X00	Carry case
P/N: 7400060010X00	Vehicle cigarette adapter
P/N: 7500VGA004X00	USB to VGA adapter

ICS

Industrial Computing Solutions

Fanless Computer

Multi-Media Panel PC

Applied Panel PC

Open Frame Panel PC

PICMG Single Board Computer

Computer-On-Modules

Embedded Computing

Video Intelligent Surveillance

Point of Services

Industrial Automation Solutions

NISE Fanless Computer, the Ideal Vertical Industry Platform

In today's industrial environment, the quest for greater efficiency, productivity, reliability, energy savings and quality control is practically universal. NISE System, NEXCOM Industrial Smart Embedded System, has been developed as an industrial-grade fanless computing system which incorporates the benefits of rugged design, superb computing power and excellent I/O connectivity. Designed for industrial automation, NISE fanless systems can be utilized within machine automation, automated optical inspection, solar panel inspection, packaging machinery, recycling machinery, and oil-field SCADA etc. NISE fanless embedded systems can be classified into three different product categories for different demands: Performance, Power-efficient and EZ controller.

NISE, has over the years, retained its position as the leading fanless platform in the industrial-grade computing field. This leading positioning comes from its excellent thermal design, component selection, reliability validation, and open architecture. Utilizing state-of-the-art technology,

NISE
The Fanless Computer, Ideal Vertical Industry Platform

Hi-Performance
NISE 3000 Series

- Wide-range processor
- Wide-range on DC input
- PCI expansion ability
- Rich I/O Connection
- Various display solution

Power-Efficient
NISE 2000 Series

- On-board processor
- Wide-range on operating temperature
- Wide-range on DC input
- PCI expansion ability
- Rich I/O connection
- Serial port connection
- Wireless ready

EZ Controller
NISE 100 Series

- On-board processor
- Single DC input
- Compact size
- Slim & light design
- Sufficient I/O connection
- WiFi ready

the fanless design of the NISE Series enables it to operate in harsh environments. In addition, NISE fanless system also provides embedded OS BSP (board-support-package) and Image services. For ease of use, NEXCOM Xcare™ utility can be applied to NISE fanless system under Windows OS. The NISE fanless system is an application-ready platform which can shorten development time and also provide full-service coverage to meet diverse requirements.

Main Features

- Open architecture: wide-range processor supported in socket type. Easy for performance upgrade.

- Same mechanical design: easy for system upgrade with the same system dimension and IO locations.

- Ready to go solution: embedded OS BSP and image ready to shorten development timeframe.

- Robust and low maintenance: fanless and robust design can reduce system down-time.

- Rich IO interfaces to meet various field devices

Applications

Facility management

- Access control
- Recycling system
- Production/ energy data analysis

Machinery automation

- Injection/ laser etching
- Molding
- CNC/ packaging

Factory inspection system

- Thickness inspection in solar panel
- Marking inspection on IC
- Surface inspection
- Packing system

Product Selection

NISE 3500

Intel® Core™ i5/ i7 with PCI or PCIe X1 expansion

NISE 3520

Intel® Core™ i7/i5 with mini-PCIe socket for Wireless Communication System

NISE 3142

Intel® Core™ 2 Duo with Dual DVI-D Independent Display System

NISE 2100A

Intel® Atom™ Dual Core D525 with Extended Temperature Support

NISE 103

Intel® Atom™ D425

NISE 90

Intel® Atom™ E620

FPPC 1220

12" Panel PC
Intel® Atom™ D525

Solution Diagram

NISE 2100A in Car Rental Kiosk Application

NISE 2000 Series in Recycling Kiosk Machine
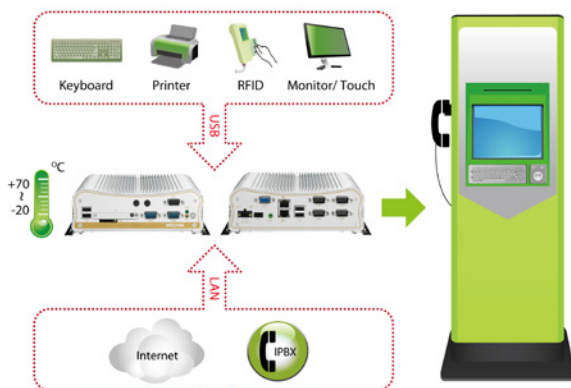
NISE 3500 & FPPC Series in Factory Automation

NISE 103 & NISE 3140 Series in Machinery Automation
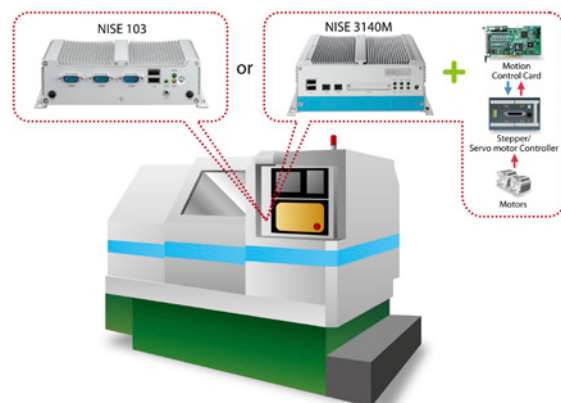
Intelligent Traffic Solutions

Perfect for Imaging Processing Systems & Ready to Go Wireless Connectivity

NISE high performance series, NISE 3000 series, is ideal for graphic intensive graphic applications which require performance and/or high computing power, for example, imaging processing systems, automatic optical inspection, digital signage, and surveillance etc.

Integrated with diverse visual device interfaces, NISE 3140 series and NISE 3500 series can be used in conjunction with a microscope via USB ports, Gigabit LAN can be linked with high resolution camera for long-distance demand requirements, and PoE camera can be utilized to save installation and maintenance costs. By utilizing the high computing power, it can readily handle and analyze the complicated data, which is generated from a pattern-matching or recognition system. Complicated analysis and imaging checking are not only required in the medical research market, but also can be found in license plate recognition, e-Police, road-side traffic control and Access Control....etc.

NISE power-efficient series, NISE 2000 series, is targeted at wireless applications in harsh environments. NISE 2000 series covers Intel® Atom™ single core and dual core platforms and provide wireless capability including Wi-Fi and mobile 3G/

3.5G connection. With wireless function, NISE 2100 series is an ideal solution for outdoor communication computer or in-vehicle computing, such as bike rental station, score boards, bus surveillance, self-service kiosk, recycling kiosk, and digital signage etc.

In addition, NISE 2000 series provides a multitude of IO interfaces to meet the requirements of both industrial automation and self-service kiosk, for example, max. 6 serial ports (isolated COM port design in selected models), digital I/O module support, wide-range on DC input, wide-range of operating temperatures, two Intel® GbE LAN ports, and additional expansion capability etc. In short, NISE 2000 series is the best choice for industrial automation, factory automation, traffic system, self-service kiosk, surveillance and access control applications.

Main Features

- High-performance platform integrated with great graphic performance
- Image processing ready platform via GbE camera or IEEE1394 camera
- Wireless ready platform via Wi-Fi module or GSM 3G/ 3.5G wireless module
- Rich peripheral for field device/ sensor connections
- Wide-range on DC input
- Wide-range on operating temperature
- Fanless & ease-of-use, reducing the maintenance cost

Applications

Image processing system

- e-Police (speeding/ illegal turn)
- Traffic light control
- Automatic optical inspection

Traffic system

- School bus
- Train station control
- Access control

Product Selection

NISE 3520 Series

Intel® Core™ i7/ i5 with mini-PCIe socket for Wireless Communication System

NISE 3142 Series

Intel® Core™ 2 Duo with Dual DVI-D Independent Display System

NISE 2100A Series

Intel® Atom™ Dual Core D525 with Extended Temperature Support

NISE 90 Series

Intel® Atom™ E620

nTUF 600/610 Series

Intel® Atom™ Dual Core D525 (or 2nd generation Intel® Core™ i7) Marine Computer

NViS 3540P8 Series

Intel® Core™ i5/ i7 with PoE solution and one PCIex1 Expansion

Solution Diagram

nTUF 600 at Marine Bridge Computer

Marine Applications

Fishing Vessel
Recreational Boat
Merchant Marine
Workboat
Sailing Yacht

NMEA

AIS | Weather Station | GPS | Gyroscope | Rader | Echo Sounder Sonar

NISE 2100A / NViS 3540P8 series at School Bus System

CF card

Storage

CompactFlash

GSM Wireless

Parents' Mobile (Kid's Location)

NISKIG120 Ignition Module

9~36V DC Input

2x RS232
2x RS232/422/485

Touch Screen | LED Display | Key Pad | Printer | Card Reader

NEXCOM

Medical Solutions

EN60601-1-2 Certified the Medical Grade Fanless Computer

NISE 3140M & NISE 3500M are remarkable models for presenting NEXCOM NISE series in medical solution, mainly in interactive visual communication, medical devices, and self-check system etc. Housed in a robust aluminum chassis, the fanless design makes for noise-free and ultra-reliable operation which meets hospital environment needs. With IEEE1394a/b and display interfaces, NISE 3140M & NISE 3500M empower ease of camera use for interactive communication, video diagnose, data analysis, and inspection equipments etc.

In addition, NISE 3140M & NISE 3500M, certified by EN60601-1-2 standard, are ideal solutions for medical devices with energy saving design meeting the demand of dust-free, noise-free, longevity of product, durable, reliable, and data backup via RAID HDD support. With rich I/O interface it provides various data collection devices linked by USB, RS232, RS485, IEEE1394b, LAN, for data communication.

With great imaging process ability, NISE series is an ideal solution for clinical data server, home healthcare or healthcare informatics and patient monitoring applications to get electrocardiogram and physiological data for diagnosis purpose. The vital survey responses and signs measurements, such as weight, blood pressure, pulse, Glucose meter and oxygen saturation, may be automatically collected and transmitted to hospital center.

Real-time monitoring and communication, through Ethernet or GSM data transmission and computer analysis, facilitate efficiency on nursing, clinic arrangement and data collecting. It can be used in ambulance, homecare, or remote monitoring.
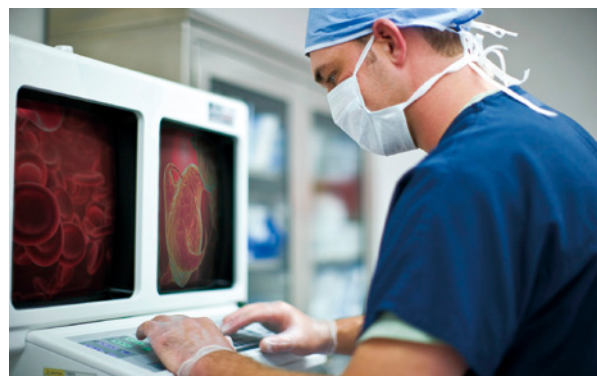
Main Features

- A range of processers are supported: integrated with Intel® GM45 chipsets to support socket type of Celeron®, Core™ 2 Duo, Core i5 & i7 solution to meet different performance or budget requirements.

- Robust and noise-free design: sturdy aluminum chassis protects the unit in harsh environments, whilst the fanless design makes NISE suitable in quiet locations.

- Versatile camera interface: available for medical inspection or research use

- Low maintenance cost: the fanless and anti-dust design improves reliability and eliminates systems failure caused by fan breakdown and dust
- Medical grade solution: the platform meets energy saving requirements and is certified to medical standards, EN60601
- Long product life support

Applications

Firewire solution in surgery recording
- Remote surgery or telesurgery
- Remote training system

Medical instrumentations solution
- Inspection instrumentation via USB/ GbE camera
- Research instrumentations via GbE and IEEE1394a/b camera
- Scientific research snstrumentation via GbE & IEEE1394a/b camera

PoE enables surveillance solution
- Access control at ward
- Security control at emergency
- Patient and asset tracking with RFID

Product Selection

NISE 3500M

Intel® Core™ i7/ i5 with
3 x IEEE1394b ports,
1 x HDMI port, and 1 x PCI

NISE 3142M

Intel® Core™ 2 Duo with 2x
IEEE1394b and dual DVI-D
independent display support

NISE 3140M

Intel® Core™ 2 Duo with
2 x IEEE 1394b ports and
1 x PCI Expansion Slots

HPPC 1920T

19" Panal PC Intel® Atom™
D525

Solution Diagram

NISE 3100e/ 3142M Series @ Self-Service Healthcare Kiosk
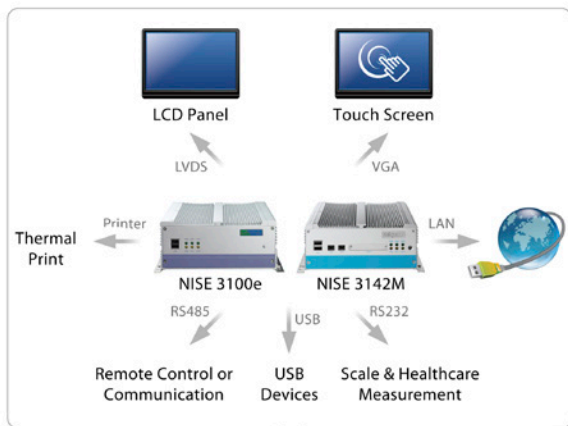
HPPC 1920T Series @ Operating Room

Multi-Media Panel PC

The Inspiring World of Digital Signage

NEXCOM Multi-Media Panel PC (MPPC) incorporates a 16:9 LCD touch screen panel, industrial motherboard and PowerDigis software. Digital Signage Software making MPPC series the perfect "signage ready" Panel PC solution for self service and Kiosk applications.

MPPC has modular architecture and fanless thermal operation, plus low power consumption. It is available in various different LCD sizes including 21.5" and 32" with resolutions up to 1920 x 1020 (Full HD). Other features include built-in dual Ethernet and optional Wi-Fi module and the slimmest X86 based touch terminal.

Designed for an extended number of applications the MPPC series can be utilized as a thin client computer or within in-vehicle systems, portable devices, digitalized home, POS, and Kiosk terminals. Totally fanless and therefore noise-free, ultra-reliable operation, MPPC series with low voltage single board computer and super slim bezel design is environmentally friendly and easy to upgrade.

MPPC 3220T

32" Fanless Panel Computer

MPPC 3220T is an 32" Panel PC, which boasts modular architecture and fanless thermal operation, plus low power consumption. The MPPC 3220T has a 16:9 widescreen with resolutions up to 1920× 1080 (Full HD). Other features include built-in dual Ethernet ports, optional Wi-Fi module and lightweight design. The devices can fit transportation or factory requirement.

MPPC 2120T

21.5" Fanless Panel Computer

MPPC 2120T is a 21.5" wide 16:9 touch screen Panel PC which can display resolutions up to 1920 x 1080 (Full HD). Based on the Atom™ D525, MPPC 2120T has low power consumption and a totally fanless design.

Specifically designed for digital signage, POS (point of sale), and Kiosk applications, the totally fanless MPPC 2120T can simultaneously play high quality video, flash and scrolling text. MPPC 2120T is therefore perfect for the 24/7 display of advertising, promotional material or customer information. It will therefore find applications within retail, hospitality, medical and banking environments.

In addition, MPPC 1020T and MPPC 2120T supports extra VGA outputs for dual independent display, 4 x USB 2.0 ports, 2 x Giga LAN and 2 x RS232 COM port.

Main Features

- Multi-media : 16:9 LCD panel from 8" to 32"
- Focus content : MPPC series has thin metal frame
- Flexibility : two pieces design, panel and rear box pc
- Fanless system : Atom™ processor with DDR3 support
- Supports extra VGA for 2 independent displays
- 2 x GbE/ 4 x USB/ Line-out/ 2 x Mini-PCIe
- Support 2.5" SATA HDD
- COM1 RS232/ 422/ 485
- COM2 RS232/ 422/ 485
- Vibration and shock resistant

Applications

School / Education

Retail Outlet
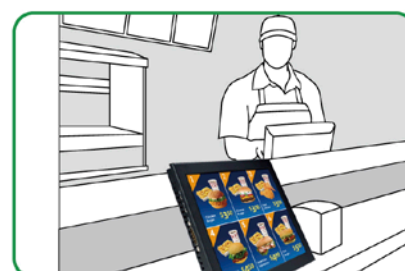
Pub / Bar / Restaurant

Hotel Lobby

Applied Panel PC

Industrial Functionality with Cost Saving, Green Technology

NEXCOM industrial Panel PC adopts an all-in-one concept that integrates a single board computer, LED display, and user-friendly touch screen within a slick and compact NEMA 4/ IP65 chassis. Designed to serve as a flexible and reliable industrial computing platform, each panel PC is a compact, highly integrated, network-ready computer with exceptional I/O connectivity.

The industrial graded panel PC from NEXCOM is designed for use in harsh environments where shock, vibration and resistance are an issue. The NEXCOM panel PC range includes a wide range of platforms with different display dimensions and peripheral I/O alternatives. APPC series, therefore, meets user requirements for a high-performance panel PC with compact design and affordable price.

APPC Series has a IP65 rated touch panel which offers superb protection against dust and water. Designed for use in a variety of environments included factory and transportation, APPC series can receive a wide range of power inputs ranging from 12V to 30V. In addition, there is also an APPC variant available with isolated COM port which is ideal for field applications.

The APPC series is totally fanless, and, therefore, guarantees noise-free, ultra-reliable operation. With integrated low voltage single board computer and super slim bezel design, the APPC Series is environmentally friendly and easy to upgrade.

The First Industrial Panel PC with Flush Touch Screen

To address applications within field cleaning and maintenance, NEXCOM has launched the APPC 1720T/ 1721T, a 17" SXGA Panel PC with flush touch screen technology. With a scratch-free 3H hardened glass surface, the flush touch screen provides significant benefits, such as multi-touch and easy maintenance, for field operation. The water/dust-free and fulsh touch panel can resist water wash, which makes it ideal for use in the food/ beverage industry. In addition, with glass protection, the touch panel has an extremely long life which ultimately reduces total expenditure.

C

APPC 0820T

The APPC 0820T is 8" fanless Panel PC with Atom™ D525 processor which can support SVGA (800x600) resolutions. With water-dust protective touch screen, it can operate in most industrial environments. APPC 0820T also has 2GbE, 2 x COMs, and 4 x USB. With power input 12V DC-in, the device is ideal for use in transportation and factory environments.

APPC 1220T/ 1520T/ 1720T

The APPC 1220T/ 1520T/ 1720T are fanless Panel PCs based on the Atom™ D525 processor. The 15" 1520T has 350 nits brightness, flush touch screen, 2 GbE LAN, 4 x COMs, 2 x USB, eSATA, PS2 KB/MS, line-out and a wide range power inputs.

With its attractive price and tried-and-tested functionality, the APPC Series is the ideal panel PC for industrial applications. With the fanless 1.8 GHz Intel Atom™ processor, the APPC provides the appropriate computing power for most industrial applications. Also the APPC series can be utilised within confined spaces due to its compact dimensions. Possessing high electromagnetic compatibility, APPC series is suitable for machine-level applications as well.

Operation is realized via the touch screen. The PC is integrated into slim line control panel housing, and equipped with an 8", 12.1", 15", or 17" display. The user benefits not only from the slim design and high computing power, but also from significant energy savings due to the low power consumption of the Atom™ CPU.

Based on the standard APPC 1220T/ 1520T/ 1720T, two models known as APPC 1221T/ 1521T/ 1721T are designed with isolation module on COM1/COM2.

Main Features

- 8", 12.1", 15" and 17" 4:3 fanless LED Panel PC (17" is CCFL)
- Dedicated Panel PC board with Atom™ D525 dual core processor
- Water-dust IP65 proof plastic front protection
- 5-wired flush touch screen with IP65 protection
- 2 x GbE/ 4 x USB/ eSATA/ PS2/ Line-out/ 2 x Mini-PCIe
- Support 2.5" SATA HDD
- 12V- 30V wide range power input
- 4 x serial ports : 2 x RS232, 2 x RS232/ 422/ 485
- COM1/2 RS232/ 422/ 485 Isolation (APPC 1221T/ 1521T)
- Resistance to vibration/ shock

Applications

- Industrial manufacturing
- Warehouse and logistics
- Harsh industrial
- Access control
- Machine control
- Forklift and truck

Fanless
Cable-less embedded Board
LED Panel
Plastic Frame
IP65 Front / Touch
Wide Power in
Easy Customization (I/O edge)

APPC
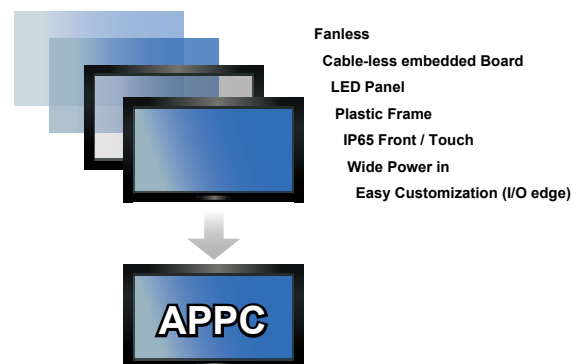
Open Frame Panel PC

Address Market Demand for Highly Customized Enclosures

NEXCOM fanless Open Frame Panel PCs (OPPC) is targeted at self-service applications like ATM, kiosk, and vending machine. Reliable fanless OPPC integrates bezel-less displays, ultra slim appearance, multiple mounting options, and touch technologies. Therefore it can better address market demand for highly customized enclosures and be applied to bill payment, clinic

registration, airport check-in, building directory, ticketing, and DVD rental within retail, healthcare, banking, telecommunication, entertainment, transportation, and tourism industries.

Ultra Slim with Latitude

OPPC has ultra slim appearance and takes up little space. Along with latitude of mounting options comprised of open frame mount, VESA mount, panel mount, and wall mount, OPPC can be consolidated with customized enclosures, helping system integrators create a distinctive look for individual project. The flexibility of OPPC will also assist system integrators to expand product lineup for the market including kiosk with minimalist design that combines simplicity and elegance, vending machine with bulk cabinet that houses complicated configurations, and ATM with extended functions to deliver sophisticated self services.

Industrial-Grade Reliability

Moreover, OPPC without front bezel is a cost-effective alternative for system integrators. It also supports various types of touch screen based on capacitive, resistive, infrared, and surface acoustical wave technologies. Besides, OPPC with fanless design has given thought to thermal dissipation and will bring industrial-grade reliability to self-service applications. Features of vibration

resistance and a operating temperature of -5~50°C will enhance system durability.

OPPC 1520T / OPPC1720T

OPPC 1520T and OPPC1720T fanless Panel PCs are powered by Intel® Atom™ D525 processor with Intel® ICH8M chipset and support for DDR3 memory. OPPC 1520T incorporates a 15" 4:3 touch screen LCD panel with resolutions up to 1024x768 (XGA) and 400 nits brightness. OPPC 1720T incorporates a 17" 4:3 touch screen LCD panel with resolutions up to 1280x1024 (SXGA) and 380 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation.

Main Features

- 15" and 17" fanless Panel PC
- Dedicated Panel PC board with Intel® Atom™ D525 dual core processor
- Resistance to vibration
- Ultra slim open frame and depth
- Open frame/ Panel/ wall/ VESA Mount support

Applications

- Banking
- Entertainment
- Healthcare
- Retail
- Telecommunication
- Transportation
- Tourism

OPPC 1520T / 1720T
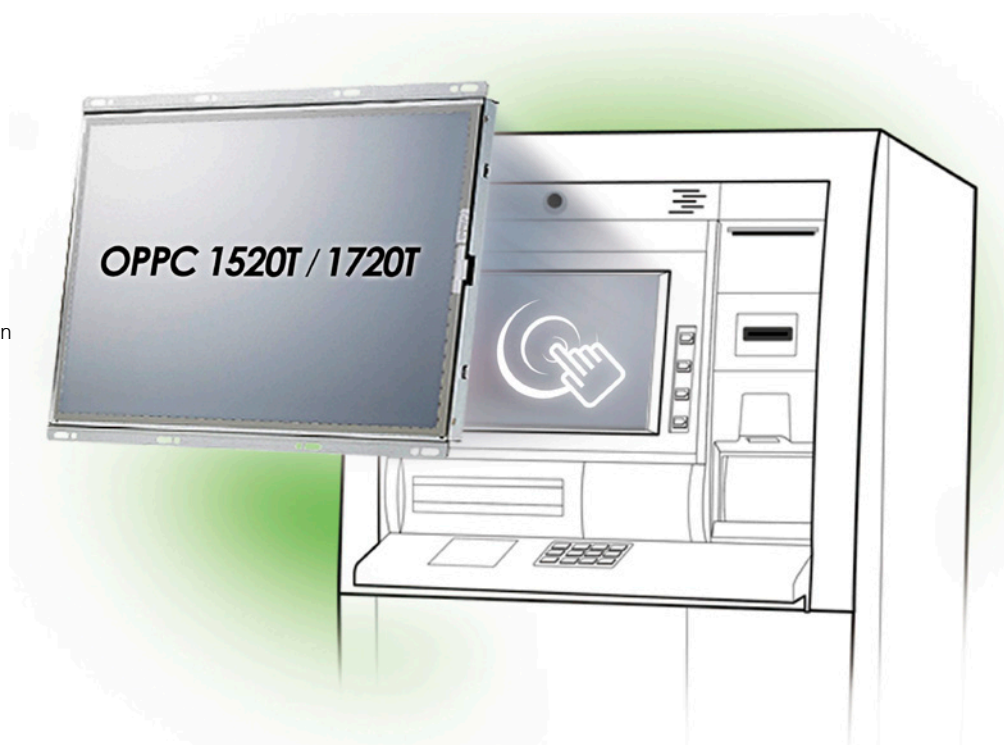
PICMG Single Board Computer

PEAK Performance
Intel® Core™ i3/i5/i7
Desktop Processors Technology

NEXCOM is leading the way in the IPC Industry by providing a series of reliable and innovative products with high customer satisfaction. NEXCOM has released a series of PICMG 1.3 PEAK Single full-size Computers that unleash peak performance with Intel® Core™ i3/i5/i7 desktop processors technology with lower power consumption to support even the most demanding industrial applications.

For quick integration and to eliminate configuration chassis, NEXCOM has several 2U and 4U system-ready 19" rackmount platforms for unique applications. The NEX series has a versatile I/O configuration and flexible system integrating scalabilities, which are critical for industrial applications requiring superior performance and reliability.
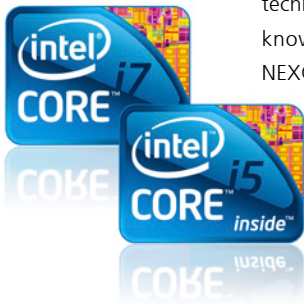
To support a wide range of applications in vertical markets, NEXCOM has engineered a diverse range of platforms, which incorporate the latest technologies from Intel and AMD. Utilizing the know-how and experience of our R&D term, NEXCOM will be your most trusted partner in the IPC industry by combining the fast time-to-market solutions with cutting-edge technologies.

PICMG Single Board Computers

PEAK 777VL2

PICMG 1.0 SBC
Intel® 45nm/ 65nm Core™ 2
quad/ duo LGA775

PEAK 876VL2

PICMG 1.3 SHB-Express
Intel® LGA1156,
Core™ i5/i3/ Pentium

PEAK 877VL2

PICMG 1.3 SHB-Express
Intel® LGA1156,
Core™ i7/i5/i3/ Pentium

PEAK 8920VL2

PICMG 1.3 SHB-Express
Intel® dual core
Xeon® LGA711

Passive Backplanes

NBP 14111

PICMG 1.3 NBP
14-slot backplane with
1 SHB slot, 3x PCI slots,
8x PCI-X slots, 1x PCIe X16

NBP 1407P

PICMG 1.0 NBP
14-slot PICMG/ ISA/ PCI
backplane

PICMG 1.3 full size Single Board Computer

PEAK 876VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel® Core™ i7/i5/i3/ Pentium processors with Hyper-Threading technology. The Intel® Core™ i7/i5/i3/Pentium supports dual channel non-ECC DDR3 1066/1333 MHz memory in two DIMM slots and one Core™ i5/i3/ Pentium integrated graphics controller. The Q57 Express Chipset PCH manages SATA HDD ports and parallel port; it further supports other versatile I/O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports.

The PEAK 876VL2, with Intel® Core™ i7/i5/i3/Pentium and PCI Express LAN, offers a great solution for advanced industrial application that requires superb display and processing performance.

NEXCOM offers the following 2U and 4U backplanes that support the PICMG 1.3 specification: (1) 2U backplane: NBP 2U220/ NBP 2U040; (2) 4U backplane: NBP 14570/ NBP 14111/ NBP 14210

PEAK 872VL2

PEAK 876VL2

Eliminate Bottlenecks

The overall throughput of the system is determined by the bottlenecks of the bandwidth in the system. For that reason, by design, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC no longer support legacy ISA ports, which allow the system to distribute more resources and support higher bandwidth for PCIe ports. Hence, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC can reserve more resources to support new PCIe Xl6 interface, SATA, USB, and LAN wakeup on backplane to increase bandwidth and performance.

Increase Bandwidth

As more sophisticated Industrial applications demand higher performance and computing capability, the bandwidth of the system becomes vital to a reliability of the computing solution. To optimize the bandwidth of throughput, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC utilize the latest technologies and components.

Extended Product Life Cycle

Compared with PICMG 1.0, the PICMG 1.3 greatly improved the performance of the PC bus that can support additional I/O features. The PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC support many new connection types, such as PCIe Xl6 interface, SATA, USB, and LAN wakeup on backplane to increase over all performance; hence, the PEAK 8920VL2 and PEAK 876VL2/ 877VL2 SBC have an extended product life cycle.

Applications

■ Industrial Automation

■ Motion Control Solutions

■ Facility Management Systems

■ Transportation Management

■ Telecommunication

■ Digital Surveillances

■ Military and Government Applications

■ Test and Measurement Platforms

Computer-On-Modules

COM Competence Center (CCC) Services Ensures Project Success

NEXCOM provides an instant service to customers looking to design COM (Computer-On-Modules) and customized carrier boards (CB) into embedded projects. NEXCOM provides COM Competence Center (CCC) Services to help customers win projects and get their product to market on schedule.

Computer-On-Modules are a great solution for restricted time frame and space critical projects. The quick design-in ETX and COM-Express form factors are perfect solutions for applications which require fast customization. In addition to make sure our products meet unique application requirements; we also offer an I/O customization service. Modifications to the ETX/COM-express module are not required; instead I/O customization is performed on the carrier board and there is a feature which greatly reduces system development time and risk.

Applications

- Panel PC and POS
- Medical applications
- Media-rich gaming platforms
- Real-time data analyzer in industrial automation
- Unmanned vehicles and training simulators in military

NEXCOM Value-added Services

NEXCOM offers following value-added services for valued customers:

- CCC for technical support and comprehensive service
- Reduce regular development time and cost by up to 60%

- Wide range off-the-shelf CPU module
- Flexible custom designed carrier board for all interfaces
- Quick time-to-market
- Lower cost and high engineering effort
- Customized BIOS and WinCE BSP

ETX Form Factor

ICES 170

Intel® Atom™ N270 processor 1.6GHz with LVDS interface

COM Express Form Factor
Type 2 Compact, 95x 95 mm^2

ICES 251

Intel® Atom™ N450 1.66GHz processor

ICES 253

Intel® Atom™ D525 1.8GHz processor

ICES 254

Intel® Atom™ processor D2700

COM Express Form Factor
Type 2 Basic, 95x 125 mm^2

ICES 267

Intel® 2nd generation Core Mobile processor

ICES 267S

Intel® 2nd generation Core Mobile processor

ICES 268

3rd generation Intel® Core™ processor

COM Express Form Factor
Type 6 Basic, 95x 125 mm^2

ICES 668

3rd generation Intel® Core™ processor

COM Competence Center (CCC) Service

Business Model

| NEXCOM's COM Module + Customer Designed Carrier Board | NEXCOM's COM Module + NEXCOM Customized Carrier Board | NEXCOM's COM Module + Customer's Existing Carrier Board |

NEXCOM CCC Services

COM Product & Document Support	Customized Services	Design Assistance Service	Embedded OS Services
· EXT & COM-Expres Modules · Evaluation Board · Document - Design Guide - EB's Schematic - Mechanical Drawing - Certification	· Customized Carrier Board Design · Customized Thermal Solution · Manufacturing · On-site Tech Support	· Schematic Review · Placement/Layout Review · Debugging · Design Training · Design Database	· Customized BIOS · Modularized BIOS · eOS Installation · Custom OS Image · Device Driver · BSP Support

Embedded Computing

The Core Technology for the Digital World

NEXCOM provides versatile embedded form factors with the best of breed product value and competitive cost. Ranged from 3.5", 5.25", and mini-ITX form factor CPU boards to embedded system boards, we offer complete products featuring new generation platforms to satisfy all mission critical embedded and industrial applications.

NEXCOM embedded computing extends board-level solutions including COM (computer-on-modules) solutions for restricted time frame and space critical projects. The quick design-in ETX and COM-Express form factors are perfect solutions for applications which require fast customization. Modifications to the ETX/COM-Express CPU module are not required; instead I/O customization is performed on the carrier board, a feature which greatly reduces system development time and risk.

We offer complete solutions to customers with high performance and low power processor platforms to shorten time-to-market and generate best return on investment. NEXCOM provides value-added customization services to solution providers dominantly in transportation, industrial computer, gaming, POS and medical markets.

Main Features

- Full range of 3.5"/ 5.25" CPU board
- Wide-range panel support for multi-media application
- High shock and vibration resistance
- Compact for space limited application
- Highly flexibility and hardware integration

Applications

- Digital signage and multi-media applications
- Medical and healthcare computer
- Gaming machine and vending machine
- Automation and panel PC
- Military and education

3.5" ECX SBC

EBC 310

On-board Intel® Atom™ E600 series board with dual GbE

EBC 353

On-board Intel® Atom™ processor D2700 2.13GHz with PCI 104/ CRT/ DVI/ LVDS/2x GbE/1x Mici-PCIe

EBC 354

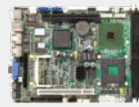On-board Intel® Atom™ processor D2700 2.13GHz with CRT/ DVI/ HDMI/ LVDS/2x GbE/2x Mici-PCIe

EBC 342

On-board Intel® Atom™ N270 1.6GHz CPU with1x mini-PCIe/ 24-bit LVDS/ 2x GbE/ CF

EBC 352

On-board Intel® Atom™ D525 dual core with dual GbE/ PCI 104

5.25" SBC

EBC 500

Support Intel® Mobile Core™ 2 Duo CPU with 1x PCI / 1x PCIe X16

EBC 540

On-board Intel® Atom™ N270 1.66GHz CPU with 1x mini-PCIe/ 1x PCI/ 1x PCI 104/ 2x GbE/ CF

EBC 545

Support Intel® Mobile Core™ 2 Duo with dual display/ 1x PCI/ 1x PC104+/ 2x GbE

EBC 550

Support Intel® Mobile Core™ 2 Duo with dual display/ 1xPCIe X16/ 1xPCIeX4/ 1xPCI/2xGbE

Solution Diagram

EBC 353
Intel® Atom™ processor D2700

Dual Display
- VGA
- DVI-D
24-bits LVDS
Single 12 Vdc input
1x Mini-PCIe
PCI 104
3xRS232
1xRS232/422/485

EBC 354
Intel® Atom™ processor D2700

Dual Display
- VGA
- HDMI
- DVI-D
- 24 bits LVDS
Single 12 Vdc input
3xRS232
1xRS232/422/485
2x Mini-PCIe

NEX 604
Intel® Atom™ processor D2700

Dual Display
- VGA
- 24-bit LVDS
HDMI
Single 12 Vdc input
2x Mini-PCIe
1xPCI slot
4xRS232

NEX 607
2nd generation Intel® Core™ processor family

Dual Display
- VGA
- DVI-D
- Dual 24-bit LVDS
- HDMI
Single 12 Vdc input
1x Mini-PCIe
1x PCIe x16 slot
3xRS232
1xRS232/422/485

Embedded Solutions
3.5" Mini-ITX
ETX COM Express

ICES 170
Intel® Atom™ N270 processor

Type 2/ Type 6 Basic, 95x 125 mm²

ICES 267
Intel® 2nd generation Core Mobile processor

ICES 267S
Intel® 2nd generation Core Mobile processor

ICES 268/668
3rd generation Intel® Core™ processor

Type 2 Compact, 95x 95 mm²

ICES 251
Intel® Atom™ N450 1.66GHz processor

ICES 253
Intel® Atom™ D525 processor

ICES 254
Intel® Atom™ processor D2700

Platform Utility Service-Xcare™

NEXCOM Xcare™ 2.0 - Platform Utility Service

New Xcare™ is a platform utility (Apps) supporting cross H/W platforms ranging from entry to high performance devices from NEXCOM, Xcare™ 2.0 CMS works as central networked platform utility to management multiple Xcare™ 2.0client devices deployed in the Client-Server architecture via Local Area Network (Local LAN) where based on Windows OS Environment (XP/ Windows 7/ WES), The number of connected client-devices is based on LAN bandwidth.
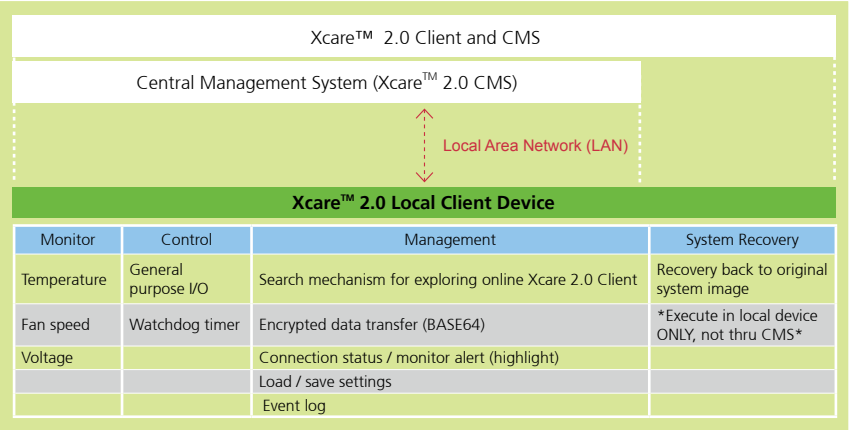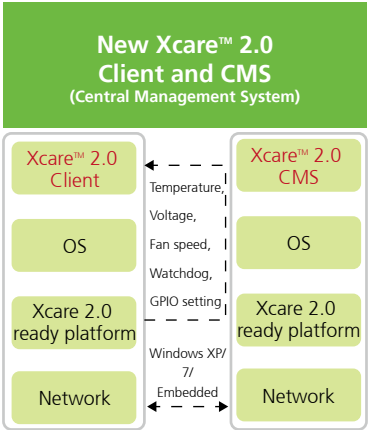

Benefited to System Integrators

System Integrators and solution assemblers often happened…

■ Need to configure 50+ device for RTC/ WDT/ GPIO in production line? Is there any easier way to get it done?

■ Need to monitor 50+ device installed in field for hardware system status (temperature, fan-speed abnormal, etc.)

■ Unfortunately device system is corrupted, can you restore the system back to original setting in minutes?

Key to Solve All Above Trouble Shootings

Functionality

New Xcare™ 2.0 Client and CMS (Central Management System)

Xcare™ 2.0 Client		Xcare™ 2.0 CMS
OS	Temperature, Voltage, Fan speed, Watchdog, GPIO setting	OS
Xcare 2.0 ready platform		Xcare 2.0 ready platform
Network	Windows XP/ 7/ Embedded	Network

Xcare™ 2.0 Client and CMS

Central Management System (Xcare™ 2.0 CMS)

Local Area Network (LAN)

Xcare™ 2.0 Local Client Device

Monitor	Control	Management	System Recovery
Temperature	General purpose I/O	Search mechanism for exploring online Xcare 2.0 Client	Recovery back to original system image
Fan speed	Watchdog timer	Encrypted data transfer (BASE64)	*Execute in local device ONLY, not thru CMS*
Voltage		Connection status / monitor alert (highlight)	
		Load / save settings	
		Event log	

Local / Remote Monitor

temperature/ fan speed/ voltage

Local / Remote Control

general purpose I/O and watchdog timer

- General purpose I/O (GPIO): GPIO allows a variety of custom connections, such as a button, a switch, cash drawer, etc. The status of GPI can be monitored and the status of GPO can be triggered.

- Watchdog timer (WDT): Watchdog timer is a device which performs a warn boot after a certain period of time if system crashed.

- Alert: All alerts of temperature, fan speed and temperature can be defined by user with upper and lower limit.

Xcare™ 2.0 Central Management Service (CMS)

- CMS remote monitoring (temperature)
- CMS remote control (GPIO setting)
- CMS connected device list
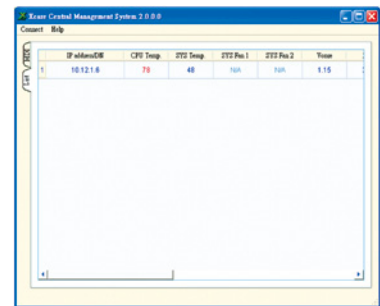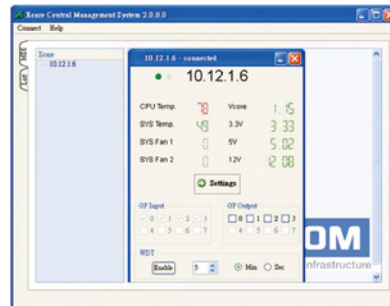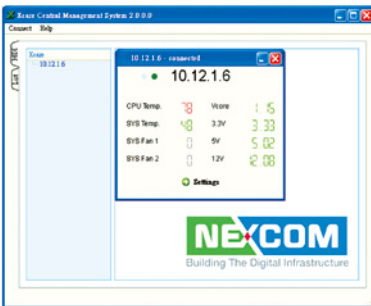
Data Recovery

- OS images that support Data Recovery will have "Recovery" menu option in XCare™

- At system startup, press F9 to boot from the recovery partition

- Recovery system will format hard drive partition and restore original OS image
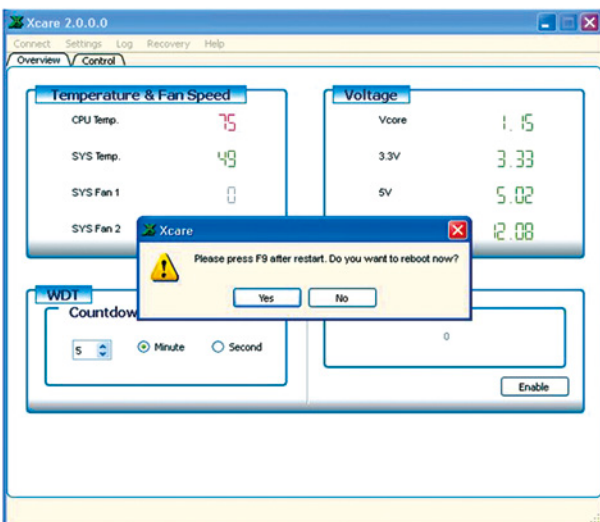
Xcare™ Service

The Xcare™ utility can be applied to following NEXCOM product lines including embedded boards, NISE fanless computer, Panel PC, and security surveillance. The system utility is based on projects and requested through NEXCOM sales representatives or technical support windows per your demands.

Xcare™ 2.0 support list

Products and models are listed but not limited, please visit NEXCOM website or contact your sales representatives for updates.

| Xcare™ 2.0 Support List				
Board Level		System level		
EBC	SBC	Intelligent Surveillance	Panel PC	Fan-less computer
EBC 342	PEAK 777	NViS 2140	APPC-1720T	NISE 2100
EBC 354		NViS 6200		NISE 2100A
				NISE 2110
				NISE 2110A
				NISE 3100e
				NISE 3100eP2
				NISE 3140
				NISE 3140P2
				NISE 3140P2E
				NISE 3145
OS supports: Windows XP/ Windows Vista/ Windows 7				

Extended Temperature Solutions

Extreme Ruggedise Fanless Embedded Computing

NEXCOM offers a series of embedded computing solutions with extended temperature ranges which are designed to address a wide variety of rugged and industrial applications. Our rugged solution products can operate in temperatures ranging from -40°C to 85°C and the thermal profile including the validation of extended temperatures, thermal shock and thermal cycle. We provide the thermal design services as well as complete extended temperature solution to customers. Our extended temperature products are not only high performance, but offer low power consumption for critical applications.

Key Features

■ Wide operating temperature -40°C- 85°C

■ High shock and vibration resistance

■ Compact design for space limited applications

■ Highly flexibility and hardware integration

■ Requires low power
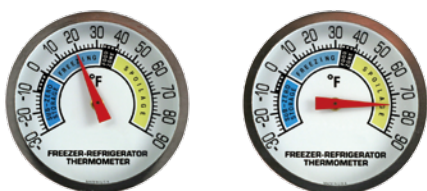
ICES 251X

ICES 251 is a COM Express Module that features Intel® Atom™ N450 1.66GHz and ICH8M in small foot print. ICES 251X supports operating temperature from -40°C to 85°C. It also provides outstanding performance in the combination of high computing power and low thermal dissipation. ICES 251X supports DDR2 667 SO-DIMM memory up to 2GB, and supports 3 x SATA, 1 x IDE, 8 x USB2.0 for fast peripherals. ICES 251X is type 2 COM Express Module support up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN. It can fulfill requirements of medical, gaming or outdoor signage applications.

EBC 310X

The EBC 310X is a 3.5" embedded board with an on-board Intel® Atom™ E640 1.0GHz SoC with L2 cache 512 KB and extreme low power consumption of just 3.6 watts. The EBC 310X supports operating temperatures ranging from -40°C to 85°C and features DDR2 1GB memory on-board, dual display to support independent CRT and LVDS interfaces and build-in HD video decoder/ encoder. Intel® PCH EG20T PCH supports 1x CAN, 3x COM and USB 2.0 controller. It can fulfill requirements of outdoor signage, factory or automation applications.

Intelligent Surveillance Solutions
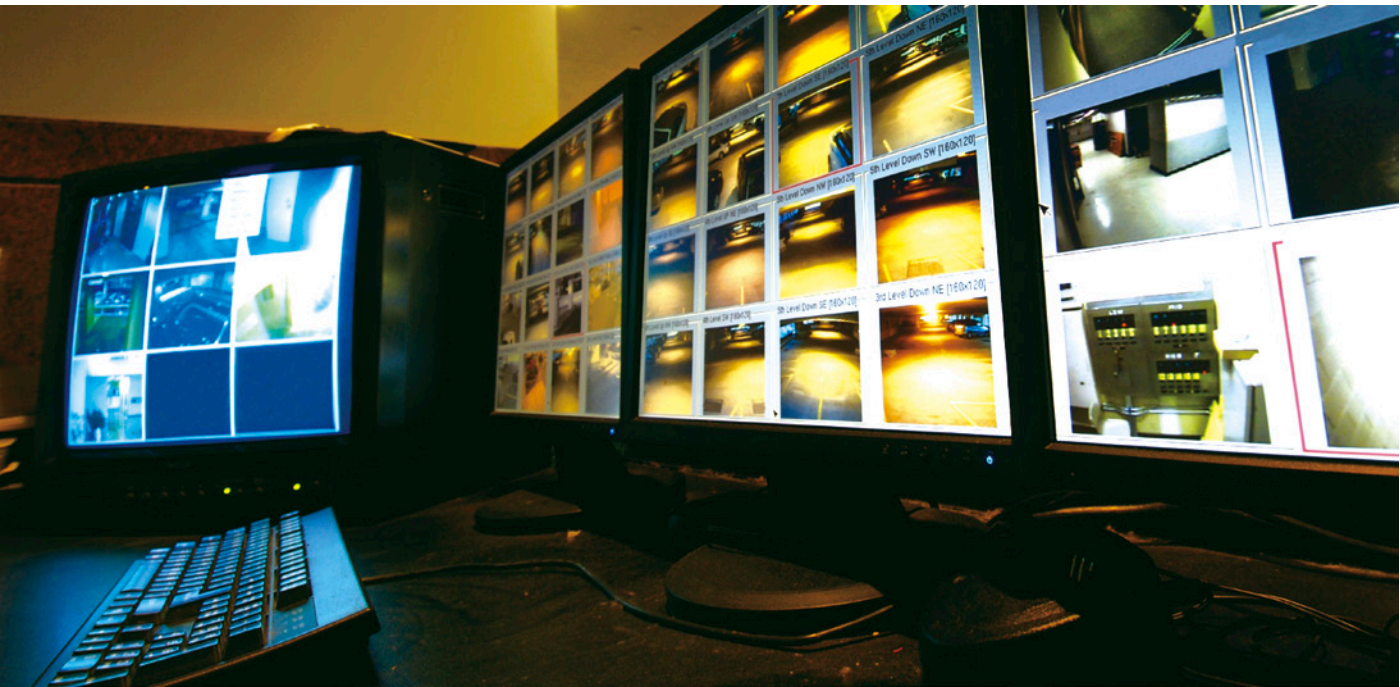
Intelligent Hybrid Embedded DVR/ NVR Solution

In response to increased global demand for intelligent surveillance solutions, NEXCOM has introduced NViS series of integrated PoE and intelligent hybrid embedded DVR/NVR systems, which provide the perfect solution for security protection. With the NEXCOM all-in-one server board, customers are able to save time and cost as well as fulfill demands of CCTV and IP surveillance in the marketplace.

Integrated with cutting-edge Intel technology, NEXCOM's hybrid surveillance system implements advanced intelligent video analysis (IVA) which is capable of handing multiple threads at the same time. For instance, tasks such as flow counting, privacy masking and missing object detection can rapidly be performed.

The NViS 2140/ 2280/ 3540/ 5240 series with built in with Intel® Atom™ processor, features a compact and energy-efficient design. Incorporating POE and power ignition technology, the three series eradicates the difficulties associated with providing different power sources to devices such as IP camera in buses, police cars, sightseeing buses, and school buses etc.

The NViS 6210 series supports a wide range of Intel® Dual Core or Quad Core CPUs. Embedded with high quality video/ audio capture chips, NViS series is the best design to for use security surveillance deployments.

Key Features

- Industrial-level for PC-based DVR
- Embedded video decoder chips on motherboard provides steadier and easier operation
- Fanless design improves reliability and eliminates systems failure caused by fan breakdown to retain low maintenance cost
- Power over Ethernet (PoE) device connection
- Hybrid surveillance enrich IVA applications
- Integrated with power ignition
- Wide range of DC input from 9V to 36V for mobile surveillance

Applications

Police car / truck

NViS 2140: 4-channel Full-D1 video, power ignition, and fanless

Public bus / vehicle / ambulance

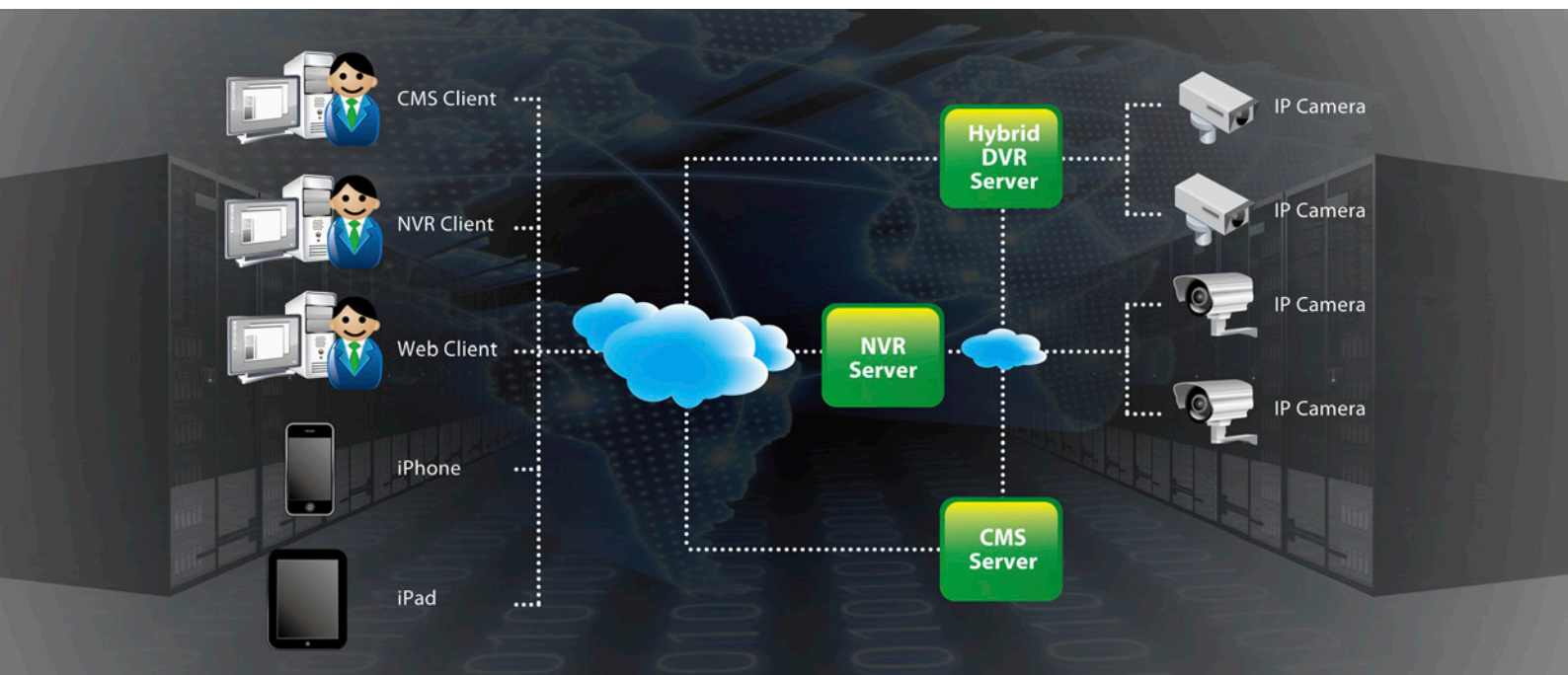NViS 2280/ 3542P4: 4-channel Full-D1 video, wide range of DC input, and POE

Supermarket / chain store / bank

NViS 6210: up to 32-channel full-D1 and 2U form factor

NViS 5240: up to 16-channel, IP cameras

NViS VMS - Video Management Solution

Intelligent Surveillance Software

Key Features

Complete VMS Solution

■ NVR Server/Hybrid DVR Server/CMS Server

■ NVR Client/Web Client/Mobile Client

■ NVR SDK

Designed for Ease of Integration

■ Modular plug-in on Server and Client

■ HTTP Protocol Only

■ No recompilation required
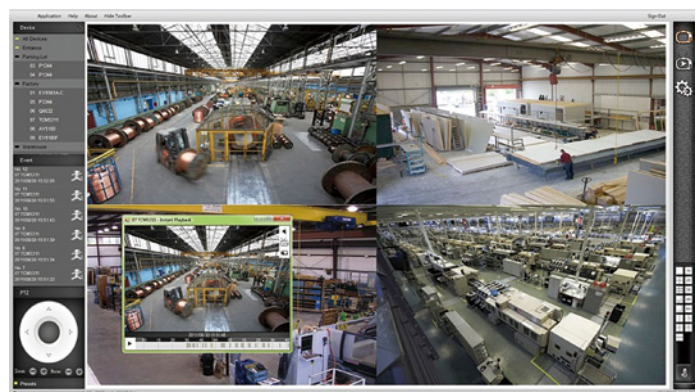
Live Monitoring

■ Layout patrol

■ Instant playback on live view and event

■ 2-way audio and broadcast

Investigation and export evidence

■ Add bookmarks

■ Review events

■ Synchronous playback

■ Export video

Smart Search

■ Sequence Explorer

■ Search motion

■ Search by Events

Plug-in Architecture and Customization

NEXCOM's software structure is not only ready for customization but also integration. The communication between any application plug-ins and the NVR server such as live view, PTZ control, and playback etc. goes through only one port and uses only HTTP protocol which makes the integration between any third party application simple and easy. NEXCOM is expert in UI customizations where the logo, colors, icons, size, layout and any application plug-in can all be modified, relocated, resized and enabled/disabled conveniently by modifying a XML file.
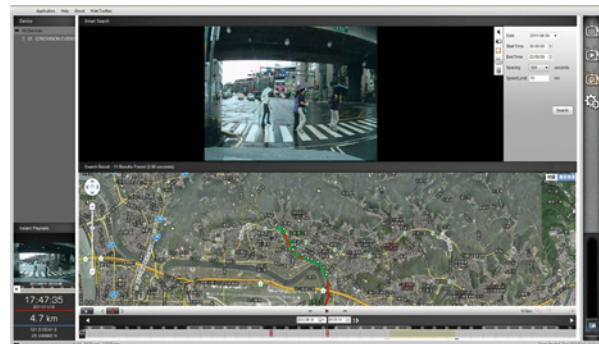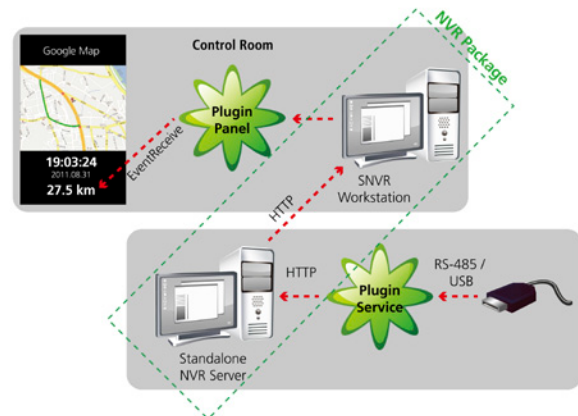
Applications

NEXCOM's complete VMS solution can be easily turned into a professional vertical market specific solution. NEXCOM understands end user application requirements and can provide flexible customization and professional services tailored toward customer specific needs. NEXCOM currently focus on following vertical market:

- Retail vertical market
- School vertical market
- Mobile vehicle vertical market
- Building automation vertical market

NEXCOM provides Ready-to-Run NViS Solution Starter kit with free trial version of VMS upon customer's request.
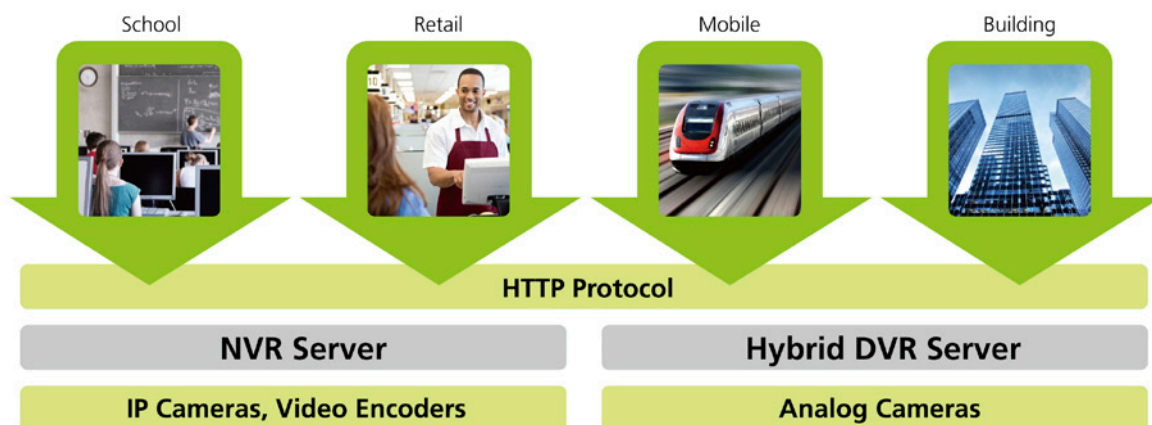
Point of Service Solutions - POS

NEXPOS, Transform Your Business

Welcome to a new world of interaction - where you can serve your customers how, when and where they choose across point of service, mobile and online channels. It's possible to achieve this when you partner with NEXPOS. Learn how our continuous innovation, global reach and cross-industry knowledge and experience will help you transform your business.

NEXPOS is a newly formed team under NEXCOM's Industrial Computing Solution (ICS) business group, which provides innovative "Point of Service" solutions. We specialize in new hardware solutions, system planning, design implementation, and project management.

Our people have decades of experience in the "Point of Service" industry. They are carefully selected not only for their technical brilliance, but also for their mature attitude in solving and providing expert advice, and innovative hardware technology,

and also providing hardware design solutions for your enterprise systems integration.

NEXPOS Leadership for Customization Service

- High Performance and Green Technology
- Expert Service Offerings
- Reliability in design and manufacturing (OEM/ODM)
- Outsourced manufacturing second to none

Our approach is always customer centered. Providing industry's leading solutions, we are to help ensure success of your solutions investment.

2012 New Products

NISE 90
DIN-Rail Computer

- On-board Intel® Atom™ E620 0.6GHz processor
- On-board DDR2 512MB memory chip
- 2x Intel® GbE LANs
- 3x USB2.0 / 1x VGA / 3x Serial Ports / 1x CAN bus
- 8CH GPI and 8CH GPO
- Support 1x 2.5" HDD Drive Bay
- Support 12V and 24V DC input

NISE 91
DIN-Rail Computer

- On-board Intel® Atom™ E640 1.0 GHz processor
- On-board DDR2 1G memory chip
- 2x Intel® 82574L GbE LANs
- 3x USB2.0 / 1x VGA / 3x serial ports / 1x CAN bus
- 8CH GPI and 8CH GPO
- Support 1x 2.5" HDD drive bay
- Support 12V and 24V DC input

NISE 104
EZ Controller

- On-board Intel® Atom™ Dual Core D2700 processor, 2.13 GHz
- Intel® NM10 Express chipset
- 1x DVI-I & 1x HDMI display output
- Dual Intel® 82574L GbE LAN ports
- 2x RS232/422/485 and 2x RS232
- 6x USB 2.0
- 1x external CFast socket
- 1x mini-PCIe with two antenna holes
- Support +12V and 24V DC power input
- Supports ATX power mode, WoL, LAN teaming and PXE function

Coming Soon

NISE 3142
High Performance Platform

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual DVI-D independent display
- 5 x RS232 and 1 x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN Teaming

2012 New Products

NISE 3142P2

High Performance Platform

■ Support Intel® Core™ 2 Duo / Celeron® processor
■ Intel® GM45 chipsets
■ Dual Intel® 82574L Gigabit Ethernet ports
■ Dual DVI-D independent display
■ 5x RS232 and 1x RS232/422/485 with Auto Direction Control
■ One external locked CFast socket (SATA interface)
■ Support 16V to 30V DC power input
■ Support ATX power mode and PXE/ WoL/ LAN teaming

NISE 3142M

High Performance Platform/ Healthcare Platform

■ Support Intel® Core™ 2 Duo / Celeron® processor
■ Intel® GM45 chipsets
■ Dual Intel® 82574L Gigabit Ethernet ports
■ Dual DVI-D Independent display
■ 5x RS232 and 1x RS232/422/485 with Auto Direction Control
■ One external locked CFast socket (SATA interface)
■ Dual IEEE1394b ports
■ Support 16V to 30V DC power input
■ Support ATX power mode and PXE/ WoL/ LAN teaming

NISE 3142M2E

High Performance Platform/ Healthcare Platform

■ Support Intel® Core™ 2 Duo/ Celeron® processor
■ Intel® GM45 chipsets
■ Dual Intel® 82574L Gigabit Ethernet ports
■ Dual DVI-D independent display
■ 5x RS232 and 1x RS232/422/485 with Auto Direction Control
■ One external locked CFast socket (SATA interface)
■ Support 16V to 30V DC power input
■ Support ATX power mode and PXE/ WoL/ LAN teaming

NISE 3520

High Performance Platform

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3x RS232 and 1x RS232/422/485 with Auto Flow Control
- 1x mini-PCIe socket with one external SIM card holder
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

NISE 3520P2E

High Performance Platform

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3x RS232 and 1x RS232/422/485 with Auto Flow Control
- 1x mini-PCIe socket with one external SIM card holder
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

NISE 3600

High Performance Platform

- Support 3rd generation Intel® Core i3/ i5 rPGA socket type processor, Intel® QM77 PCH
- 4x USB3.0 & 2x USB2.0 Dual
- Intel® GbE LAN ports
- 1x VGA & 1x DVI-D display output, Dual Display Port output
- 5x RS232 and 1x RS232/422/485
- 1x external CFast socket
- Support 9~30V DC power input
- Supports ATX power mode, WoL and PXE function

2012 New Products

NISE 3600E2
High Performance Platform

- Support 3rd generation Intel® Core i3/ i5 rPGA socket type processor; Intel® QM77 PCH
- 4x USB3.0 & 2x USB2.0 & Dual Intel® GbE LAN ports
- 1x VGA & 1x DVI-D display output
- Dual Display Port output
- 5x RS232 and 1x RS232/422/485
- 1x external CFast socket
- Support 9~30V DC power input
- Supports ATX power mode, WoL and PXE function

nTUF 600
Marine Computer

- On-board Intel® Atom™ Dual Core D525 processor, 1.8 GHz
- 4x USB ports
- Dual M12 connector for Intel® 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse
- 1x external CFast socket
- 1x mini-PCIe with two Antenna Holes
- Support +24V DC power input
- Dual cold swappable 2.5" SSD tray
- Supports ATX Power Mode, WoL, LAN teaming and PXE function

nTUF 610
Marine Computer

- On-board Intel® 2nd generation Core™ i7-2610UE 1.5 GHz
- 4x USB ports
- Dual M12 connector for Intel® 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse
- 1x external CFast socket
- 1x mini-PCIe with two antenna hole
- Support +24V DC power input
- Dual cold swappable 2.5" HDD tray
- Supports ATX power mode, WoL, LAN teaming and PXE function

MPPC 3220T

Multi-Media Panel PC

- 16:9 32" fanless panel computer
- Intel® Atom™ D525, Dual Core, low power consumption CPU
- SAW touch screen
- Dual GbE/ Line-in/ Line-out/ MIC-in/ PS2 KB/ MS4 x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- DDR3 1GB/ 2.5" HDD Bracket/ two speakers
- Optional Wi-Fi module/ 2.5"HDD/ VGA splitter/ panel mount kit
- Panel mount/ VESA mount compliance

APPC 0820T/ 0820TC

Applied Panel PC

- 4:3 8" fanless panel computer
- Intel® Atom™ D525, Dual Core, low power consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 1x mini-PCIe sockets/ 1x CF
- 1x RS232/ 1x RS232/422/485/ 1x GPIO
- DDR3 1GB / 2.5" HDD bracket
- Optional Wi-Fi module / 2.5" HDD
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 100mmx 100mm

APPC 1220T/ 1221T

High Performance Platform

- 4:3 12.1" fanless LED panel computer
- Intel® Atom™ D525, Dual Core, low power consumption CPU
- Fully flat 5-wire touch screen
- Dual GbE; 2nd display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4 / 2x Mini-PCIe/ 1x CF/ 2x RS232/422/485
- Optional Wi-Fi module / 2.5"HDD / 2x COMs / GPIO / CAN Bus
- DDR3 1GB / 2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 100mmx 100mm
- Wide range power input 12V~ 30V DC

APPC 1930T/1931T

Applied Panel PC

- 4:3 19" fanless panel computer
- Intel® Atom™ D2700, Dual Core, low power consumption CPU
- Panel by 5-wire touch screen
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- Optional Wi-Fi module/ 2.5"HDD/ 2x COMs/ GPIO/ CAN bus
- DDR3 1GB/ 2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 100mmx 100mm
- Wide range power input: 12V~ 30V DC

2012New Products

OPPC 1520T

Open Frame Panel PC

- 4:3 15" fanless LED panel computer
- Intel® Atom™ D525, Dual Core, low power consumption CPU
- Dual GbE/ 2nd display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- DDR3 1GB / 2.5" HDD bracket
- Optional Wi-Fi module / 2.5"HDD / panel mount kit
- Open frame and panel mount/ VESA mount compliance
- Wide range power input: 12V~ 30V DC

OPPC 1720T

Open Frame Panel PC

- 4:3 15" fanless panel computer
- Intel® Atom™ D525, Dual Core, low power consumption CPU
- Dual GbE/ 2nd display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- DDR3 1GB / 2.5" HDD bracket
- Optional Wi-Fi module / 2.5"HDD / panel mount kit
- Open frame and panel mount/ VESA mount compliance
- Wide range power input: 12V~ 30V DC

HPPC 1920T

Healthcare Panel PC

- 4:3 19" fanless panel computer
- Intel® Atom™ D525, Dual Core, low power consumption CPU
- PCT (Projected Capacitive Touch) touch screen
- Dual GbE/ 2nd display VGA/ Line-out/ PS2 KB/MS
- 4x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485
- Optional Wi-Fi module/ 2.5"HDD
- Optional Wi-Fi module / 2.5"HDD bracket
- IP65 compliant front panel
- Mounting support: stand/ VESA 75mm x 75mm, 100mm x 100mm
- Wide range power input: 12V~ 30V DC

FPPC 1220

Factory Panel PC

- 4:3 12.1" fanless panel computer
- Intel® Atom™ D425, low power consumption CPU
- DDR3 1GB/ 3x GbE/ 2nd display-VGA/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 2/ 1x PCI slot/ 1x CF/ 2x RS232/ 1x RS232/422/485
- IP65 compliant front panel
- Mounting support: panel/ wall/ stand/ VESA 75mmx 75mm, 100mm x 100mm

NPT 1500

POS Terminal

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Water spill resistant front bezel
- Optional VESA 75 x 75mm mounting support

NPT 1550

POS Terminal

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Optional kits for MSR/ fingerprint/ VFD
- Optional VESA 100x 100mm mounting for wall-mount application

NPT 1551

POS Terminal

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive true flat touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

NPT 1552

POS Terminal

- Intel® Core™ i3/i5/i7 mobile processor, 2.1 GHz
- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" projected capacitive true flat touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Optional kits for MSR/ fingerprint/ VFD
- Optional VESA 100x 100mm mounting for wall-mount application

2012 New Products

NPT 5850

POS Terminal

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Intel® Core™ i3/i5/i7 mobile processor, 2.1GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

NPT 5851

POS Terminal

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive true flat touch screen
- Intel® Core™ i3/i5/i7 mobile processor, 2.1 GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

NPT 5852

POS Terminal

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" projected capacitive true flat touch screen
- Intel® Core™ i3/i5/i7 mobile processor, 2.1GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

Coming Soon

NPB 3550

Point-of-Sales Box System

- Fanless POS box system
- Slim and compact enclosure design
- Intel® Atom™ processor D2700, 2.13GHz
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1),DVI(1), GbE LAN(1), cash drawer(1)
- Optional wall-mount kit for compact space accommodation
- Support DDR3 1066 SO-DIMM memory

NViS 2280

Video Intelligent Surveillance

4 PoE, Mobile NVR

- Built-in Intel® Atom™ D2700 Dual Core 2.13GHz processor
- Internal wireless communication (3.5G/ WLAN/ BT/ GPS)
- 2x 2.5" hot swappable HDD tray for 750G or above video data
- Dual local display by (VGA+ HDMI)
- 2x Intel® 83583V Gigabit Ethernet
- Support 1x isolated RS-232 port
- Optional power ignition
- 9~36V wide range power input

NViS 3542P4/ 3542P8

Video Intelligent Surveillance

4 PoE/ 8 PoE, Mobile NVR

- Support Intel® Core™ i7/ i5 Socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/ DVI independent display
- 3x R232 and 1x R232/422/485 with Auto Flow Control
- On-board DC to DC power design to support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL
- Support 3G/ Wi-Fi/ GPS communications
- 4x PoE ports/ 8x POE ports

NViS 5240

Video Intelligent Surveillance

4 Bay, Tower NVR

- Built-in Intel® Atom™ D2700 Dual Core 2.13GHz Processor
- 4x 2.5" HDD Tray for 2T or Above Video Data
- Dual Local Display by (VGA+HDMI)
- 2x Intel® Gigabit Ethernet
- 1x PCIe x4 or 1x mini-PCIe (either one)
- NViS VMS pre-installed

NViS 6210

Video Intelligent Surveillance

2U, 32CH Hybrid DVR

- 2U rackmount hybrid DVR with BNC connectors published
- Support Intel® Core™ i3/i5/i7 desktop processors
- Video decoder (TW6816) chips on-board
- Up to 32 CH 960/900FPS @ D1 display & recording
- Dual local display by (VGA+ DVI), (VGA+ HDMI) or (DVI+ HDMI)
- 2x Intel® Gigabit Ethernet/ support Intel® AMT 7.0 for remote management
- 1x PCIe x16 slot, support SATA3.0, RS232/422/485
- SDK support for Windows operating system

2012 New Products

NViS 6220

Video Intelligent Surveillance

2U Rackmount NVR

- 2U rackmount NVR with 1x PCIe x16 expansion slot available
- Support Intel® Core™ i3/i5/i7 desktop processors
- 8x 3.5" HDD tray for 16T or above video data
- Dual local display by (VGA+DVI), (VGA+ HDMI) or (DVI+ HDMI)
- 2x Intel® Gigabit Ethernet/ support Intel® AMT 7.0 for remote management
- 1x PCIe x16 slot, support SATA 3.0, RS232/422/485

NViS 8480

Video Intelligent Surveillance

4U HDcctv DVR

- 4U 19" rackmount standard
- Supports Intel® Core™ i7/i5 Quad Core processors
- Four DDR3 DIMM sockets, up to 16GB DDR3 1066/1333 MHz SDRAM
- Dual Intel® Gigabit Ethernet ports
- 6x USB2.0 / 1x VGA/ 1x DVI-D
- 4x PCIe expansion slots
- 6x 3.5" SATA HDD bays for external
- Supported up to 8-cahnnal HD CCTV

PBOX Customization Service

With decades experience in the provision of industrial computer solutions, ICS business group of NEXCOM has strong core competence with custom design team for industrial system solution. Combined with our embedded board and Single Board Computer product lines, we provide custom chassis design and system design services to cover a wide area in industrial domain.

Based on customers' specifications and needs, we are using expert opinion and suggestion to assess project efficiently. With thoughtful consideration, we propose most cost effective solution and rapid services. We specialize in custom design for flexible system solution with rapid response, proposal, project management, mechanical drawing, prototyping, high quality manufacturing and integration services.

EBC 353

3.5" ECX CPU Board

- Onboard Intel® Atom™ processor D2700 2.13GHz CPU
- Intel® NM10 Express chipset
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM
- Display: VGA & DVI-D & LVDS (1 x DF13 20-pin 24-bit Single channel)
- 1x Mini-PCIe
- 1x PCI-104
- 2x Intel® 82574L PCI Express Gigabit Ethernet
- 2x SATA
- 6x USB, 4-in/4-out GPIO, Mic-in , Speak out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input
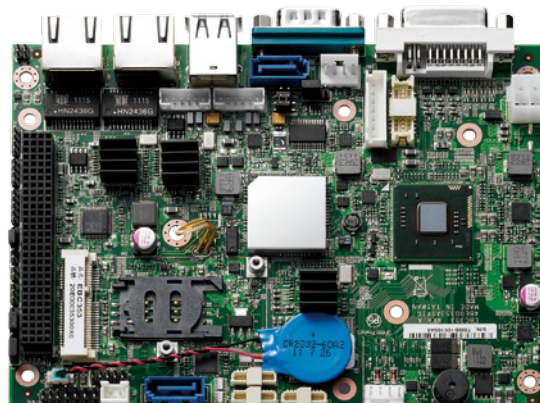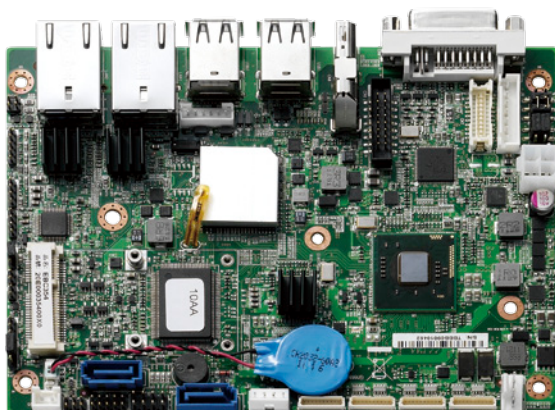
EBC 354

3.5" ECX CPU Board

- On-board Intel® Atom™ processor D2700 2.13GHz CPU
- Intel® NM10 Express chipset
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (1x DF13 20-pin 18/24-bit Single channel)
- 2x Mini-PCIe
- 2x Intel® 82574L PCI Express Gigabit Ethernet
- 2x SATA
- 6x USB, 4-in/4-out GPIO, Mic-in , Speak out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

NEX 603

Industrial Mother Board, Mini-ITX (POS Board)

- Support Intel® Atom™ Dual Core D525 processor
- Support 2x DDR3 SO-DIMM SDRAM, up to 4GB
- Support dual display VGA and LVDS
- One Gigabit Ethernet
- Support High Definition audio codec with 2W amplifier
- 6x COMs, 6x USB 2.0, 1x cash drawer
- Mini-DIN 4pin DC12V power input

NEX 604

Industrial Mother Board, Mini-ITX

- Intel® Atom™ Dual-Core D2700/ 2.13GHz processor
- Intel® NM10 Express chipset
- Dual 204-pins DDR3 SO-DIMMs support max. 4GB SDRAM memory
- Support VGA/HDMI, VGA/LVDS or HDMI/LVDS dual displays
- 6x USB, 4x COM, 2x GbE, 2x SATA, 1x LPT, 1x PCI
- Audio Mic-in/ Line- out, (internal Line-in)
- 2x Mini-PCIe (1x full/SIM tray, 1x half-size)
- Single DC +12V input by AT/ ATX mode
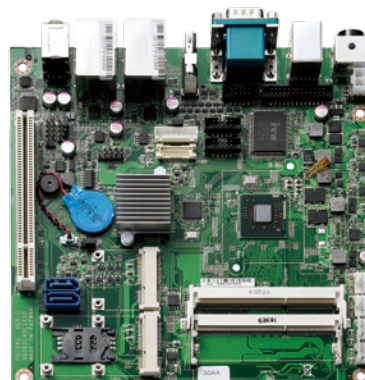
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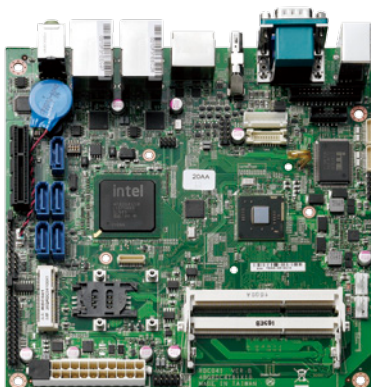
NEX 605

Industrial Mother Board, Mini-ITX

- Intel® Atom™ Dual-Core D2700/ 2.13GHz processor
- Intel® ICH10R to support Intel® Matrix Storage RAID 0/ 1/ 5/ 10
- Dual 204-pins DDR3 SO-DIMMs support max. 4GB SDRAM memory
- Support VGA/HDMI, VGA/LVDS or HDMI/LVDS dual displays
- 8x USB, 4x COM, 2x GbE (Intel), 2x eSATA/ 6x SATA, 8x GPIO, 1x LPT
- Audio Mic-in/ Line- out, (internal Line-in)
- 1x Mini-PCIe (1x full-size/ SIM tray), 1x PCIe x4
- Standard ATX v.2.0 input by AT/ ATX power mode

NEX 607

Industrial Mother Board, Mini-ITX

- 2nd generation Intel® Core™ processor family
- Intel® QM67 chipset
- Two 204-pin SO-DIMM socket supports up to 8 GB DDR3 1066/1333 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (2 x DF13 20-pin 18/24/36/48-bit dual channel)
- 1x mini-PCIe, 1x PCIe x16 slot
- 2x Intel® Gigabit Ethernet
- 4x SATA
- 10x USB, 4-in/4-out GPIO, Mic-in , Line-out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

Coming Soon
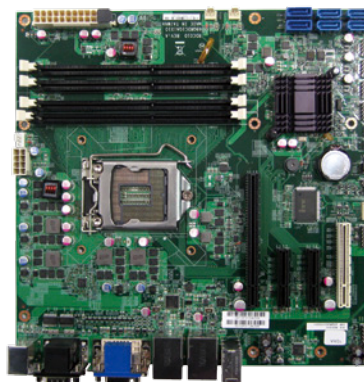
NEX 880

Industrial Mother Board, Micro-ATX

- Support 2nd generation Intel® Core™ desktop processors
- 4 x DDR3 DIMM Socket up to 32 GB
- VGA + DVI dual displays
- 2 x Intel® Gigabit Ethernet
- Support Intel® AMT 7.0
- 1x PCIe X16(with PCIe x8 signals), 1x PCIe x8(with PCIe x1 signals), 1xPCIe x4 (with PCIe x4 signals) slot, 1x PCIe x4 (with PCIe x1 signals) slot
- Support SATA 3.0, 2x RS232

NEX 890

Industrial Mother Board, Micro-ATX

- Support 2nd generation Intel® Core™ workstation processors
- 4 x DDR3 DIMM Socket up to 32 GB, support ECC SDRAM
- VGA + DVI dual displays
- 2 x Intel® Gigabit Ethernet
- Support Intel® AMT 7.0
- 1x PCIe x16 (with PCIe x8 signals), 1x PCIe x8, 2x PCIe x4 slots
- Support SATA 3.0, 2x RS232

Coming Soon

ICES 254

COM Express, Type 2 Compact

- Intel® Atom™ Dual Core processor D2700, 2.13GHz
- Intel® ICH10R to support Intel® Matrix Storage RAID 0/1/5/10
- 1x DDR3 SO-DIMM socket up to 4GB
- Type 2 COM Express compact size to support 5 Express lanes, 32 bit PCI interface, one IDE, Gigabit LAN and HDMI
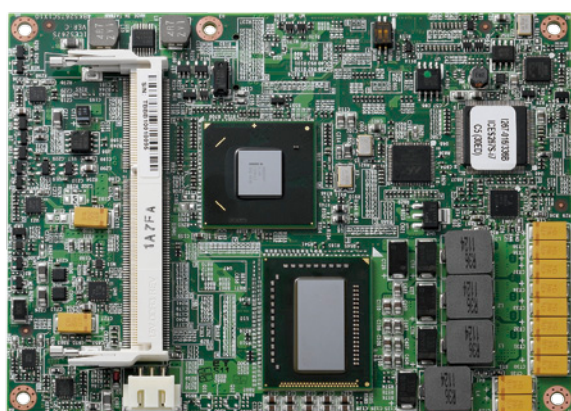
Coming Soon

ICES 267S

COM Express, Type 2 Basic

- Intel® 2nd generation Intel® Core™ processor family
- Intel® QM67 PCH chipset
- 1x DDR3 SO-DIMM socket support non-ECC DDR3 800/1066/1333MHz up to 4GB
- Support SDVO
- Type 2 COM Express 2.0 module support 6 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN

ICES 268

COM Express, Type 2 Basic

- Intel® 3rd generation Intel® Core™ processor
- Intel® QM77 PCH chipset with USB3.0 support & SATAIII 6Gbs
- 2x DDR3 SO-DIMM socket supporting non-ECC DDR3 1333/1600 up to 16GB
- Support either PCIe x16 or SDVO
- Type 2 COM Express 2.0 module support 6 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN

Coming Soon

ICES 668

COM Express, Type 6 Basic

- 3rd generation Intel® Core™ processor
- Intel® QM77 PCH chipset with USB3.0 support & SATAIII 6Gbs
- 2x DDR3 SO-DIMM socket supporting ECC DDR3 1333/1600 up to 16GB
- Type 6 COM Express 2.0 module support PCIe x16, 7x Express
- Lanes, 12x USB2.0/USB3.0, 3x DDI, and Gigabit LAN
- Intel® HD Graphic engine support triple independent displays
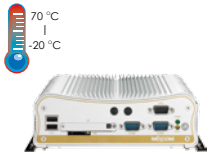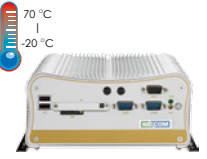
Coming Soon

Fanless Computer

Model	NISE90	NISE91	NISE100	NISE101
CPU	Intel® Atom™ E620 0.6GHz	Intel® Atom™ E640 1.0GHz	Intel® ATOM™ N270 1.6GHz	Intel® ATOM™ N270 1.6GHz
Chipset	Intel® EG20T	Inte®l EG20T	Intel® 945GSE/ICH7M	Intel® 945GSE/ICH7M
Max. Memory	512MB DDR2 on board	1G DDR2 on board	2GB DDR2	2GB DDR2
HDD Space	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
CF Socket	N/A	N/A	N/A	1 (Internal)
CD-ROM/DVD-ROM	N/A	N/A	N/A	N/A
VGA	1	1	1 via DVI-I to VGA adapter	1
LVDS	N/A	Single, 18/24bit (internal)	N/A	N/A
DVI	N/A	N/A	1 (DVI-I)	1
TV-out	N/A	N/A	N/A	N/A
HDMI	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	N/A
eSATA	N/A	N/A	N/A	N/A
IEEE1394	N/A	N/A	N/A	N/A
USB	3	3	2	2
PS/2	N/A	N/A	1	1
Parallel Port	N/A	N/A	N/A	N/A
Serial Port	3	3	3	2
RS422/485	1	1	1	1
RS422/485 Isolation	N/A	N/A	N/A	N/A
CANbus	1	1	N/A	N/A
Digital I/O	N/A	N/A	N/A	N/A
miniPCIe	N/A	1	N/A	1
SIM Card Holder	N/A	1 (internal)	N/A	N/A
GPIO	8-in/8-out	8-in/8-out	4-in/4-out (Internal)	4-in/4-out (Internal)
LAN Ports	2x GbE	2x GbE	1 x GbE	2 x GbE
Audio	N/A	N/A	N/A	Mic-in & Spk-out
Power Input Range	DC 12V DC 24V	DC 12V DC 24V	ATX, DC 12V	ATX, DC 12V
Power Supply Adapter	Optional	Optional	12V, 60W AC/DC	Optional
Expansion	N/A	N/A	N/A	N/A
Operating temp. (w/HDD) Based on IEC 60068 STD	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C
System Dimension (WxDxH)	59 x 140 x 167mm	59 x 140 x 167mm	185 x 132 x 50mm	185 x 131 x 54mm
Carton Dimension (WxDxH)	288 x 252 x 181mm	288 x 252 x 181mm	259 x 233 x 129mm	259 x 233 x 129mm

	NISE103	NISE104	NISE2000	NISE2010	NISE2020	NISE2100
		COMMING SOON				
	Intel® ATOM™ D425 1.8GHz	Intel® Atom™ D2700 2.13GHz	Intel® ATOM™ N270 1.6GHz	Intel® ATOM™ N270 1.6GHz	Intel® ATOM™ N270 1.6GHz	Intel® Atom™ D525 1.8GHz
	Intel® ICH8M	Intel® NM10	Intel® 945GSE/ICH7M	Intel® 945GSE/ICH7M	Intel® 945GSE/ICH7M	Intel® ICH8M PCH
	2GB DDR3	4G DDR3	2GB DDR2	2GB DDR2	2GB DDR2	2GB DDR3
	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
	1	1 (External, CFast)	1 (External)	1 (External)	1 (External)	1 (External)
	N/A	N/A	N/A	N/A	N/A	N/A
	1	N/A	1	1	1	1
	Single, 18bit (Internal)	N/A (option)	Single, 18bit (Internal)	Single, 18bit (Internal)	Single, 18bit (Internal)	Single, 18bit (Internal)
	N/A	1 (DVI-I)	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	1	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	4	6	4	4	4	4
	N/A	N/A	1	1	1	N/A
	N/A	N/A	1 (Internal)	1	1	N/A
	4	4	4	4	4	6
	1	2	2	2	2	2
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	4-in/4-out (External)	N/A	N/A	N/A	N/A	N/A
	1	1	1	1	1	1
	1 (internal)	1 (internal)	N/A	N/A	N/A	1
	N/A	4-in/4-out (internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (External)
	2 x GbE	2x GbE	2 x GbE	2 x GbE	2 x GbE	3 x GbE
	Mic-in & Spk-out	Mic-in & Spk-out	Spk-out	Spk-out	Spk-out	Spk-out
	ATX, DC 12V	DC 12V DC 24V	ATX, DC +16V ~ 30V	ATX, DC +16V ~ 30V	ATX, DC +16V ~ 30V	ATX, DC + 9V ~ 36VDC
	Optional	Optional	Optional	Optional	Optional	Optional
	N/A	N/A	N/A	1 x PCI	2 x PCI	N/A
	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C
	185 x 131 x 54mm	185 x 131 x 54mm	195 x 200 x 65mm	195 x 200 x 81mm	195 x 200 x 107mm	195 x 200 x 65mm
	259 x 233 x 129mm	259 x 233 x 129mm	324 x 303 x 193mm	324 x 303 x 193mm	350 x 321 x 217mm	335 x 294 x 193mm

Fanless Computer

Model	NISE2100A	NISE2110	NISE2110A	NISE3100e
CPU	Intel® Atom™ D525 1.8GHz	Intel® Atom™ D525 1.8GHz	Intel® Atom™ D525 1.8GHz	Intel® Pentium® M/ Celeron® M
Chipset	Intel® ICH8M PCH	Intel® ICH8M PCH	Intel® ICH8M PCH	Intel® 910GMLE/ICH6M
Max. Memory	2GB DDR3	2GB DDR3	2GB DDR3	2GB DDR2
HDD Space	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
CF Socket	1 (External)	1 (External)	1 (External)	1 (Internal)
CD-ROM/DVD-ROM	N/A	N/A	N/A	N/A
VGA	1	1	1	1
LVDS	Single, 18bit (Internal)	Single, 18bit (Internal)	Single, 18bit (Internal)	Dual, 18bit (Internal)
DVI	N/A	N/A	N/A	1 (DVI-D)
TV-out	N/A	N/A	N/A	N/A
HDMI	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	N/A
eSATA	N/A	N/A	N/A	N/A
IEEE1394	N/A	N/A	N/A	N/A
USB	4	4	4	6
PS/2	N/A	N/A	N/A	2
Parallel Port	N/A	N/A	N/A	1 (Internal)
Serial Port	6	6	6	4
RS422/485	N/A	2	N/A	1
RS422/485 Isolation	2 (2KV)	N/A	2 (2KV)	N/A
CANbus	N/A	N/A	N/A	N/A
Digital I/O	N/A	N/A	N/A	N/A
miniPCIe	1	1	1	N/A
SIM Card Holder	1	1	1	N/A
GPIO	4-in/4-out (External)	4-in/4-out (External)	4-in/4-out (External)	4-in/4-out (Internal)
LAN Ports	2 x GbE	3 x GbE	2 x GbE	2 x GbE
Audio	Spk-out	Spk-out	Spk-out	Mic-in & Spk-out
Power Input Range	ATX, DC + 9V ~ 36VDC	ATX, DC + 9V ~ 36VDC	ATX, DC + 9V ~ 36VDC	ATX, DC +16 ~ 30V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	N/A	1 x PCI or 1 x PCIe (option)	1 x PCI or 1 x PCIe (option)	1x PCI
Operating temp. (w/HDD) Based on IEC 60068 STD	-20°C ~ 70°C	-5°C ~ 55°C	-20°C ~ 70°C	-5°C ~ 55°C
System Dimension (WxDxH)	195 x 200 x 65mm	195 x 200 x 90mm	195 x 200 x 90mm	195 x 268 x 80mm
Carton Dimension (WxDxH)	335 x 294 x 193mm	335 x 294 x 193mm	335 x 294 x 193mm	367 x 309 x 234mm

NISE3100eP2	NISE3150e	NISE3110	NISE3110P2	NISE3140	NISE3140E
Intel® Pentium® M/ Celeron® M	Intel® Pentium® M/ Celeron® M	Intel® Core™ 2 Duo/ Core™ Duo	Intel® Core™ 2 Duo/ Core™ Duo	Intel Core 2 Duo	Intel Core 2 Duo
Intel® 910GMLE/ ICH6M	Intel® 910GMLE/ ICH6M	Intel® 945GME/ICH7M	Intel®945GME/ICH7M	GM45 / ICH9M	GM45 / ICH9M
2GB DDR2	2GB DDR2	4GB DDR2	4GB DDR2	4GB DDR3	4GB DDR3
1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
1 (Internal)	1 (Internal)	1 (Internal)	1 (Internal)	1 (External)	1 (External)
N/A	Slim DVD Combo x1	N/A	N/A	N/A	N/A
1	1	1	1	1	1
Dual, 18bit (Internal)	Dual, 18bit (Internal)	Dual, 18bit (Internal)	Dual, 18bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)
1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-I)	1 (DVI-I)
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
6	6	6	6	6	6
2	2	2	2	1	1
1 (Internal)	1	1 (Internal)	1 (Internal)	1	1
4	4	4	4	4	4
1	1	1	1	1	1
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +12 ~ 30V	ATX, DC +12 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V
Optional	Optional	19V, 120W	19V, 120W	Optinal	Optinal
2x PCI	N/A	1x PCI	2x PCI	1x PCI	1x PCIex1
-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C
195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 80mm
367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

Fanless Computer

Model	NISE3140P2	NISE3140P2E	NISE3140M	NISE3140M2E
CPU	Intel® Core™ 2 Duo	Intel® Core™ 2 Duo	Intel® Core™ 2 Duo	Intel® Core™ 2 Duo
Chipset	GM45 / ICH9M	GM45 / ICH9M	GM45 / ICH9M Enhance	GM45 / ICH9M Enhance
Max. Memory	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3
HDD Space	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay
CF Socket	1 (External)	1 (External)	1 (External)	1 (External)
CD-ROM/DVD-ROM	N/A	N/A	N/A	N/A
VGA	1	1	1	1
LVDS	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)
DVI	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
TV-out	N/A	N/A	N/A	N/A
HDMI	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	N/A
eSATA	N/A	N/A	N/A	N/A
IEEE1394	N/A	N/A	2 (IEEE1394b)	2 (IEEE1394b)
USB	6	6	6	6
PS/2	1	1	1	1
Parallel Port	1	1	1	1
Serial Port	4	4	4	4
RS422/485	1	1	1	1
RS422/485 Isolation	N/A	N/A	N/A	N/A
CANbus	N/A	N/A	N/A	N/A
Digital I/O	N/A	N/A	N/A	N/A
miniPCIe	N/A	N/A	N/A	N/A
SIM Card Holder	N/A	N/A	N/A	N/A
GPIO	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
LAN Ports	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Audio	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
Power Input Range	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V	ATX, DC +16 ~ 30V
Power Supply Adapter	Optinal	Optinal	Optinal	Optinal
Expansion	2x PCI	1x PCI; 1x PCIex1	1x PCI	1x PCI; 1x PCIex1
Operating temp. (w/HDD) Based on IEC 60068 STD	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C
System Dimension (WxDxH)	195 x 268 x 101mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 101mm
Carton Dimension (WxDxH)	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

NISE3142	NISE3142P2	NISE3142M	NISE3142M2E	NISE3145	NISE3500
Intel® Core™ 2 Duo	Intel® Core™ 2 Duo	Intel® Core™ 2 Duo	Intel® Core™ 2 Duo	Intel® Core™ 2 Duo	Intel® Core™ i7 / i5 socket
GM45 / ICH9M	GM45 / ICH9M	GM45 / ICH9M Enhance	GM45 / ICH9M Enhance	GM45 / ICH9M	Intel® QM57
4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3
1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" HDD driver bay
1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External)	N/A
N/A	N/A	N/A	N/A	Slim DVD Combo	N/A
N/A	N/A	N/A	N/A	1	1
Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)
2 (DVI-D)	2 (DVI-D)	2 (DVI-D)	2 (DVI-D)	1 (DVI-I)	1 (DVI-I)
N/A	N/A	N/A	N/A	-	N/A
N/A	N/A	N/A	N/A	-	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	2
N/A	N/A	2	2	N/A	N/A
6	6	6	6	6	6
N/A	N/A	N/A	N/A	1	1
N/A	N/A	N/A	N/A	1	1 (Internal)
6	6	6	6	4	4
1	1	1	1	1	1
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
2x GbE	2x GbE	2x GbE	2x GbE	2 x GbE	2 x GbE
Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
ATX, DC +16~30V	ATX, DC +16~30V	ATX, DC +16~30V	ATX, DC +16~30V	ATX, DC +16 ~ 30V	ATX, DC +9 ~ 30V
Optional	Optional	Optional	Optional	Optinal	Optinal
1 x PCI	2 x PCI	1 x PCI	1 x PCI 1 x PCIex1	N/A	1x PCI
-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 50°C	-5°C ~ 55°C
195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 80mm
367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

Fanless Computer

Model	NISE3500P2	NISE3500M	NISE3500M2E	NISE3520
CPU	Intel® Core™ i7 / i5 socket	Intel® Core™ i7 / i5 socket	Intel® Core™ i7 / i5 socket	Intel® Core™ i7/i5 socket
Chipset	Intel® QM57	Intel® QM57	Intel® QM57	QM57
Max. Memory	4GB DDR3	4GB DDR3	4GB DDR3	4GB DDR3
HDD Space	1x 2.5" HDD driver bay	1x 2.5" HDD driver bay	2x 2.5" HDD driver bay	1x 2.5" SATA HDD bay
CF Socket	N/A	N/A	N/A	N/A
CD-ROM/DVD-ROM	N/A	N/A	N/A	N/A
VGA	1	1	1	1
LVDS	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (Internal)	Dual, 24bit (internal)
DVI	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
TV-out	N/A	N/A	N/A	N/A
HDMI	N/A	1	1	1
Display Port	N/A	N/A	N/A	N/A
eSATA	2	2	2	N/A
IEEE1394	N/A	3 (IEEE1394b)	3 (IEEE1394b)	N/A
USB	6	6	6	6
PS/2	1	1	1	1
Parallel Port	1 (Internal)	1 (Internal)	1 (Internal)	N/A
Serial Port	4	4	4	4
RS422/485	1	1	1	1
RS422/485 Isolation	N/A	N/A	N/A	N/A
CANbus	N/A	N/A	N/A	N/A
Digital I/O	N/A	N/A	N/A	N/A
miniPCIe	N/A	N/A	N/A	1
SIM Card Holder	N/A	N/A	N/A	1
GPIO	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (internal)
LAN Ports	2 x GbE	2 x GbE	2 x GbE	2x GbE
Audio	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out
Power Input Range	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V
Power Supply Adapter	Optinal	Optinal	Optinal	Optional
Expansion	2x PCI	1x PCI	1x PCI 1x PCIex1	1 x PCI
Operating temp. (w/HDD) Based on IEC 60068 STD	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C
System Dimension (WxDxH)	195 x 268 x 101mm	195 x 268 x 80mm	195 x 268 x 101mm	195 x 268 x 80mm
Carton Dimension (WxDxH)	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm	367 x 309 x 234mm

	NISE3520P2	NISE3520P2E	NISE3600	NISE3600E2	nTUF600	nTUF610
	Intel® Core™ i7/i5 socket	Intel® Core™ i7/i5 socket	3rd Gen Intel® Core™ i5/i3 socket (2nd Gen Intel® Core™ i5/i3 socket)	3rd Gen Intel® Core™ i5/i3 socket (2nd Gen Intel® Core™ i5/i3 socket)	Intel® Atom™ D525 1.8GHz	2nd Gen Intel® Core™ i7-2610UE 1.5GHz
	QM57	QM57	QM77	QM77	Intel® ICH8M	QM67
	4GB DDR3	4GB DDR3	8GB DDR3	8GB DDR3	2GB DDR2 (pre-install)	2GB DDR3 (pre-install)
	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	2x 2.5" SATA SSD bay	2x 2.5" SATA SSD bay
	N/A	N/A	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)
	N/A	N/A	N/A	N/A	N/A	N/A
	1	1	1	1	1	1
	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	Dual, 24bit (internal)	N/A	N/A
	1 (DVI-I)	1 (DVI-I)	1 (DVI-D)	1 (DVI-D)	N/A (Active by MXM)	1 (DVI-D)
	N/A	N/A	N/A	N/A	N/A	N/A
	1	1	N/A	N/A	N/A (Active by MXM)	N/A (Active by MXM)
	N/A	N/A	2	2	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
	6	6	2 - USB2.0 4 - USB3.0	2 - USB2.0 4 - USB3.0	4	4
	1	1	N/A	N/A	2	2
	N/A	N/A	N/A	N/A	N/A	N/A
	4	4	6	6	6	6
	1	1	1	1	4 (NMEA)	4 (NMEA)
	N/A	N/A	N/A	N/A	Yes, 2KV	Yes, 2KV
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	4-in/4-out	4-in/4-out
	1	1	1	1	1	1
	1	1	1	1	1	1
	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
	2x GbE	2x GbE	2x GbE	2x GbE	2x GbE (M12)	2x GbE (M12)
	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Mic-in & Spk-out	Spk-out, Mic-in	Spk-out, Mic-in
	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC 24V (Isolation Protection)	ATX, DC 24V (Isolation Protection)
	Optional	Optional	Optional	Optional	N/A	N/A
	2 x PCI	1 x PCI 1 x PCIex1	1 x PCIex4	2 x PCIex4	N/A	N/A
	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-5°C ~ 55°C	-25°C ~ 55°C	-25 ~ 55°C
	195 x 268 x 101mm	195 x 268 x 101mm	216 x 270 x 93mm	216 x 270 x 114mm	294 x 200 x 100mm	294 x 200 x 100mm
	367 x 309 x 234mm	367 x 309 x 234mm	TBC	TBC	399 x 303 x 194mm	399 x 303 x 194mm

Applied Panel PC

Model	APPC 0810T	APPC 1210T/1211T	APPC 1510T/1511T	APPC 0820T/0820TC
LCD Size	8.0" 4:3	12.1" 4:3	15" 4:3	8.0" 4:3
Max Resolution	SVGA, 800 x 600	SVGA, 800 x 600	XGA, 1024 x 768	SVGA, 800 x 600
Luminance(cd/m2)	350	350	350	400
Contrast Ratio	400	300	500	500
Viewing Angle(H-V)	55(U), 65(D), 65(L), 65(R)	50(U), 60(D), 70(L), 70(R)	65(U), 55(D), 65(L), 65(R)	50(U), 70(D), 70(L), 70(R)
Backlight	LED	LED	LED	LED
Touch Screen	Resistive 4-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire (Flush panel type)
CPU	Intel® Atom™ N270 1.6GHz	Intel® Atom™ N270 1.6GHz	Intel® Atom™ N270 1.6GHz	Intel® Atom™ D525 Dual Core 1.8GHz
Chipset	Intel® 945GSE/ICH7M	Intel® 945GSE/ICH7M	Intel® 945GSE/ICH7M	Intel® ICH8M
Memory	1GB DDR2 SO-DIMM module	1GB DDR2 SO-DIMM module	1GB DDR2 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1/ 1 (Optional)
2nd display output	VGA	VGA	VGA	VGA
PS2 KB/MS	Yes	Yes	Yes	1 / 0
Ethernet(10/100/1000)	2	2	2	2
Line out	Line out	Line out	Line out	Line out/ 1
Line in	0	0	0	Line in/ 0
MIC-in	MIC-in	0	0	MIC-in/ 0
USB 2.0	2	4	4	4/ 2
COM port	2xRS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	1xRS232, 1x RS232; 422; 485 / 1x RS232
Power Switch	1	1	1	1
Reset Button	0	0	0	1
Power Jack	TERMINAL BLOCKS 3 Pin PHOENIX	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°
GPIO	0	0 / 4-in; 4-out	0 / 4-in; 4-out	0/ 4-in; 4-out
CANbus	0	0	0	0
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes
Expansion	1xMini PCIe	2xMini PCIe	2xMini PCIe	1xMini PCIe
Construction Front Panel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel
Mounting	Panel/Wall/Stand/ VESA75x75mm	Panel/Wall/Stand/ VESA100x100mm	Panel/Wall/Stand/ VESA100x100mm	Panel/Wall/Stand/ VESA100x100mm
Power Input	11~28V DC	12~30V DC	12~30V DC	12V DC
Operating Temp.	0°C ~ 45°C	0°C ~ 45°C	0°C ~ 45°C	-5°C ~ 50°C
Storage Temp.	-20˚C ~ 75˚C	-20˚C ~ 75˚C	-20˚C ~ 75˚C	-20˚C ~ 75˚C
Operating Humidity	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing
IP Level	Front Frame IP65	Front Frame IP65	Front Frame IP65	Front Frame IP65

Model	APPC 1220T/1221T	APPC 1520T/1521T	APPC 1720T/1721T	APPC 1930T/1931T
LCD Size	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3
Max Resolution	SVGA, 800 x 600	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance(cd/m2)	350	350	380	350
Contrast Ratio	300	500	1000	1000
Viewing Angle(H-V)	50(U), 60(D), 70(L), 70(R)	65(U), 55(D), 65(L), 65(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	CCFL	LED
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire (Flush panel type)	Resistive 5-wire
CPU	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ D2700 Dual Core 2.13GHz
Chipset	Intel® ICH8M	Intel® ICH8M	Intel® ICH8M	Intel® ICH10R
Memory	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1
2nd display output	VGA	VGA	VGA	VGA
PS2 KB/MS	1	1	1	1
Ethernet(10/100/1000)	2	2	2	2
Line out	Line out	Line out	Line out	Line out
Line in	Line in	Line in	Line in	Line in
MIC-in	MIC-in	MIC-in	MIC-in	MIC-in
USB 2.0	4	4	4	4
COM port	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232	2x RS232; 422; 485 / Isolation 2x RS232; 422; 485, 2x RS232
Power Switch	1	1	1	1
Reset Button	1	1	1	1
Power Jack	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°	DC 4 pin DIN Power Jack with shield, 90°
GPIO	0/ 4-in; 4-out	0/ 4-in; 4-out	0/ 4-in; 4-out	0/ 4-in; 4-out
CANbus	0/1 (Optional)	0/1 (Optional)	0/1 (Optional)	0/1 (Optional)
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes
Expansion	2xMini PCIe	2xMini PCIe	2xMini PCIe	2xMini PCIe
Construction Front Panel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel	ABS+PC Plastic front bezel
Mounting	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm
Power Input	12~30V DC	12~30V DC	12~30V DC	12~30V DC
Operating Temp.	-5℃ ~ 50℃	-5℃ ~ 50℃	-5℃ ~ 50℃	-5℃ ~ 50℃
Storage Temp.	-20˚C ~ 75˚C	-20˚C ~ 75˚C	-20˚C ~ 75˚C	-20˚C ~ 75˚C
Operating Humidity	10% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing	10%~90%, Non-condensing	10% ~ 90%, Non-condensing
IP Level	Front Frame IP65	Front Frame IP65	Front Frame IP65	Front Frame IP65

Multi-Media Panel PC

Model	MPPC 0810T	MPPC 2120T	MPPC 2210T	MPPC 3220T
LCD Size	8.9" 16:9	21.5" 16:9	21.6" 16:9	32" 16:9
Max Resolution	WSVGA, 1024 x 600	Full HD, 1920 x 1080	Full HD, 1920 x 1080	Full HD, 1920 x 1080
Luminance(cd/m2)	220	300	300	400
Contrast Ratio	500	1000	1000	4000
Viewing Angle(H-V)	50(U), 60(D), 70(L), 70(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	CCFL	CCFL	LED
Touch Screen	Resistive 5-wire(Optional)	Resistive 5-wire	Resistive 5-wire(Optional)	SAW (Surface Acoustic Wave)
CPU	Intel® Atom™ N270 1.6GHz	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ N270 1.6GHz	Intel® Atom™ D525 Dual Core 1.8GHz
Chipset	Intel® 945GSE/ICH7M	Intel® ICH8M	Intel® 945GSE/ICH7M	Intel® ICH8M
Memory	1GB DDR2 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR2 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1
2nd display output	VGA	Clone VGA (Optional)	VGA	Clone VGA (Optional)
PS2 KB/MS	0	1	0	1
Ethernet(10/100/1000)	2	2	2	2
Line out	Line out	Line out	Line out	Line out
Line in	0	Line in	0	Line in
MIC-in	MIC-in	MIC-in	0	MIC-in
USB 2.0	4	4	2	4
COM port	1xRS232, 1xRS232/422/485	2xRS232/422/485	1xRS232/422/485	2x RS232/422/485
Power Switch	1	1	1	1
Reset Button	0	1	0	1
Power Jack	DC Jack	DC 4 pin DIN Power Jack with shield, 90°	DC Jack	DC 4 pin DIN Power Jack with shield, 90°
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes
Expansion	0	2xMini PCIe	1xMini PCIe	2x Mini PCIe
Audio Speaker	N/A	AMP 2W+2W	AMP 2W+2W	AMP 2W+2W
Mounting	Panel/Wall/VESA 75x75mm	Panel/Wall/Stand/VESA 75 x 75/100 x 100/ 400 x 100mm	Panel/Wall/VESA 75 x 75mm/ 100 x 100mm	Panel/ Wall/ Stand/ VESA 75 x 75/100 x 100/ 400 x 200mm
Power Input	12V DC	12~30V DC	12V DC	24V DC
Operating Temp.	0°C ~ 40°C	0°C ~ 45°C	0°C ~ 40°C	0°C ~ 45°C
Storage Temp.	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Operating Humidity	5% ~ 90%, Non-condensing	20% ~ 80%, Non-condensing	5% ~ 90%, Non-condensing	10% ~ 90%, Non-condensing

Open Frame Panel PC/ HPPC/ FPPC

Model	OPPC 1520T	OPPC 1720T	HPPC 1920T	FPPC 1220
LCD size	15" 4:3	17" 4:3	19" 4:3	12.1" 4:3
Max resolution	XGA, 1024x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	SVGA, 800 x 600
Luminance (cd/m2)	400	380	250	370
Contrast ratio	700	1000	1000	450
Viewing angle (H-V)	80(U), 60(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 80(L), 80(R)	50(U), 60(D), 70(L), 70(R)
Backlight	LED	CCFL	CCFL	CCFL
Touch screen	Resistive 5-wire	Resistive 5-wire	PCT (Projected Capacitive Touch)	N/A
CPU	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ D525 Dual Core 1.8GHz	Intel® Atom™ D425 1.8GHz
Chipset	Intel® ICH8M	Intel® ICH8M	Intel® ICH8M	Intel® ICH8M
Memory	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module	1GB DDR3 SO-DIMM module
CF socket	1	1	1	1
2nd display output	VGA	VGA	VGA	VGA
PS2 KB/ MS	Yes	Yes	Yes	Yes
Ethernet (10/100/1000)	2	2	2	3
Line out	Line out	Line out	Line out	Line out
Line in	Line in	Line in	0	0
MIC-in	MIC-in	MIC-in	0	MIC-in
USB 2.0	4	4	4	2
COM port	2x RS232/422/485	2x RS232/422/485	2x RS232/422/485	2x RS232, 1x RS232/422/485
Power switch	1	1	1	0
Reset button	1	1	1	0
Power jack	DC 4 pin DIN power jack with shield, 90°	DC 4 pin DIN power jack with shield, 90°	DC 4 pin DIN power jack with shield, 90°	TERMINAL BLOCKS 3 Pin PHOENIX
2.5" hard driver bay	Yes	Yes	Yes	N/A
Expansion	2x Mini PCIe	2x Mini PCIe	2x Mini PCIe	1x PCI
Mounting	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm	Panel/ Wall/ Stand/ VESA 75x 75, 100x 100mm
Power input	12~30V DC	12~30V DC	12~30V DC	24V DC
Operating temp	-5°C ~ 50°C	-5°C ~ 50°C	0°C ~ 45°C	-5°C ~ 50°C
Storage temp	-20˚C ~ 75˚C	-20˚C ~ 75˚C	-20˚C ~ 75˚C	-20˚C ~ 75˚C
Operating humidity	10%~90%, non-ondensing limits to be at 90% RH at max 30°C limits to be at 70% RH at max 50°C"	20% ~ 80%, non-condensing	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing

Embedded Computing

Model	EBC 500	EBC 540	EBC 545	EBC 550
PCB size (L/W)	203 x146 mm	203 x146 mm	203 x146 mm	203 x146 mm
CPU	Intel® Core™ 2 Duo Core™ Duo Core™ Solo	Intel® Atom™ N270	Intel® Core™ 2 Duo Celeron® M	Intel® Core™ 2 Duo Celeron® M
Chipset (NB/ SB)	Intel® 945GME ICH7-M DH	Intel® 945GSE ICH7-M	Intel® GM45 ICH9-M	Intel® GM45 ICH9-M
CPU FSB(MHz)	533/ 677	533	667/ 800/ 1066	667/ 800/ 1066
Max. Memory	4 GB DDR2 (2 x DIMM)	2 GB DDR2 (1 x DIMM)	8 GB DDR3 (2 x DIMM)	8 GB DDR3 (2 x DIMM)
VGA Interface	Intel® 945GME GMCH Integrated	Intel® 945GME GMCH Integrated	Intel® 945GME GMCH Integrated	Intel® 945GME GMCH Integrated
LCD Interface (LVDS LCD)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)
DVI/ HDMI	N/A	N/A	N/A	N/A
Ethernet (10/ 100)	N/A	N/A	N/A	N/A
Ethernet (10/ 100/ 1000)	2 x Intel® 82573L	2 x Realtek 8111C-GR	2 x Intel® 82574L	2 x Intel® 82574L
Wake on LAN	Yes	Yes	Yes	Yes
Audio	Realtek ALC655 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC
CF	1	1	N/A	N/A
IDE Interface	1 x 44 pin IDE (Ultra DMA 100/ 66/ 33)	N/A	N/A	N/A
Mini-PCI	N/A	N/A	N/A	N/A
SATA	2	2	2	4
USB 2.0	6	6	6	6
Serial Port	4	6	4	4
RS422/ 485 Support	N/A	Yes	Yes	No
Parallel Port	N/A	1	1	1
Power Supply	ATX	AT/ ATX	AT/ ATX	AT/ ATX
5Vsb Input	Yes	Yes	Yes	Yes
Expansion	1 x PCIe x16 Slot 1 x PCI Slot	1 x PCI Slot 1 x PCI-104 Slot	1 x PCI Slot 1 x PC/104+ Slot	1 x PCIe x16 Slot 1 x PCIe x4 Slot 1 x PCI Slot

	EBC 301	EBC 310	EBC 340	EBC 342	EBC 352
	246 x105 mm	146 x 105 mm	146 x 105 mm	146 x 105 mm	146 x 105 mm
	Intel® Pentium® M Celerom® M	Intel® Atom™ E640 ultra low power consumption SoC	Intel® Atom™ N270	Intel® Atom™ N270	Intel® Atom™ Dual-core D525
	Intel® 910GME ICH-6M	Intel® EG20T (PCH)	Intel® 945GSE ICH7-M	Intel® 945GSE ICH7-M	Intel® ICH8M
	400/ 533	800	533	533/ 667	800
	512 MB DDR2 on-board (option 1 GB)	1 GB DDR2 on-board	1 GB DDR2 (1 x SO-DIMM)	2 GB DDR2 (1 x SO-DIMM)	2 GB DDR3 (1 x SO-DIMM)
	Intel® 910GME	Intel Atom™ E600 series integrated graphic engine, support video decode (MPEG2, MPEG4, 264, VC1, WMV9)/ encode (MPEG4, H.264)	Intel® GMA950	Intel® GMA950	Intel® D525 integrated graphic engine
	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)
	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A
	1 x Realtek 8111C-GR	1 x Intel® 82574L 1 x Realtek 8211CL	1 x Realtek 8111C-GR	2 x Realtek 8111C-GR	2 x Intel® 82574L
	Yes	Yes	Yes	Yes	Yes
	Through optional module EBK 301-C1	Realtek ALC888 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC	Realtek ALC888 CODEC
	1 (Through optional module EBK 301-C2)	N/A	1	1	1
	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A
	1	2	1	1	2
	4	6	6	6	6
	2	3	4	3	4
	Yes (w/ optional EBK 301-C1 and EBK 301-C2)	Yes	Yes	Yes	Yes
	N/A	N/A	1	1	N/A
	AT/ ATX	AT/ ATX	AT	AT/ ATX	AT/ ATX
	Yes	N/A	N/A	N/A	N/A
	EBK 301-C1 EBK 301-C2	1 x Mini-PCIe	1 x PCI-104 Slot	1 x Mini-PCIe	1 x Mini-PCIe 1 x PCI-104 Slot
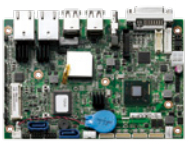
Embedded Computing

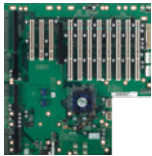| Model	EBC 353	EBC354	NEX 605	NEX 607	NEX 608
				COMMING SOON	
PCB size (L/W)	146 x 105mm	146 x 105mm	170 x 170mm	170 x 170mm	170x 170mm
CPU	Intel® Atom™ D2700	Intel® Atom™ D2700	Intel® Atom™ processor D2700	Intel® Core™ i5/i7	"Intel® Atom™ Dual-Core D525"
Chipset (NB/ SB)	Intel® NM10 Express chipset	Intel® NM10 Express chipset	Intel® 828010R (ICH10R)	Intel® QM67 PCH	Intel® ICH8M
CPU FSB(MHz)	–	–	-	-	-
Max. Memory	4GB DDR3 (1 x SO-DIMM)	4GB DDR3 (1 x SO-DIMM)	4GB DDR3 (2x SO-DIMM)	8GB DDR3 (2x SO-DIMM)	2GB DDR3 (1x SO-DIMM)
VGA Interface	Intel® Atom™ D2700 integrated graphic engine	Intel® Atom™ D2700 integrated graphic engine	Intel® Atom™ D2700 integrated graphic engine	Integrated graphics controller, Intel® HD Graphics 3000	Intel® D525 integrated graphic engine
LCD Interface (LVDS LCD)	Yes (1 CCFL for nverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)	Yes (1 CCFL for Inverter Power)
DVI/ HDMI	1/0	1/1	0/1	1/1	N/A
Ethernet (10/ 100)	N/A	N/A	N/A	N/A	N/A
Ethernet (10/ 100/ 1000)	2x Intel® 82574L	2x Intel® 82574L	2x Intel® 82574L	1x Intel®82574L, 1x Intel® 82579LM PHY	3x Realtek RTL8111C
Wake on LAN	Yes	Yes	Yes	Yes	Yes
Audio	Realtek ALC886 CODEC	Realtek ALC886 CODEC	Realtek ALC886 CODEC	Realtek ALC886 CODEC	Realtek ALC888 CODEC
CF	N/A	N/A	N/A	N/A	1
IDE Interface	N/A	N/A	N/A	N/A	1x 44pins IDE Ultra DMA 100/66/33
Mini-PCI	N/A	N/A	N/A	N/A	N/A
SATA	2	2	1x eSATA+ 5x SATA	4	2
USB 2.0	6	6	8	10	6
Serial Port	4	4	4	4	4
RS422/ 485 Support	Yes	Yes	N/A	Yes	Yes
Parallel Port	N/A	N/A	Yes	N/A	N/A
Power Supply	AT/ATX	AT/ATX	AT/ ATX	AT/ ATX	AT/ ATX
5Vsb Input	N/A	N/A	Yes	N/A	N/A
Expansion	1x Mini-PCIe, 1x PCI-014	2 x Mini-PCIe	1x Mini-PCIe 1x PCIe x4	1x Mini-PCIe 1x PCIe x16	1x Mini-PCIe 1x PCI (32)

PICMG Single Board Computer
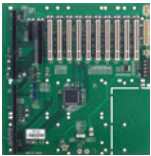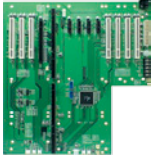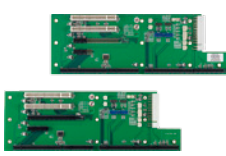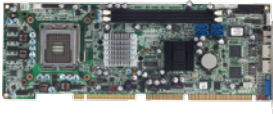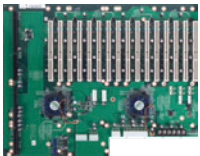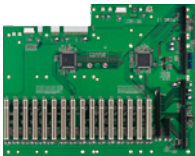
Model	PEAK 872VL2	PEAK 876VL2	PEAK 877VL2
Form Factor	Full-size PICMG 1.3	Full-size PICMG 1.3	Full-size PICMG 1.3
CPU Type	Intel® LGA775 Core™ 2 Duo/ Pentium® 4/ Pentium® D/ Celeron® D Processors with 533/ 800/ 1066/ 1333 MHz	Intel® LGA1156/ Core™ i3/ Core™ i5/ Core™ i7/ Pentium®	Intel® LGA1156, Core™ i7/ i5/ i3/ Pentium® Intel® Quad Core™ i5/ i7
Chipset	Intel® 82Q45 Intel® ICH 10DO	Intel® Q57 Express Chipset PCH	Intel® Q57 Express Chipset PCH
CPU FSB (MHz)	800/ 1066/ 1333	1066/ 1333	1066/ 1333
Expansive	PCI, PCI Express	PCI, PCI Express	PCI, PCI Express
Max. Memory	4 GB DDR3, Dual Channel (2 x DIMM)	8 GB DDR3, Dual Channel (2 x DIMM)	8 GB DDR3, Dual Channel (2 x DIMM)
VGA	Intel® Q45 GMCH Integrated Intel® GMA 4500	Intel® Core™ i5/ i3/ Pentium® processors Integrated graphics	Integrated graphic engine by XGI Volari Z11 GPU with DDR2 SDRAM throughPCIe 1 x Interface
Ethernet(10/ 100)	0	0	0
Ethernet(10/ 100/ 100)	2 x Intel® 82574L	1 x Intel® 82578DM PHY for AMT 6.0 1 x Intel® 82574L PCI Express Gigabit Ethernet	1 x Intel® 82578DMPHY for AMT 6.0 1 x Intel® 82574LPCI ExpressGigabit Ethernet
SATA	6	6	6
IDE Interface	N/A	N/A	N/A
USB	8 ports (USB 2.0)	8 ports (USB 2.0)	8 ports (USB 2.0)
Serial Ports	2	2	2
RS422/ 485 support	N/A	N/A	N/A

Model MICMG 1.3	NBP 14111	NBP 14210	NBP 14570-BX	NBP 0522/A
PCI Bridge	1 x Intel® QG6700PX	1x Pericom 8150	1x Pericom 8152	N/A
PCI	3	10	7	2
PICMG	1	1	1	1
PCIe X1	0	0	4	2/0
PCIe X4	0	1	0	0/1
PCIe X8	0	0	0	0
PCIe X16	1	1	1	0/1
PCI-X	8	0	0	0
SATA	2	2	2	2
USB2.0	4	2	4	2

PICMG Single Board Computer

Model			
	PEAK 8920VL2	**PEAK 765VL2**	**PEAK 777VL2**
Form Factor	Full-Size PICMG 1.3	Full-Size PICMG 1.0	Full-Size PICMG 1.0
CPU Type	Dual-Core Intel® Xeon® Processor 5000 Series and Quad-Core Intel® Xeon® Processor 5300 Series(80W)	Intel® LGA775 Core™ 2 Duo/ Pentium® 4/ Pentium® D/ Celeron® D/ Celeron® 440 Processors with 533/ 800/ 1066 MHz	Intel® LGA775 Core™ 2 Duo/ Pentium 4®/ Pentium® D/ Celeron® D Processors with 533/ 800/ 1066/ 1333 MHz
Chipset	Intel® 5000P Intel® 6321ESB	Intel® Q965 Intel®ICH8	Intel® G41 Intel® ICH7
CPU FSB (MHz)	1066/ 1333	533/ 800/ 1066	800/ 1066/ 1333
Expansive	PCI, PCI Express	PCI/ ISA	(32-bit/ 33 HMz) PCI/ ISA
Max. Memory	8 GB DDR2 FB-DIMM Four Channel (4 x DIMM)	4 GB DDR2 Dual Channel (2 x DIMM)	4 GB DDR3 (2 x DIMM)
VGA	ATI ES1000PCI Graphic Controller	Intel® Q965 GMCH integrated Intel® GMA 300	Intergated
Ethernet(10/ 100)	0	0	0
Ethernet(10/ 100/ 100)	2 x Intel® 82573L	2 x Intel® 82573L	2 x Intel® 82574L
SATA	2	4	4
IDE Interface	1 x 40 pin IDE	0	1 x 40 pin IDE
USB	8 ports (USB 2.0)	8 ports (USB 2.0)	8 ports (USB 2.0)
Serial Ports	2	2	2
RS422/ 485 support	N/A	N/A	N/A

Model MICMG 1.3				
	NBP 20016	**NBP 202A6**	**NBP 2U040**	**NBP 2U220**
PCI Bridge	1 x Intel® QG6700PXH	2 x Pericom8150	N/A	N/A
PCI	0	20	4	2
PICMG	1	1	1	1
PCIe X1	0	1	0	0
PCIe X4	0	0	0	1
PCIe X8	0	0	0	0
PCIe X16	0	1	0	1
PCI-X	16	0	0	0
SATA	2	2	2	2
USB2.0	4	4	4	2

Model PICMG 1.3	PBOX 100	PBOX 362	PBOX 240P-872	PBOX 440P-872	PBOX 460P-8920
Form Factor	Compact box	Desktop	2U	4U	4U
Dimension	300 x 194 x 51 mm	239 x 200 x 126 mm	483 x 450 x 88 mm	483 x 450 x 177 mm	483 x 671 x 177 mm
CPU	Intel® Atom™ N270 1.6GHz	Intel® Celeron® 575 Core™ 2 Duo T9400 Core™ 2 Quad Q9100	Intel® Pentium® 4 Celeron® D Core™ 2 Due Core™2 Quad	Intel® Pentium® 4 Celeron® D Core™ 2 Due Core™ 2 Quad	Intel® Quad Core Dual-core Dual Xeon®
Chipset	Intel® 945GSE ICH7M	Intel® GM45 ICH9M	Intel® Q45 ICH10DO	Intel® Q45 ICH10DO	Intel® 5000Pm 6321ESB
RAM	Up to 2GB DDR2	Up to 4GB DDR3	Up to 4GB DDR3	Up to 4GB DDR3	Up to 8GB DDR2
RAM Type	DDR2	DDR3	DDR3	DDR3	FB-DIMM
Gbe (10/100/100)	1	2	2	2	2
COM	1	4	2 (Internal)	2 (Internal)	2 (Internal)
PS/ 2 KB	N/A	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)
PS/ 2 MS	N/A	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)	1 (Y-cable)
VGA	1	1	1	1	1
DVI	1	N/A	N/A	N/A	N/A
USB	4	2 (Front), 2 (Rear)	8 (Internal)	8 (Internal)	6 (Internal)
Line-in	N/A	N/A	N/A	N/A	N/A
Line-out	1	1	1	1	N/A
Mic-in	1	1	1	1	N/A
SATA	2 Ports	4 Ports	6 Ports	6 Ports	2 Ports
Parallel	N/A	N/A	1 (Internal)	1 (Internal)	1 (Internal)
FDD Port	N/A	N/A	1 (Internal)	1 (Internal)	N/A
CF Socket	N/A	1	1	1	N/A
HDD Drive	2.5" SATA	2.5" SATA	5.25" HDD x 1	5.25" HDD x 3	5.25" HDD x 3
Mini-PCIe	1	1	N/A	N/A	N/A
PCI	1	1	2/4	7/ 10/ 0	N/A
PCI-X	N/A	N/A	N/A	0/ 0/ 16	16
PCIe x4	N/A	N/A	1/0	4/ 1/ 0	N/A
PCIe x16	N/A	N/A	1/0	1/ 1/ 0	N/A
Power	60W Power adaptor +12Vdc/5A	270W	400W	400W	500W
Operating Temp	0℃ ~ 40℃	0℃ ~ 40℃	0℃ ~40℃	0℃ ~ 40℃	0℃ ~ 40℃
Storage temp	-20℃ ~ 60℃	-20℃ ~ 60℃	-20℃ ~ 60℃	-20℃ ~ 60℃	-20℃ ~ 60℃
Operating Humidity	10% ~ 90%	10% ~ 90%	10% ~ 90%	10% ~ 90%	10% ~ 90%

Intellignet Survillance Solution (NViS Series)

Model	NViS 2140H	NViS 2280	NViS 3540	NViS 3542P4
Form factor	Mobile	Mobile	Mobile	Mobile
Fanless	YES	YES	YES	Smart Fan
Video input	4	8	4	4
Video format	Up to 120fps @ D1	From CIF to X Mega pixel	Up to 120fps @ D1	From CIF to X Mega pixel
Video recording	Up to 120fps @ D1	From CIF to X Mega pixel	Up to 120fps @ D1	From CIF to X Mega pixel
PoE ports	N/A	4	8 NViS 3540P8	4
CPU	Intel® Atom™ Dual Core D525 1.8GHz	Intel® Atom™ Dual Core D2700 2.13GHz	Intel® Core™ i7/i5	Intel® Core™ i7/i5
Chipset	ICH8M	ICH10R	QM57	QM57
Max. memory	DDR3 2G	DDR3 4G	DDR3 4G	DDR3 4G
HDD	1x 2.5" HDD	2x 2.5" HDD	2x 2.5" HDD	2x 2.5" HDD
VGA	YES	YES	YES	YES
HDMI	N/A	YES	N/A	YES
Power igniton support	YES (Optional Module ISKIG120)	YES (Optional Module ISKIG120)	YES (Optional Module ISKIG120)	YES (Optional Module ISKIG120)
USB	4	6	6	6
Serial port	YES	YES	YES	YES
SIM card holder	YES	YES	YES	YES
LAN ports	2	2	2	2
Power input range	9 ~ 36	9 ~ 36	9 ~ 0	9 ~ 30
Expansion	1x Mini-PCIe / 1x PCIe NViS 2140 only	2x Mini-PCIe for 3G/ Wi-Fi/ capture card	1x PCIe for capture card NViS 3540 only	1x Mini-PCIe for 3G or WiFi 1x COM for GPS

	NViS 5240	NViS 6210	NViS 6220	NViS 8480
	Tower	2U Rackmount	2U Rackmount	4U Rackmount
	N/A	N/A	N/A	N/A
	8	32	32	8
	From CIF to X Mega pixel	Up to 960fps @ D1	From CIF to X Mega pixel	1920 X 1080P X30FPS 1920 X1080i X60FPS
	From CIF to X Mega pixel	Up to 960fps @ D1	From CIF to X Mega pixel	1920 X 1080P X30FPS 1920 X1080i X60FPS
	N/A	N/A	N/A	N/A
	Intel® Atom™ Dual Core D2700 2.13GHz	Intel® Core™ i3/i5/i7	Intel® Core™ i3/i5/i7	Intel® Core™ i3/i5/i7
	ICH10R	Q67	Q67	Q67
	DDR3 4G	DDR3 16G	DDR3 16G	DDR3 16G
	4x 3.5" HDD	8x 3.5" HDD	8x 3.5" HDD	8x 3.5" HDD
	YES	YES	YES	YES
	YES	YES	YES	N/A
	N/A	N/A	N/A	N/A
	6	6	6	8
	YES	YES (Internal)	YES (Internal)	YES
	N/A	N/A	N/A	N/A
	2	2	2	2
	AC 100 ~ 240	AC 100 ~ 240	AC 100 ~ 240	AC 100 ~ 240
	1x Mini-PCIe 1x PCIeX4	1x PCIeX16 (Internal use) 1x Mini-PCIe	1x PCIeX16 1x Mini-PCIe	1x PCIeX8 / 1x PCIeX4 1x PCIeX1 / 1x PCIeX1

NISE 90

Main Features

- On-board Intel® Atom™ E620 0.6GHz processor
- On-board DDR2 512MB memory chip
- 2x Intel GbE LANs
- 3x USB2.0 / 1x VGA / 3x Serial Ports / 1x CAN bus

- 8CH GPI and 8CH GPO
- Support 1x 2.5" HDD Drive Bay
- Support 12V and 24V DC input

Product Overview

Equipped with Intel® Atom™ E620 0.6GHz processor and Intel® Platform Controller Hub EG20T, the NISE 90 fanless computer features low power consumption of only 15W and an abundance of I/O options to meet the requirements of factory and industrial automation control.

Featuring fanless design, the NISE 90 is able to offer optimum reliability and performance. In addition, the NISE 90 is equipped with an abundance of I/O interfaces, such as GPIO, CAN BUS, 3x COM ports, two Intel GbE LAN and DC Input (either 12V or 24V DC) that provide flexibility for various application designs.

Specifications

Main Board
- On-board Intel® Atom™ Tunnel Creek E620 0.6GHz processor, 512K Cache
- On-board Chipset: Intel® EG20T

Main Memory
- On-board DDR2 512MB memory chip, unbuffered and non-ECC support

Storage Device
- 1x 2.5" SATA HDD drive bay for optional SSD or HDD
- Support optional SATA DOM, Horizontal type only

I/O Interface-Front
- 3x USB ports
- 2x RJ45 GbE LAN ports, Intel 82574L controller on board
  Support LAN teaming function
- 3x DB9 Serial ports
  COM1: Support RS232/422/485 (Selected on BIOS menu)
  COM2: Support RS232 only
  COM3: Support RS232 only

- 1x DB9 CAN Bus
  - Support CAN 2.0b protocol
  - Support both 11-bit and 26-bit identifiers
  - Support bit rates up to 1Mbps
  - Clock frequency of 40MHz

I/O Interface-Bottom
- 1x DB15 VGA port
- 1x DB15 male connector for 8CH General Purpose Input
- 1x DB15 male connector for 8CH General Purpose Output
- 3-pin DC input, support 12V DC input and 24V DC input
- 1x Power on/off switch

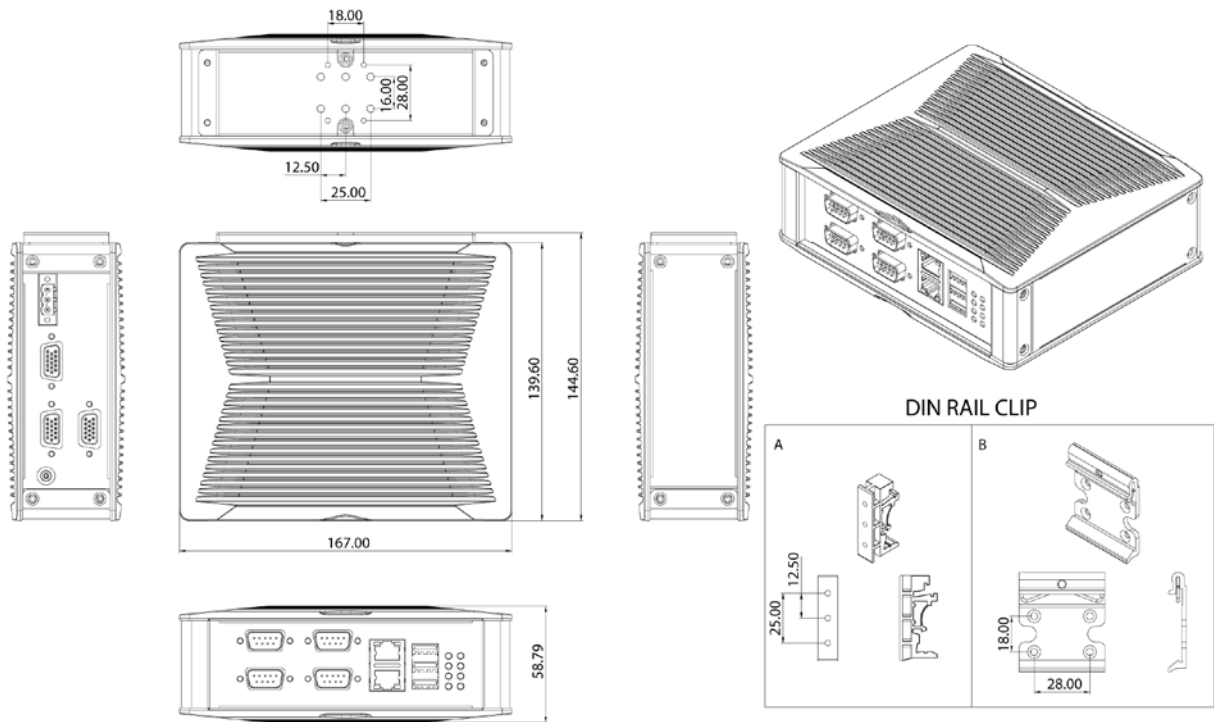### Supported OS
- Windows XP
- Windows Embedded Standard 2009
- Fedora 14 (Kernnel 2.6)

System Dimension
- 59mm (W) x 140mm (D) x167mm (H)

Dimension Drawing

DIN RAIL CLIP

Construction
• Aluminum chassis with fanless design

Environment
• Operating temperature:
  Ambient with air flow: -5 ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
• Storage temperature: -20 ~ 80°C
• Relative humidity: 10% ~ 93% (non-condensing)
• Shock protection: 20G, half sine, 11ms, IEC60068-2-27
• Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
• CE
• FCC Class A

Ordering Information

• **NISE 90 (P/N: 10J00009000X0)**
  DIN Rail fanless system with Intel® Atom™ E620 0.6GHz processor and DDR2 512MB memory on board

• **12V, 60W AC/DC power adapter w/o power core (P/N: 7400060014X00)**

• **Aluminum DIN Rail mounting kit (P/N: 88J00009001X0)**
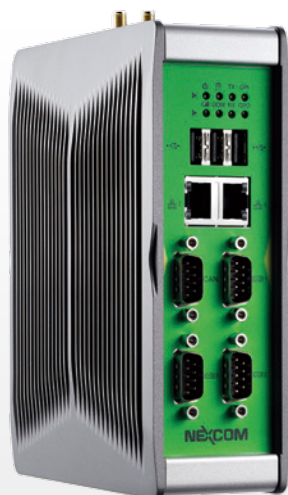
• **Wallmount kit (P/N: 88J00009002X0)**

NISE 91

Main Features

- On-board Intel® Atom™ E640 1.0 GHz Processor
- On-board DDR2 1G Memory Chip
- 2x Intel® 82574L GbE LANs
- 3x USB2.0 / 1x VGA / 3x Serial Ports / 1x CAN bus

- 8CH GPI and 8CH GPO
- Support 1x 2.5" HDD Drive Bay
- Support 12V and 24V DC Input

Product Overview

Equipped with Intel® Atom™ E640 1.0 GHz processor and Intel® Platform Controller Hub EG20T, the NISE 91 fanless computer features low power consumption of only 15W and an abundance of I/O options to meet the requirements of factory and industrial automation control.

Featuring fanless design, the NISE 91 is able to offer optimum reliability and performance. In addition, the NISE 91 is equipped with an abundance of I/O interfaces, such as 2x antennas, GPIO, CAN BUS, 3x COM ports, two Intel® GbE LAN and DC Input (either 12V or 24V DC) that provide flexibility for various application designs.

Specifications

Main Board
- On-board Intel® Atom™ E640 1.0GHz processor, 512K Cache
- On-board chipset: Intel® EG20T

Main Memory
- On-board DDR2 1G memory chip, unbuffered and non-ECC support

Storage Device
- 1x 2.5" SATA HDD drive bay for optional SSD or HDD
- Support optional SATA DOM, horizontal type only

I/O Interface-Front
- 3x USB ports
- 2x RJ45 GbE LAN ports, Intel® 82574L controller on board, Support LAN teaming
- 3x DB9 serial ports
  COM1: support RS232/422/485 (selected on BIOS menu)
  COM2: support RS232 only
  COM3: support RS232 only
- 1x DB9 CAN bus
  - Support CAN 2.0b protocol (support both 11-bit and 26-bit identifiers)
  - Support bit rates up to 1Mbps
  - Clock frequency of 40MHz

I/O Interface-Bottom
- 1x DB15 VGA port
- 1x DB15 male connector for 8CH General Purpose Input
- 1x DB15 male connector for 8CH General Purpose output
- 3-pin DC input, support 12V DC input and 24V DC input
- 1x power on/off switch

I/O Interface-Top
- 1 x internal mini-PCIe socket on board
- 2 x antennas for optional Wi-Fi module

Supported OS
- Windows XP
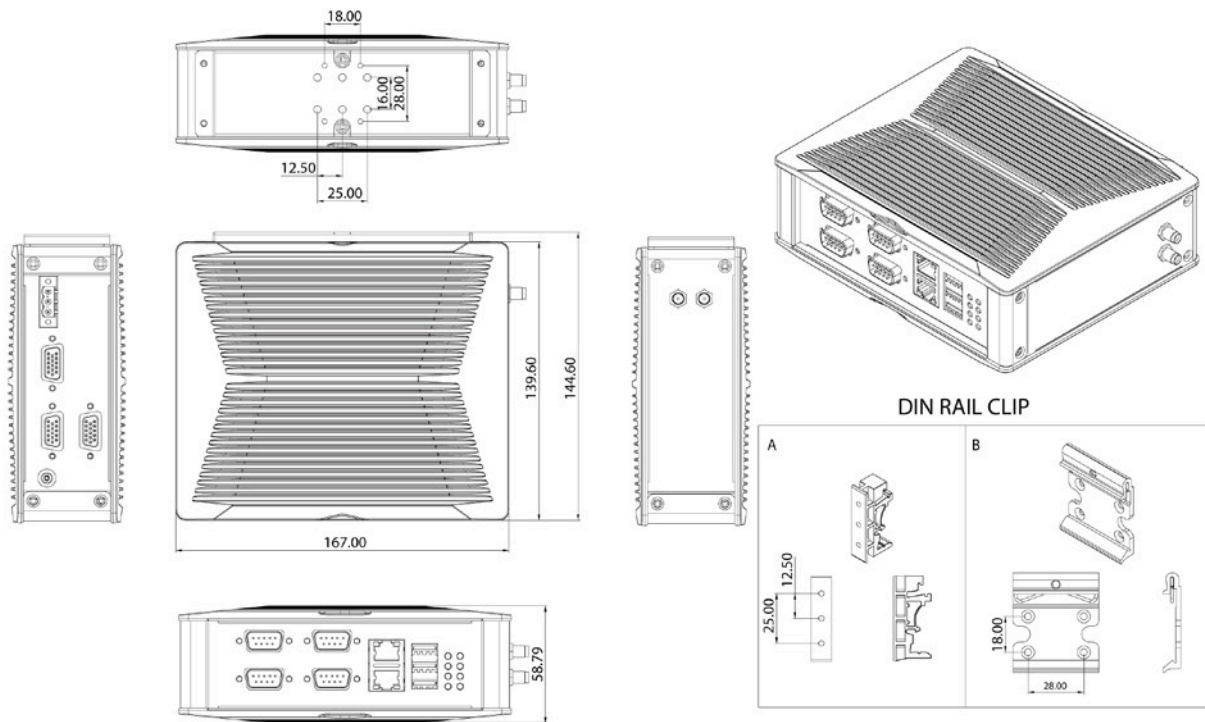- Windows Embedded Standard 2009
- Fedora 14 (Kernnel 2.6)

System Dimension
- 59mm(W)x 140mm(D)x 167mm(H)

Construction
- Aluminum chassis with fanless design

NEXCOM

Dimension Drawing

DIN RAIL CLIP

Environment
- Operating temperature:
  Ambient with air flow: -5 ~ 55°C (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20 ~ 80°C
- Relative humidity: 10% ~ 93% (non-condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
 Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE
- FCC Class A

Ordering Information

- **NISE 91 (P/N: 10J00009100X0)**
  DIN Rail fanless system with Intel® Atom™ E640 1.0 GHz processor and DDR2 1G memory on board

- **12V, 60W AC/DC power adapter w/o power core (P/N: 7400060014X00)**

- **Aluminum DIN Rail mounting kit (P/N: 88J00009001X0)**

- **Wallmount kit (P/N: 88J00009002X0)**

NISE 100

Intel® Atom™ N270 1.6 GHz Fanless System
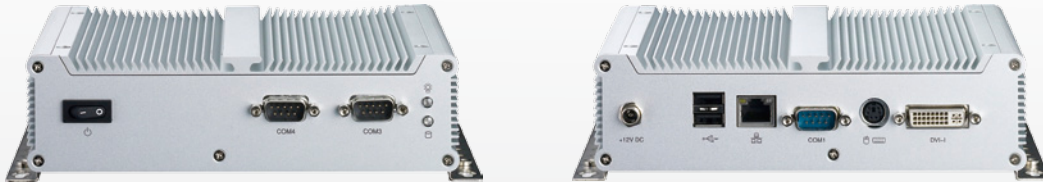
Main Features

- On-board Intel® Atom™ N270 Processor, 1.6GHz
- Intel® 945GSE chipsets
- Single 10/100/1000 Mbps LAN ports
- 2 x USB2.0/DVI-I/Keyboard & Mouse Interface
- 1 x RS232/422/485 and 2 x RS232
- Support +12V DC Power Input
- Supports ATX Power Mode

Product Overview

NISE 100, a tiny fanless industrial computing housed in a size of 185mm/W x 132mm/D x 50mm/H, makes it a perfect match for space critical applications. Designed with Intel® Atom™-based N270 1.6GHZ processor and 945GSE embedded chipset, NISE 100 is an energy-efficient solution in a lightweight system, featuring both performance and reliability in industrial grade non-stop system operating.

The NISE 100 supports two RS232, one RS232/422/485, one 10/100/1000 LAN port, two USB ports, one PS/2 for keyboard/mouse, and one DVI-I for VGA and DVI-D display in demand. With 12V DC input, NISE 100 is easy to link with DC power source or through AC/DC power adapter. Taking the low power consumption advantage, NISE 100 is a fanless EZ Controller, nice device to work in harsh and quiet environment. With the dimension and performance features, NISE 100 is an idea for gate control, public information, self-service system, POS, Kiosk, low-power budget devices, LED signage and logistic system applications.

Specifications

CPU Support
- On-board Intel® Atom™ N270 processor, 1.6GHz, 667MHz FSB
- Intel® 945GSE and ICH7M chipsets

Main Memory
- 1 x DDR2 SO-DIMM sockets, single channel, support up to 2GB DDR2 400/533 SDRAM, un-buffered,non-ECC

I/O Interface-Front
- HDD Access/Power status LEDs
- 2 x RS232
- ATX Power on/off switch

I/O Interface-Rear
- 1 x DVI-I
- 1 x PS/2 Keyboard & Mouse
- 1 x RS232/422/485
- 1 x 10/100/1000 LAN port
- 2 x USB2.0 port
- +12V DC power input

Power Requirements
- Support of +12V DC input
- 1 x External 60W AC/DC lockable power adapter
  - Power input : 100 to 240V AC 2A 50/60Hz
  - Power output: 12V DC

Dimensions
- 185mm (W) x 132mm (D) x 50mm (H) (7.28" x 5.2" x 1.97")
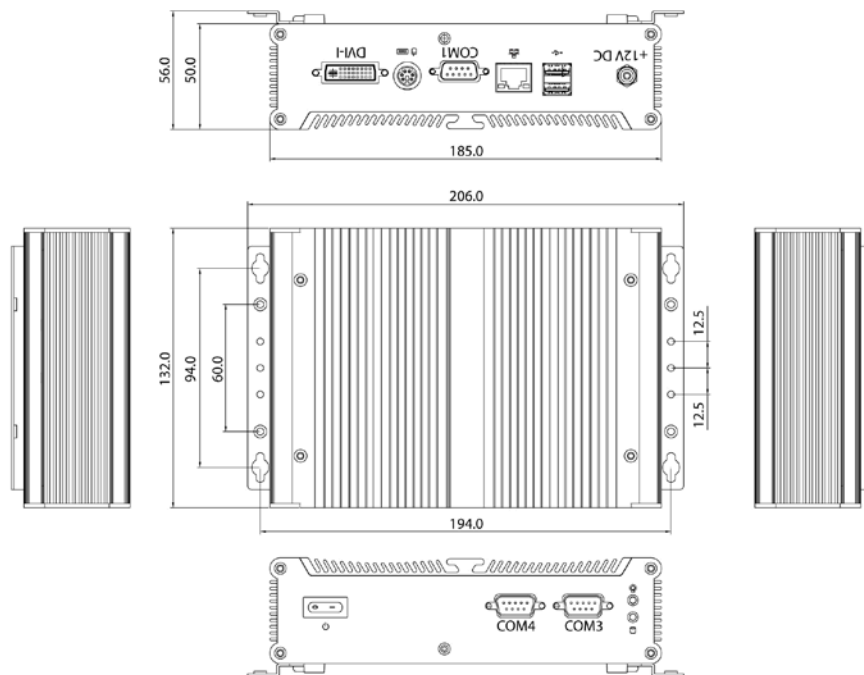
Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27

Dimension Drawing

* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* CE approval
* FCC Class A

Ordering Information

Barebone

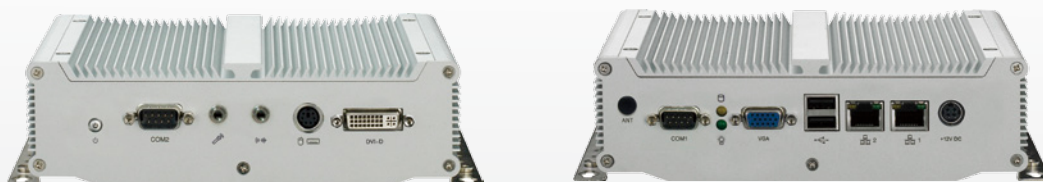* **NISE 100 (P/N: 10J00010000X0)**
  Intel® Atom™ N270 Fanless System

NISE 101

Main Features

- On-board Intel® Atom™ N270 Processor, 1.6GHz
- Intel® 945GSE chipsets
- Dual 10/100/1000 Mbps LAN ports
- 2 x USB2.0/VGA/DVI-D/1 x PS/2

- 1 x RS232/422/485 and 1 x RS232
- Support +12V DC Power Input
- Supports ATX Power Mode

Product Overview

NISE 101, a tiny fanless industrial computing housed in a size of 185mm/W x 131mm/D x 54mm/H, makes it a perfect match for space critical applications. Designed with Intel® Atom™-based N270 1.6GHZ processor and 945GSE embedded chipset, NISE 101 is an energy-efficient solution in a lightweight system, featuring both performance and reliability in industrial grade non-stop system operating.

The NISE 101 supports one RS232, one RS232/422/485, two 10/100/1000 LAN port, two USB ports, one PS/2 for keyboard/mouse, one VGA and one DVI-D display in demand. With 12V DC input, NISE 101 is easy to link with DC power source or through AC/DC power adapter. Taking the low power consumption advantage, NISE 101 is a fanless EZ Controller, nice device to work in harsh and quiet environment. With the dimension and performance features, NISE 101 is an idea for gate control, public information, self-service system, POS, Kiosk, low-power budget devices, LED signage and logistic system applications.

Specifications

CPU Support
- On-board Intel® Atom™ N270 processor, 1.6GHz, 667MHz FSB
- Intel® 945GSE and ICH7M chipsets

Main Memory
- 1 x DDR2 SO-DIMM sockets, single channel, support up to 2GB DDR2 400/533 SDRAM, un-buffered,non-ECC

I/O Interface-Front
- ATX Power on/off switch
- 1 x RS232/422/485
- 1 x PS/2 for keyboard and mouse
- 1 x DVI-D
- 1 x Speaker-out
- 1 x Mic-in

I/O Interface-Rear
- 1 x RS232
- 1 x DB15 VGA
- 2 x 10/100/1000 Intel® LAN port

- 2 x USB2.0 port
- +12V DC power input
- HDD Access/Power status LEDs
- 1 x Antenna hole

Device
- 1 x 2.5" HDD drive bay
- 1 x internal CF card socket
- 1 x Mini-PCIe socket

Power Requirements
- +12V DC input
- Optional external 60W AC/DC lockable power adapter
  - Power input : 100 to 240V AC 2A 50/60Hz
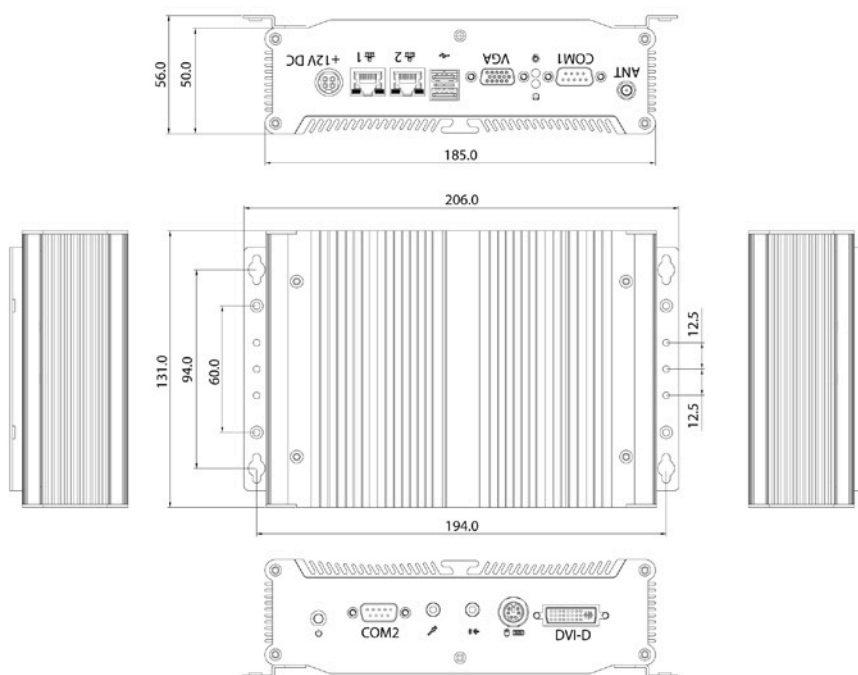 - Power output: 12V DC

Dimensions
- 185mm (W) x 131mm (D) x 54mm (H) (7.28" x 5.2" x 2.13")

Construction
- Aluminum chassis with fanless design

Dimension Drawing

Environment

- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications

- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 101 (P/N: 10J00010100x0)**
  Intel® Atom™ N270 Fanless System

- **12V, 60W AC/DC power adapter w/o power cord
  (P/N: 7400060002X00)**

NISE 103

Intel® Atom™ D425 1.8 GHz Fanless System

Main Features

- On-board Intel® Atom™ D425 Processor, 1.8 GHz
- Intel® ICH8M chipsets
- Dual Intel 10/100/1000 Mbps LAN Ports
- 4 x USB2.0
- 1 x RS232/ 422/ 485 and 3x RS232

- 1 x Mini PCIe with Two Antenna Holes and One SIM Card Holder
- 1 x DB15 Digital Input & Output
- Support +12V DC Power Input
- Supports ATX Power Mode, WOL, LAN Teaming and PXE Function

Product Overview

Designed with Intel® D425 1.8 GHZ processor and ICH8M embedded chipset and 12V DC input to take a low power consumption advantage, NISE 103 is a compact fanless industrial computing housed in a size of 185mm x 131mm x 54mm. The NISE 103 supports three RS232, one RS232/422/485, two 10/100/1000 LAN port, four USB ports, one digital I/O, one VGA display, audio jack (speaker-out, Mic-in) and one external CF card socket. It is also a wireless-ready platform which has mini-PCIe socket and SIM card holder on board to support optional GSM wireless module or Wi-Fi module (default). EZ Controller, NISE 103 has a digital I/O port which offers 8X isolated digital input/output channels.

With isolation protection of 2,500V DC, and dry contact support, NISE103 can be applied to industrial and building automation applications. With rich IO connection in palm-sized system, NISE103 is an ideal fanless system for gate control, public information, self-service system, POS, Kiosk, low-power budget devices, and transportation applications etc.

Specifications

CPU Support
- On-board Intel® Atom™ D425 processor, 1.8 GHz
- Intel® ICH8M chipsets

Main Memory
- 1 x DDR3 SO-DIMM sockets, single channel, support up to 2GB DDR3 667/800 SDRAM, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- 3 x COM ports
  COM2: RS232/422/485
  COM3& COM4: RS232
- 2 x USB2.0 pocrt
- Audio jack (speaker-out, Mic-in)
- 2 x Antenna holes

I/O Interface-Rear
- 1 x VGA
- COM1: 1x RS232
- 2 x Intel® GbE LAN port

- 2 x USB2.0 port
- +12V DC power input
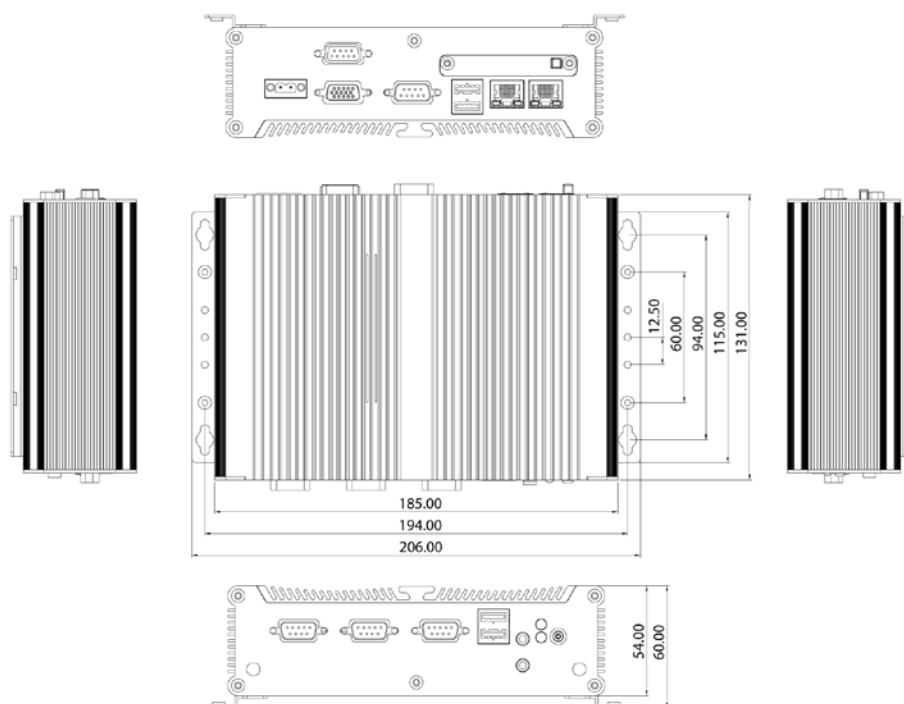- 1 x DB15 male digital input & output

Digital Input & Output
- 4 x Digital Input (Source type)
  - Input Voltage (Dry Contact):
    Logic 0: Close to GND
    Logic 1: Open
  - Input Voltage:
    Logic 0: 3V max
    Logic 1: +5V ~ +30V
- 4x Digital Output (Sink type)
  - Output Voltage: 3.6V ~ 5V
  - Sink current: 200 mA max. per channel

Device
- 1 x 2.5" HDD driver bay
- 1 x External CF Socket
- 1 x SATA DOM

Dimension Drawing

- 1 x mini-PCIe socket
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

Power Requirements
- DC to DC power designed for on-board support of +12V DC
- 1 x optional 12V, 60W power adapter

Dimensions
- 185mm (W) x 131mm (D) x 54mm (H) (7.28" x 5.2" x 2.13")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 103 (P/N: 10J00010300X0)**
  Intel® Atom™ D425 Fanless System

- **12V, 60W AC/ DC power adapter w/o power cord
  (P/N: 7400060013X00)**

NISE 104

Intel® Atom™ Dual Core D2700 2.13 GHz Fanless System

Coming Soon

Main Features

- On-board Intel® Atom™ Dual Core D2700 processor, 2.13 GHz
- Intel® NM10 Express chipset
- 1x DVI-I & 1x HDMI display output
- Dual Intel® 82574L GbE LAN ports
- 2x RS232/422/485 and 2x RS232

- 6x USB2.0
- 1x external CFast socket
- 1x mini-PCIe with two antenna holes
- Support +12V and 24V DC power input
- Supports ATX power mode, WoL, LAN teaming and PXE function

Product Overview

Powered by Intel® Atom™ Dual Core D2700 2.13 GHz and NM10 PCH, NISE104 has higher graphic and computing performance, but 3 Watts less power consumption compared with previous Atom platform! With performance enhance, NISE104 still follow NISE guideline with fanless and cables-less concept housed in a compact chassis, 185mm (W) x 131mm (D) x 54mm (H). The NISE104 offers dual independent display capability through DVI-I and HDMI connectors, Dual Intel GbE LAN ports, 6x USB2.0, 2x RS232, 2x RS232/422/485, CFast socket and miniPCIe socket for optional wireless module connection, either WiFi or 3.5G module.

Both 12V DC input and 24V DC input are supported in NISE104 which adapts to the different power condition in Factory Automation or Machinery Automation. With Dual independent display and super graphic performance, the NISE104 is an idea choice for public information, self-service Kiosk, access control or data acquisition controller…etc.

Specifications

CPU Support
- On-board Intel® Atom™ Dual Core processor D2700, 2.13 GHz, 1M L2 cache
- Intel® NM10 Express chipset

Main Memory
- 1 x DDR3 SO-DIMM sockets, support up to 4GB DDR3 1066 SDRAM, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- 4x COM ports (COM2& 3: RS232/422/485)
- 2x USB2.0 port
- Audio jack (speaker-out & Mic-in)
- 2x antenna holes

I/O Interface-Rear
- 2x Intel® 82574L GbE LAN port
- 4x USB2.0 port
- 1x HDMI
- 1x DVI-I (support VGA & DVI-D display via cable)

- 1x 2-pin DC input, support both +12V & +24V
- 1x external screwed type CFast socket

Device
- 1x 2.5" HDD driver bay
- 1x External CFast Socket
- 1x mini-PCIe socket
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

Power Requirements
- Support both +12V DC and +24V DC input
- 1x optional 12V, 60W power adapter

Dimensions
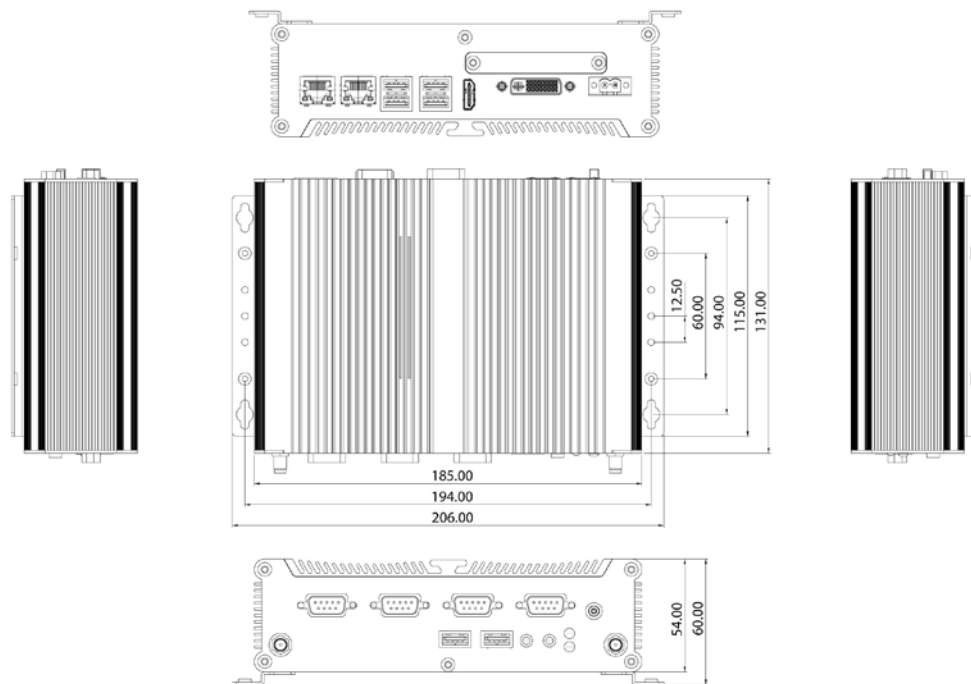- 185mm(W) x 131mm(D) x 54mm(H) (7.28"x 5.2"x 2.13")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)

Dimension Drawing

- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 104 (P/N: 10J00010400X2)**
  Intel® Atom™ Dual Core D2700 fanless systemm

- **12V, 60W AC/ DC power adapter w/o power cord
  (P/N: 7400060013X00)**

NISE 2000

Intel® Atom™ N270 1.6GHz Fanless System

Main Features

- On-board Intel® Atom™ N270 Processor, 1.6GHz
- Intel® 945GSE chipsets
- Dual 1000/100/10 Mbps LAN ports
- 4 x USB2.0/VGA
- 2 x RS232 and 2 x RS232/422/485

- Support 16V to 30V DC Input
- Support ATX power mode and PXE/ WOL
- One Mini-PCIe Socket
- One External CF Socket

Product Overview

Measuring a mear 195mm x 200mm x 65mm, NISE 2000, a Intel® Atom™ N270 1.6G system, is designed for ultra-slim system housed in a compact fanless design chassis with perfect thermal solution. Its unique fanless design eliminates concerns about dust accumulation, and greatly reduces the maintenance cost. NISE 2000 is a perfect solution to maintain reliable operation over long periods of time in harsh environments. The NISE 2000 Series features an on-board 1.6 GHz Intel® Atom™ N270 processor with 945GSE chipset. The entire system consumes less than 25 watts power consumption making the operating both energy-efficient and cost effective. Coupled with its four serial ports (two support RS422/485 with auto-flow control feature), dual 10/100/1000 LAN ports, four USB ports and one external CF socket, the NISE 2000 Series is also equipped with one mini-PCIe Socket for expansion needs. Wide range of DC input still remain in NISE 2000 series from 16~30V DC input. The compact aluminum enclosure of the NISE 2000 ensures continuing operation even in space-critical applications. Taking the advantage of lower power consumption in a long product life cycle support, NISE 2000 is an perfect solution for those applications in retail automation, self-service Kiosk, health care automation, industrial process control, battery-operated devices, media servers, gaming machines and VoIP.

Specifications

Main Board
- NISB2001
- On-board Intel® Atom™ N270 processor, 1.6GHz, 667MHz FSB

Chipset
- Intel® 945GSE
- Intel® ICH7M

Main Memory
- 1 x DDR2 SO-DIMM sockets, single channel, support up to 2GB DDR2 400/533 SDRAM, unbuffered, non-ECC

Expansion
- One Mini-PCIe socket (for optional Wi-Fi module)

I/O Interface-Front
- ATX Power on/off switch
- HDD Access/ Power status LEDs
- 2 x USB2.0 ports
- 4 x Serial port (COM3 & COM4 screw terminal support RS232/422/485, auto-flow control)

I/O Interface-Rear
- 16 ~ 30V DC input
- 1 x PS/2 Keyboard/Mouse
- 1 x DB15 VGA connector
- 2 x GbE LAN ports
- 1 x Speaker-out
- 2 x USB2.0 ports
- One antenna hole for optional Mini-PCIe Wi-Fi module

Storage
- 1 x 2.5" SATA HDD drive bay
- One external CF socket
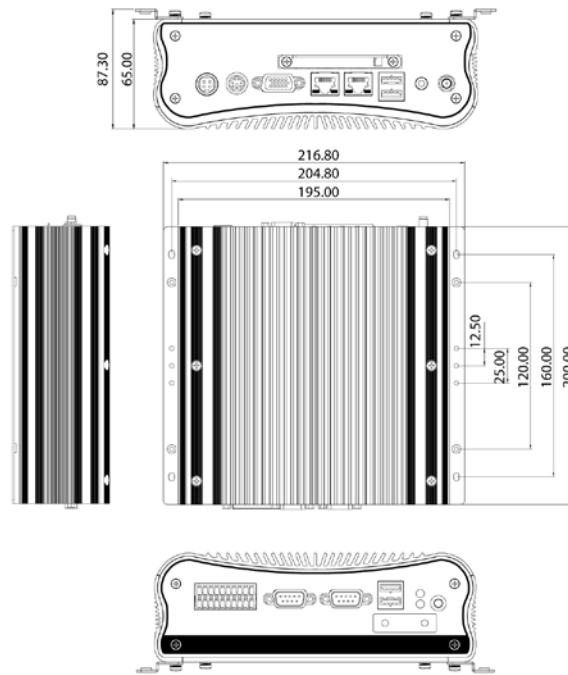- Support one optional USB DOM (2.54mm, Horizontal type)

Power Requirements
- ATX Power mode
- On-board DC to DC power design support from 16V to 30V DC input
- Optional 19V, 65W AC/DC Power adapter

Dimensions
- 195 mm (W) x 200 mm (D) x 65 mm (H) (7.7 " x 7.9 " x 2.6 ")

Dimension Drawing

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 2000 (P/N: 10J00200000X0)**
  Intel® Atom™ N270 Fanless Bare-Bone System

- **19V, 65W AC/DC power adapter w/o power cord
  (P/N: 7400065012X00)**

NISE 2010

Main Features

- On-board Intel® Atom™ N270 Processor, 1.6GHz
- Intel® 945GSE chipsets
- Dual 1000/100/10 Mbps LAN ports
- 4 x USB2.0/VGA/Parallel port
- 2 x RS232 and 2 x RS232/422/485

- Support 16V to 30V DC Power Input
- Support ATX power mode and PXE/ WOL
- One Mini-PCIe Socket
- One PCI Expansion Slot

Product Overview

Integrated with Intel® Atom™-based N270 1.6GHZ processor and 945GSE embedded chipset, NISE 2010 is an energy efficient solution in a lightweight system, featuring the performance and reliable operation of industrial grade non-stop system design.

NISE 2010 features an on-board 1.6 GHz Intel® Atom™ N270 processor with 945GSE chipset. The entire system consumes less than 25 watts power making the operating both energy-efficient and cost effective. Coupled with its four serial ports (two support RS422/485 with auto-flow control feature), dual 10/100/1000 LAN ports, four USB ports and one external CF socket, the NISE 2010 is also equipped with one mini-PCIe Socket and one PCI slot for expansion needs. Wide range of DC input still remain in NISE 2000 series from 16~30V DC input.

With guaranteed long product life cycle, it makes the NISE 2010 the most ideal model for embedded vertical markets including factory automation, access control, machinery control, equipment control, outdoor advertising systems, and self-service system such as vending machine, ticketing kiosks and POS.

Specifications

Main Board
- NISB2001
- On-board Intel® Atom™ N270, 1.6GHz speed, 667MHz FSB

Chipset
- Intel® 945GSE
- Intel® ICH7M

Main Memory
- 1 x DDR2 SO-DIMM sockets, single channel, support up to 2GB DDR2 400/533 SDRAM, unbuffered, non-ECC

Expansion
- Supports one 32-bit/33MHz PCI card (Max. 10W power consumption)
- PCI card: Max. 176mm in length
- One Mini-PCIe Socket (for optional Wi-Fi module)

I/O Interface-Front
- ATX Power on/off switch
- HDD Access/ Power status LEDs
- 4 x Serial port (COM3 & COM4 screw terminal support RS232/422/ 485, auto-flow control)

- 2 x USB2.0 ports
- 1 x Parallel port

I/O Interface-Rear
- 16 ~ 30V DC input
- 1 x PS/2 Keyboard/Mouse
- 1 x DB15 VGA connector
- 2 x GbE LAN ports
- 1 x Speaker-out
- 2 x USB2.0 ports
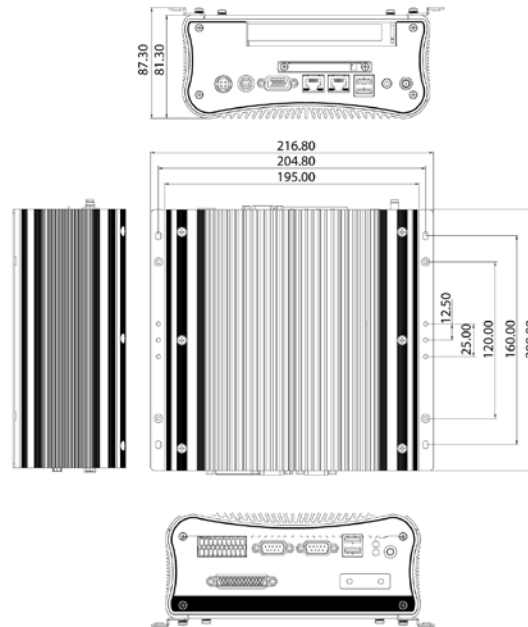- One antenna hole for optional Mini-PCIe Wi-Fi module

Storage
- 1 x 2.5" SATA HDD drive bay
- One external CF socket
- Support one optional USB DOM (2.54mm, Horizontal type)

Power Requirements
- ATX Power mode
- On-board DC to DC power design support from 16V to 30V DC input
- Optional 19V, 65W AC/DC Power adapter

Dimension Drawing

Dimensions
• 195mm (W) x 200 mm (D) x 81mm (H) (7.7 " x 7.9 " x 3.2 ")

Construction
• Aluminum Chassis with fanless design

Environment
• Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
• Storage temperature: -20°C ~ 80°C
• Relative humidity: 10% to 93% (Non-Condensing)
• Shock protection: 20G, half sine, 11ms, IEC60068-2-27
• Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
• CE approval
• FCC Class A

Ordering Information

Barebone

• **NISE 2010 (P/N: 10J00201000X0)**
  Intel® Atom™ N270 Fanless Bare-Bone System, with one PCI Expansion Slot

• **19V, 65W AC/DC power adapter w/o power cord (P/N: 7400065012X00)**

NISE 2020

Intel® Atom™ N270 1.6GHz Fanless System with
2 x PCI Expansion Slot

Main Features

- On-board Intel® Atom™ N270 Processor, 1.6GHz
- Intel® 945GSE chipsets
- Dual 1000/100/10 Mbps LAN ports
- 4 x USB2.0/VGA/Parallel port
- 2 x RS232 and 2 x RS232/422/485

- Support 16V to 30V DC Input
- Support ATX power mode and PXE/ WOL
- One Mini-PCIe Socket
- Two PCI Expansion Slot

Product Overview

NISE 2020, with Intel® Atom™ N270 1.6GHz CPU on board, provides robust performance-per-watt which is the best for cost effective embedded solution. An energy-efficient solution in a compact system, NISE 2020 offers great flexibility to communicate with client devices accommodated various power supply requirements in dynamic vertical markets, range from 16 ~ 30V DC input. Coupled with its four serial ports (two support RS422/485 with auto-flow control feature), dual 10/100/1000 LAN ports, four USB ports, one printer port and one external CF socket, the NISE 2020 is also equipped with two PCI slot and one mini-PCIe Socket for optional expansion needs.

Benefits from less than 25 watts power consumption, NISE 2020 is an ideal model for embedded vertical markets, such as industrial automation, machinery control, message board controller, VoIP, low power-budget devices, and self-service system.

Specifications

Main Board
- NISB2000
- On-board Intel® Atom™ N270 processor, 1.6GHz, 667MHz FSB

Chipset
- Intel® 945GSE
- Intel® ICH7M

Main Memory
- 1 x DDR2 SO-DIMM sockets, single channel, support up to 2GB DDR2 400/533 SDRAM, unbuffered, non-ECCC

Expansion
- Supports two 32-bit/33MHz PCI card (Max. 10W power consumption/slot)
- PCI card: Max. 176mm in length
- One Mini-PCIe socket (for optional Wi-Fi module)

I/O Interface-Front
- ATX Power on/off switch
- HDD Access/Power status LEDs
- 2 x USB2.0 ports
- 1 x Parallel port

- 4 x Serial port
  (COM3 & COM4 screw terminal support RS232/422/485)

I/O Interface-Rear
- 16 ~ 30V DC input
- 1 x PS/2 Keyboard/Mouse
- 1 x DB15 VGA connector
- 2 x GbE LAN ports
- 1 x Speaker-out
- 2 x USB2.0 ports
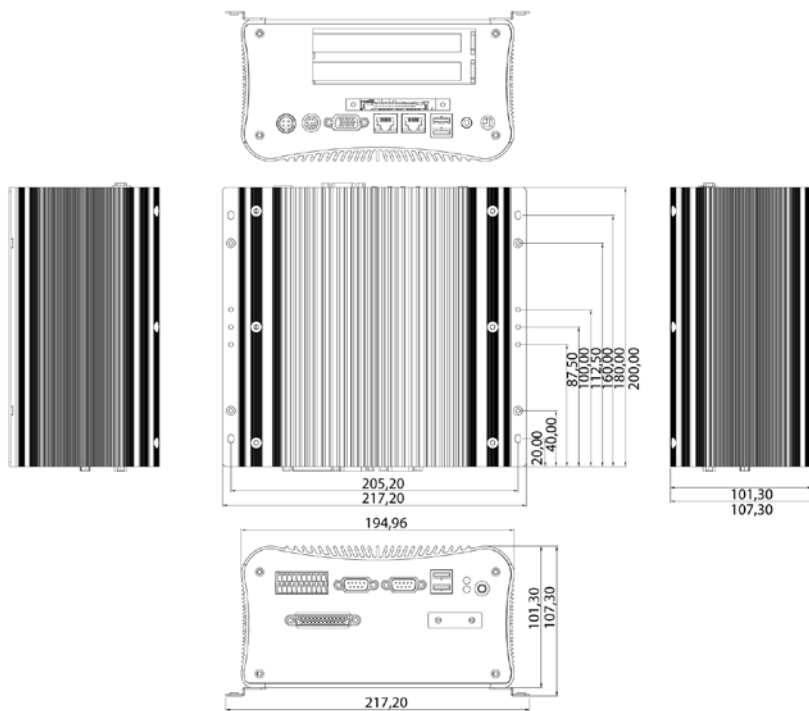- One antenna hole for optional Mini-PCIe Wi-Fi module

Storage
- 1 x 2.5" SATA HDD drive bay
- One external CF socket
- Support one optional USB DOM (2.54mm, Horizontal type)

Power Requirements
- ATX Power mode
- On-board DC to DC power design, support from 16V to 30V DC input
- Optional 19V 65W or 120W AC/DC Power adapter

Dimension Drawing

Dimensions
+ 195 mm (W) x 200 mm (D) x 101 mm (H) (7.7" x 7.9" x 3.98")

Construction
+ Aluminum Chassis with fanless design

Environment
+ Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
+ Storage temperature: -20°C ~ 80°C
+ Relative humidity: 10% to 93% (Non-Condensing)
+ Shock protection: 20G, half sine, 11ms, IEC60068-2-27
+ Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
+ CE approval
+ FCC Class A

Ordering Information

Barebone

+ **NISE 2020 (P/N: 10J00202000X0)**
  Intel® Atom™ N270 Fanless Bare-Bone System with two PCI Expansion Slot

+ **19V, 65W AC/DC power adapter w/o power cord (P/N: 7400065012X00)**

+ **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 2100

Main Features

- On-board Intel® Atom™ Dual Core D525 (1.8GHz, 1M Cache) processor
- One DDR3 SO-DIMM socket, DDR3 800 2G memory module support max.
- Three Intel® 1000/100/10 Mbps LAN ports
- 4 x USB2.0/1x VGA

- 1 x DB15 GPIO connector
- 4 x RS232 and 2 x RS232/422/485 with auto flow control
- One external CF Socket and one external SIM card holder
- 9 ~ 36V DC input
- ATX power mode

Product Overview

NISE2100 series are based on the cutting edge technology of the Intel® Atom™ Dual Core D525 processor. With Atom™ Dual Core D525 CPU, DDR3 667/ 800 SO-DIMM and multiple I/O ports, NISE 2100 series can be utilized within industrial automation, self-service machines like KIOSK check-in machines, recycling machines as well as factory automation etc. Other features of this versatile series include three Intel® Gigabit LAN ports, four RS-232 COM ports, two RS232/ 422/ 485 COM ports, four USB2.0, one VGA port, one GPIO port, and one speak out. In terms of storage, SATA HDD/ SSD or front accessible CF card are available for deployment. The NISE 2100 Series has a wide DC input range which varies from 9V to 36V and is therefore designed to meet most application requirements.

Specifications

Main Board
- NISB 2100
- On-board Intel® Atom™ D525 Dual Core processor, 1.8GHz, 1M Cache
- Intel® ICH8M PCH

Main Memory
- 1 x DDR3 SO-DIMM socket, support up to 2 GB DDR3 800 SDRAM memory module, unbuffered and non-ECC

Expansion
- 1x Mini-PCIe socket onboard
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

I/O Interface-Front
- ATX Power on/off switch
- HDD Access/ Power status LEDs
- 2 x USB2.0 ports
- 2 x Serial port (RS232)

- 1 x external SIM card holder
- 1 x DB15 GPIO connector
- 2 x Antenna holes (Either optional Wi-Fi or mobile wireless module)

I/O Interface-Rear
- 9~ 36V DC input
- 1 x 3-pin for remote power on/off switch
- 1 x DB15 VGA port
- 3 x Intel® GbE LAN ports
- 1 x Speaker out
- 2 x USB2.0 ports
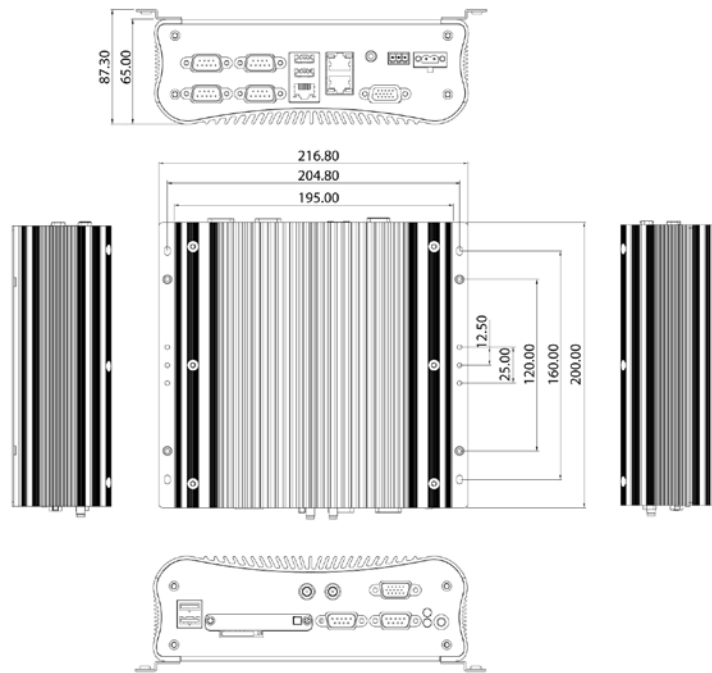- 4 x Serial port (2x RS232 and 2x RS232/422/485 with auto-flow control)

Storage
- 1 x 2.5" SATA HDD drive bay
- 1 x external CF socket

Power Requirements
- ATX Power mode
- DC to DC power design on-board, support from 9V ~ 36V DC
- Optional 19V, 65W power adapter

Dimension Drawing

Dimensions
* 195 mm (W) x 200 mm (D) x 65 mm (H) (7.7" x 7.9" x 2.6")

Construction
* Aluminum Chassis with fanless design

Environment
* Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (Non-condensing)
* Shock protection: 20G, half sine, 11ms, IEC60068-2-27
* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* CE approval
* FCC Class A
* e13

Ordering Information

Barebone

* **NISE 2100 (P/N: 10J00210000X0)**
  Intel® Atom™ D525 Fanless Barebone System with DDR3 SO-DIMM socket on board

* **19V 65W AC/DC power adapter w/o power cord (P/N: 7400065009X00)**

NISE 2100A

Intel® Atom™ D525 1.8GHz Fanless System with DDR3 SO-DIMM socket

Main Features

- On-board Intel® Atom™ Dual Core D525 (1.8GHz, 1M Cache) processor
- One DDR3 SO-DIMM socket, DDR3 800 2G memory module support max.
- Dual Intel® 1000/ 100/ 10 Mbps LAN ports
- 4 x USB2.0/ 1x VGA

- 1 x DB15 GPIO connector
- 4 x RS232 and 2 x RS232/ 422/ 485 with auto flow control
- One external CF Socket and one external SIM card holder
- 9 ~ 36V DC input
- ATX power mode

Product Overview

NISE2100 series are based on the cutting edge technology of the Intel® Atom™ Dual Core D525 processor. With Atom™ Dual Core D525 CPU, DDR3 667/ 800 SO-DIMM and multiple I/O ports, NISE 2100 series can be utilized within industrial automation, self-service machines like KIOSK check-in machines, recycling machines as well as factory automation etc. Other features of this versatile series include three Intel® Gigabit LAN ports, four RS-232 COM ports, two RS232/ 422/ 485 COM ports, four USB2.0, one VGA port, one GPIO port, and one speak out. In terms of storage, SATA HDD/ SSD or front accessible CF card are available for deployment. The NISE 2100 Series has a wide DC input range which varies from 9V to 36V and is therefore designed to meet most application requirements.

Specifications

Main Board
- NISB 2100A
- On-board Intel® Atom™ D525 Dual Core processor, 1.8GHz, 1M Cache
- Intel® ICH8M PCH

Main Memory
- 1 x DDR3 SO-DIMM socket, support up to 2 GB DDR3 800 SDRAM memory module, unbuffered and non-ECC

Expansion
- 1 x Mini-PCIe socket onboard
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

I/O Interface-Front
- ATX Power on/ off switch
- HDD Access/ Power status LEDs
- 2 x USB2.0 ports
- 2 x Serial port (RS232)
- 1 x external SIM card holder
- 1 x DB15 GPIO connector
- 2 x Antenna holes (Either optional Wi-Fi or Mobile wireless module)

I/O Interface-Rear
- 9~ 36V DC input
- 1 x 3-pin for remote power on/ off switch
- 1 x DB15 VGA port
- 2 x Intel® 82574L GbE LAN ports (support WoL & LAN teaming)
- 1 x Speaker out
- 2 x USB2.0 ports
- 4 x Serial port (2x RS232 and 2x RS232/ 422/ 485 with auto-flow control: isolation protection on COM1 and COM2)

Storage
- 1 x 2.5" SATA HDD drive bay
- 1 x external CF socket

Power Requirements
- ATX Power mode
- DC to DC power design on-board, support from 9V ~ 36V DC
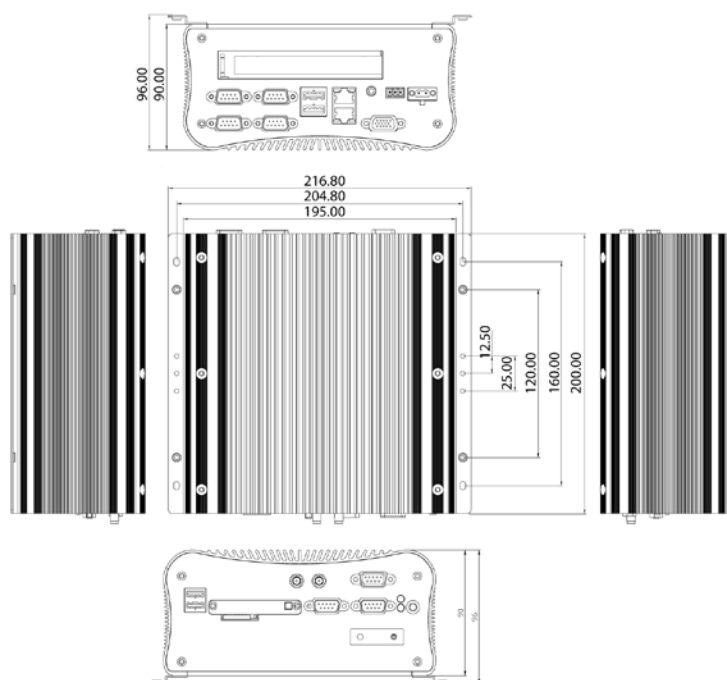- Optional 19V, 65W power adapter

Dimensions
- 195 mm (W) x 200 mm (D) x 65 mm (H) (7.7" x 7.9" x 2.6")

Construction
- Aluminum Chassis with fanless design

Dimension Drawing

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°C (with industrial grade devices)
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications

- CE approval
- FCC Class A
- e13

Ordering Information

Barebone

- **NISE 2100A (P/N: 10J00210001X0)**
  Intel® Atom™ D525 fanless barebone system with DDR3 SO-DIMM
  Socket on board

- **19V 65W AC/DC power adapter w/o power cord (P/N: 7400065009X00)**

NISE 2110

Intel® Atom™ D525 1.8GHz Fanless System with DDR3 SO-DIMM socket and one PCI expansion

Main Features

- On-board Intel® Atom Dual Core D525 (1.8GHz, 1M Cache) processor
- One DDR3 SO-DIMM socket, DDR3 800 2G memory module support max.
- Three Intel® 1000/100/10 Mbps LAN ports
- 4 x USB2.0/1x VGA
- 4 x RS232 and 2 x RS232/422/485 with auto flow control

- 1 x DB15 GPIO connector
- 1 x external CF Socket and one external SIM card holder
- 9 ~ 36V DC input
- ATX power mode
- 1 x PCI Expansion Slot

Product Overview

NISE2100 series are based on the cutting edge technology of the Intel® Atom™ Dual Core D525 processor. With Atom™ Dual Core D525 CPU, DDR3 667/ 800 SO-DIMM and multiple I/O ports, NISE 2100 series can be utilized within industrial automation, self-service machines like KIOSK check-in machines, recycling machines as well as factory automation etc. Other features of this versatile series include three Intel® Gigabit LAN ports, four RS-232 COM ports, two RS232/ 422/ 485 COM ports, four USB2.0, one VGA port, one GPIO port, and one speak out. In terms of storage, SATA HDD/ SSD or front accessible CF card are available for deployment. The NISE 2100 Series has a wide DC input range which varies from 9V to 36V and is therefore designed to meet most application requirements.

Specifications

Main Board
- NISB 2100
- On-board Intel® Atom™ D525 Dual Core processor, 1.8GHz, 1M Cache
- Intel® ICH8M PCH

Main Memory
- 1 x DDR3 SO-DIMM socket, support up to 2 GB DDR3 800 SDRAM memory module, unbuffered and non-ECC

Expansion
- 1 x PCI expansion
- PCI card: Max. 176mm in length
- 1 x mini-PCIe
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

I/O Interface-Front
- ATX Power on/off switch
- HDD Access/ Power status LEDs
- 2 x USB2.0 ports
- 2 x Serial port (RS232)

- 1 x external SIM card holder
- 1 x DB15 GPIO connector
- 2 x Antenna holes

I/O Interface-Rear
- 9 ~ 36V DC input
- 1 x 3-pin for remote power on/off switch
- 1 x DB15 VGA port
- 3 x Intel® GbE LAN ports
- 1 x Speaker out
- 2 x USB2.0 ports
- 4 x Serial port (2x RS232 and 2x RS232/422/485 with auto-flow control)
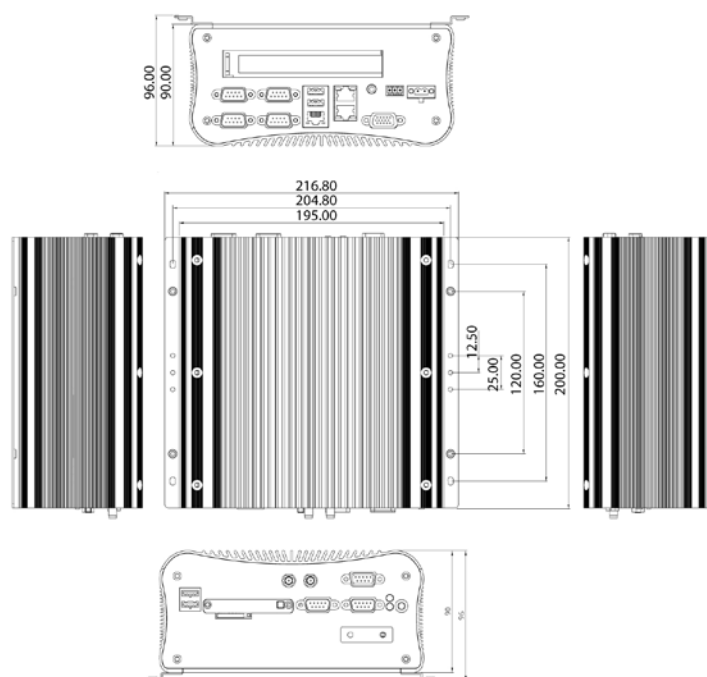
Storage
- 1 x 2.5" SATA HDD drive bay or optional SATA DOM module (Horizontal type)
- 1 x external CF socket

Power Requirements
- ATX Power mode

Dimension Drawing

- DC to DC power design on-board, support from 9V ~ 36V DC
- Optional 19V, 65W power adapter

Dimensions
- 195 mm (W) x 200 mm (D) x 90 mm (H) (7.7" x 7.9" x 3.5")

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A
- e13

Ordering Information

Barebone

- **NISE 2110 (P/N: 10J00211000X0)**
  Intel® Atom™ D525 fanless barebone system with DDR3 SO-DIMM
  Socket and one PCI expansion

- **19V 65W AC/DC power adapter w/o power cord
  (P/N: 7400065009X00)**

NISE 2110A

Main Features

- On-board Intel® Atom™ Dual Core D525 (1.8GHz, 1M Cache) processor
- One DDR3 SO-DIMM socket, DDR3 800 2G memory module support max.
- Dual Intel® 1000/ 100/ 10 Mbps LAN ports
- 4 x USB2.0/ 1x VGA
- 4 x RS232 and 2 x RS232/ 422/ 485 with auto flow control

- 1 x DB15 GPIO connector
- 1 x external CF Socket and one external SIM card holder
- 9 ~ 36V DC input
- ATX power mode
- 1 x PCI Expansion Slot

Product Overview

NISE2100 series are based on the cutting edge technology of the Intel® Atom™ Dual Core D525 processor. With Atom™ Dual Core D525 CPU, DDR3 667/ 800 SO-DIMM and multiple I/O ports, NISE 2100 series can be utilized within industrial automation, self-service machines like KIOSK check-in machines, recycling machines as well as factory automation etc. Other features of this versatile series include three Intel® Gigabit LAN ports, four RS-232 COM ports, two RS232/ 422/ 485 COM ports, four USB2.0, one VGA port, one GPIO port, and one speak out. In terms of storage, SATA HDD/ SSD or front accessible CF card are available for deployment. The NISE 2100 Series has a wide DC input range which varies from 9V to 36V and is therefore designed to meet most application requirements.

Specifications

Main Board
- NISB 2100A
- On-board Intel® Atom™ D525 Dual Core processor, 1.8GHz, 1M Cache
- Intel® ICH8M PCH

Main Memory
- 1 x DDR3 SO-DIMM socket, support up to 2 GB DDR3 800 SDRAM memory module, unbuffered and non-ECC

Expansion
- 1 x PCI expansion
- PCI card: Max. 176mm in length
- 1 x mini-PCIe
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

I/O Interface-Front
- ATX Power on/ off switch
- HDD Access/ Power status LEDs
- 2 x USB2.0 ports
- 2 x Serial port (RS232)

- 1 x external SIM card holder
- 1 x DB15 GPIO connector
- 2 x antenna holes

I/O Interface-Rear
- 9 ~ 36V DC input
- 1 x 3-pin for remote power on/off switch
- 1 x DB15 VGA port
- 2 x Intel® 82574L GbE LAN ports (Support WoL & LAN Teaming)
- 1 x Speaker out
- 2 x USB2.0 ports
- 4 x Serial port (2x RS232 and 2x RS232/422/485 with auto-flow control, isolation protection on COM1 & COM2)
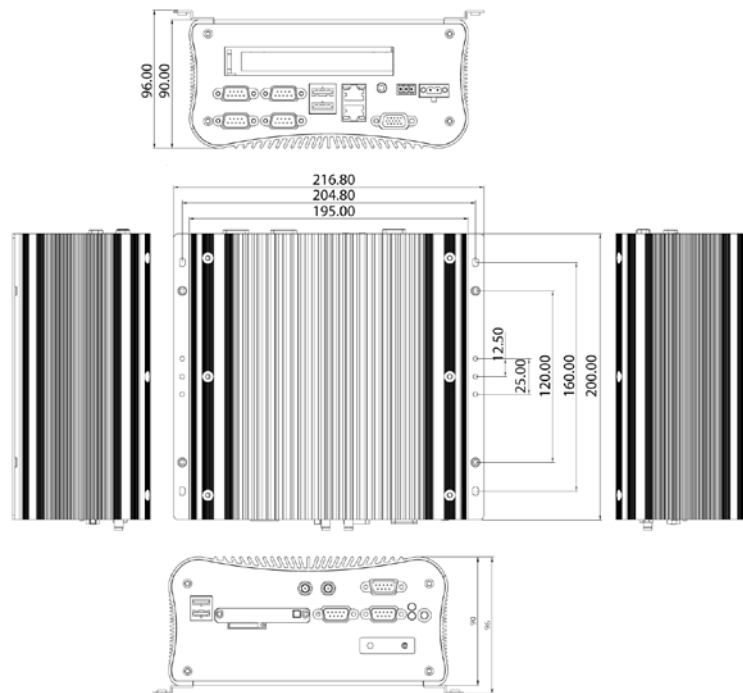
Storage
- 1 x 2.5" SATA HDD drive bay or optional SATA DOM module (horizontal type)
- 1x external CF socket

Power Requirements
- ATX Power mode
- DC to DC power design on-board, support from 9V ~ 36V DC
- Optional 19V, 65W power adapter

Dimension Drawing

Dimensions
* 195 mm (W) x 200 mm (D) x 90 mm (H) (7.7" x 7.9" x 3.5")

Construction
* Aluminum Chassis with fanless design

Environment
* Operating temperature:
  Ambient with air flow: -20°C to 70°C (with industrial grade devices)
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (Non-condensing)
* Shock protection: 20G, half sine, 11ms, IEC60068-2-27
* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* CE approval
* FCC Class A
* e13

Ordering Information

Barebone

* **NISE 2110A (P/N: 10J00211001X0)**
  Intel® Atom™ D525 fanless barebone system with DDR3 SO-DIMM socket and one PCI expansion

* **19V 65W AC/DC power adapter w/o power cord (P/N: 7400065009X00)**

NISE 3100e

Intel® Pentium® M/Celeron® M Fanless System with
1x PCI Expansion Slot

Main Features

- Support Intel® Pentium® M/ Celeron® M Processors
- Intel® 910GMLE chipsets
- Dual 10/100/1000 LAN Ports
- USB2.0/VGA/DVI Interface
- 3x RS232 and 1x RS232/422/485 via DB44 Connector

- On-board DC to DC Power Designed to Support +16 - 30V DC power input
- Supports ATX Power Mode and PXE/WOL
- One PCI Expansion Slot

Product Overview

Featuring Intel® 910GMLE & ICH6M chipsets, the NISE 3100e fanless PC supports Intel's Pentium® M/ Celeron® M processor with 400 MHz FSB and DDR2 400 memory up to 2 GB. The rugged NISE 3100e fanless PC is designed for space-critical application requires extreme reliability, low-power consumption and versatile I/O configuration. With one PCI Expansion Slot, the versatile NISE 3100e fanless PC offers a wide connection option of I/O ports located at both the front and the rear of the unit. For added flexibility, the NISE 3100e also boasts three RS232 ports, one RS232/422/485 port and one PCI Expansion Slot. For data storage, the NISE 3100e provides one CompactFlash socket and one 2.5" HDD drive bay. The system supports ATX power supply and can accept a wide range of power supplies from 16 to 30 VDC.

Housed in a compact 195 mm x 268 mm x 80 mm heavy-duty aluminum chassis, the NISE 3100e is designed for reliable, maintenance-free industrial computing. The NISE 3100e fanless PC offers a cost-effective solution for a multitude of mission-critical embedded computing applications in automation, machine control, self-service and POS systems.

Specifications

Main Board
- NISB3100
- Support Intel® Pentium® M/ Celeron® M processors
- Supports Low Voltage and Ultra Low Voltage Intel® Pentium® M or Celeron® M
- Supports 400 MHz FSB CPUs only
- Intel® 910GMLE and ICH6M chipsets

Main Memory
- 2 x 240-pin DDR2 DIMM socket, up to 2GB un-buffered non-ECC DDR2 400 SDRAM module

Expansion
- Supports one 32-bit/33 MHz PCI card (10W max./ per slot)
- PCI card: Max. 169mm in length with HDD installed

I/O Interface-Front
- Optional customized logo
- HDD Access/Power/LAN status LEDs
- 2 x USB2.0 ports
- ATX Power on/off switch

I/O Interface-Rear
- 1 x PS/2 Keyboard/ Mouse
- 4 x USB2.0 ports/ 4x Serial port
- 1 x Audio Mic-in and 1x Speaker-out
- 1 x DVI-D interface
- 2 x 10/100/1000 LAN
- 1 x DB15 VGA connector
- 16 ~ 30V DC power input
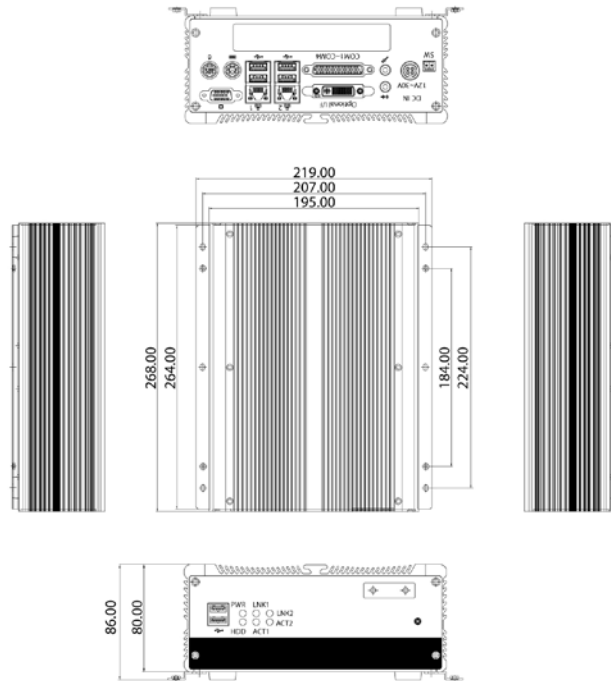- 1 x 2-pin connector output for remote power on/off switch

Device
- 1 x On-board Internal Compact Flash socket
- 1 x Internal 2.5" SATA HDD driver bay

Power Requirements
- DC to DC power designed on board, support from 16V to 30V DC input (Max: 120 Watts)
- 1 x Optional 120 W AC adapter (lockable)
  - Power input: 100 to 240V AC 2 A 50/60 Hz
  - Power output: 19V DC

Dimension Drawing

Dimensions
- 195mm (W) x 268mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
- Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 3100e (P/N: 10J00310027X0)**
  Intel® Pentium® M/ Celeron® M Fanless Bare-Bone System
  1 x PCI Expansion Slot

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3100eP2

Intel® Pentium® M/Celeron® M Fanless System with 2x PCI Expansion Slot

Main Features

- Support Intel® Pentium® M/ Celeron® M Processors
- Intel® 910GMLE chipsets
- Dual 10/100/1000 LAN Ports
- USB2.0/VGA/DVI Interface
- 3x RS232 and 1x RS232/422/485 via DB44 Connector

- On-board DC to DC Power Designed to Support +16 - 30V DC power input
- Supports ATX Power Mode and PXE/ WoL
- Two PCI Expansion Slot

Product Overview

NISE 3100eP2 features with two PCI peripherals expansion in a compact size of fanless system with easy installation. The NISE 3100eP2 has dual 10/100/1000 ports to communicate between multiple network connections. A wide range of supported CPUs in NISE 3100eP2 provides ample computing power to control connected peripherals.

Featuring Intel® 910GMLE & ICH6M chipsets, the NISE 3100eP2 fanless PC supports Intel's Pentium® M/ Celeron® M processor with 400 MHz FSB and DDR2 400 memory up to 2 GB. The rugged NISE 3100eP2 fanless PC is designed for space-critical application requires extreme reliability, low-power consumption and versatile I/O configuration. The added expansion feature is perfect to configure NISE 3100eP2 in industrial automation, machine automation environment, and more.

Specifications

Main Board
- NISB3100
- Support Intel® Pentium® M/ Celeron® M processors
- Supports Low Voltage and Ultra Low Voltage Intel® Pentium® M or Celeron® M
- Supports 400 MHz FSB CPUs only
- Intel® 910GMLE and ICH6M chipsets

Main Memory
- 2 x 240-pin DDR2 DIMM socket, up to 2GB un-buffered non-ECC DDR2 400 SDRAM module

Expansion
- Supports two 32-bit/33 MHz PCI card (10W max./ per slot)
- PCI card:
  Max. 169mm in length with HDD installed
  Max. 240mm in length x2 with HDD installed

I/O Interface-Front
- Optional customized logo
- HDD Access/Power/LAN status LEDs

- 2 x USB2.0 ports
- ATX Power on/off switch

I/O Interface-Rear
- 1 x PS/2 Keyboard/ Mouse
- 4 x USB2.0 ports/ 4x Serial port
- 1 x Audio Mic-in and 1x Speaker-out
- 1 x DVI-D interface
- 2 x 10/100/1000 LAN
- 1 x DB15 VGA connector
- 16 ~ 30V DC power input
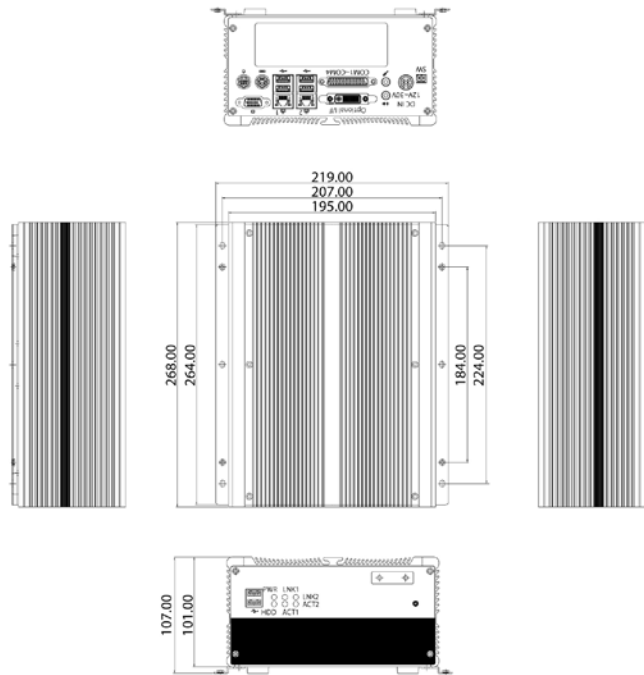- 1 x 2-pin connector output for remote power on/off switch

Device
- 1 x On-board Internal Compact Flash socket
- 1 x Internal 2.5" SATA HDD driver bay

Power Requirements
- DC to DC power designed on-board, support from 16V to 30V DC input (Max: 120 Watts)

Dimension Drawing

- 1 x Optional 120W AC/DC lockable adapter
  - Power input: 100 to 240V AC 2 A 50/60 Hz
  - Power output: 19V DC

Dimensions
- 195mm (W) x 268mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 3100eP2 (P/N: 10J3100P209X0)**
  Support Intel® Pentium® M/Celeron® M Fanless Bare-Bone System 2 x PCI Expansion

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3110

Main Features

- Support Intel® Core™ 2 Duo /Core™ Duo/ Celeron® M processors
- Intel® 945GME Chipsets
- Dual 1000/100/10Mbps LAN ports
- 6 x USB2.0/ VGA / DVI
- 3 x RS232 and 1 x RS232/422/485 via DB44 Connector

- On-board DC to DC power design to support +12V to 30V DC power input
- Support ATX power mode and PXE / WoL
- One PCI Expansion Slot

Product Overview

Featuring Intel® 945GME & ICH7-M chipsets, the NISE 3110 Fanless PC supports Intel's Core™ 2 Duo /Celeron® M processor with 533/667 MHz FSB and DDR2 667/533 memory. The rugged NISE 3110 fanless PC is designed for space-critical application requires extreme reliability, low-power consumption and versatile I/O configuration. For added flexibility, the NISE 3110 also boasts three RS232 ports, one RS232/422/485 port and one PCI expansion slot. For data storage, the NISE 3110 provides one CompactFlash socket and one 2.5" HDD drive bay. The System supports ATX mode power feature and can accept a wide range of power supplies from 12 V DC to 30 V DC.

Housed in a compact 195 mm x 268 mm x 80 mm heavy-duty aluminum chassis, the NISE 3110 is designed for reliable, maintenance-free industrial computing. The NISE 3110 fanless PC offers a cost-effective solution for a multitude of mission-critical embedded computing applications in automation, machine control, and POS systems.

Specifications

Main Board
- EBC 576FL
- Support Intel® Core™ 2 Duo, Core™ Duo, Celeron® M family processors
- Support 533/667 MHz FSB CPU
- Intel® Embedded Processor Reference List (Intel® Longevity CPU):
  Core™ Duo Processor (T2500) 2.0G
  Celeron® M 440 1.86G

Chipset
- Intel® 945GME Graphics Memory Controller Hub (GMCH)
- Intel® 82801 ICH7-M

Main Memory
- 2 x 240-pin DDR2 533/667 DIMM sockets, up to 4 GB, dual channel unbuffered non-ECC
- * Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation

Expansion
- Supports one 32-bit/ 33MHz PCI card (10W max./ per slot)

- PCI card:
  Max. 160mm in length with 2.5" HDD installed
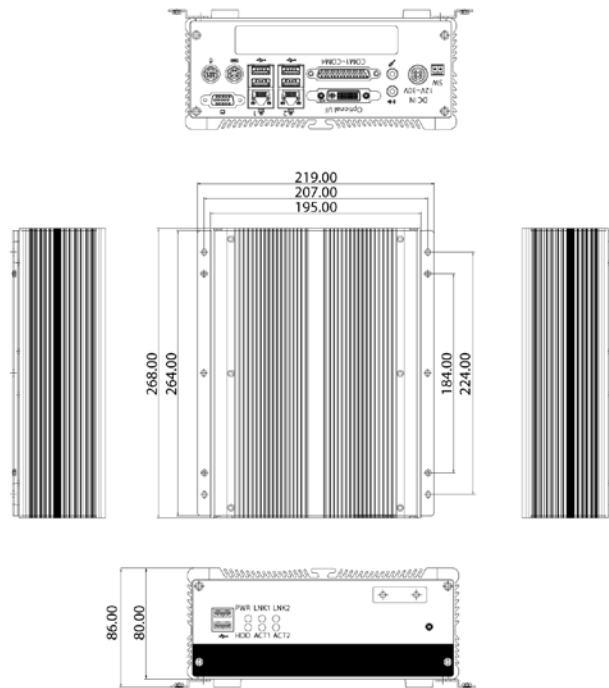 Max. 240mm in length without 2.5" HDD installed

I/O Interface-Front
- Customized logo (Optional)
- HDD Access/Power/LAN status LEDs
- 2 x USB 2.0 ports
- ATX power on/off switch

I/O Interface-Rear
- 2 x PS/2 Keyboard/Mouse
- 1 x DB15 VGA connector
- 4 x USB 2.0 ports
- 2 x GbE LAN Ports
- 1 x DVI-D interface
- 4 x Serial Ports, with 1x DB44 connector
  (Three ports support RS232; One port supports RS232/422/485)
- 1 x Mic-in and 1 x Speaker-out
- 1 x 2-pin connector output for remote power on/off switch
- DC-in power connector for +12V ~+30V DC power input

Dimension Drawing

Device
- 1 x On-board CompactFlash socket
- 1 x Internal 2.5" HDD drive bay

Power Requirements
- DC to DC power designed on board, support from 12V to 30V DC input (Max: 120 Watts)
- 1 x External 120 W AC adapter (lockable)
  - Power input: 100 to 240V AC 2 A 50/60 Hz
  - Power output: 19V DC

Dimensions
- 195 mm (W) x 268 mm (D) x 80 mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 3110 (P/N: 10J00311000X0)**
  Intel® Core™ 2 Duo, Core™ Duo, Celeron® M Fanless Bare-Bone System, 1 x PCI Expansion Slot

- **w/Core™ 2 Duo 1.5 GHz 4M L2 (BGA)**
  NISE 3110-L74 (P/N: 10J00311005X0)
  Intel® Core™ 2 Duo 1.5 GHz CPU w/4M L2 Fanless System 1 x PCI Expansion Slot

NISE 3110P2

Intel® Core™ 2 Duo, Core™ Duo, Celeron® M

Fanless System with 2 x PCI Expansion Slots

Main Features

- Support Intel® Core™ 2 Duo / Core™ Duo/ Celeron® M Processors
- Intel® 945GME Chipsets
- Dual 1000/100/10Mbps LAN ports
- 6 x USB2.0/ VGA / DVI
- 3 x RS232 and 1 x RS232/422/485 via DB44 Connector
- On-board DC to DC power design to support +12V to 30V DC power input
- Support ATX power supply and PXE / WoL
- Two PCI Expansion Slots

Product Overview

Featuring Intel® 945GME & ICH7-M chipsets, the NISE 3110P2 fanless PC supports Intel's Core™ 2 Duo/Celeron® M processor with 533/667 MHz FSB and DDR2 667/533 memory. The rugged NISE 3110P2 fanless PC is designed for space-critical application requires extreme reliability, low-power consumption and versatile I/O configuration. For added flexibility, the NISE 3110P2 also boasts three RS232 ports, one RS232/422/485 port and two PCI Expansion Slots.

For data storage, the NISE 3110P2 provides one CompactFlash socket and one 2.5" HDD drive bay. The System supports ATX mode power feature and can accept a wide range of power supplies from 12 V DC to 30 V DC. Housed in a compact 195 mm x 268 mm x 107 mm heavy-duty aluminum chassis, the NISE 3110P2 is designed for reliable, maintenance-free industrial computing. The NISE 3110P2 fanless PC offers a cost-effective solution for a multitude of mission-critical embedded computing applications in automation, machine control, and POS systems.

Specifications

Main Board
- EBC 576FL
- Support Intel® Core™ 2 Duo, Core™ Duo, Celeron® M family processors
- Support 533/667 MHz FSB CPU
- Intel® Embedded Processor Reference List (Intel® Longevity CPU):
  Core™ Duo Processor (T2500) 2.0G;
  Celeron® M 440 1.86G

Chipset
- Intel® 945GME Graphics Memory Controller Hub (GMCH)
- Intel® 82801 ICH7-M

Main Memory
- 2 x 240-pin DDR2 533/667 DIMM sockets, up to 4 GB, dual channel unbuffered non-ECC
- * Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation.

Expansion
- Supports 2 x 32-bit/ 33MHz PCI card (10W max./ per slot)

- PCI card:
  Max. 160 mm x 1 and 240 mm x 1 in length (With 2.5" HDD installed)
 Max. 240 mm x 2 in length (Without 2.5" HDD installed)

I/O Interface-Front
- Customized logo (Optional)
- HDD Access/Power/LAN status LEDs
- 2 x USB 2.0 ports
- ATX power on/off switch

I/O Interface-Rear
- 2 x PS/2 connectors (KB/MS)
- 1 x DB15 VGA connector
- 4 x USB 2.0 ports
- 2 x GbE LAN Ports
- 4 x Serial Ports, with 1x DB44 connector (Three ports support RS232; One port supports RS232/422/485)
- 1 x DVI-D interface
- 1 x Mic-in and 1 x Speaker-out
- 1 x 2-pin connector output for remote power on/off switch
- DC-in power connector for +12V ~+30V DC power input

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Dimension Drawing
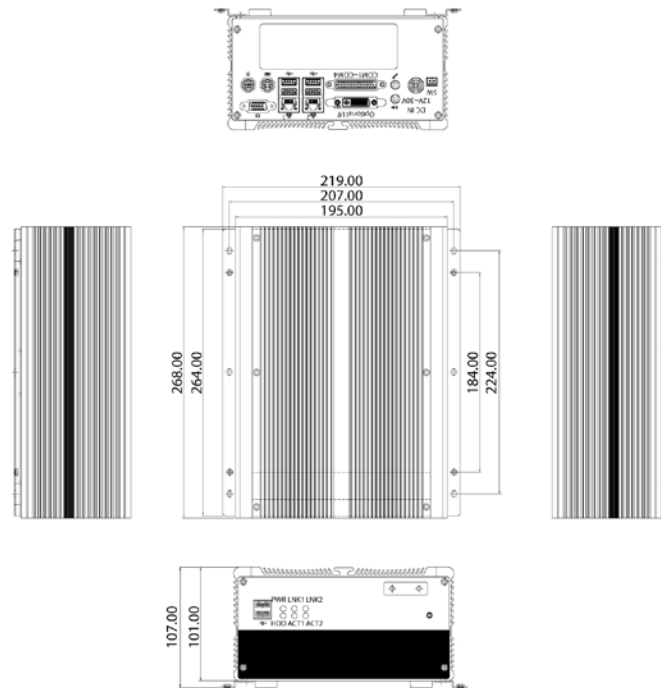
Device
- 1 x On-board CompactFlash socket
- 1 x Internal 2.5" HDD drive bay

Power Requirements
- DC to DC power designed on-board, support from 12V to 30V DC input (Max: 120 Watts)
- 1 x External 120 W AC adapter
  - Power input: 100 to 240V AC 2 A 50/60 Hz
  - Power output: 19V DC

Dimensions
- 195 mm (W) x 268 mm (D) x 101 mm (H) (7.7" x 10.5" x 3.98")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 3110P2 (P/N: 10J00311003X0)**
  Intel® Core™ 2 Duo, Core™ Duo, Celeron® M Fanless Bare-Bone System, with two PCI Expansion Slots

NISE 3140/3140E

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual VGA or VGA/DVI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Direction Control

- One external locked CF socket
- On-board DC to DC power design to support 16V to 30V DC power input
- Support ATX power mode and PXE / WoL / LAN Teaming

Product Overview

Utilizing the Intel® GM45 chipsets, NISE 3140 is highly scalable supporting a wide variety of Intel® Core™ 2 Duo and Celeron® processors. Using the Intel® graphics media accelerator 4500MHD, the rugged NISE 3140 delivers exceptional graphics performance with notable rates of data transfer.

NISE 3140 provides a number of important features required by image processing operation, including dual-channel DDR3 memory, two Gigabit Ethernet LANs, auto-direction control on RS485 interface. On top of that, NISE 3140 supports dual independent displays through 2x VGA, DVI or LVDS outputs. Housed in a robust aluminum chassis, NISE 3140 of fanless design offers noise-free, ultra reliable operating in the most demanding of industrial environment.

The NISE 3140 series is an idea system for industrial automation, machine automation, Automated Optical Inspection (AOI), visual inspection, video surveillance, image mapping and face recognition markets.

Specifications

Main Board
- NISB 3140
- Support Intel® Core™ 2 Duo Processor P8400 (3M Cache, 2.26 GHz, 1066 MHz FSB)
- Support Intel® Celeron® Processor 575 (1M Cache, 2.00 GHz, 667 MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 Graphics and Memory Controller Hub
- Featuring the Mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IBM (ICH9M) I/O Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 1 x Front Access CF Card Socket
- 2 x USB2.0 ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 16 ~ 30V DC input
- 1 x PS/2 for Keyboard/Mouse
- 1 x DB25 Parallel Port (Optional GPIO or LVDS interface)
- 1 x DB44 Serial Port for 4x RS232 (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (support WoL & LAN teaming)
- 4 x USB2.0 ports
- 1 x DB15 VGA port
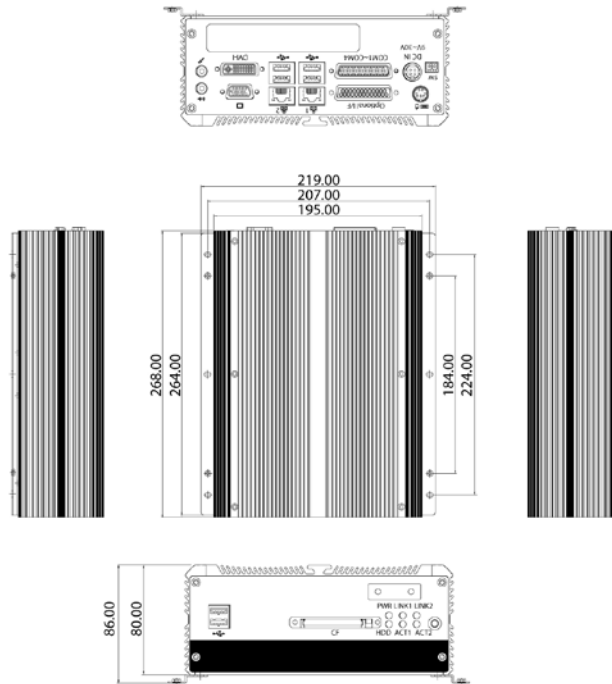- 1 x DVI-I Port (DVI-D + VGA)
- 1 x Speaker-out and Mic-in

Device
- 1 x 2.5" SATA HDD drive bay
- 1x external locked CF card socket

Expansion
- One PCI expansion (NISE 3140 only, 10W max./ per slot)
- One PCIe x1 expansion (NISE 3140E only, 10W max./ per slot)
- Max. Support Add-on Card Length: 169mm

Dimension Drawing

Power Requirements
- ATX power mode
- On-board DC to DC power support from 16V to 30V DC
- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class B

Ordering Information

Barebone

- **NISE 3140 (P/N: 10J00314000X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with one PCI Expansion

- **NISE 3140E (P/N: 10J00314001X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with one PCIe x 1 Expansion

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3140P2/3140P2E

Intel® Core™ 2 Duo Fanless System

with 2 x Expansion Slots

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual VGA or VGA/DVI Independent Display

- 3 x RS232 and 1 x RS232/422/485 with Auto Direction Control
- One external locked CF socket
- On-board DC to DC power design to support 16V to 30V DC power input
- Support ATX power mode and PXE / WoL / LAN Teaming

Product Overview

Utilizing the Intel® GM45 chipsets, NISE 3140 is highly scalable supporting a wide variety of Intel® Core™ 2 Duo and Celeron® processors. Using the Intel® graphics media accelerator 4500MHD, the rugged NISE 3140 delivers exceptional graphics performance with notable rates of data transfer.

NISE 3140 provides a number of important features required by image processing operation, including dual-channel DDR3 memory, two Gigabit Ethernet LANs, auto-direction control on RS485 interface. On top of that, NISE 3140 supports dual independent displays through 2x VGA, DVI or LVDS outputs. Housed in a robust aluminum chassis, NISE 3140 of fanless design offers noise-free, ultra reliable operating in the most demanding of industrial environment.

The NISE 3140 series is an idea system for industrial automation, machine automation, Automated Optical Inspection (AOI), visual inspection, video surveillance, image mapping and face recognition markets.

Specifications

Main Board
- NISB 3140
- Support Intel® Core™ 2 Duo Processor P8400 (3M Cache, 2.26 GHz, 1066 MHz FSB)
- Support Intel® Celeron® Processor 575 (1M Cache, 2.00 GHz, 667 MHz FSB)

Main Memory
- 2 x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 Graphics and Memory Controller Hub
- Featuring the Mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IBM (ICH9M) I/O Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 1 x Front Access CF Card Socket
- 2 x USB2.0 ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 16 ~ 30V DC input
- 1 x PS/2 for Keyboard/Mouse
- 1 x DB25 Parallel Port (Optional GPIO or LVDS interface)
- 1 x DB44 Serial Port for 4x RS232 (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (support WoL & LAN teaming)
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I Port (DVI-D + VGA)
- 1 x Speaker-out and Mic-in

Device
- 1 x 2.5" SATA HDD drive bay
- 1x external locked CF card socket
- Optional power adapter

Dimension Drawing
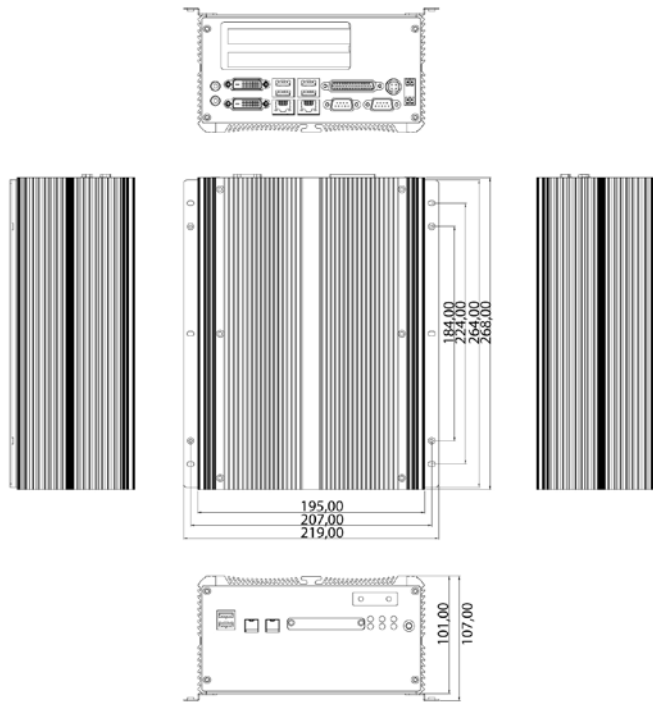
Expansion

- Two PCI expansion (NISE3140P2 only, 10W max./ per slot)
- One PCI and one PCIe x1 expansion (NISE3140P2E only, 10W max./ per slot)
- Add-on card length support:
  Max. 169mm x 1 and 240mm x 1 (with 2.5" HDD installed)
  Max. 240mm x 2 (without 2.5" HDD installed)

Power Requirements

- ATX power mode
- On-board DC to DC power support from 16V to 30V DC

Dimensions

- 195mm (W) x 268 mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

Construction

- Aluminum Chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C ~ - 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications

- CE approval
- FCC Class B

Ordering Information

Barebone

- **NISE 3140P2 (P/N: 10J00314002X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with two PCI Expansion

- **NISE 3140P2E (P/N: 10J00314003X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with one PCI and one PCIe x 1 Expansions

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3140M

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual VGA or VGA/DVI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Direction Control

- One external locked CF socket
- Dual IEEE1394b ports
- On-board DC to DC power design to support 16V to 30V DC power input
- Support ATX power mode and PXE / WoL / LAN Teaming

Product Overview

Utilizing the Intel® GM45 enhanced chipsets, NISE 3140M is highly scalable supporting a wide variety of Intel® Core™ 2 Duo and Celeron® processors. Using the Intel® graphics media accelerator 4500MHD, the rugged NISE 3140M delivers exceptional graphics performance with notable rates of data transfer. NISE 3140M provides a number of important features required by image processing operation, including dual-channel DDR3 memory, two Gigabit Ethernet LANs, auto-direction control on RS485 and optional IEEE1394b interface. On top of that, NISE 3140M supports dual independent displays through 2x VGA, DVI or LVDS outputs. Housed in a robust aluminum chassis, NISE 3140M of fanless design offers noise-free, ultra reliable operating in the most demanding of industrial environment.

NISE 3140M is compliant with EN60601-1, a standard for medical grade computing system. In addition to industrial applications, NISE 3140M series also a perfect solution for healthcare equipments such as surgery recording system, medical inspection, medical research instrumentations, security control …etc.

Specifications

Main Board
- NISB 3140M
- Support Intel® Core™ 2 Duo Processor P8400
  (3M Cache, 2.26 GHz, 1066 MHz FSB)
- Support Intel® Celeron® Processor 575
  (1M Cache, 2.00 GHz, 667 MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 Graphics and Memory Controller Hub
- Featuring the Mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IEM (ICH9M-E) I/O Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 1 x Front Access CF Card Socket
- 2 x USB2.0 ports
- Dual IEEE1394b ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 16 ~ 30V DC input
- 1 x PS/2 for Keyboard/Mouse
- 1 x DB25 Parallel Port (Optional GPIO or LVDS interface)
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (support WoL & LAN teaming)
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I Port (DVI-D + VGA)
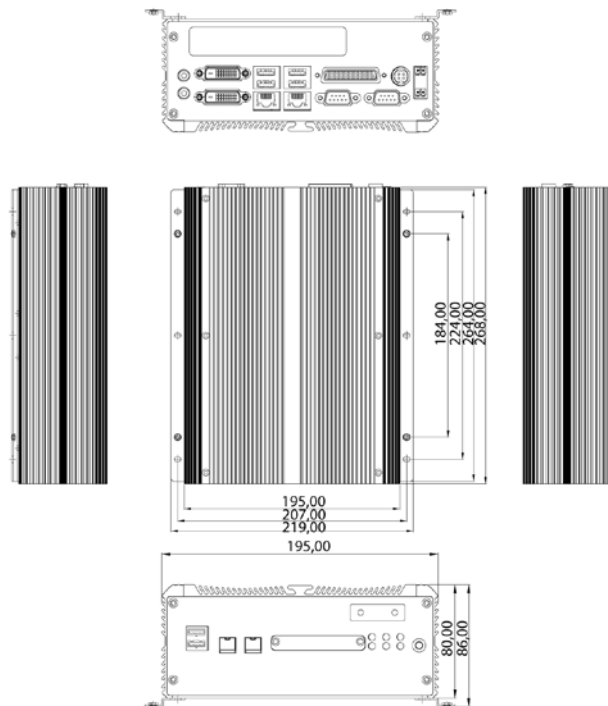- 1 x Speaker-out and Mic-in

Device
- 1 x 2.5" SATA HDD drive bay
- 1 x external locked CF card socket

Expansion
- One PCI Expansion (10W max./ per slot)
- Add-on card length: 169mm max.

Dimension Drawing

Power Requirements
- ATX power mode
- On-board DC to DC power support from 16V to 30V DC
- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- EN60601
- CE approval
- FCC Class B

Ordering Information

Barebone

- **NISE 3140M (P/N: 10J00314006X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® Medical Grade Fanless Bare-Bone system with one PCI Expansion

- **19V, 120W AC/DC medical grade power adapter w/o power cord (P/N: 7400120006X00)**

NISE 3140M2E

Intel® Core™ 2 Duo Fanless System with IEEE 1394b,
1 x PCI and 1 x PCIe x1 Expansion Slots

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual VGA or VGA/DVI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Direction Control

- One external locked CF socket
- Dual IEEE1394b ports
- On-board DC to DC power design to support 16V to 30V DC power input
- Support ATX power mode and PXE / WoL / LAN Teaming

Product Overview

Utilizing the Intel® GM45 enhanced chipsets, NISE 3140M2E is highly scalable supporting a wide variety of Intel® Core™ 2 Duo and Celeron® processors. Using the Intel® graphics media accelerator 4500MHD, the rugged NISE 3140M2E delivers exceptional graphics performance with notable rates of data transfer. NISE 3140M2E provides a number of important features required by image processing operation, including dual-channel DDR3 memory, two Gigabit Ethernet LANs, auto-direction control on RS485 and optional IEEE1394b interface. On top of that, NISE 3140M2E supports dual independent displays through 2x VGA, DVI or LVDS outputs. Housed in a robust aluminum chassis, NISE 3140M2E of fanless design offers noise-free, ultra reliable operating in the most demanding of industrial environment.

NISE 3140M2E is compliant with EN60601-1, a standard for medical grade computing system. In addition to industrial applications, NISE 3140M2E series also a perfect solution for healthcare equipments such as surgery recording system, medical inspection, medical research instrumentations, security control …etc.

Specifications

Main Board
- NISB 3140M
- Support Intel® Core™ 2 Duo Processor P8400 (3M Cache, 2.26 GHz, 1066 MHz FSB)
- Support Intel® Celeron® Processor 575 (1M Cache, 2.00 GHz, 667 MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 Graphics and Memory Controller Hub
- Featuring the Mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IEM (ICH9M-E) I/O Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 1 x Front Access CF Card Socket
- 2 x USB2.0 ports
- Dual IEEE1394b ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 16 ~ 30V DC input
- 1 x PS/2 for Keyboard/Mouse
- 1 x DB25 Parallel Port (Optional GPIO or LVDS interface)
- 1 x DB44 Serial Port for 4x RS232 (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (10W max./ per slot)
- 4 x USB2.0 ports
- 1 x DB15 VGA port
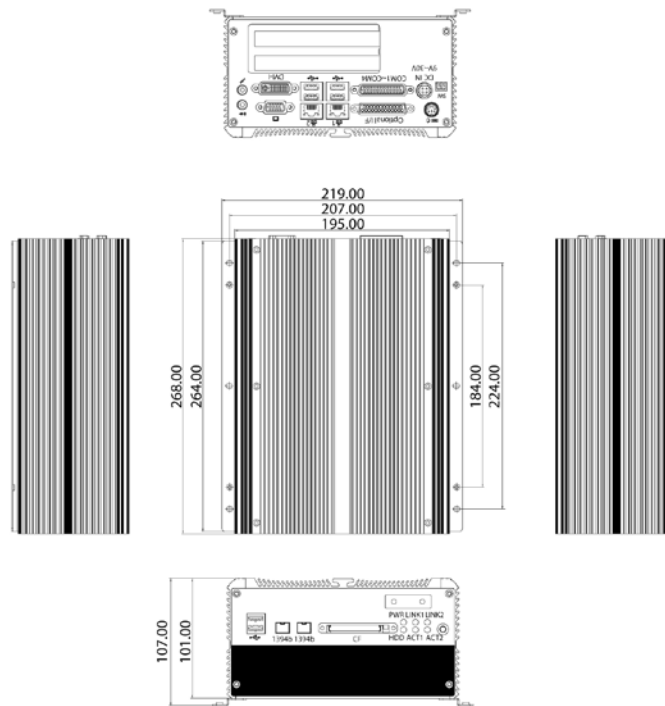- 1 x DVI-I Port (DVI-D + VGA)
- 1 x Speaker-out and Mic-in

Device
- 2 x 2.5" SATA HDD drive bay
- 1x external locked CF card socket

Expansion
- One PCI Expansion (10W max./ per slot)
- One PCIe x1 Expansion (10W max./ per slot)
- Add-on card length: 169mm max.

Dimension Drawing

Power Requirements
• ATX power mode
• On-board DC to DC power support from 16V to 30V DC
• Optional power adapter

Dimensions
• 195mm (W) x 268 mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

Construction
• Aluminum Chassis with fanless design

Environment
• Operating temperature:
 Ambient with air flow: -5°C ~ 55°C
 (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
• Storage temperature: -20°C ~ 80°C
• Relative humidity: 10% to 93% (non-condensing)
• Shock protection: 20G, half sine, 11ms, IEC60068-2-27
• Vibration protection
 Random: 0.5Grms @5~500 Hz according to IEC68-2-64
 Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
• EN60601
• CE approval
• FCC Class B

Ordering Information

Barebone

• **NISE 3140M2E (P/N: 10J00314008X0) RoHS Compliant**
 Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with One PCI and One PCIe x1 slots

• **NISE 3140M2 (P/N: 10J00314007X0) RoHS Compliant**
 Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with Two PCI slots

• **19V, 120W AC/DC medical grade power adapter w/o power cord (P/N: 7400120006X00)**

• **19V, 120W AC/DC non-medical power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3142

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual DVI-D Independent display

- 5 x RS232 and 1 x RS232/422/485 with Auto Direction Control
- One External Locked CFast Socket (SATA Interface)
- Support 16V to 30V DC Power Input
- Support ATX power mode and PXE / WoL / LAN Teaming

Product Overview

NISE 3142 fanless computer supports Intel® Core™ 2 Duo and Celeron® socket type processor. Upgraded with two DVI-D and CFast SATA interfaces, NISE 3142 transfers data faster than its predecessor NISE 3140 and can present high-definition images simultaneously in dual large independent displays. The feature makes NISE 3142 apt for eSOP.

Along with fanless design, it can adapt to filthy environments rife with greasy dusts. In addition, NISE 3142 with multiple I/O options is a future proof solution, which is ideal for applications within industrial automation, factory automation, automatic optical inspection, ATMs, public infotainment, in-vehicle signage, and surveillance as well as data acquisition.

Specifications

Main Board
- NISB3142
- Support Intel® Core™ 2 Duo processor T9400
  (6M cache, 2.53GHz, 1066MHz FSB)
- Support Intel® Core™ 2 Duo Processor P8400
  (3M Cache, 2.26 GHz, 1066MHz FSB)
- Support Intel® Celeron® Processor 575
  (1M Cache, 2.0GHz, 667MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 Graphics and Memory Controller Hub
- Featuring the Mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IBM (ICH9M) I/O Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs

- 1 x Front Access CFast Card Socket (SATA interface)
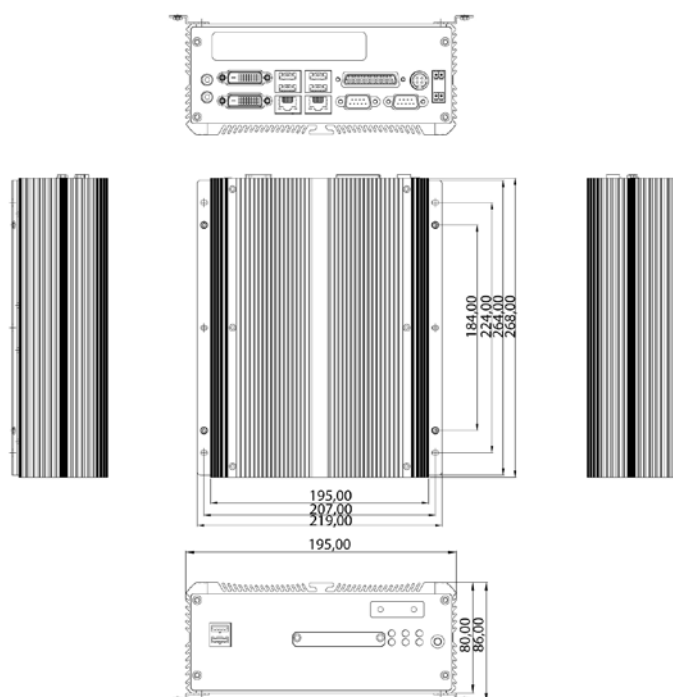- 2 x USB2.0 ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 2-pin System signal
- 16~30V DC input
- 2 x DB9 COM5 & COM6, RS232
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (support WoL & LAN teaming)
- 4 x USB2.0 ports
- 2 x DVI-D Port
- 1 x Speaker-out and Line-in

Storage
- 1 x 2.5" SATA HDD drive bay
- 1 x external locked CFast card socket (SATA interface)

Dimension Drawing

Expansion Slot
* One PCI expansion (NISE3140 only, 10W max./per slot)
* Add-on card length:
  169 mm max. with HDD installed
  240 mm max. without HDD installed

Power Input
* ATX power mode
* On-board DC to DC power support from 16V to 30VDC
* Optional Power Adapter

Dimensions
* 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
* Aluminum Chassis with fan-less design

Environment
* Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (Non-Condensing)
* Shock protection: 20G, half sine, 11ms, IEC60068-2-27
* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* CE approval
* FCC Class A

Ordering Information

Barebone

* **NISE 3142 (P/N: 10J00314200X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® fanless barebone system with dual DVI-D display output and one PCI expansion slot

* **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3142P2

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual DVI-D independent display

- 5x RS232 and 1x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN teaming

Product Overview

NISE 3142 fanless computer supports Intel® Core™ 2 Duo and Celeron® socket type processor. Upgraded with two DVI-D and CFast SATA interfaces, NISE 3142 transfers data faster than its predecessor NISE 3140 and can present high-definition images simultaneously in dual large independent displays. The feature makes NISE 3142 apt for eSOP.

Along with fanless design, it can adapt to filthy environments rife with greasy dusts. In addition, NISE 3142 with multiple I/O options is a future proof solution, which is ideal for applications within industrial automation, factory automation, automatic optical inspection, ATMs, public infotainment, in-vehicle signage, and surveillance as well as data acquisition.

Specifications

Main Board
- NISB3142
- Support Intel® Core™ 2 Duo processor T9400
  (6M cache, 2.53GHz, 1066MHz FSB)
- Support Intel® Core™ 2 Duo processor P8400
  (3M cache, 2.26 GHz, 1066MHz FSB)
- Support Intel® Celeron® processor 575
  (1M cache, 2.0GHz, 667MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un- buffered and non-ECC

Chipset
- Intel® GM45 graphics and Memory Controller Hub
- Featuring the ,obile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IBM I/O (ICH9M) Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD access/power status LEDs

- 1x front access CFast card socket (SATA interface)
- 2x USB2.0 ports

I/O Interface-Rear
- 2-pin remote power on/off switch
- 2-pin system signal
- 16~30V DC input
- 2x DB9, COM5 & COM6, RS232
- 1x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with Auto Flow Control)
- 2x GbE LAN ports (support WoL & LAN teaming)
- 4x USB2.0 ports
- 2x DVI-D port
- 1x speaker-out and Line-in

Storage
- 1x 2.5" SATA HDD drive bay
- 1x external locked CFast card socket (SATA interface)

Dimension Drawing
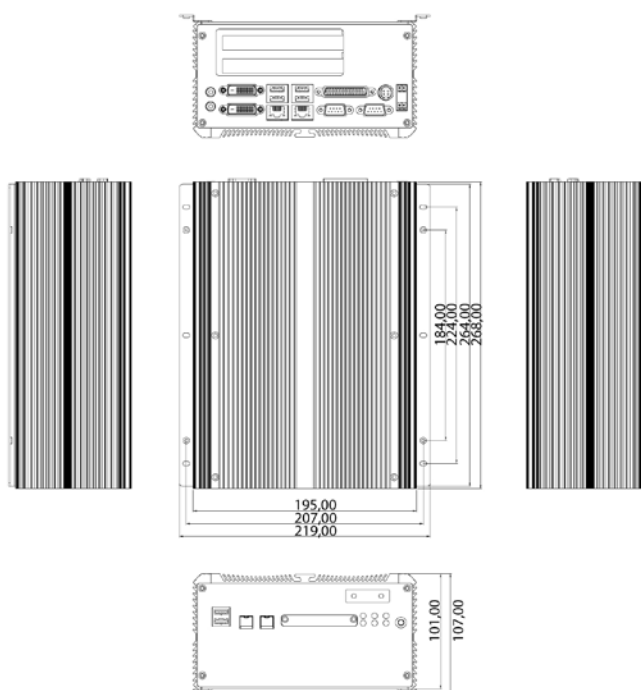
Expansion Slot
- Two PCI expansion (10W max./ per slot)
- Add-on card length:
  169 mm max. with HDD installed
  240 mm max. without HDD installed

Power Input
- ATX power mode
- On-board DC to DC power support from 16V to 30VDC
- Optional power adapter

Dimensions
- 195mm(W)x 268mm(D)x 101mm(H) (7.7"x 10.5"x 3.98")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 3142P2 (P/N: 10J00314202X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® fanless barebone system with dual DVI-D display output and two PCI expansion slots

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3142M

Intel® Core™ 2 Duo Fanless System with IEEE1394b, Dual DVI-D Display Outputs and 1x Expansion Slots

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual DVI-D Independent display
- 5x RS232 and 1x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA Interface)
- Dual IEEE1394b ports
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN teaming

Product Overview

NISE 3142 fanless computer supports Intel® Core™ 2 Duo and Celeron® socket type processor. Upgraded with two DVI-D and CFast SATA interfaces, NISE 3142 transfers data faster than its predecessor NISE 3140 and can present high-definition images simultaneously in dual large independent displays. The feature makes NISE 3142 apt for eSOP.

Along with fanless design, it can adapt to filthy environments rife with greasy dusts. In addition, NISE 3142 with multiple I/O options is a future proof solution, which is ideal for applications within industrial automation, factory automation, automatic optical inspection, ATMs, public infotainment, in-vehicle signage, and surveillance as well as data acquisition.

Specifications

Main Board
- NISB3142
- Support Intel® Core™ 2 Duo processor T9400 (6M cache, 2.53GHz, 1066MHz FSB)
- Support Intel® Core™ 2 Duo processor P8400 (3M cache, 2.26 GHz, 1066MHz FSB)
- Support Intel® Celeron® processor 575 (1M cache, 2.0GHz, 667MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 graphics and Memory Controller Hub
- Featuring the mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IEM I/O (ICH9M-E) Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD access/power status LEDs
- 1x front access CFast card socket (SATA interface)
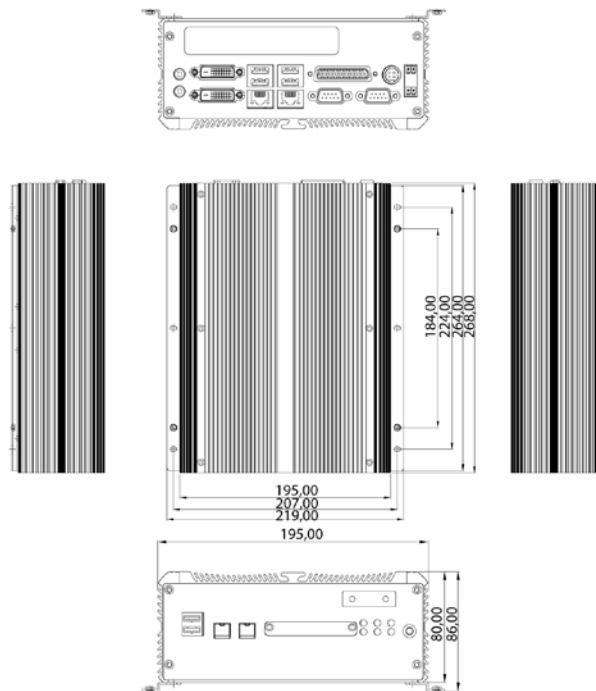- 2x USB2.0 ports
- Dual IEEE1394b ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 2-pin System signal
- 16~30V DC input
- 2 x DB9, COM5 & COM6, RS232
- 1 x DB44 Serial Port for 4x RS232 (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (support WoL & LAN teaming)
- 4 x USB2.0 ports
- 2 x DVI-D Port
- 1 x Speaker-out and Line-in

Storage
- 2 x 2.5" SATA HDD drive bay
- 1 x external locked CFast card socket (SATA Interface)

Dimension Drawing

Expansion Slot
- One PCI expansion (10W max./per slot)
- Add-on card length:
  169 mm max. with HDD installed
  240 mm max. without HDD installed

Power Input
- ATX power mode
- On-board DC to DC power support from 16V to 30VDC
- Optional power adapter

Dimensions
- 195mm(W)x 268mm(D)x 80mm(H) (7.7"x 10.5"x 3.1")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% ~ 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NISE 3142M (P/N: 10J00314201X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® fanless barebone system with dual DVI-D display outputs and one PCI expansion slot

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3142M2E

Main Features

- Support Intel® Core™ 2 Duo/ Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual DVI-D Independent display

- 5 x RS232 and 1 x RS232/422/485 with Auto Direction Control
- One external locked CFast socket (SATA interface)
- Support 16V to 30V DC power input
- Support ATX power mode and PXE/ WoL/ LAN teaming

Product Overview

NISE 3142 fanless computer supports Intel® Core™ 2 Duo and Celeron® socket type processor. Upgraded with two DVI-D and CFast SATA interfaces, NISE 3142 transfers data faster than its predecessor NISE 3140 and can present high-definition images simultaneously in dual large independent displays. The feature makes NISE 3142 apt for eSOP.

Along with fanless design, it can adapt to filthy environments rife with greasy dusts. In addition, NISE 3142 with multiple I/O options is a future proof solution, which is ideal for applications within industrial automation, factory automation, automatic optical inspection, ATMs, public infotainment, in-vehicle signage, and surveillance as well as data acquisition.

Specifications

Main Board
- NISB3142
- Support Intel® Core™ 2 Duo processor T9400
  (6M cache, 2.53GHz, 1066MHz FSB)
- Support Intel® Core™ 2 Duo processor P8400
  (3M cache, 2.26 GHz, 1066MHz FSB)
- Support Intel® Celeron® processor 575
  (1M cache, 2.0GHz, 667MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 graphics and Memory Controller Hub
- Featuring the mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IEM I/O (ICH9M-E) Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD access/power status LEDs

- 1x front access CFast card socket (SATA interface)
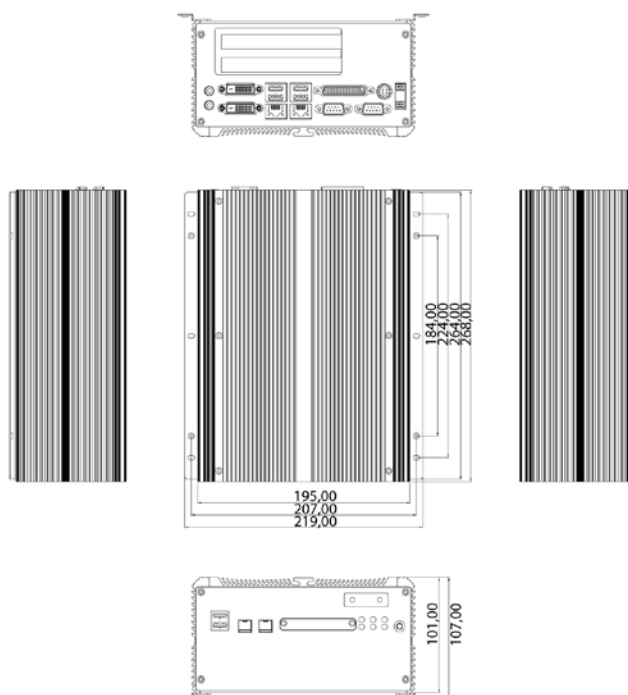- 2x USB2.0 ports

I/O Interface-Rear
- 2-pin remote power on/off switch
- 2-pin system signal
- 16~30V DC input
- 2x DB9, COM5 & COM6, RS232
- 1x DB44 serial port for 4x RS232
  (COM2: RS232/422/485 with Auto Flow Control)
- 2x GbE LAN ports (support WoL & LAN teaming)
- 4x USB2.0 ports
- 2x DVI-D port
- 1x speaker-out and Line-in

Storage
- 1x 2.5" SATA HDD drive bay
- 1x external locked CFast card socket (SATA interface)

Dimension Drawing

Expansion Slot
* One PCI expansion (10W max./ per slot)
* One PCIe x1 expansion (10W max./ per slot)
* Add-on card length:
  169 mm max. with HDD installed

Power Input
* ATX power mode
* On-board DC to DC power support from 16V to 30VDC
* Optional power adapter

Dimensions
* 195mm(W)x 268mm(D)x 101mm(H) (7.7"x 10.5"x 3.98")

Construction
* Aluminum chassis with fanless design

Environment
* Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (non-condensing)
* Shock protection: 20G, half sine, 11ms, IEC60068-2-27
* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* CE approval
* FCC Class A

Ordering Information

Barebone

* **NISE 3142M2E (P/N: 10J00314203X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® fanless barebone system with dual DVI-D display output, one PCI expansion and one PCIe x1 expansion slots

* **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3145

Intel® Core™ 2 Duo Fanless System with Slim DVD Combo

Main Features

- Support Intel® Core™ 2 Duo / Celeron® processor
- Intel® GM45 chipsets
- Dual Intel® 82574L Gigabit Ethernet ports
- Dual VGA or VGA/DVI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Direction Control
- One external locked CF socket
- On-board DC to DC power design to support 16V to 30V DC power input
- Support ATX power mode and PXE / WoL / LAN Teaming
- Slim DVD Combo

Product Overview

Utilizing the Intel® GM45 chipsets, NISE 3145 is highly scalable supporting a wide variety of Intel® Core™ 2 Duo and Celeron® processors. Using the Intel® graphics media accelerator 4500MHD, the rugged NISE 3145 delivers exceptional graphics performance with notable rates of data transfer.

NISE 3145 provides a number of important features required by image processing operation, including dual-channel DDR3 memory, two Gigabit Ethernet LANs, auto-direction control on RS485 interface. On top of that, NISE 3145 supports dual independent displays through 2x VGA, DVI or LVDS outputs. Housed in a robust aluminum chassis, NISE 3145 of fanless design offers noise-free, ultra reliable operating in the most demanding of industrial environment. The NISE 3145 series is an idea system for industrial automation, machine automation, Automated Optical Inspection (AOI), visual inspection, video surveillance, image mapping and face recognition markets.

Specifications

Main Board
- NISB 3140
- Support Intel® Core™ 2 Duo Processor P8400
  (3M Cache, 2.26 GHz, 1066 MHz FSB)
- Support Intel® Celeron® Processor 575
  (1M Cache, 2.00 GHz, 667 MHz FSB)

Main Memory
- 2x 240-pin DIMM, up to 4GB DDR3 800/1066 MHz SDRAM, un-buffered and non-ECC

Chipset
- Intel® GM45 Graphics and Memory Controller Hub
- Featuring the Mobile Intel® Graphics Media Accelerator 4500MHD
- Intel® 82801IBM (ICH9M) I/O Controller Hub

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 1 x Front Access CF Card Socket
- 2 x USB2.0 ports

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 16~30V DC input
- 1 x PS/2 for Keyboard/Mouse
- 1 x DB25 Parallel Port (Optional GPIO or LVDS interface)
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with Auto Flow Control)
- 2 x GbE LAN ports (support WoL & LAN teaming)
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I Port (DVI-D + VGA)
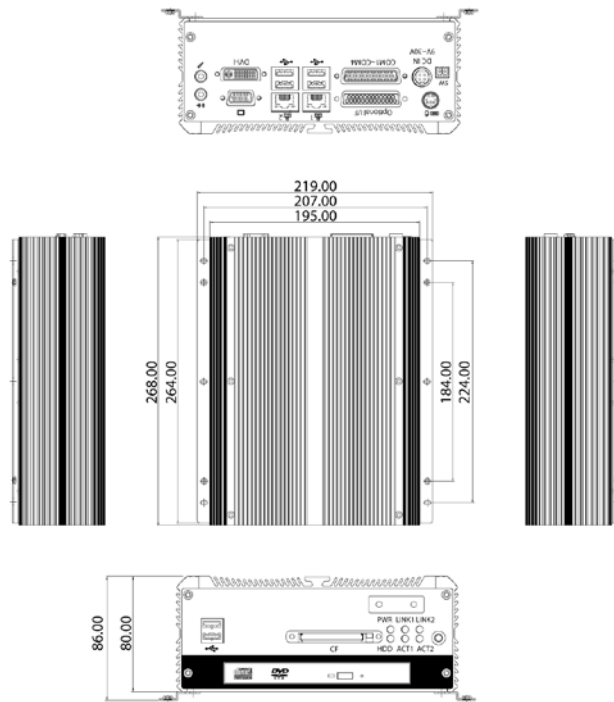- 1 x Speaker-out and Mic-in

Device
- 1 x 2.5" SATA HDD drive bay
- 1 x external locked CF card socket
- Slim DVD Combo

Power Requirements
- ATX power mode
- On-board DC to DC power support from 16V to 30V DC
- Optional power adapter

Dimension Drawing

Dimensions
- 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 50°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)

Certifications
- CE approval
- FCC Class B

Ordering Information

Barebone

- **NISE 3145 (P/N: 10J00314500X0) RoHS Compliant**
  Intel® Core™ 2 Duo / Celeron® Fanless Bare-Bone system with Slim DVD Combo

- **19V, 120W AC/DC power adapter w/o power cord (P/N: 7410120002X00)**

NISE 3500

Main Features

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control
- 5th RS232 (option: 4x digital input, 4x digital output)
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

Product Overview

Utilizing 32nm Intel® Core™ i7/i5 processor, NISE 3500 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3500 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5x COM ports, 6x USB, 8x GPIO, 2x SATAII, 2x eSATA, audio interfaces. NISE 3500M has more features than NISE 3500, for example, it is equipped with 3x IEEE1394b ports and 1x HDMI port. NISE 3500 is designed for a broad range of applications which demand intense graphics performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.

Specifications

Main Board
- NISB3500
- On board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

Main Memory
- 2x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, un-buffered and non-ECC

  Note: Actual memory size is dynamic based on the OS I/O resource allocation

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 2 x USB2.0 ports
- 2 x eSATA ports

I/O Interface-Rear
- 2-pin Remote Power on/ff switch
- 9~30V DC input
- 1 x PS/2 for Keyboard / Mouse
- 1 x DB9 for COM5, RS232 (option: 4x GPI and 4x GPO)

- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with auto flow control)
- 2x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
- 1 x Speaker-out and 1x Mic-in

Device
- 1 x 2.5" HDD driver bay

Expansion
- 1 x PCI expansion (10W max./ per slot)
- Add-on card length: 169mm max.

Power Requirements
- ATX power mode
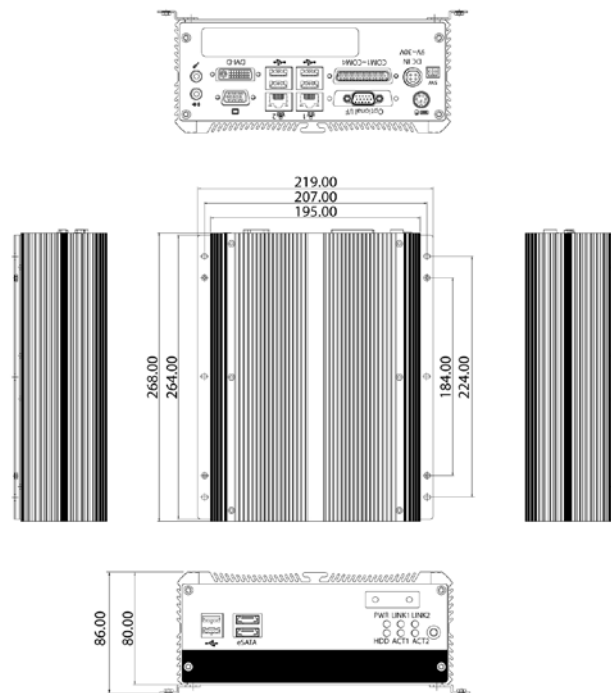- On-board DC to DC power support from 9V to 30V DC
- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum Chassis with fanless design

Dimension Drawing

Environment
* Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (Non-Condensing)
* Shock protection: 20G, half sine, 11ms, IEC60068-2-27
* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* CE approval
* FCC Class B
* UL/ cUL
* e13

Ordering Information

Barebone

* **NISE 3500 (P/N: 10J00350000X0) RoHS Compliant**
  Intel® Core™ i7/i5 Fanless System with one PCI Expansion Slot

* **19V, 120W AC/DC Power Adapter w/o power core
  (P/N: 7410120002X00)**

NISE 3500P2

Intel® Core™ i7/ i5 Fanless System with VGA, DVI-I, eSATA and two Expansion Slot

Main Features

- Support Intel® Core™ i7/ i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/ DVI Independent Display

- 3 x RS232 and 1 x RS232/ 422/ 485 with Auto Flow Control
- 5th RS232 (option: 4x digital input, 4x digital output)
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

Product Overview

Utilizing 32nm Intel® Core™ i7/ i5 processor, NISE 3500 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3500 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5x COM ports, 6x USB, 8x GPIO, 2x SATAII, 2x eSATA, audio interfaces. NISE 3500M has more features than NISE 3500, for example, it is equipped with 3x IEEE1394b ports and 1x HDMI port. NISE 3500 is designed for a broad range of applications which demand intense graphics performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.

Specifications

Main Board
- NISB3500
- On board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

Main Memory
- 2x 240-pin memory DIMM, up to 4GB DDR3 800/ 1066MHz SDRAM, unbuffered and non-ECC
  Note: Actual memory size is dynamic based on the OS I/O resource allocation

I/O Interface-Front
- ATX power on/ off switch
- HDD Access/ Power status LEDs
- 2 x USB2.0 ports
- 2 x eSATA ports

I/O Interface-Rear
- 2-pin Remote Power on/ off switch
- 9~30V DC input
- 1 x PS/ 2 for Keyboard / Mouse
- 1 x DB9 for COM5, RS232 (option: 4x GPI and 4x GPO)

- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/ 422/ 485 with auto flow control)
- 2 x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
- 1 x Speaker-out and 1x Mic-in

Device
- 1 x 2.5" HDD driver bay

Expansion
- 2 x PCI expansion (10W max./ per slot)
- Add-on card length: 169mm max.

Power Requirements
- ATX power mode
- On-board DC to DC power support from 9V to 30V DC
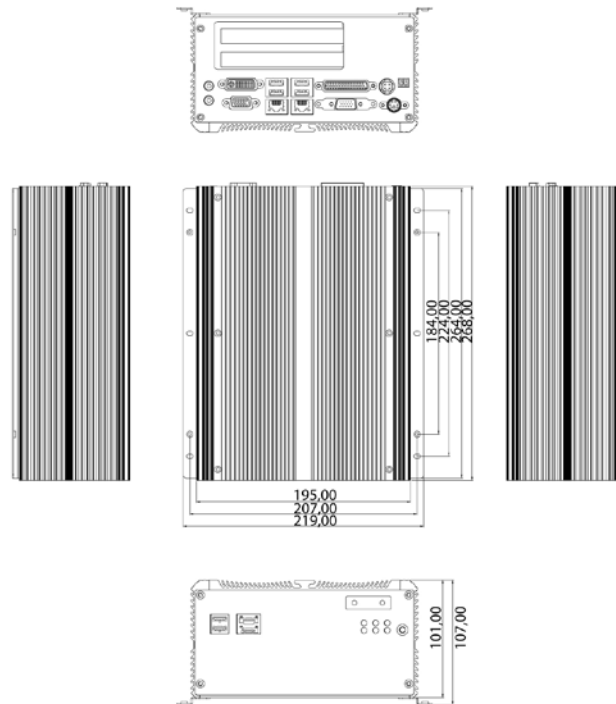- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

Construction
- Aluminum Chassis with fanless design

Dimension Drawing

Environment

- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications

- CE approval
- FCC Class B
- UL/ cUL
- e13

Ordering Information

Barebone

- **NISE 3500P2 (P/N: 10J00350002X0) RoHS Compliant**
  Intel® Core™ i7/ i5 fanless system with two PCI expansion slots

- **NISE 3500P2E (P/N: 10J00350004X0) RoHS Compliant**
  Intel® Core™ i7/ i5 fanless system with one PCI and one PCIe x1
  expansion sots (MoQ is required)

- **NISE 3500E2 (P/N: 10J00350005X0) RoHS Compliant**
  Intel® Core™ i7/ i5 fanless system with two PCIe x1 expansion slots
  (MoQ is required, not in UL model list)

- **NISE 3500P2E4 (P/N: 10J00350017X0) RoHS Compliant**
  Intel® Core™ i7/ i5 fanless system with one PCI and one PCIe x4
  expansion slots (MoQ is required, not in UL model list)

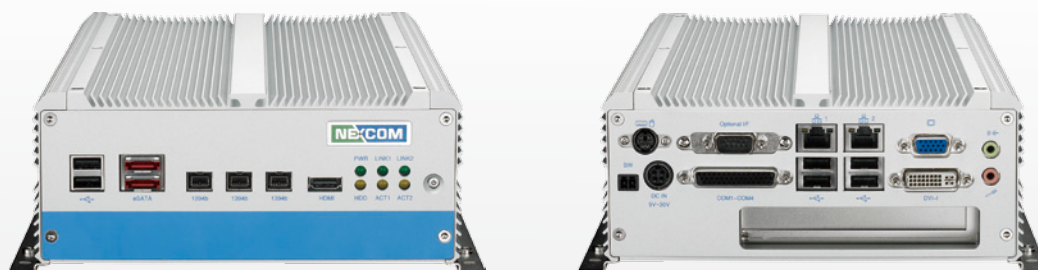- **19V, 120W AC/DC power adapter w/o power core
  (P/N: 7410120002X00)**

NISE 3500M

**Intel® Core™ i7/i5 Fanless System with
IEEE 1394b, eSATA, HDMI and one Expansion Slot**

Main Features

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control

- 5th RS232 (option: 4x digital input, 4x digital output)
- 3x IEEE1394b ports, 2x eSATA
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

Product Overview

Utilizing 32nm Intel® Core™ i7/i5 processor, NISE 3500 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3500 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5x COM ports, 6x USB, 8x GPIO, 2x SATAII, 2x eSATA, audio interfaces. NISE 3500M has more features than NISE 3500, for example, it is equipped with 3x IEEE1394b ports and 1x HDMI port. NISE 3500 is designed for a broad range of applications which demand intense graphics performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.

Specifications

Main Board
- NISB3500
- On board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

Main Memory
- 2x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, un-buffered and non-ECC
  Note: Actual memory size is dynamic based on the OS I/O resource allocation

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 2 x USB2.0 ports
- 2 x eSATA ports
- 3 x IEEE1394b ports
- 1 x HDMI

I/O Interface-Rear
- 2-pin Remote Power on/ff switch
- 9~30V DC input
- 1 x PS/2 for Keyboard / Mouse

- 1 x DB9 for COM5, RS232 (option: 4x GPI and 4x GPO)
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with auto flow control)
- 2x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
- 1 x Speaker-out and 1x Mic-in

Device
- 1 x 2.5" HDD driver bay

Expansion
- 1 x PCI expansion (10W max./ per slot)
- Add-on card length: 169mm max.

Power Requirements
- ATX power mode
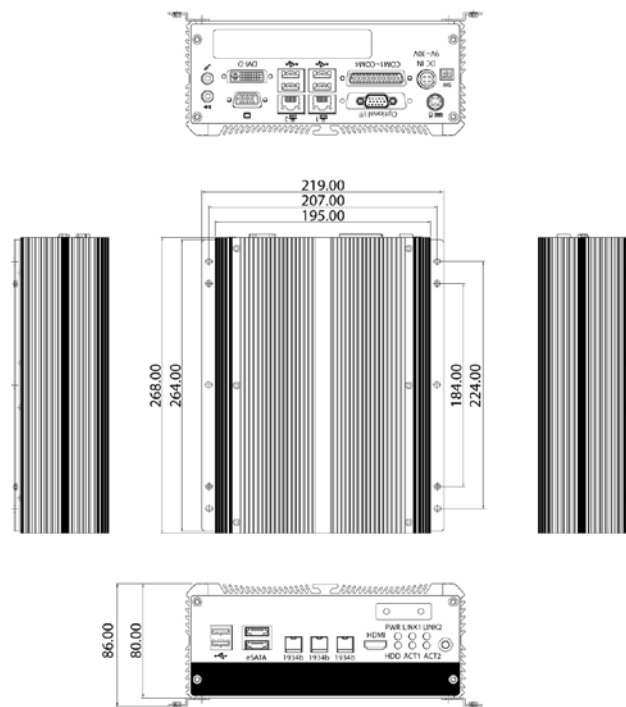- On-board DC to DC power support from 9V to 30V DC
- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum Chassis with fanless design

Dimension Drawing

Environment

- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications

- EN60601
- CE approval
- FCC Class B
- UL/ cUL
- e13

Ordering Information

Barebone

- **NISE 3500M (P/N: 10J00350001X0) RoHS Compliant**
  Intel® Core™ i7/i5 fanless system with one PCI expansion slot

- **NISE 3500ME (P/N: 10J00350014X2) RoHS Compliant**
  Intel® Core™ i7/i5 fanless system with one PCIe x1 expansion slot (MoQ is required)

- **19V, 120W non-medical grade AC/DC power adapter w/o power core (P/N: 7410120002X00)**

NISE 3500M2E

Main Features

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control

- 5th RS232 (option: 4x digital input, 4x digital output)
- 3 x IEEE1394b ports, 2x eSATA
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL
- 1 x PCI expansion slots and 1 x PCIe expansion slots

Product Overview

Utilizing 32nm Intel® Core™ i7/i5 processor, NISE 3500 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3500 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5x COM ports, 6x USB, 8x GPIO, 2x SATAII, 2x eSATA, audio interfaces. NISE 3500M has more features than NISE 3500, for example, it is equipped with 3x IEEE1394b ports and 1x HDMI port. NISE 3500 is designed for a broad range of applications which demand intense graphics performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.

Specifications

Main Board
- NISB3500
- On board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

Main Memory
- 2x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, unbuffered and non-ECC
- * Note: Actual memory size is dynamic based on the OS I/O resource allocation

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- 2 x USB2.0 ports
- 2 x eSATA ports
- 3 x IEEE1394b ports
- 1 x HDMI

I/O Interface-Rear
- 2-pin Remote Power on/ff switch
- 9~30V DC input

- 1 x PS/2 for Keyboard / Mouse
- 1 x DB9 for COM5, RS232 (option: 4x GPI and 4x GPO)
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with auto fl ow control)
- 2x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
- 1 x Speaker-out and 1x Mic-in

Device
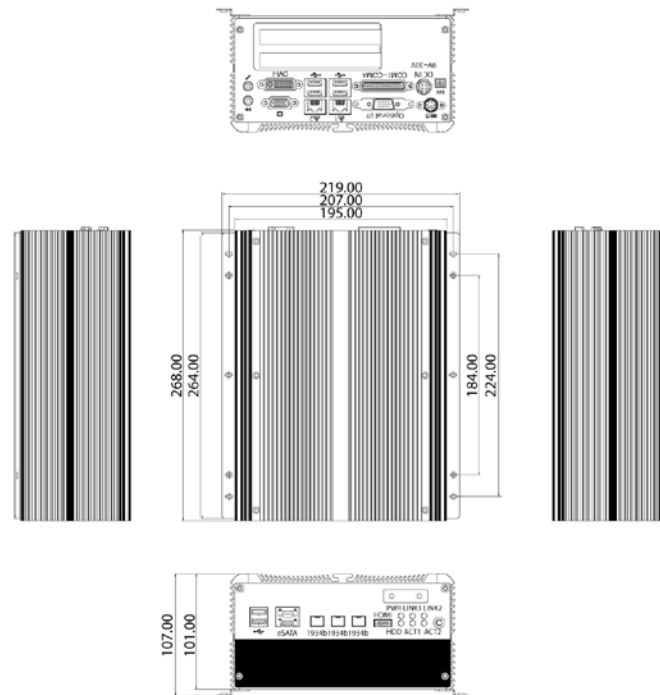- 2 x 2.5" HDD driver bay

Expansion
- 1 x PCI expansion (10W max./ per slot)
- 1 x PCIe expansion (10W max./ per slot)
- Add-on card length: 169mm max.

Power Requirements
- ATX power mode
- On-board DC to DC power support from 9V to 30V DC
- Optional power adapter

Dimension Drawing

Dimensions
- 195mm (W) x 268 mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- EN60601
- CE approval
- FCC Class B
- UL/ cUL
- e13

Ordering Information

Barebone

- **NISE 3500M2E (P/N: 10J00350003X0) RoHS Compliant**
  Intel® Core™ i7/i5 fanless system with one PCI expansion and one PCIe x 1 expansion slot

- **NISE 3500M2 (P/N: 10J00350006X0) RoHS Compliant**
  Intel® Core™ i7/i5 fanless system with two PCI expansion (MoQ is required)

- **19V, 120W non-medical grade AC/DC power adapter w/o power core (P/N: 7410120002X00)**

NISE 3520

Intel® Core™ i7/i5 Fanless System with Mini-PCIe socket, Wireless Interface, HDMI and one Expansion Slot

Main Features

- Support Intel® Core™ i7/ i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display

- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control
- 1x mini-PCIe socket with one external SIM card holder
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

Product Overview

A wireless-ready system, Utilizing 32nm Intel® Core™ i7/ i5 processor, NISE 3520 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3520 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 4x COM ports, 6x USB, 8x GPIO, 1x Mini-PCIe socket, 1x SIM card holder, 1x HDMI and mobile audio interfaces. NISE 3520 is designed for a broad range of applications which demand intense graphic performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications. With mobile communication ability, NISE 3520 can be applied to mobile application or those applications where cannot reach LAN cable, for example, mobile DVR, Kiosk and Data Acquisition in the field.

Specifications

Main Board
- NISB3520
- On board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

Main Memory
- 2x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, unbuffered and non-ECC
- * Note: Actual memory size is dynamic based on the OS I/O resource allocation

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- Wireless Active LEDs
- 2 x Antenna holes
- 2 x USB2.0 ports
- 1 x Line-out and 1x Mic-in
- 1 x HDMI
- 1 x External SIM card holder

I/O Interface-Rear
- 2-pin Remote Power on/ff switch
- 9~30V DC input
- 1 x PS/2 for Keyboard / Mouse
- 1 x DB15 male connector for GPIO (4x input and 4x output)
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with auto flow control)
- 2x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
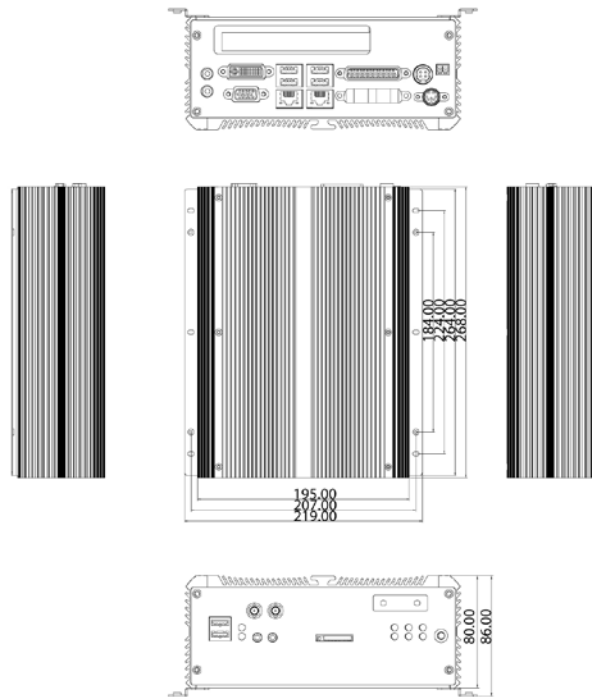- 1 x Speaker-out and 1x Mic-in

Device
- 1 x 2.5" HDD driver bay

Expansion
- 1 x PCI expansion (10W max./nper slot)
  Add-on card length: 169mm max
- 1 x Mini-PCIe socket
  Default: support optional 3.5G module
  Option: support optional Wi-Fi module

Dimension Drawing

Power Requirements
- ATX power mode
- On-board DC to DC power support from 9V to 30V DC
- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

Construction
- Aluminum Chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
- EN60601
- CE approval
- FCC Class B

Ordering Information

Barebone

- **NISE 3520 (P/N: 10J00352000X0) RoHS Compliant**
  Intel® Core™ i7/i5 Fanless System with one PCI Expansion Slot

- **19V, 120W AC/DC Power Adapter w/o power core
  (P/N: 7410120002X00)**

NISE 3520P2/3520P2E

Intel® Core™ i7/i5 Fanless System
w/ Mini PCIe and 2x Expansion Slots

Main Features

- Support Intel® Core™ i7/ i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display

- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control
- 1 x mini PCIe socket with one external SIM card holder
- Support 9V to 30V DC power input
- Support ATX power mode and PXE/ WoL

Product Overview

A wireless-ready system, Utilizing 32nm Intel® Core™ i7/i5 processor, NISE 3520 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3520 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5x COM ports, 6x USB, 8x GPIO, 1x Mini PCIe socket, 1x SIM card holder, 1x HDMI, 2x GSM audio, 2x PCI slot,

NISE 3520 is designed for a broad range of applications which demand intense graphics performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.

Specifications

Main Board
- NISB3500M
- On board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

Main Memory
- 2x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, unbuffered and non-ECC
- * Note: Actual memory size is dynamic based on the OS I/O resource allocation*

I/O Interface-Front
- ATX power on/off switch
- HDD Access/Power status LEDs
- Wireless Active LEDs
- 2 x Antenna holes
- 2 x USB2.0 ports
- 1 x Line-out and 1x Mic-in
- 1 x HDMI
- 1 x External SIM card holder

I/O Interface-Rear
- 2-pin Remote Power on/off switch
- 9~30V DC input
- 1 x PS/2 for Keyboard / Mouse
- 1 x DB15 male connector for GPIO (4x input and 4x output)
- 1 x DB44 Serial Port for 4x RS232
  (COM2: RS232/422/485 with auto flow control)
- 2x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
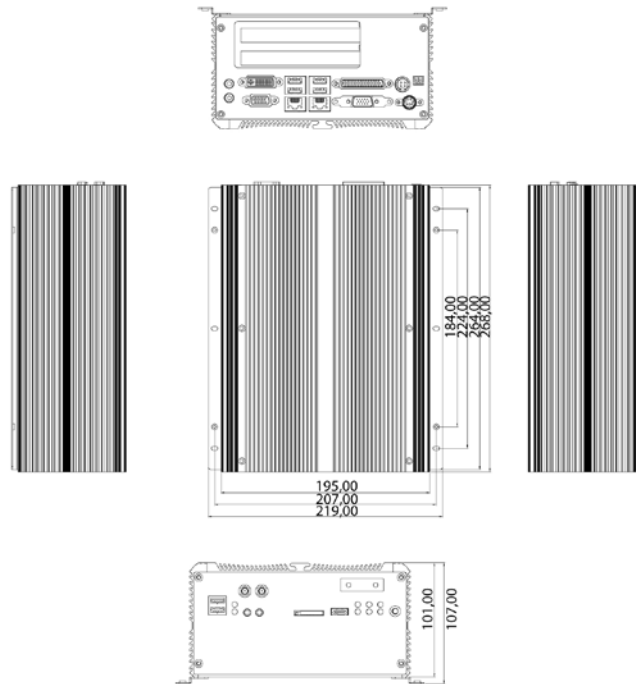- 1 x DVI-I port
- 1 x Speaker-out and 1x Mic-in

Device
- 1x 2.5" HDD driver bay

Expansion
- 2 x PCI expansion (NISE 3520P2 only, 10W max./per slot)
- 1 x PCI & 1 x PCIe x1 expansion (NISE 3520P2E only, 10W max./per slot
- Add-on card length: 169mm max
- 1 x Mini-PCIe socket
  - Default: support optional 3.5G module
  - Option: support optional Wi-Fi module

Dimension Drawing

Power Requirements
* ATX power mode
* On-board DC to DC power support from 9V to 30V DC
* Optional power adapter

Dimensions
* 195mm (W) x 268 mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

Construction
* Aluminum Chassis with fan-less design

Environment
* Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (Non-Condensing)
* Shock protection: 20G, half sine, 11ms, IEC60068-2-27
* Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
* EN60601
* CE approval
* FCC Class B

Ordering Information

Barebone

* **NISE 3520P2 (P/N: 10J00352002X0) RoHS Compliant**
  Intel® Core™ i7/ i5 Fanless System with two PCI Expansion slot

* **NISE 3520P2E (P/N: 10J00352003X0) RoHS Compliant**
  Intel® Core™ i7/ i5 Fanless System with one PCI and one PCIex1 Expansion slots

* **19V, 120W AC/DC Power Adapter w/o power core
  (P/N: 7410120002X00)**

NISE 3600

3rd Generation Intel® Core™ i3 /i5 rPGA Socket Type Processor

Fanless System with one PCIe x4 Expansion

Main Features

- Support 3rd generation Intel® Core™ i3/ i5 rPGA socket type processor
- Intel® QM77 PCH
- 4x USB3.0 & 2x USB2.0
- Dual Intel® GbE LAN ports
- 1x VGA & 1x DVI-D display output

- Dual Display Port output
- 5x RS232 and 1x RS232/422/485
- 1x external CFast socket
- Support 9~30V DC power input
- Supports ATX power mode, WoL and PXE function

Product Overview

Integrated with 3rd generation Core™ i7/ Core™ i5 with QM77 PCH platform, the NISE 3600 series obviously presents the state-of-the-art fan-less computer design not only on the features but also on the mechanical design. The NISE 3600 covers wide-range processor selection, not only the 3rd generation Core™ i7/i5 socket processor, but also backward compatible to the 2nd generation Core™ i7/ Core i5. With the newest platform, the NISE 3600 offers 4x USB3.0, 2x USB2.0, Dual Intel Gbe LAN ports, Dual DVI-I, Dual Display port, 6x COM ports, and external CFast socket for front accessible availability.

In addition to USB3.0 support, the NISE 3600 series can deliver 3x independent display output, which can save the system integration budge to fulfill multi-task demand. Meanwhile, the NISE 3600 series have greater expansion capability with two PCIe x4, appropriate to Machinery Automation or Factory Automation Applications. With computing and graphic performance enhancement, the NISE 3600 is easy to fulfill the graphic-intensive or computing-oriented applicatons, including, Auto Optical Inspection, Machinery Automation, ePolice, Public Infotainment, Surveillance or Image Processing equipments.

Specifications

CPU Support
- Support 3rd generation Intel® Core™ i5/ i3/ Celeron rPGA socket type processor
- Support 2nd generation Intel® Core™ i5/ i3/ Celeron rPGA Socket type processor
- Intel® QM77 PCH chipset

Main Memory
- 2x DDR3 SO-DIMM sockets, support dual channel up to 8 GB DDR3 1333/1600 SDRAM, un-buffered and non-ECC

Display Option
- Dual independent display
  - Display port and DVI-D
  - VGA and DVI-D
- Three independent display
  - Two display port and DVI-D
  - Two display port and VGA

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- LAN1 & LAN2 status LEDs

- 2x Display Port
- 2x USB3.0 ports

I/O Interface-Rear
- 2-pin remote power on/off switch
- 2-pin system signal
- 2x DB9, RS232 COM port
- 1x DB44 for 3x RS232 and 1x RS232/422/485 COM port
- 2x GbE LAN ports (with Intel® 82574L & 82579LM LAN chip)
- 2x USB3.0 & 2x USB2.0
- 1x VGA & 1x DVI-D output
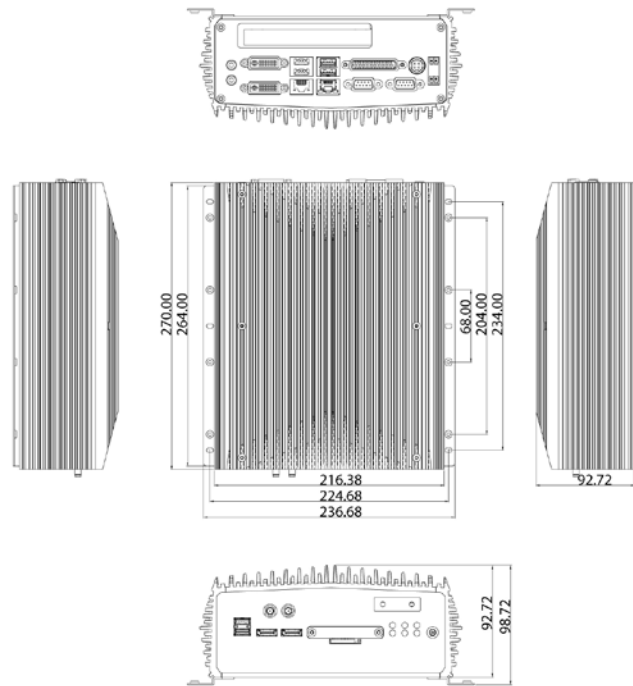- Audio phone jack for speaker-out and Mic-in
- 9~ 30V DC input

Device
- 1x 2.5" HDD/ SSD driver bay
- 1x external CFast socket

Expansion Slot
- One PCIe x4 expansion (10W max./per slot)
- Add-on card length:
  169mm max. with HDD installed
  240mm max. without HDD installed

Dimension Drawing

Power Requirements
• DC input range: 9V~30V DC input

Dimensions
• 216mm (W) x 270 mm (D) x 93mm (H)

Construction
• Aluminum chassis with fanless design

Environment
• Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
• Storage temperature: -20°C ~ 80°C
• Relative humidity: 10% to 93% (non-condensing)
• Shock protection: 20G, half sine, 11ms, IEC60068-2-27
• Vibration protection
  Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
• CE
• FCC Class A

Ordering Information

Barebone

• **NISE 3600 (P/N: 10J00360000X0)**
  3rd Generation Intel® Core™ i3/ i5 rPGA Fanless System with one PCIe x4 Expansion

NISE 3600E2

Main Features

- Support 3rd generation Intel® Core™ i3/ i5 rPGA socket type processor
- Intel® QM77 PCH
- 4x USB3.0 & 2x USB2.0
- Dual Intel® GbE LAN ports
- 1x VGA & 1x DVI-D display output

- Dual Display Port output
- 5x RS232 and 1x RS232/422/485
- 1x external CFast socket
- Support 9~30V DC power input
- Supports ATX power mode, WoL and PXE function

Product Overview

Integrated with 3rd generation Core™ i7/ Core™ i5 with QM77 PCH platform, the NISE 3600 series obviously presents the state-of-the-art fan-less computer design not only on the features but also on the mechanical design. The NISE 3600 covers wide-range processor selection, not only the 3rd generation Core i7/i5 socket processor, but also backward compatible to the 2nd generation Core™ i7/ Core™ i5. With the newest platform, the NISE 3600 offers 4x USB3.0, 2x USB2.0, Dual Intel Gbe LAN ports, Dual DVI-I, Dual Display port, 6x COM ports, and external CFast socket for front accessible availability.

In addition to USB3.0 support, the NISE 3600 series can deliver 3x independent display output, which can save the system integration budge to fulfill multi-task demand. Meanwhile, the NISE 3600 series have greater expansion capability with two PCIe x4, appropriate to Machinery Automation or Factory Automation Applications. With computing and graphic performance enhancement, the NISE 3600 is easy to fulfill the graphic-intensive or computing-oriented applicatons, including, Auto Optical Inspection, Machinery Automation, ePolice, Public Infotainment, Surveillance or Image Processing equipments.

Specifications

CPU Support
- Support 3rd generation Intel® Core™ i5/ i3/ Celeron rPGA socket type processor
- Support 2nd generation Intel® Core™ i5/ i3/ Celeron rPGA Socket type processor
- Intel® QM77 PCH chipset

Main Memory
- 2x DDR3 SO-DIMM sockets, support dual channel up to 8 GB DDR3 1333/1600 SDRAM, un-buffered and non-ECC

Display Option
- Dual independent display
  - Display port and DVI-D
  - VGA and DVI-D
- Three independent display
  - Two display port and DVI-D
  - Two display port and VGA

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- LAN1 & LAN2 status LEDs

- 2x Display Port
- 2x USB3.0 ports

I/O Interface-Rear
- 2-pin remote power on/off switch
- 2-pin system signal
- 2x DB9, RS232 COM port
- 1x DB44 for 3x RS232 and 1x RS232/422/485 COM port
- 2x GbE LAN ports (with Intel® 82574L & 82579LM LAN chip)
- 2x USB3.0 & 2x USB2.0
- 1x VGA & 1x DVI-D output
- Audio phone jack for speaker-out and Mic-in
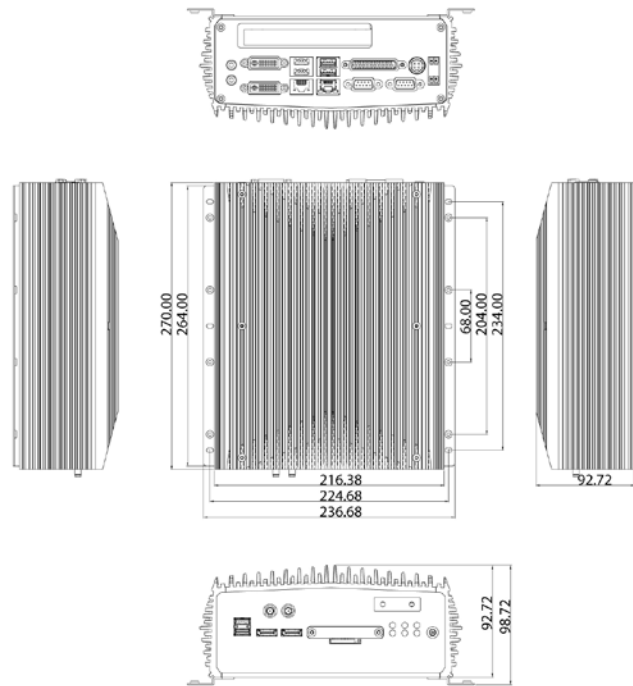- 9~ 30V DC input

Device
- 1x 2.5" HDD / SSD driver bay
- 1x external CFast socket

Expansion Slot
- Two PCIe x4 expansion (10W max./per slot)
- Add-on card length:
  169mm max. with HDD installed
  240mm max. without HDD installed

Dimension Drawing

Power Requirements
• DC input range: 9V~30V DC input

Dimensions
• 216mm (W) x 270 mm (D) x 114mm (H)

Construction
• Aluminum chassis with fanless design

Environment
• Operating temperature:
  Ambient with air flow: -5°C ~ 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
• Storage temperature: -20°C ~ 80°C
• Relative humidity: 10% to 93% (non-condensing)
• Shock protection: 20G, half sine, 11ms, IEC60068-2-27
• Vibration protection
• Random: 0.5Grms @5~500 Hz according to IEC68-2-64
  Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

Certifications
• CE
• FCC Class A

Ordering Information

Barebone

• **NISE 3600E2 (P/N: 10J00360001X0)**
  3rd Generation Intel® Core™ i3/ i5 rPGA Fanless System with two PCIe x4 Expansions

nTUF 600

Intel® Atom™ Dual Core D525 1.8 GHz Fanless Marine Computer

Main Features

- On-board Intel® Atom™ Dual Core D525 processor, 1.8 GHz
- 4x USB ports
- Dual M12 connector for Intel® 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse

- 1x external CFast socket
- 1x mini-PCIe with two Antenna Holes
- Support +24V DC power input
- Dual cold swappable 2.5" SSD tray
- Supports ATX Power Mode, WoL, LAN teaming and PXE function

Product Overview

nTUF series stands for NEXCOM Tough Computer mainly for Marine Bridge and Control Room computing solution. The nTUF600 Marine Fanless Computer is based on Intel® Atom™ Dual Core D525 platform providing optimized graphic and computing performance with rich interfaces for Marine peripherals connection. The nTUF600 features with 4x USB2.0, 2x M12 GbE LAN port, 1x VGA, 2x DB9 RS232, 2x PS/2, 1x CFast socket and two cold swappable 2.5" SSD trays on the front panel. In the rear side, the nTUF600 offers 4x Digital Input, 4x Digital Output and 4x NMEA ports with 2KV optical protection. The isolated 24V DC input in nTUF600 is designed for Marine applications followed by IEC60945 regulations.

The fanless design and thermal solution on nTUF600 ensure the Marine Bridge System running smoothly and reliably. The front accessible interface design, swappable 2.5" SSD tray and screwed type CFast deliver the benefit of engineering-free and the ease of installation and maintenance.

Specifications

CPU Support
- On-board Intel® Atom™ Dual Core processor D525, 1.8 GHz, 1M cache
- Intel® ICH8M PCHs chipset

Main Memory
- 1 x DDR2 SO-DIMM sockets, support up to 2 GB DDR2 667/ 800 SDRAM, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- LAN1 & LAN2 status LEDs
- 4x USB2.0 ports
- 2x M12 GbE LAN ports
  Intel® 82574L GbE LAN controller on board with1.5KV surge protection
- 1x VGA output
- 1x DVI-D & 1x HDMI (only work when optional MXM 3.0 graphic module is installed)
- Audio jack (speaker-out & Mic-in & Line-in)
- 2x antenna holes
- 2x DB9, RS232
- 2x PS/2 for keyboard & mouse
- 2x cold swappable 2.5" HDD tray

- 1x external screwed type CFast socket
- 3-pin +24V DC input
- 1x external fuse;10A

I/O Interface-Rear
- 4x Digital Input: 6-pin screw terminals
  Voltage level: 5V, TTL-level
- 4x Digital Output: 8-pin screw terminals
  36V DC with 100mA relay
- 4x NMEA interfaces
  Signal: TX / RX signals
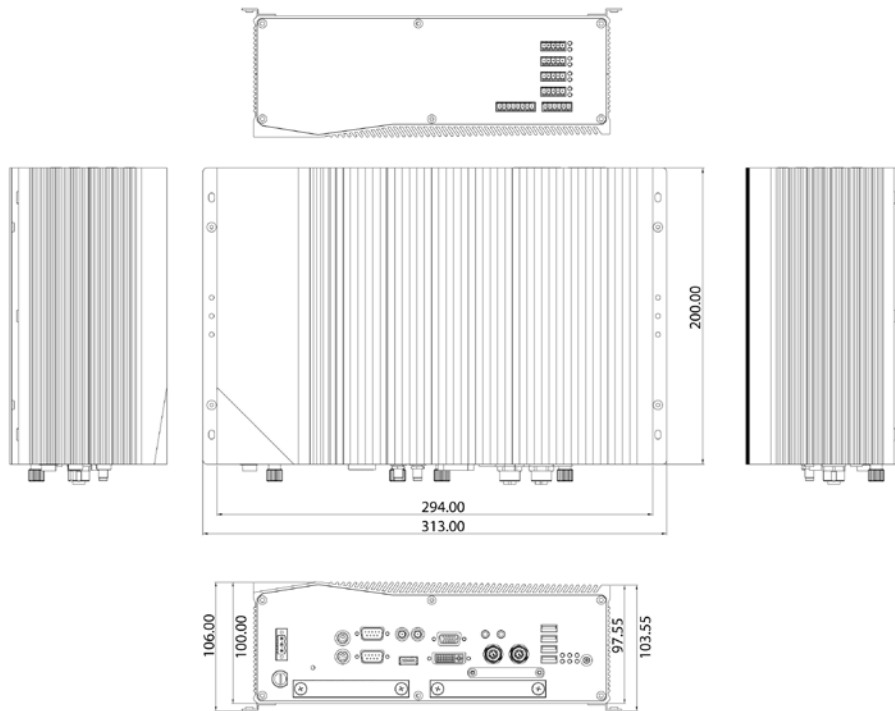 2KV optical isolation protection

Device
- 2x 2.5" SSD driver bay
- 1x external CFast socket
- 1 x mini-PCIe socket
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

Power Requirements
- DC input range: 16V~30V DC input
- Nominal DC input: +24V DC input with 1.5KV isolation protection
- Pin definition: Positive, Negative and Chassis Ground

NEXCOM

Dimension Drawing

Dimensions

• 294mm (W) x 200mm (D) x 100mm (H) (11.6"x 7.9"x 3.94")

Construction

• Aluminum chassis with fanless design

Environment

• Operating temperature:
  Ambient with air flow: -25°C~55°C
  (according to IEC60945, E10 and DNV standards)
• Storage temperature: -20°C ~ 80°C
• Relative humidity: 10% to 93% (non-condensing)

Certifications

• IEC60945 (in process)
• IACS-E10 (in process)
• DNV 2.4 (in process)

Ordering Information

Barebone

• **nTUF 600 (P/N: 10M00060000X2)**
  Intel® Atom™ Dual Core D525 Fanless Marine Computer

nTUF 610

Intel® 2nd Generation Core i7-2610UE 1.5GHz Fanless Marine Computer

Main Features

- On-board Intel® 2nd Generation Core™ i7-2610UE 1.5 Ghz
- 4x USB ports
- Dual M12 connector for Intel® 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse

- 1x external CFast socket
- 1x mini-PCIe with two antenna holes
- Support +24V DC power input
- Dual Cold Swappable 2.5" SSD tray
- Supports ATX power mode, WoL, LAN teaming and PXE function

Product Overview

nTUF series stands for NEXCOM Tough Computer mainly for Marine Bridge and Control Room computing solution. The nTUF610 Marine Fanless Computer is based on Intel® 2nd Generation Core™ i7 platform providing the highest graphic and computing performance with versatile interfaces for Marine peripherals connection. The nTUF610 features with 4x USB2.0, 2x M12 GbE LAN port, 1x VGA, 1x DVI-D, 2x DB9 RS232, 2x PS/2, 1x CFast socket and two cold swappable 2.5" SSD trays on the front panel. In the rear side, the nTUF600 offers 4x Digital Input, 4x Digital Output and 4x NMEA ports with 2KV optical protection. The isolated 24V DC input in nTUF600 is designed for Marine applications followed by IEC60945 regulations.

The fan-less design and thermal solution on nTUF610 ensure the Marine Bridge System running smoothly and reliably. The front accessible interface design, swappable 2.5" SSD tray and screwed type CFast deliver the benefit of engineering-free and the ease of installation and maintenance. Powered by Intel® Core™ i7 platform, the superior computing and graphic performance enable the nTUF610 an ideal solution for Marine ECDIS Navigation applications.

Specifications

CPU Support
- On-board Intel® 2nd Generation Core™ i7-2610UE 1.5 Ghz 4M Cache
- Intel® QM67 PCH

Main Memory
- 1 x DDR3 SO-DIMM sockets, support up to 2 GB DDR3 1066/ 1333 SDRAM, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/power status LEDs
- LAN1 & LAN2 Status LEDs
- 4x USB2.0 ports
- 2x M12 GbE LAN ports
- Intel® 82574L GbE LAN controller on board
- 1.5KV ESD/ surge protection
- 1x VGA output & 1x DVI-D display output
- 1x HDMI (only work when optional MXM 3.0 graphic module is installed)
- Audio jack (speaker-out & Mic-in)
- 2x antenna holes

- 2x DB9, RS232
- 2x PS/2 for keyboard & mouse
- 2x cold swappable 2.5" HDD tray
- 1x external screwed type CFast socket
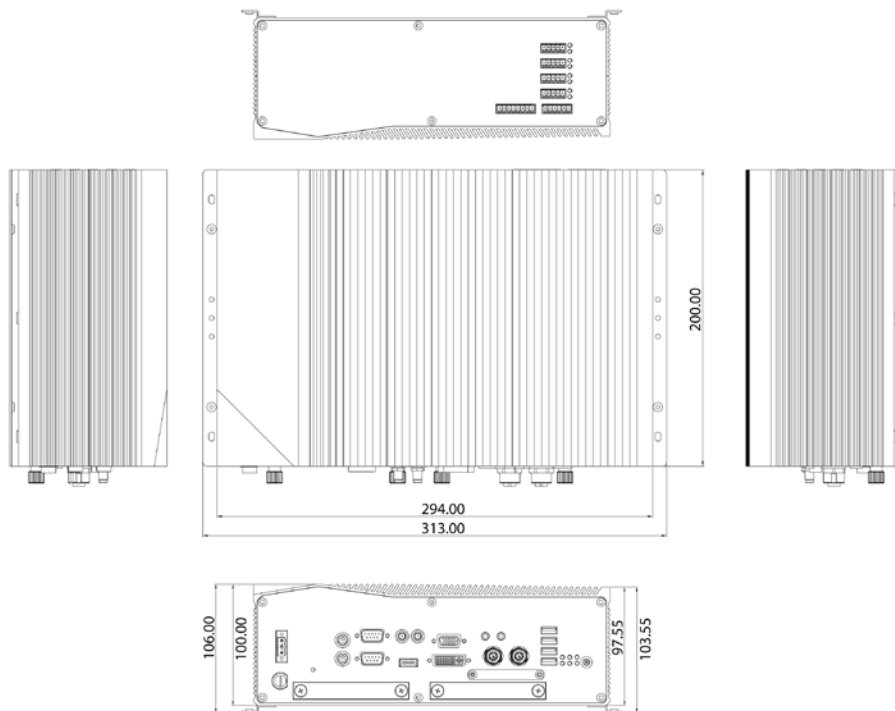- 3-pin +24V DC input
- 1x external fuse

I/O Interface-Rear
- 4x Digital Input: 6-pin screw terminals
  Voltage level: 5V, TTL-level digital input
- 4x Digital Output: 8-pin screw terminals
  36V DC with 100mA relay
- 4x NMEA interfaces
  Signal: TX/RX signals
  2KV optical isolation protection

Device
- 2x 2.5" SSD driver bay
- 1x external CFast socket
- 1x mini-PCIe socket
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

Dimension Drawing

Power Requirements
- DC input range: 16V~30V DC input
- Nominal DC Input: +24V DC input with 1.5KV isolation protection
- Pin definition: Positive, Negative and Chassis Ground

Dimensions
- 294mm (W) x 200mm (D) x 100mm (H) (11.6"x 7.9"x 3.94")

Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -25°C ~ 55°C
  (according to IEC60945, E10 and DNV standards)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (non-condensing)

Certifications
- IEC60945 (in process)
- IACS-E10 (in process)
- DNV 2.4 (in process)

Ordering Information

Barebone

- **nTUF 610 (P/N: 10M00061000X2)**
  Intel® 2nd generation Core i7-2610UE 1.5GHz
  Fanless Marine Computer

MPPC 2120T

21.5" TFT Full HD 16:9 Fanless Panel PC with Intel® Atom™ D525, 1.8 GHz, Touch Screen, 1GB DDR3, 4xUSB, 2xCOM

Main Features

- 16:9 21.5" Fanless Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Dual GbE/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2 x mini-PCIe sockets/ 1 x CF/ 2 x RS232/ 422/ 485

- DDR3 1GB/ 2.5" HDD Bracket/ Two Speakers
- Optional Wi-Fi Module/ 2.5"HDD/ VGA Splitter/ Panel Mount Kit
- Panel Mount/ VESA Mount Compliance
- Wide Range Power Input 12V~ 30V DC

Product Overview

The MPPC 2120T is available in 21.5" 16:9 LCD size with resolutions up to 1920x1080 (full HD) and industrial motherboard making it the perfect "signage ready" Panel PC solution for self Service/Kiosk and interactive digital signage players. The resistance touch screen enhances user interaction to offer improved customer service. In addition, the MPPC 2120T is fanless multimedia Panel PC which is powered by a high performance Intel® Atom™ D525 processor with Intel® ICH8M chipset and support for DDR3 memory, which enable simultaneous running of rich stream dynamic multimedia content. Other features include built-in dual Ethernet, optional Wi-Fi module, the slimmest x86 based touch terminal and panel/VESA mount design which minimizes space and enables installation almost any location, including retail outlets, supermarkets, train station and airports.

Specifications

Panel
- LCD size: 21.5", 16:9
- Resolution: full HD, 1920 x 1080
- Luminance: 300 cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: CCFL
- Touch screen: 5-line Resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8Hz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory:
  1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card

- Hard drive bay: optional 2.5" SATA HDD or SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: Monitoring system temperature, and voltage
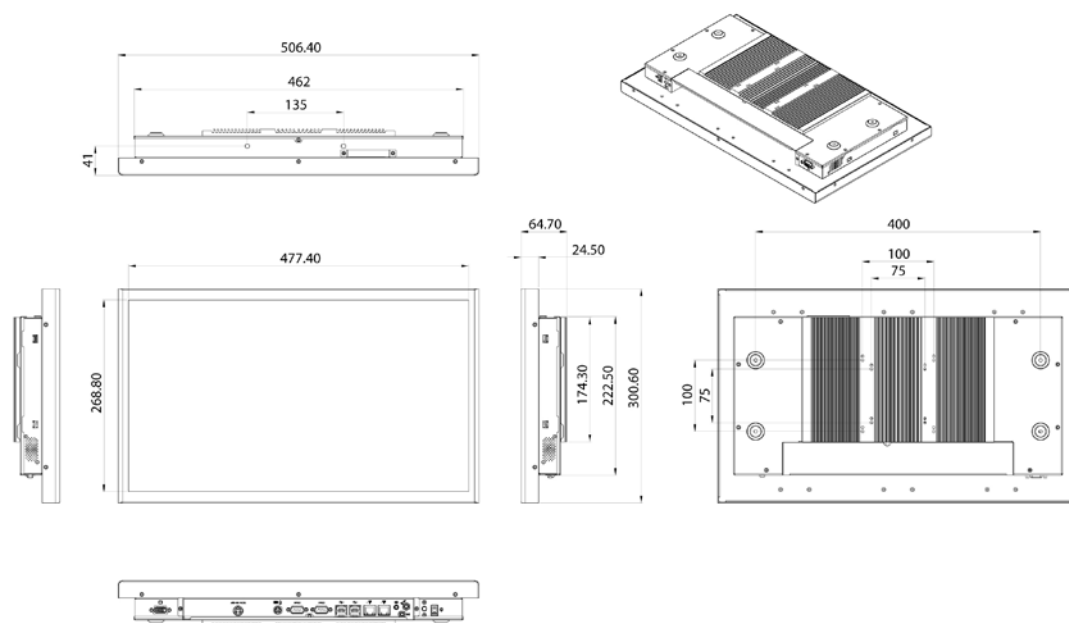- Expansion: 2x Mini-PCIe sockets

Rear I/O
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Ethernet: 2 x RJ45
- Clone VGA port: 1 x DB15 (VGA Splitter Optional)
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Dimension Drawing

- Two 2W Speakers

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Color: pantone black
- Mounting:
  panel/ wall/ stand/ VESA 75x75; 100x100; 400x100mm
  Panel Mount Kit (Optional)
- Power input: 12V~ 30V DC
- Power adapter: AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: 0°C to 45°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 506.4 x 300.6 x 64.7 mm
- Weight: 8 Kg

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MPPC 2120T (P/N: 90IM2120T00X0)**
  21.5" TFT Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2, Power Adapter

MPPC 3220T

**32" TFT LED Full HD 16:9 Fanless Panel PC with Intel® Atom™ D525,
1.8 GHz, SAW Touch Screen, 1GB DDR3, 4xUSB, 2xCOM**

Main Features

- 16:9 32" Fanless Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- SAW touch screen
- Dual GbE/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS

- 4 x USB/ 2 x mini-PCIe sockets/ 1 x CF/ 2 x RS232/ 422/ 485
- DDR3 1GB/ 2.5" HDD Bracket/ Two Speakers
- Optional Wi-Fi Module/ 2.5"HDD/ VGA Splitter/ Panel Mount Kit
- Panel Mount/ VESA Mount Compliance

Product Overview

The MPPC 3220T is available in 32" 16:9 LCD size with resolutions up to 1920x1080 (full HD) and industrial motherboard making it the perfect "signage ready" Panel PC solution for self Service/Kiosk and interactive digital signage players. The SAW touch screen enhances user interaction to offer improved customer service. In addition, the MPPC 3220T is fanless multimedia Panel PC which is powered by a high performance Intel® Atom™ D525 processor with Intel® ICH8M chipset and support for DDR3 memory, which enable simultaneous running of rich stream dynamic multimedia content. Other features include built-in dual Ethernet, optional Wi-Fi module, the slimmest x86 based touch terminal and panel/VESA mount design which minimizes space and enables installation almost any location, including retail outlets, supermarkets, train station and airports.

Specifications

Panel
- LCD size: 32", 16:9
- Resolution: full HD, 1920 x 1080
- Luminance: 400 cd/m²
- Contrast ratio: 4000
- LCD color: 1073.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED
- Touch screen: SAW (Surface Acoustic Wave)
- Touch light transmission: 92%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8Hz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory:
  1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default),
  Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card

- Hard drive bay: optional 2.5" SATA HDD or SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: Monitoring system temperature, and voltage
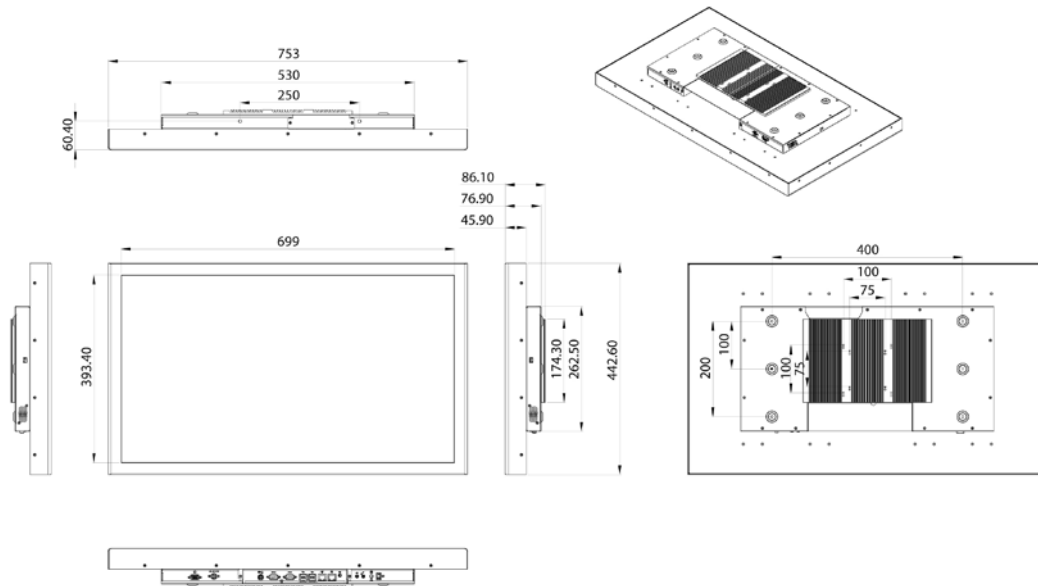- Expansion: 2x Mini-PCIe sockets

Rear I/O
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Ethernet: 2 x RJ45
- Clone VGA port: 1 x DB15 (VGA Splitter Optional)
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

NEXCOM

Dimension Drawing

- Two 2W Speakers

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Color: pantone black
- Mounting:
  panel/ wall/ stand/ VESA 75x75; 100x100; 400x200mm
  Panel Mount Kit (Optional)
- Power input: 24V DC
- Power adapter: AC to DC power adaptor (+24V, 180W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: 0°C to 45°C
- Storage temperature: -20°C to 75°C
- Operating humidity:
  10%~90% relative humidity, non-condensing
  Limits to be at 90% RH at max 40°C
- Dimension: 753 x 442.6 x 86.1 mm
- Weight: 18.2Kg

Certifications
- CE approval
- FCC Class B

Ordering Information

- **MPPC 3220T (P/N: 90IM3220T00X0)**
  32" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2, Power Adapter

APPC 0820T/0820TC

8" TFT LED SVGA 4:3 Flush Panel PC with Intel® Atom™ D525, 1.8GHz, Touch Screen, 1GB DDR3, 4 x USB, 2 x COM and VGA

APPC 0820TC

APPC 0820T

Main Features

- 4:3 8" Fanless Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Flush Panel by 5-wire Touch Screen
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 1 x mini-PCIe sockets/ 1 x CF

- 1 x RS232/ 1 x RS232/ 422/ 485/ 1 x GPIO
- DDR3 1GB / 2.5" HDD Bracket
- Optional Wi-Fi Module / 2.5" HDD
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mm x 100mm

Product Overview

Incorporated a 8" 4:3 touch screen LCD panel with resolutions up to 800x600 (SVGA) and 400 nits brightness, the APPC 0820T and APPC 0820TC are fanless Panel PC based on the Atom™ D525 processor. The industrial motherboard is reengineering to have RAM and mini-PCIe aligned in the same side of the board with its Intel® Atom™ D525 CPU. This dedicated motherboard benefits users both in future capability expansion and ease for maintenance. The Panel PC comes with flush panel design and can have IP65 front for industrial applications. The touch screen provides the durable, reliable, and scratch-able benefits for easy maintenance in wide applications.

The ultra slim APPC 0820TC makes it become industrial slimmest model for space-critical applications, such as, access control, small automation machineries, forklift and truck etc. Even though the size is compact, the I/O functionalities- 1x power switch, 1x reset, 1x RS-232, 2x USB, 1x Line-out and 1xVGA- aren't scarified. For more sophisticated automation process, the APPC 0820T provides richer I/O than other 8" Applied Panel PCs. Except for the standard specifications of 1x power switch, 1x reset, 1x RS-232, 2x USB, 1x Line-out, 1x VGA, APPC 0820T adds extra functionalities including two additional USB, 1x Line-in, 1x Mic-in, 1x RS232/422/485, 1x GPIO and PS/2 keyboard and mouse.

Specifications

Panel
- LCD Size: 8", 4:3
- Resolution: SVGA 800x600
- Luminance: 400cd/m2
- Contrast ratio: 500
- LCD color: 262K
- Viewing angle: 50(U), 70(D), 70(L), 70(R)
- Backlight: LED
- Touch screen: 5-wire resistive (flush panel type)
- Touch light transmission: 82%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered

- Storage:
  APPC 0820TC: (Choice of one)
  - SSD: CF socket by IDE support Type I/II compact Flash card (SATA to CF converter board (Optional))
  - Hard drive bay: optional 2.5" SATA HDD
  - SATA DOM (Optional)
  APPC 0820T: (Choice of one)
  - SSD: CF socket by IDE support Type I/II compact Flash card (Build in SATA to CF converter board)
  - Hard drive bay: optional 2.5" SATA HDD
  - SATA DOM (Optional)
  - HDD and choice of CF or SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: Monitoring system temperature, and voltage
- Expansion: 1x Mini-PCIe sockets

Dimension Drawing

APPC 0820T
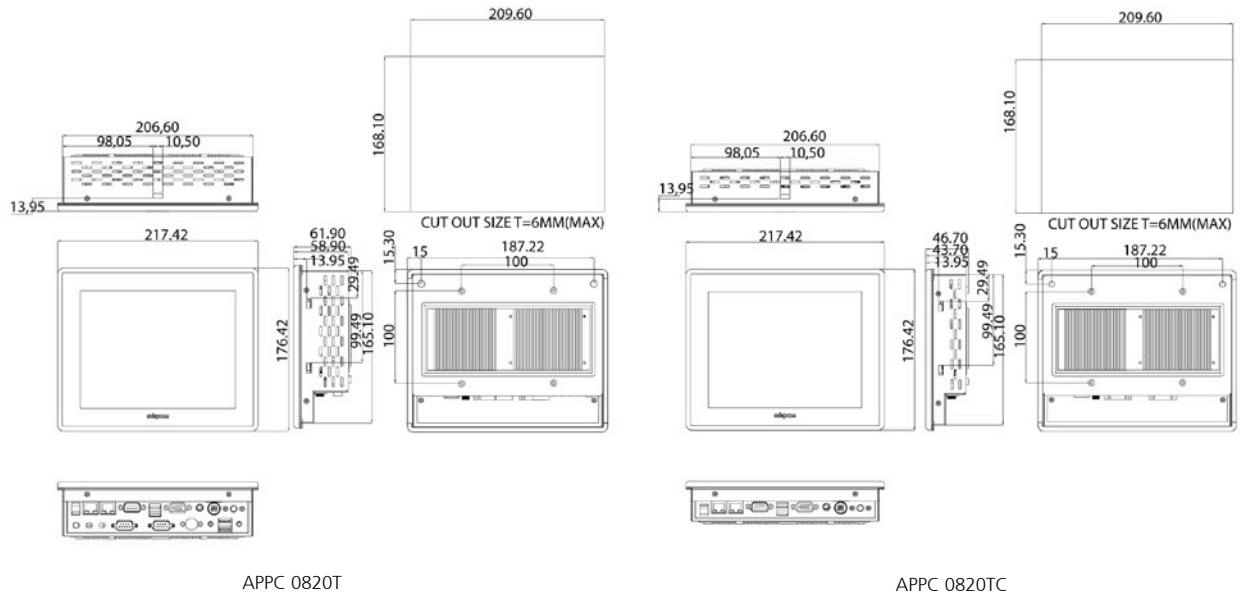
APPC 0820TC

Rear I/O

- APPC 0820TC:
  COM #1: RS232
  Ethernet: 2 x RJ45
  2nd display VGA port: 1 x DB15
  Audio port: 1 x Line out
  USB: 2 x USB 2.0
  Power switch
  Reset button
- APPC 0820T:
  GPIO: 4 x digital in / 4 x digital out
  COM #1: RS232
  COM #2: RS232/422/485
  Ethernet: 2 x RJ45
  2nd display VGA port: 1 x DB15
  Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
  USB: 4 x USB 2.0
  PS2 keyboard/ mouse
  Power switch
  Reset button

Audio

- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Ethernet

- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

- Color: pantone black
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V DC
- Power adapter: Optional AC to DC power adaptor (+12V, 60W)

- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension:
  APPC0820T - 217.4 x 176.4 x 61.9 mm
  APPC0820TC - 217.4 x 176.4 x 46.7 mm
- Weight:
  APPC0820T - 2Kg
  APPC0820TC - 1.7Kg

Certifications

- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 0820T (P/N: 10IA0820T00X0)**
  8" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3 with two COM ports and Audio

- **APPC 0820TC (P/N: 10IA0820T01X0)**
  8" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3 with one COM port

- **Options**
  12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060002X00)

APPC 1220T/1221T

12" TFT LED SVGA 4:3 Flush Panel PC with Intel® Atom™ D525, 1.8GHz, Touch Screen, 1GB DDR3, 4xUSB, 4xCOM and VGA

Main Features

- 4:3 12.1" Fanless LED Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Fully flat 5-wire Touch Screen
- Dual GbE; 2nd Display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4 / 2 x Mini-PCIe/ 1 x CF/ 2 x RS232/ 422/ 485

- Optional Wi-Fi Module / 2.5"HDD / 2 x COMs / GPIO / CAN Bus
- DDR3 1GB / 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mmx100mm
- Wide Range Power Input 12V~ 30V DC

Product Overview

Incorporated a 12.1" 4:3 touch screen LCD panel with resolutions up to 800x600 (SVGA) and 350 nits brightness, industrial motherboard for versatile industrial applications, the APPC 1220T is fanless Panel PC based on the Atom™ D525 processor. The Panel PC comes with flush panel design and can have IP65 front for industrial applications. The touch screen provides the durable, reliable, and scratch-able benefits for easy maintenance in wide applications, especially for food and beverage industrial, which require strictly cleaning process.

The APPC 1220T Panel PC has 2GbE LAN, 2 x COMs, 2x USB, PS2 KB/MS, and Line-in/Line-out/MIC-in. With wide range power input from 12V to 30V, the APPC series can have industrial field and machine devices. With 2nd display by VGA, APPC series can hook 2nd display via VGA port with different content. Depending on applications, customers can easily remove rear chassis to implement DDR3 memory, 2.5" HDD and 2 x Mini-PCIe. Based on APPC 1220T model, APPC 1221T has two RS-232/422/485 COM ports with isolation to fit industrial applications plus two additional RS-323 COM ports. In addition, one GPIO port for 4 input/output is available for digital control. There is also an optional CAN bus interface for communication with CAN bus device.

Specifications

Panel
- LCD Size: 12.1", 4:3
- Resolution: SVGA 800x600
- Luminance: 350cd/m2
- Contrast ratio: 300
- LCD color: 262K
- Viewing Angle: 50(U), 60(D), 70(L), 70(R)
- Backlight: LED
- Touch screen: Fully flat 5-wire resistive
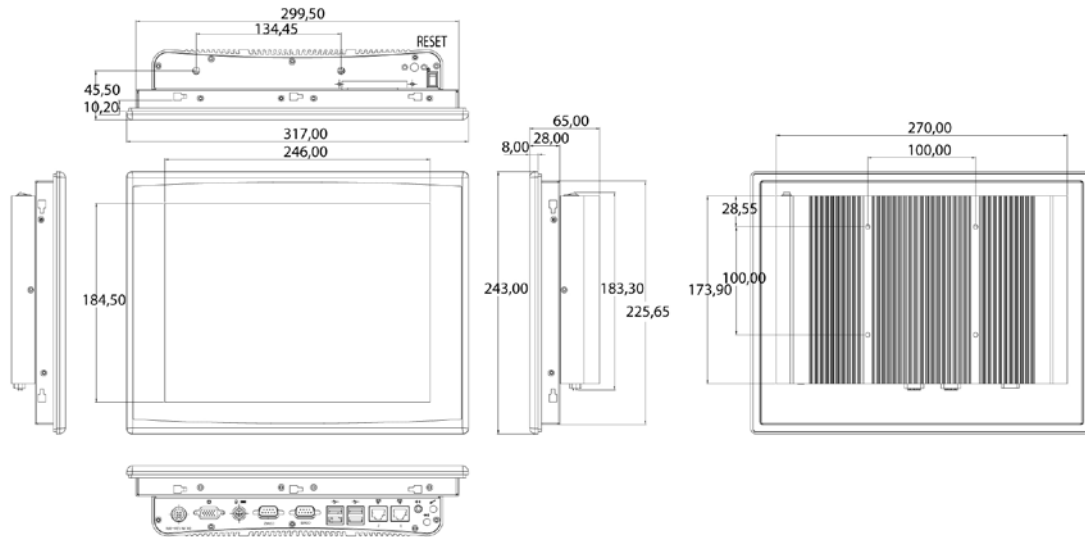- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card
- Hard drive bay: optional 2.5" SATA HDD or SATA DOM

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion: 2x Mini-PCIe sockets
- NEXCOM Xcare platform system management supported

Rear I/O
- CAN BUS (for APPC1221T Optional)
- GPIO (for APPC1221T only): 4 x digital in / 4 x digital out
- COM #1: RS232/422/485 (APPC 1221T w/ 2.5kv isolated)
- COM #2: RS232/422/485 (APPC 1221T w/ 2.5kv isolated)
- COM #3 & COM #4 (for APPC 1221T only): 2x RS232
- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Dimension Drawing

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Color: pantone black
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V~ 30V DC
- Power adapter: Optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 317 x 243 x 65mm
- Weight: 3.8 Kg

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 1220T (P/N: 10IA1220T00X0)**
  12.1" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2

- **APPC 1221T (P/N: 10IA1221T00X0)**
  12.1" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2 w/ isolation, COM#3/ #4, GPIO (CAN bus Optional)

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N:7400060002X00)**

APPC 1520T/1521T

15" TFT LED XGA 4:3 Flush Panel PC with Intel® Atom™ D525, 1.8GHz, Touch Screen, 1GB DDR3, 4xUSB, 4xCOM and VGA

Main Features

- 4:3 15" Fanless LED Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Fully flat 5-wire Touch Screen
- Dual GbE; 2nd Display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4 / 2 x Mini-PCIe/ 1 x CF/ 2 x RS232/ 422/ 485

- Optional Wi-Fi Module / 2.5"HDD / 2 x COMs / GPIO / CAN Bus
- DDR3 1GB / 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mmx100mm
- Wide Range Power Input 12V~ 30V DC

Product Overview

Incorporated a 15" 4:3 touch screen LCD panel with resolutions up to 1024x768 (XGA) and 350 nits brightness, industrial motherboard for versatile industrial applications, the APPC 1520T is fanless Panel PC based on the Atom™ D525 processor. The Panel PC comes with flush panel design and can have IP65 front for industrial applications. The touch screen provides the durable, reliable, and scratch-able benefits for easy maintenance in wide applications, especially for food and beverage industrial, which require strictly cleaning process.

The APPC 1520T Panel PC has 2GbE LAN, 2 x COMs, 2x USB, PS2 KB/MS, and Line-in/Line-out/MIC-in. With wide range power input from 12V to 30V, the APPC series can have industrial field and machine devices. With 2nd display by VGA, APPC series can hook 2nd display via VGA port with different content. Depending on applications, customers can easily remove rear chassis to implement DDR3 memory, 2.5" HDD and 2 x Mini-PCIe. Based on APPC 1520T model, APPC 1521T has two RS-232/422/485 COM ports with isolation to fit industrial applications plus two additional RS-323 COM ports. In addition, one GPIO port for 4 input/output is available for digital control. There is also an optional CAN bus interface for communication with CAN bus device.

Specifications

Panel
- LCD Size: 15", 4:3
- Resolution: XGA 1024x768
- Luminance: 350cd/m2
- Contrast ratio: 500
- LCD color: 16.2M
- Viewing Angle: 65(U), 55(D), 65(L), 65(R)
- Backlight: LED
- Touch screen: Fully flat 5-wire resistive
- Touch light transmission: 80%
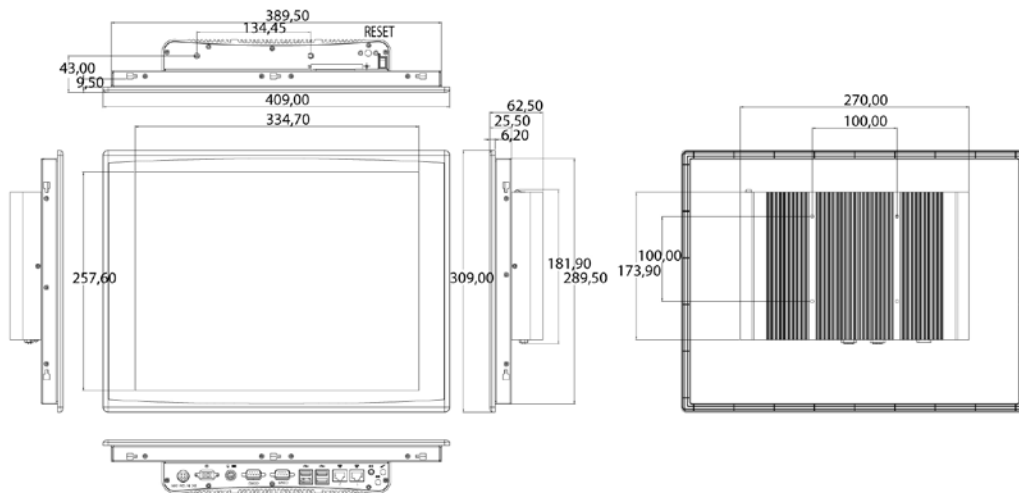- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card
- Hard drive bay: optional 2.5" SATA HDD or SATA DOM

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion: 2x Mini-PCIe sockets
- NEXCOM Xcare platform system management supported

Rear I/O
- CAN BUS (for APPC1521T Optional)
- GPIO (for APPC1521T only): 4 x digital in / 4 x digital out
- COM #1: RS232/422/485 (APPC 1521T w/ 2.5kv isolated)
- COM #2: RS232/422/485 (APPC 1521T w/ 2.5kv isolated)
- COM #3 & COM #4 (for APPC 1521T only): 2x RS232
- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Dimension Drawing

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Color: pantone black
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V~ 30V DC
- Power adapter: Optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 409x309x62.5 mm
- Weight: 5.3 Kg

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 1520T (P/N: 10IA1520T00X0)**
  15" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2

- **APPC 1521T (P/N: 10IA1521T00X0)**
  15" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2 w/ isolation, COM#3/ #4, GPIO (CAN bus Optional)

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N:7400060002X00)**

APPC 1720T/1721T

17" TFT SXGA 4:3 Flush Panel PC with Intel® Atom™ D525, 1.8GHz, Touch Screen, 1GB DDR3, 4 x USB, 4 x COM and VGA

Main Features

- 4:3 17" Fanless Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Flush Panel by 5-wire Touch Screen
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 2 x Mini-PCIe sockets/ 1 x CF/ 2 x RS232/ 422/ 485

- Optional Wi-Fi Module / 2.5"HDD / 2 x COMs / GPIO / CAN Bus
- DDR3 1GB / 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mm x 100mm
- Wide Range Power Input 12V~ 30V DC

Product Overview

Incorporated a 17" 4:3 touch screen LCD panel with resolutions up to 1280x1024 (SXGA) and 380 nits brightness, industrial motherboard for versatile industrial applications, the APPC 1720T is fanless Panel PC based on the Atom™ D525 processor. The Panel PC comes with flush panel design and can have IP65 front for industrial applications. The touch screen provides the durable, reliable, and scratch-able benefits for easy maintenance in wide applications, especially for food and beverage industrial, which require strictly cleaning process.

The APPC 1720T Panel PC has 2GbE LAN, 2 x COMs, 2x USB, PS2 KB/MS, and Line-in/Line-out/MIC-in. With wide range power input from 12V to 30V, the APPC series can have industrial field and machine devices. With 2nd display by VGA, APPC series can hook 2nd display via VGA port with different content. Depending on applications, customers can easily remove rear chassis to implement DDR3 memory, 2.5" HDD and 2 x Mini-PCIe. Based on APPC 1720T model, APPC 1721T has two RS-232/422/485 COM ports with isolation to fit industrial applications plus two additional RS-323 COM ports. In addition, one GPIO port for 4 input/output is available for digital control. There is also an optional CAN bus interface for communication with CAN bus device.

Specifications

Panel
- LCD Size: 17", 4:3
- Resolution: SXGA 1280x1024
- Luminance: 380cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing Angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: CCFL
- Touch screen: 5-wire resistive (flush panel type)
- Touch light transmission: 81%
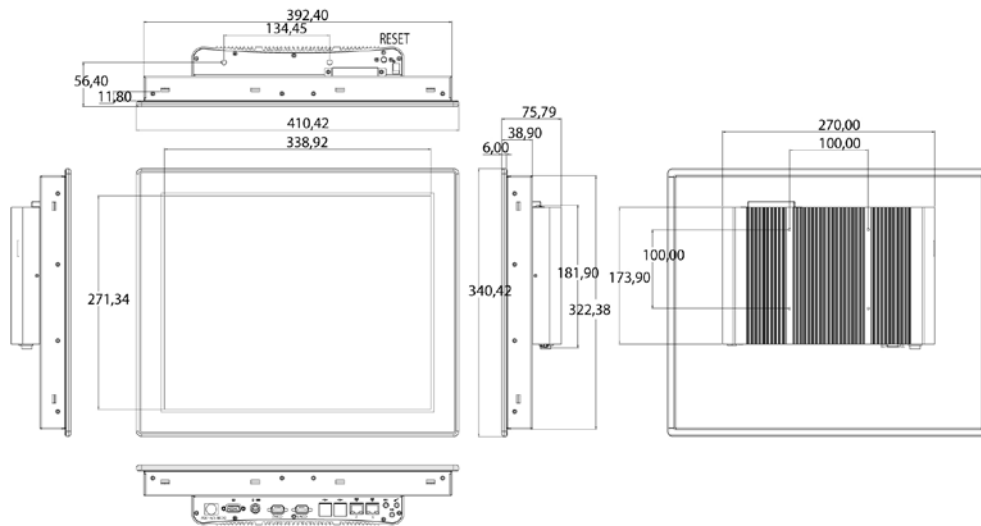- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8Hz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card
- Hard drive bay: optional 2.5" SATA HDD or SATA DOM

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: Monitoring system temperature, and voltage
- Expansion: 2x Mini-PCIe sockets
- NEXCOM Xcare platform system management supported

Rear I/O
- CAN BUS (for APPC1721T Optional)
- GPIO (for APPC1721T only): 4 x digital in / 4 x digital out
- COM #1: RS232/422/485 (APPC 1721T w/ 2.5kv isolated)
- COM #2: RS232/422/485 (APPC 1721T w/ 2.5kv isolated)
- COM #3 & COM #4 (for APPC 1721T only): 2x RS232
- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Dimension Drawing

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Color: pantone black
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V~ 30V DC
- Power adapter: Optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 410.4 x 340.4 x 75.79 mm
- Weight: 6.3 Kg

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 1720T (P/N: 10IA1720T00X0)**
  17" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2

- **APPC 1721T (P/N: 10IA1721T00X0)**
  17" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2 w/ isolation, COM#3/ #4, GPIO (CAN bus Optional)

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N:7400060002X00)**

APPC 1930T/1931T

19" TFT SXGA 4:3 Flush Panel PC with Intel® Atom™ D2700, 2.13GHz, Touch Screen, 1GB DDR3, 4x USB, 4x COM and VGA

Coming Soon

Main Features

- 4:3 19" Fanless Panel Computer
- Intel® Atom™ D2700, Dual Core, Low Consumption CPU
- Flush Panel by 5-wire Touch Screen
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 4/ 2 x mini-PCIe sockets/ 1 x CF/ 2 x RS232/422/485

- Optional Wi-Fi Module/ 2.5"HDD/ 2 x COMs/ GPIO/ CAN Bus
- DDR3 1GB/ 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mm x 100mm
- Wide Range Power Input 12V~ 30V DC

Product Overview

Incorporated a 19" 4:3 touch screen LCD panel with resolutions up to 1280x 1024 (SXGA) and 350 nits brightness, industrial motherboard for versatile industrial applications, the fanless Panel PC APPC 1930T utilizes Atom™ D2700 processor. The Panel PC comes with flush panel design with IP65 front certificate for industrial applications. The touch screen provides the durable, reliable, and scratch-able benefits for easy maintenance in wide applications, especially for food and beverage industrial, which require strictly cleaning process.

The APPC 1930T Panel PC has 2GbE LAN, 2 x COMs, 2x USB, PS2 KB/MS, and Line-in/Line-out/MIC-in. With wide range power input from 12V to 30V, the APPC series can have industrial field and machine devices. With a VGA port, APPC series can hook 2nd display delivering different content. Depending on applications, customers can easily remove rear chassis to implement DDR3 memory, 2.5" HDD and 2 x Mini-PCIe.

Based on APPC 1930T model, APPC 1931T has two RS-232/422/485 COM ports with isolation plus two additional RS-323 COM ports for industrial automation applications. In addition, one GPIO port for 4 input/output is available for digital control. There is also an optional CAN bus interface for communication device connection.

Specifications

Panel
- LCD Size: 19", 4:3
- Resolution: SXGA 1280x1024
- Luminance: 350cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED
- Touch screen: 5-wire resistive (flush panel type)
- Touch light transmission: 81%
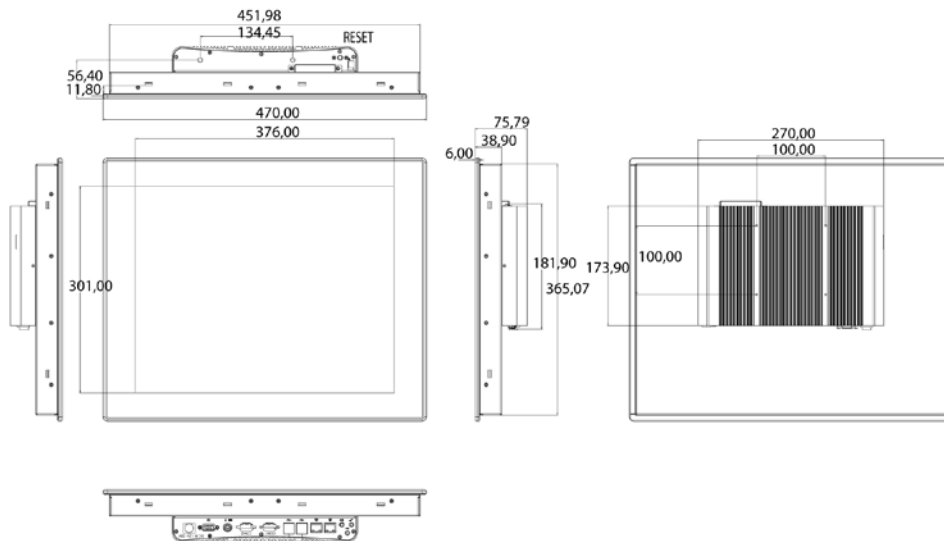- Touch interface: USB

System
- CPU: Intel® Atom™ D2700, 2.13GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH10R
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default),

- Support up to 2GB DDR3 800, non-ECC and un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compactFlash card
- Hard drive bay: optional 2.5" SATA HDD or SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion: 2x Mini-PCIe sockets
- NEXCOM Xcare™ platform system management supported

Rear I/O
- CAN BUS (for APPC 1931T Optional)
- GPIO (for APPC 1931T only): 4x digital in / 4x digital out
- COM #1: RS232/422/485 (APPC 1931T w/ 2.5kv isolated)
- COM #2: RS232/422/485 (APPC 1931T w/ 2.5kv isolated)
- COM #3 & COM #4 (for APPC 1931T only): 2x RS232
- Ethernet: 2x RJ45

Dimension Drawing

- 2nd display VGA port: 1x DB15
- Audio port: 1x Line out; 1x Line in; 1x MIC-in
- USB: 4x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Color: pantone black
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V~ 30V DC
- Power adapter: optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  IEC 68 2-27

- HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10% to 90% relative humidity, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 1930T (P/N: TBD)**
  19" TFT LED Panel PC with Intel® Atom™ D2700 2.13 GHz, touch screen, 1GB DDR3, COM#1/ #2

- **APPC 1931T (P/N: TBD)**
  19" TFT LED Panel PC with Intel® Atom™ D2700 2.13 GHz, touch screen, 1GB DDR3, COM #1/ #2 with isolation, COM#3/ #4, GPIO (CAN bus optional)

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060002X00)**

OPPC 1520T

15" TFT LED XGA 4:3 Fanless Panel PC with Intel® Atom™ D525, 1.8GHz, Touch Screen, 1GB DDR3, 4xUSB, 2xCOM and VGA

Main Features

- 4:3 15" Fanless LED Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Dual GbE/ 2nd Display VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2 x mini-PCIe sockets/ 1 x CF/ 2 x RS232/ 422/ 485

- DDR3 1GB / 2.5" HDD Bracket
- Optional Wi-Fi Module / 2.5"HDD / Panel Mount Kit
- Open Frame and Panel Mount/ VESA Mount Compliance
- Wide Range Power Input 12V~ 30V DC

Product Overview

OPPC 1520T fanless Panel PCs are powered by Intel® Atom™ D525 processor with Intel® ICH8M chipset and support for DDR3 memory. OPPC 1520T incorporates a 15" 4:3 touch screen LCD panel with resolutions up to 1024x768 (XGA) and 400 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation.

OPPC 1520T is designed to meet the requirements of vertical market segments, such as Kiosk, ATMs, and vending machines. Customers also benefit from various mounting options, including open frame mount from both rear and front sides, VESA mount, wall mount and panel mount. This versatility gives users a quick route to market for a customized Panel PC.

Specifications

Panel
- LCD Size: 15", 4:3
- Resolution: XGA 1024x768
- Luminance: 400cd/m2
- Contrast ratio: 700
- LCD color: 262K
- Viewing Angle: 80(U), 60(D), 80(L), 80(R)
- Backlight: LED
- Touch screen: 5-wire resistive
- Touch light transmission: 81%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory:
  1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card
- Hard drive bay: optional 2.5" SATA HDD or SATA DOM

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
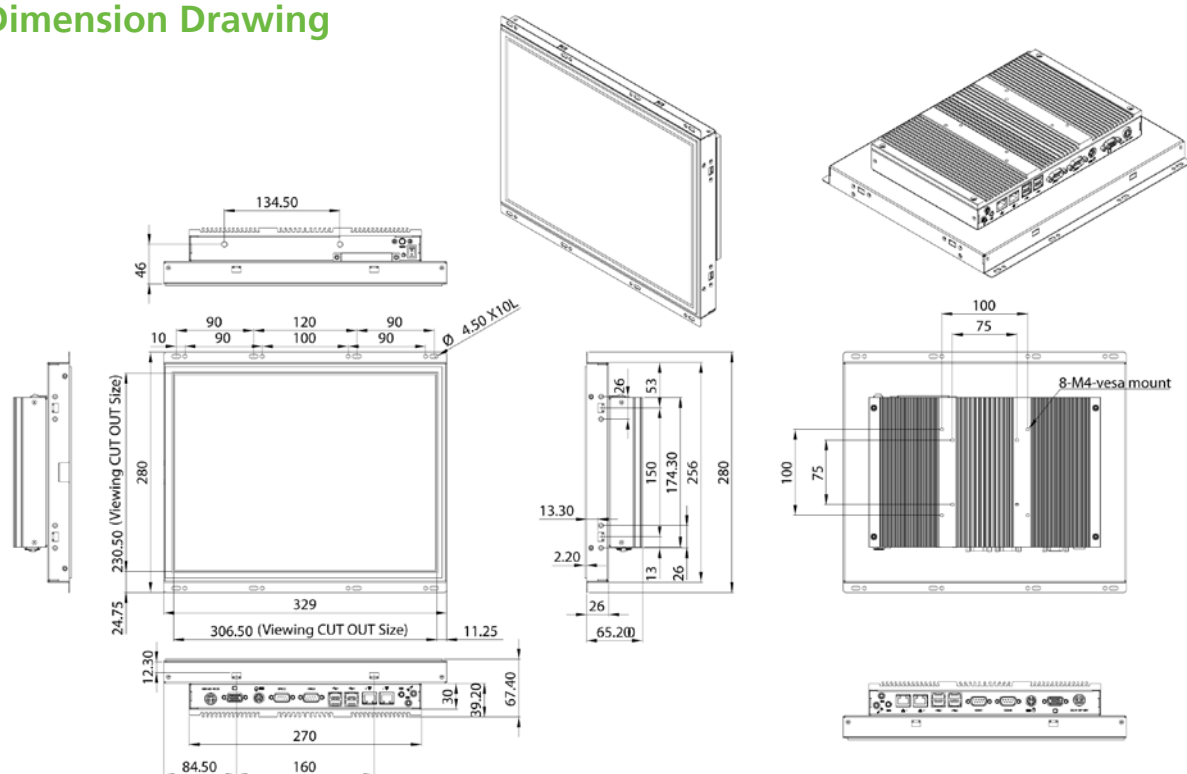- Expansion: 2x Mini-PCIe sockets

Rear I/O
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

Dimension Drawing

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Front panel open frame
- Mounting:
  Open frame mount
  Panel/ wall/ stand/ VESA 75 x 75; 100mm x 100mm
  Power input: 12V~ 30V DC
  Power adapter: Optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity:
  10%~90% relative humidity, non-condensing
  Limits to be at 90% RH at max 30°C
  Limits to be at 70% RH at max 50°C
- Dimension: 329 x 280 x 67.4 mm
- Weight: 4 Kg

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **OPPC 1520T (P/N: 90IQ1520T00X0)**
  15" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2

Options

- 12V, 60W AC/DC power adapter w/o power cord
  (P/N: 7400060002X00)

OPPC 1720T

17" TFT SXGA 4:3 Fanless Panel PC with Intel® Atom™ D525, 1.8GHz, Touch Screen, 1GB DDR3, 4 x USB, 2 x COM and VGA

Main Features

- 4:3 17" Fanless Panel Computer
- Intel® Atom™ D525, Dual Core, Low Consumption CPU
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- 4 x USB/ 2 x mini-PCIe sockets/ 1 x CF/ 2 x RS232/ 422/ 485

- DDR3 1GB / 2.5" HDD Bracket
- Optional Wi-Fi Module / 2.5"HDD / Panel Mount Kit
- Open Frame and Panel Mount/ VESA Mount Compliance
- Wide Range Power Input 12V~ 30V DC

Product Overview

OPPC 1720T fanless Panel PCs are powered by Intel® Atom™ D525 processor with Intel® ICH8M chipset and support for DDR3 memory. OPPC 1720T incorporates a 17" 4:3 touch screen LCD panel with resolutions up to 1280x1024 (SXGA) and 380 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation.

OPPC 1720T is designed to meet the requirements of vertical market segments, such as Kiosk, ATMs, and vending machines. Customers also benefit from various mounting options, including open frame mount from both rear and front sides, VESA mount, wall mount and panel mount. This versatility gives users a quick route to market for a customized Panel PC.

Specifications

Panel
- LCD Size: 17", 4:3
- Resolution: SXGA 1280x1024
- Luminance: 380cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing Angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: CCFL
- Touch screen: 5-wire resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8Hz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory:
  1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card

- Hard drive bay: optional 2.5" SATA HDD or SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: Monitoring system temperature, and voltage
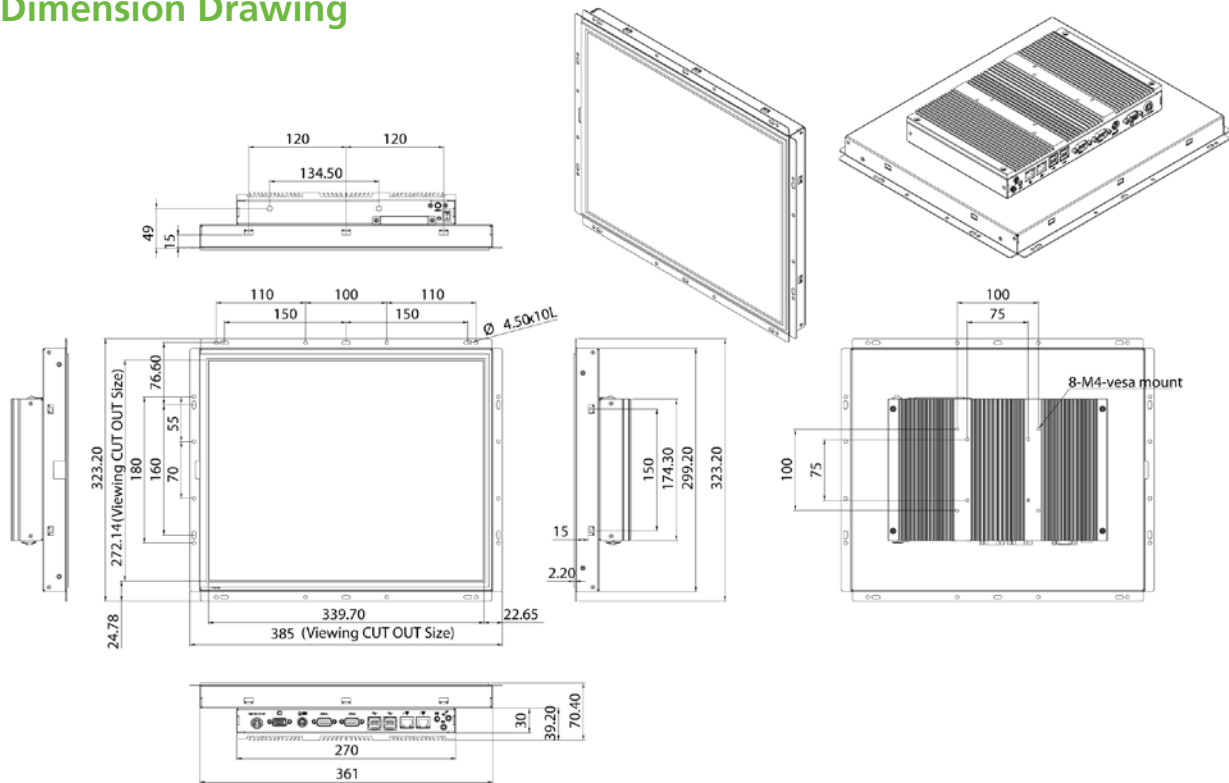- Expansion: 2x Mini-PCIe sockets

Rear I/O
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in
- USB: 4 x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out/Line in/MIC-in Audio Jack

NEXCOM

Dimension Drawing

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Front panel open frame
- Mounting:
  Open frame mount
  Panel/ wall/ stand/ VESA 75 x 75; 100mm x 100mm
- Power input: 12V~ 30V DC
- Power adapter: Optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 385 x 323.2 x 70.4 mm
- Weight: 5.6 Kg

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **OPPC 1720T (P/N: 90IQ1720T00X0)**
  17" TFT Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2

Options

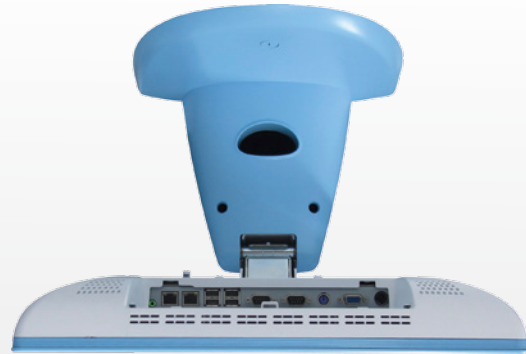- 12V, 60W AC/DC power adapter w/o power cord
  (P/N: 7400060002X00)

HPPC 1920T

19" TFT SXGA 4:3 Flush Panel PC with Intel® Atom™ D525, 1.8GHz, PCT Touch Screen, 1GB DDR3, 4x USB, 2x COM and VGA

Main Features

- 4:3 19" Fanless Panel Computer
- Intel® Atom™ D525, Dual Core, Low-Power Consumption CPU
- PCT (Projected Capacitive Touch) Touch Screen
- Dual GbE/ 2nd display-VGA/ Line-out/ PS2 KB/MS
- 4x USB/ 2x mini-PCIe sockets/ 1x CF/ 2x RS232/422/485

- Optional Wi-Fi Module/ 2.5"HDD
- DDR3 1GB/ 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Stand/ VESA 75mm x 75mm, 100mm x 100mm
- Wide Range Power Input 12V~ 30V DC

Product Overview

Incorporated a 19" 4:3 touch screen LCD panel with resolutions up to 1280x 1024 (SXGA) and 250 nits brightness, the healthcare fanless Panel PC HPPC 1920T utilizes Atom™ D525 processor for medical applications. The Projected Capacitive Touch screen enhances users' interaction and offers smooth strokes on the touch panel. The HPPC 1920T Panel PC has 2GbE LAN, 2x COMs, 4x USB, PS2 KB/MS, and Line-out.

Specifications

Panel
- LCD Size: 19", 4:3
- Resolution: SXGA 1280x1024
- Luminance: 250 cd/m2
- Contrast ratio: 1000
- Viewing angle: 80(U), 80(D), 80(L), 80(R)
- Backlight: CCFL
- Touch screen: PCT (Projected Capacitive Touch)
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default),
- Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compactFlash card
- Hard drive bay: optional 2.5" SATA HDD or SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by

software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion: 2x Mini-PCIe sockets
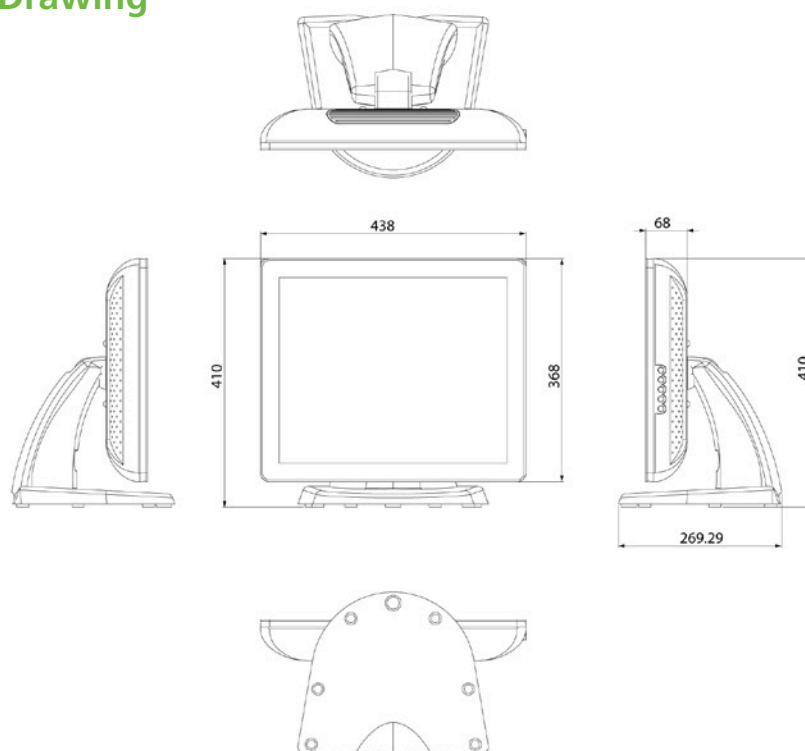- NEXCOM Xcare™ platform system management supported

Rear I/O
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1x Line out
- USB: 4x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button

Audio
- AC97 codec: Realtek ALC888
- Audio interface: Line out Audio Jack

Dimension Drawing

Ethernet
- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- Mounting: panel/ wall/ stand/ VESA 75mm x 75mm, 100mm x 100mm
- Power input: 12V~ 30V DC
- Power adapter: optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  IEC 68 2-27
- HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: 0°C to 45°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10% to 90% relative humidity, non-condensing

Ordering Information

Barebone

- **HPPC 1920T (P/N: TBD)**
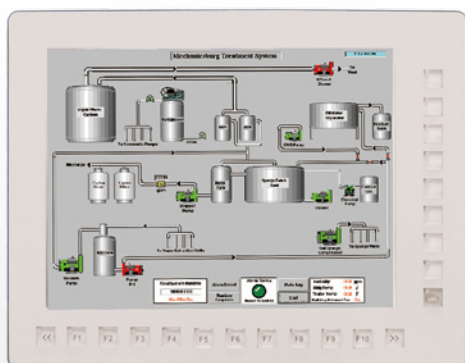 19" TFT Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM #1/ #2

FPPC 1220

12.1" TFT SVGA 4:3 Panel PC with Intel® Atom™ D425, 1.8GHz, 1GB DDR3, 2x USB, 3x COM and VGA

Main Features

- 4:3 12.1" Fanless Panel Computer
- Intel® Atom™ D425, Low-Power Consumption CPU
- DDR3 1GB/ 3x GbE/ 2nd display-VGA/ Line-out/ MIC-in/ PS2 KB/MS
- USB x 2/ 1x PCI slot/ 1x CF/ 2x RS232/ 1x RS232/422/485

- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 75mm x 75mm, 100mm x 100mm

Product Overview

Incorporated a 12.1" 4:3 LCD panel with resolutions up to 800x 600 (SVGA) and 350 nits brightness, industrial motherboard for diverse industrial applications, the factory automation fanless Panel PC FPPC 1220 utilizes Atom™ D425 processor. The IP65 compliant front panel can be offered for automation machine applications.

The FPPC 1220 Panel PC has 3GbE LAN, 3x COMs, 2x USB, PS2 KB/MS, and Line-out/MIC-in. With a VGA port, FPPC series can hook 2nd display delivering different content.

Specifications

Panel
- LCD Size: 12.1", 4:3
- Resolution: SVGA 800x600
- Luminance: 370cd/m2
- Contrast ratio: 450
- Viewing angle: 50(U), 60(D), 70(L), 70(R)
- Backlight: CCFL

System
- CPU: Intel® Atom™ D425, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default),
- Support up to 2GB DDR3 800, non-ECC and un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compactFlash card
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion: 1x PCI slot
- NEXCOM Xcare™ platform system management supported

Rear I/O
- COM #1: RS232
- COM #2: RS232
- COM #3: RS232/422/485
- Ethernet: 3x RJ45
- 2nd display VGA port: 1x DB15
- Audio port: 1x Line out; 1x MIC-in
- USB: 2x USB 2.0
- PS2 keyboard/ mouse

Audio
- AC97 codec: Realtek ALC888
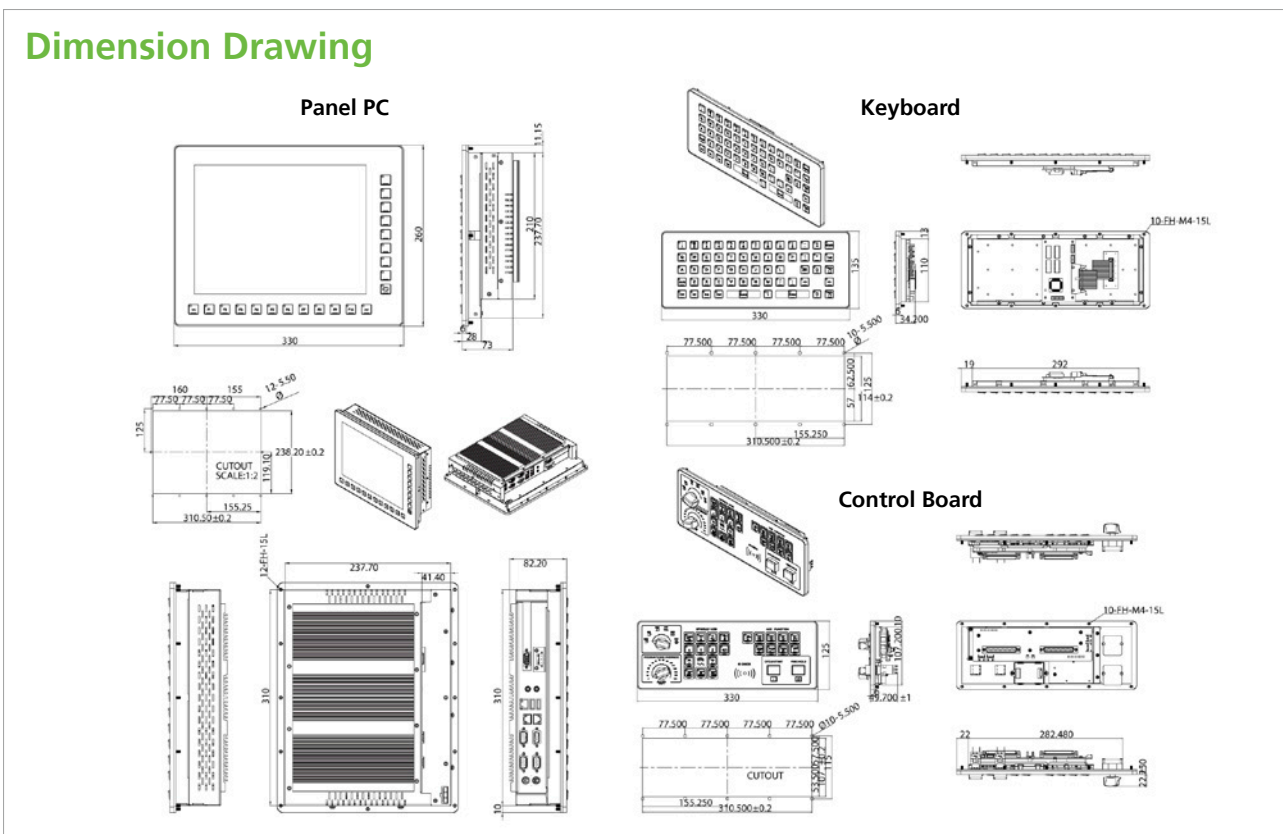- Audio interface: Line out/ MIC-in Audio Jack

Ethernet
- LAN chip: 3x Realtek 8111L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 75mm x 75mm; 100mm x 100mm
- Power input: 24V DC

Dimension Drawing

Panel PC

Keyboard

Control Board

- Vibration:
  IEC 68 2-64 (w/ HDD)
  0.5Grms @sine, 5~500Hz, 1hr/axis (HDD operating)
  2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  IEC 68 2-27
- HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10% to 90% relative humidity, non-condensing

Ordering Information

Barebone

- **FPPC 1220 (P/N: TBD)**
  12.1" TFT Panel PC with Intel® Atom™ D425 1.8 GHz, 1GB DDR3, COM #1/ #2/ #3
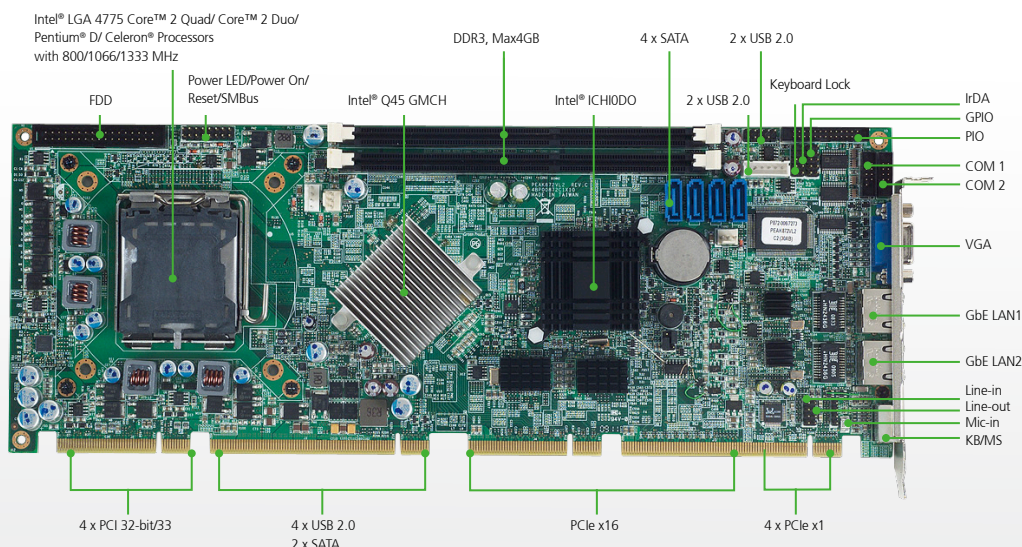
PEAK 872VL2

Intel® Core™ Quad/Core™ 2 Duo LGA775 with
2 x PCI Express Gigabit LAN/6 x SATA/8 x USB 2.0

Main Features

- Intel® LGA775 Core™ 2 Quad/ Core™ 2 Duo/ Pentium® D/ Celeron® Processors with 800/1066/1333 MHz
- Support Non-ECC Dual Channel DIMM-DDR3 800/1066 MHz up to 4GB
- 2 x 82574 PCI Express Gigabit Ethernet LAN

- 6 x SATA, 8 x USB2.0, 2 x COM, 1 x Parallel, 1 x Floppy
- Intel® Q45 GMCH Integrated Intel® GMA4500, Max 128 MB of DVMT for Graphics Memory Allocation
- Analog Display Supports up to 2045 X 1536 at 75 Hz for CRT

Product Overview

PEAK 872VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel® Core™ 2 Quad/Core™ 2 Duo technology. Featuring Intel® Q45 and ICH10 DO chipsets, the PEAK 872VL2 supports socket LGA775 of Intel® Pentium® D/Celeron® processors with 800/1066/1333 MHz FSB supporting speeds up to 3.0 GHz and Hyper-Threading technology. The Intel® Q45 supports dual channel non-ECC DDR3 800/1066 MHz memory in two DIMM slots and an integrated graphics controller. The South Bridge ICH10 DO manages Ultra ATA/100 & SATA HDD ports, parallel port, and floppy port. Furthermore, it supports other versatile I/O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports.

NEXCOM offers the following 2U and 4U backplanes that support the PICMG 1.3 specification:
2U Backplane: NBP 2U220/NBP 2U040
4U Backplane: NBP 14570/NBP 14111/NBP 14210

The PEAK 872VL2 with Intel® Core™ 2 Duo technology and PCI Express LAN offer a great solution for advanced industrial application that require superb display and processing performance.

Specifications

CPU Support
- Support Intel® LGA775 Core™ 2 Quad, Core™ 2 Duo, Pentium® D/ Celeron® processors with 800/1066/1333 MHz
- Intel® Embedded Processor List (Intel® Longevity CPU):
  Intel® Core™ 2 Quad Processor (Q9400)
  Intel® Core™ 2 Duo Processor (E8400 & E7400 & E6400 & E4300)
  Intel® Pentium® Dual Core Processor (E2160)
  Intel® Celeron® Processor 440

Main Memory
- 2 x 240-pin DIMM, for up to 4GB dual channel Non-ECC DDR3 800/1066 SDRAM

Chipset
- Intel® Q45 Graphic Controller Hub (GMCH)
- Intel® ICH10 DO

BIOS
- Award system BIOS

- Plug & Play support
- Advanced Power Management and Advanced Configuration & Power Interface support

On-board LAN
- 2 x Intel® 82574L PCI Express Gigabit Ethernet Controllers
- Support Boot From LAN (PXE)
- 2 x RJ45 with LED

Display
- Intel® Q45 GMCH Integrated Intel® GMA4500, Max 128 MB of DVMT for Graphics Memory Allocation
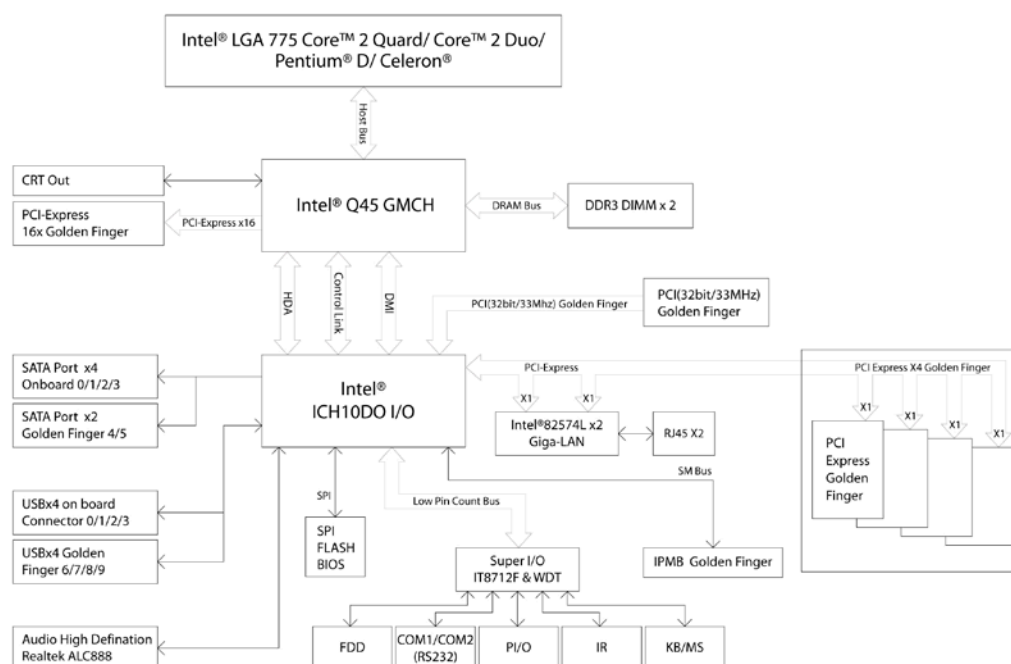- Analog display support up to 2048x1536 @ 75Hz for CRT

Audio
- HD Audio Codec, Realtek ALC888
- 3 x (1x4-pin) headers for Line-in/Line-out/MIC-in

I/O Interfaces
- USB 2.0: 8 ports (4 on board, 4 to backplane)

Block Diagram

- Serial port: 2 port, with 2x5pin headers (COM 1 and COM 2)
- SATA HDD: 6 ports, Support RAID 0/1/5/10 and Intel® Matrix Storage Technology (Intel® MST) (4 on board, 2 to backplane)
- Parallel port: 1 x 26-pin connector
- Floppy: 1 x 34-pin connector
- IrDA: 1 x 5-pin header
- GPIO: Supports 4 sets general purpose I/O each with TTL level (5 V) interface
- On-board buzzer x 1
- Power LED/Power On/ Reset/ SMBUS HDD Active LED/ PC speaker: 2 x 8 pin header
- 5-pin for key lock
- 1 x 4-pin fan connector (for CPU); 2 x 3-pin fan connectors (for System)
- IPMB interface through PICMG 1.3 Golden-finger
- I/O On SBC Bracket
  1 x VGA DB-15 connector
  2 x RJ45 Gigabit Ethernet LAN port
  1 x PS/2 Keyboard/Mouse

Watchdog Timer
- 1-minute increments from 1 to 255 minutes
- 1-second increments from 1 to 255 seconds
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

System Monitor
- 4 Voltages (+3.3V, +5V, +12V, Vcore)
- 2 Temperatures (For CPU and System)
- 3 FAN speed monitors (1 for CPU and 2 for System FAN)

Dimensions
- PICMG 1.3 SHB
- Dimension: 338.58mm (L) x 126.39mm (W) (13.3" x 4.9")

Power Input
- Power source from backplane through golden finger

- Support ATX power supplies
- +12V/+5V/+3.3V/+5Vsb

Environment
- Board level operating temperatures: -15°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **PEAK 872VL2 (P/N: 10P0872VL00X0)**

  PICMG 1.3 Full-Size SHB, Intel® Q45 Chipset, LGA775 Core™ 2 Quad/ Core™ 2 Duo/ Pentium® D/ Celeron® with 800/1066/1333 MHz FSB, 32bit/33MHz PCI, DDR3 DIMM x 2, VGA integrated, Intel® 82574L PCI Express Gigabit Ethernet x 2, Six Serial ATA

PEAK 876VL2

Intel® Core™ i5/ i3/ Pentium® LGA1156 with
2 x PCI Express Gigabit LAN/ 6 x SATA/ 8 x USB 2.0
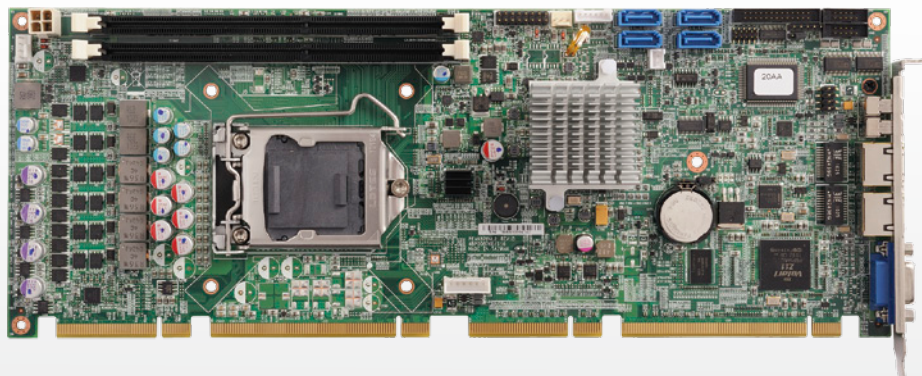
Main Features

- Intel® Core™ i5/ i3/ Pentium Integrated Graphics
- Support Intel® LGA1156, Core™ i5/ i3/ Pentium®
- 1 x 82574 PCI Express Gigabit Ethernet
- 1 x 82578DM Gigabit Ethernet

- 6 x SATA, 8 x USB2.0, 2 x COM, 1 x Parallel
- Support Non-ECC Dual Channel DIMM-DDR3 1066/1333 MHz up to 8GB
- Intel® AMT 6.0

Product Overview

PEAK 876VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel® Core™ i5/i3/Pentium® processors with Hyper-Threading technology. The Intel® Core™ i5/i3/Pentium® supports dual channel non-ECC DDR3 1066/ 1333 MHz memory in two DIMM slots and a Core™ i5/i3/ Pentium® integrated graphics controller. The Q57 Express Chipset PCH manages SATA HDD ports, parallel port. Furthermore, it supports other versatile I/O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports. The PEAK 876VL2, with Intel® Core™ i5/ i3/ Pentium® and PCI Express LAN, offers a great solution for advanced industrial application that requires superb display and processing performance.

Specifications

CPU Support
- Intel® LGA1156, Core™ i5/ i3/ Pentium®

Main Memory
- 2 x 240-pin DIMM, for up to 8GB dual channel Non-ECC DDR3 1066/1333 SDRAM

Chipset
- Intel® Q57 Express Chipset PCH

BIOS
- AMI BIOS
- Plug & Play support
- Advanced Power Management and Advanced Configuration & Power Interface support

On-board LAN
- 1 x Intel® 82578DM PHY for AMT 6.0
- 1 x Intel® 82574L PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2 x RJ45 with LED

Display
- Intel® Core™ i5/ i3/ Pentium® processors Integrated graphics
- Analog display support up to 2048x1536 @ 75Hz for CRT

I/O Interfaces
- USB 2.0: 8 ports (2 on board, 4 to backplane), 2 ports through I/O Bracket
- Serial port: 2 port, with 2x5pin headers (COM 1 and COM 2)
- SATA HDD: 6 ports, Support RAID 0/1/5/10 and Intel® Matrix Storage
- Parallel port: 1 x 26-pin connector
- IrDA: 1 x 5-pin header
- GPIO: Supports 4 sets general purpose I/O each with TTL level (5 V) interface
- On-board buzzer x 1
- Power LED/Power On/Reset/SMBUS: 2 x 8 pin header
- 1 x 4-pin fan connector (for CPU); 1 x 3-pin fan connectors (for System)
- IPMB interface through PICMG 1.3 Golden-finger
- I/O On SBC Bracket
  1 x VGA DB-15 connector
  2 x RJ45 Gigabit Ethernet LAN port
  2 x USB 2.0 Ports

Watchdog Timer
- 1-minute increments from 1 to 255 minutes
- 1-second increments from 1 to 255 seconds
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Block Diagram
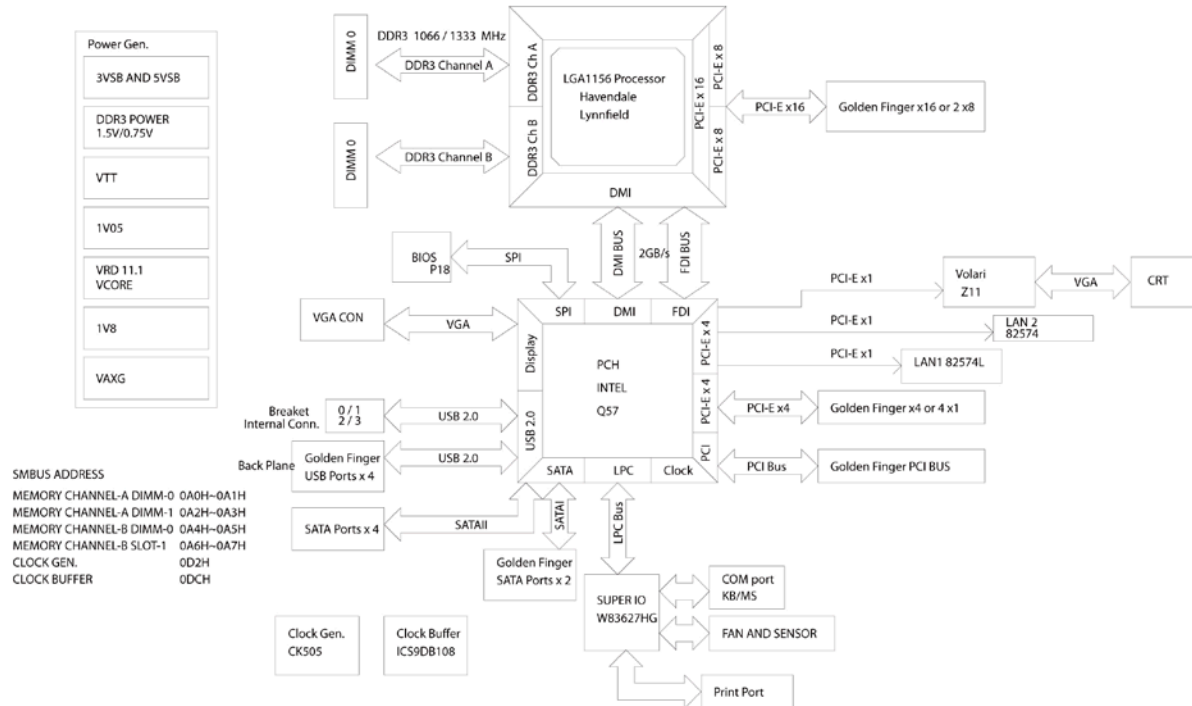
System Monitor

- 6 Voltages (+3.3V, +5V, +12V, Vcore) memory, VTT
- 3 Temperatures (For CPU and System)
- 2 FAN speed monitors (1 for CPU and 2 for System FAN)

Dimensions

- PICMG 1.3 SHB
- Dimension: 338.58mm (L) x 126.39mm (W) (13.3" x 4.9")

Power Input

- Power source from backplane through golden finger and AUX +12V
- Support ATX/AT power supplies
- +12V/ +5V/ +3.3V/ +5Vsb

Environment

- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **PEAK 876VL2 (P/N:10P0876VL00X0)**

  PICMG 1.3 Full-Size SHB, Intel® LGA1156, Core™ i5/ i3/ Pentium® with Max 8GB, DDR3 DIMM, VGA
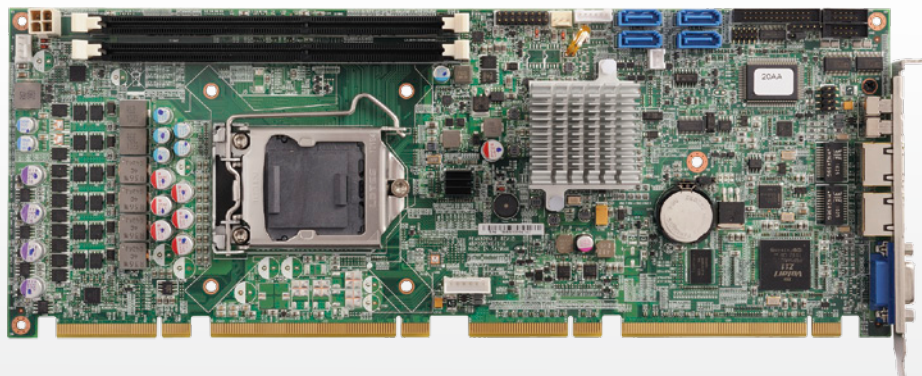
PEAK 877VL2

Intel® Core™ i7/ i5/ i3/ Pentium® LGA1156 with
2 x PCI Express Gigabit LAN/ 6 x SATA/ 8 x USB 2.0

Main Features

- Onboard XGI Z11 graphic for Intel® Core™ i7 processors
- Support Intel® LGA1156, Core™ i7/ i5/ i3/ Pentium®
- 1 x 82574 PCI Express Gigabit Ethernet
- 1 x 82578DM Gigabit Ethernet

- 6 x SATA, 8 x USB2.0, 2 x COM, 1 x Parallel
- Support Non-ECC Dual Channel DIMM-DDR3 1066/1333 MHz up to 8GB
- Intel® AMT 6.0

Product Overview

PEAK 877VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel® Core™ i7/ i5/ i3/ Pentium® processors with Hyper-Threading technology. The Intel® Core™ i7/ i5/ i3/ Pentium® supports dual channel non-ECC DDR3 1066/ 1333 MHz memory in two DIMM slots and an XGI Z11 integrated graphics controller. The Q57 Express Chipset PCH manages SATA HDD ports, parallel port. Furthermore, it supports other versatile I/O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports. The PEAK 877VL2, with Intel® Core™ i7/ i5/ i3/ Pentium® and PCI Express LAN, offers a great solution for advanced industrial application that requires processing performance.

Specifications

CPU Support
- Intel® LGA1156, Core™ i7/ i5/ i3/ Pentium®
- Intel® Quad Core™ i5/ i7

Main Memory
- 2 x 240-pin DIMM, for up to 8GB dual channel Non-ECC DDR3 1066/1333 SDRAM

Chipset
- Intel® Q57 Express Chipset PCH

BIOS
- AMI BIOS
- Plug and play support
- Advanced power management and advanced configuration & power interface support

On-board LAN
- 1 x Intel® 82578DM PHY for AMT 6.0
- 1 x Intel® 82574L PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
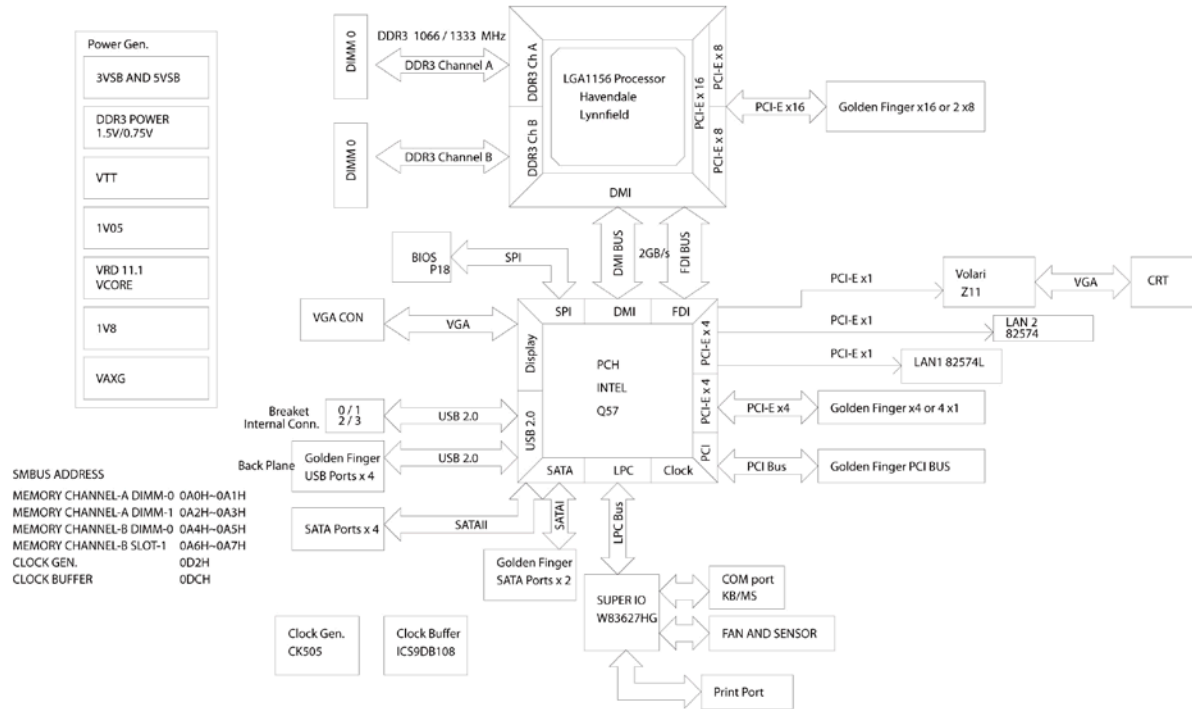- 2 x RJ45 with LED

Display
- Integrated graphic engine by XGI Volari Z11 GPU with DDR2 SDRAM through PCIe 1 x Interface

- Analog VGA Interface: 230MHz pixel clock support CRT display up to 1600x1200@70Hz 16M colors

I/O Interfaces
- USB 2.0: 8 ports (2 on board, 4 to backplane), 2 ports through I/O Bracket
- Serial port: 2 port, with 2x5pin headers (COM 1 and COM 2)
- SATA HDD: 6 ports, Support RAID 0/1/5/10 and Intel® Matrix Storage Technology (Intel® MST)
- Parallel port: 1 x 26-pin connector
- IrDA: 1 x 5-pin header
- GPIO: Supports 4 sets general purpose I/O each with TTL level (5 V) interface
- On-board buzzer x 1
- Power LED/ Power On/ Reset/ SMBUS: 2 x 8 pin header
- 1 x 4-pin fan connector (for CPU); 1 x 3-pin fan connectors (for System)
- IPMB interface through PICMG 1.3 Golden-finger
- I/O On SBC Bracket
- 1 x VGA DB-15 connector
- 2 x RJ45 Gigabit Ethernet LAN port
- 2 x USB 2.0 Ports

Block Diagram

Watchdog Timer
- 1-minute increments from 1 to 255 minutes
- 1-second increments from 1 to 255 seconds
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

System Monitor
- 6 Voltages (+3.3V, +5V, +12V, Vcore) memory, VTT
- 3 Temperatures (For CPU and System)
- 2 FAN speed monitors (1 for CPU and 2 for System FAN)

Dimensions
- PICMG 1.3 SHB
- Dimension: 338.58mm (L) x 126.39mm (W) (13.3" x 4.9")

Power Input
- Power source from backplane through golden finger and AUX +12V
- Support ATX/AT power supplies
- +12V/+5V/+3.3V/+5Vsb

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **PEAK 877VL2 (P/N:10P0877VL00X0)**

  PICMG 1.3 Full-Size SHB, Intel® LGA1156, Core™ i7/ i5/ i3/ Pentium® with Max 8GB, DDR3 DIMM, VGA integrated, Intel® 82574L PCI Express Gigabit Ethernet x 2, Serial ATA x 4
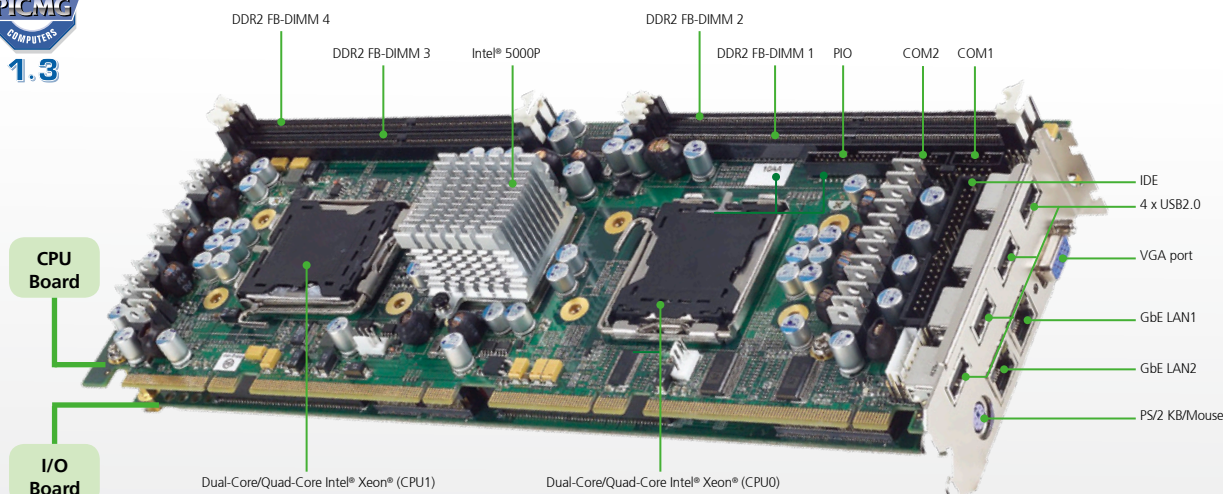
PEAK 8920VL2

**Intel® Dual-Core Xeon® LGA771 Processor with
Fully Buffered DIMM/2 x PCI Express Gigabit LAN/6 x USB**

Main Features

- Quad Core/Dual-Core Xeon® Processor SBC
- Intel® 5000P Embedded Chipset with Longevity Support
- Robust Mechanism Design for Enhanced Product Reliability
- Up to 8GB ECC/Register FB-DIMM DDR 2 Memory
- Dual PCI Express Gigabit Ethernet for High Networking Bandwidth

- Four USB 2.0 Directly Output from Bracket to Save the Cabling Cost
- Flexible Design for Single/Dual Processors
- Dedicated CPU Cooler Design for Thermal Solution

Product Overview

The PEAK 8920VL2 supports LGA771 Dual-Core Quad-Core Intel® Xeon® Processor up to 2.33 GHz with 1333 MHz FSB. Featuring an Intel® 5000P Chipset + Intel® ESB2, the PEAK 8920VL2 delivers higher throughput with dual point-to-point system buses, faster memory for I/O bandwidth, and Fully Buffered DIMM (FB-DIMM) support. The SBC PEAK 8920VL2 is successor to flagship PEAK 7220, which complied with PICMG 1.3 to ensure easy configuration, highest quality standard, and seamless compatibility with products from other manufactures. With the excellent I/O Bandwidth handling, the industrial graded high performance PEAK 8920VL2 is suitable to configure for medical and Gaming.

Specifications

CPU Support
- Support Dual-Core Intel® Xeon® processor 5100 series and Quad-Core Intel® Xeon® Processor 5300 series (80W)
- Intel® Embedded Processor List (Intel® Longevity CPU):
  Dual-Core Intel® Xeon® Processor (5130 & 5140)
  Dual-Core Intel® Xeon® Processor LV (5128, 5138, 5148)
- 1066/1333 MHz FSB support

Main Memory
- 4 x 240-pin four channel DDR 2 FB-DIMM
- Support ECC/Register DDR2 memory up to 8GB

Chipset
- Intel® 5000P memory controller Hub
- Intel® 6321ESB I/O controller Hub

BIOS
- AMI BIOS
- Plug & Play support
- Support Soft off, Wake on LAN, Power On by PS2 Keyboard Function Key, RTC alarm Power On
- Power on after power failure
- 8M-bit flash ROM

On-board LAN
- 2 x Intel® 82573L PCI Express Gigabit Ethernet

- Support Boot From LAN (PXE)
- Support Wake On LAN (When 5Vsb power available)
- 2 x RJ45 with LED

Display
- ATI ES1000 PCI graphic Controller
- 32MB DDR2 SDRAM VGA Memory
- 1 x DB15 VGA port

I/O Interface
- USB 2.0: 4 ports through I/O bracket
- USB 2.0: 2 ports, with 1x6 JST (2.5mm)
- Serial port: 2 ports, with 2x5 box-header (2.0mm) support RS-232 only
- Parallel port: 1 port , with 2x13 box-header (2.0mm), Bi-directional, EPP/ECP
- PS/2: 1 x Mini-Din Keyboard/Mouse
- GPIO: Support 4 sets of general purpose I/O each with TTL level (5V) interface
- FAN: 2 x 4-pin FAN connectors (for CPU coolers)
- 1 x on board buzzer
- 1 x 2-pin power on switch/1 x SMBus 2.0 to Backplane
- 1 x 2-pin header for reset/1 x 5-pin header for key lock
- 1 x 2-pin header for power LED/1 x 2-pin header for HDD LED

Block Diagram
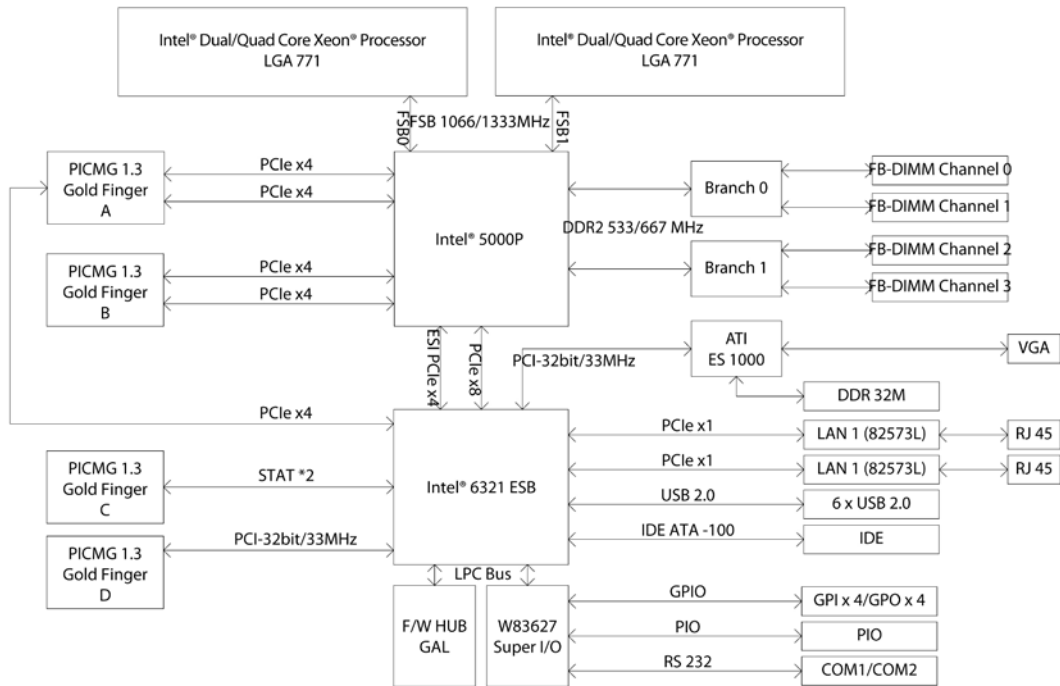
Watchdog Timer
- Watchdog Timer is programmable by software from 0 to 255 seconds (Tolerance 10% under room temperature 25°C)

Storage
- SATA: 2 ports, support RAID 0,1 through Backplane
- IDE: 1 x 40-pin IDE connector, support Ultra ATA 33/66/100
- 1 x 2-pin JST (2.5mm) power connector for DOM (Disk On Module)

System Monitor
- 8 voltage (For +3.3V, +12V, Vcore x2, 1.8V, 1.5V, 5Vsb)
- 3 temperature (For 2 CPU and system)
- 3 FAN speed monitor (2 for CPU and 1 for ESB2)

On-board RTC
- On-chip RTC with battery back up
- 1 x External Li-Lon battery

Dimensions
- PICMG 1.3 SHB
  338.58mm (L) x 126.39mm (W) (13.3" x 4.9")

Power Input
- Power source from backplane through PICMG 1.3 Golden Finger, support ATX mode

CPU: 2 x Dual-Core Xeon® 3.0G Memory: 4 x FBD DDR2 2.0GB	+12V	+5V	+3.3V	+5Vsb
Full-Loading Mode	21.4 A	2.07 A	3.85 A	0.04 A
Light-Loading Mode	10.59 A	1.69 A	3.63 A	0.04 A

* Note:
1. Full Loading: Utilize CPU 100% with Burn-in test running
2. Light Loading: Utilize CPU loading below 5% without data or application running

Environment
- Operating Temperature: 0°C to 60°C (for Board Level Only)
- Storage Temperature: -20°C to 85°C
- Relative Humidity:
  Operating: 10% to 90% (non-condensing)
  Non-Operating: 5% to 95% (non-condensing)

Certifications
- CE approval
- FCC Class A
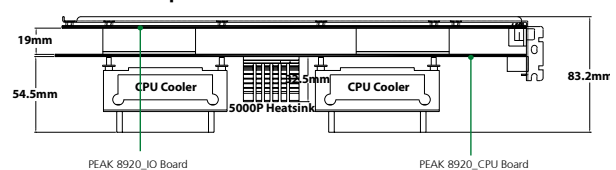
Ordering Information

- **PEAK 8920VL2 (P/N: 10P00892000X0)**
  PICMG 1.3 Full-Size SHB Express (System Host Board), Intel® 5000P Chipset, LGA 771 socket support Dual-Core/Quad-Core Intel® Xeon® processors w/ 4 DDR2 FB-DIMM/2 Express GbE/6 USB2.0/VGA/2 SATA.

NEXCOM Backplane Support List
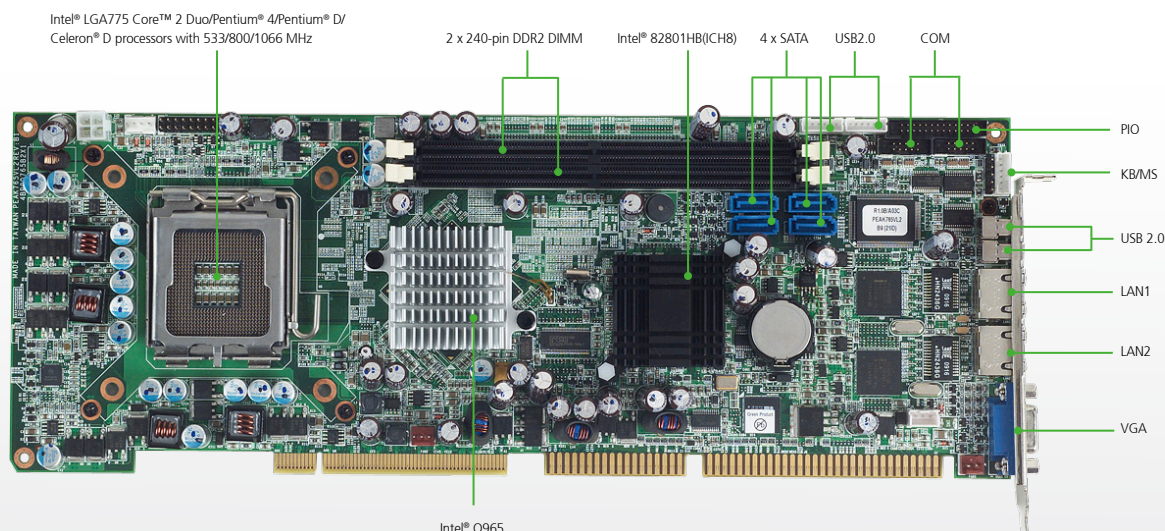
NBP 14111	PICMG1.3 Passive Backplane 14-slots w/ 1 PICMG 1.3 SHB/1 PCIe x16 slot/4 PCI slots/8 PCI-X slots
NBP 20016	PICMG1.3 Passive Backplane 20-slots w/ 1 PICMG 1.3 SHB/16 PCI-X slots

PEAK 8920VL2 Top View

PEAK 765VL2

Intel® LGA775 Core™ 2 Duo/Pentium® 4/Pentium® D/
Celeron® D processors with 533/800/1066 MHz

2 x 240-pin DDR2 DIMM   Intel® 82801HB(ICH8)   4 x SATA   USB2.0   COM

PIO

KB/MS

USB 2.0

LAN1

LAN2

VGA

Intel® Q965

Main Features

• Single Socket LGA775, Supports Intel® Core™ 2 Duo with 533/800/1066 MHz FSB
• Intel® Q965 and ICH8 chipset

• 2 x 240-pin DIMM, Supports Dual Channel 533/667/800 MHz DDR2
• 2 x Intel® 82573L PCI Express Gigabit Ethernet LAN
• 4 x SATA, 6 x USB 2.0, 2 x COM Ports

Product Overview

PEAK 765VL2 is the PICMG 1.0 full-size Single Board Computer (SBC), which support Intel® Core™2 Duo technology. Featuring Intel® Q965 and ICH8 chipsets, the PEAK 765VL2 supports socket LGA775 of Intel® Core™ 2 Duo/Pentium® 4/Pentium® D/Celeron® D processor with 533/800/1066 MHz FSB.

The Intel® Q965 supports dual channel non-ECC DDR2 533/667/800 MHz memory up to 4GB maximum with two DIMM slots and an integrated graphics controller. The South Bridge ICH8 manages SATA HDD ports, and parallel port. Furthermore, it supports other versatile I/O ports such as two serial ports, six USB ports and two PCI Express Gigabit LAN ports.

Specifications

CPU Support
• Supports Intel® LGA775 Core™ 2 Duo/Pentium® 4/Pentium® D/ Celeron® D processors
• Intel® Embedded Processors List (Intel® Longevity CPU)
  Intel® Core™ 2 Duo Processor E6400 & E4300 & E2160
  Intel® Pentium® 4 Processor 651 & 551 & 531
  Intel® Celeron® D Processor 352 & 341
  Intel® Celeron® Processor 440
• 533/800/1066 MHz System Bus

Main Memory
• 2 x 240-pin DIMM, support Dual channel 533/667/800 MHz SDRAM DDR2
  memory up to 4GB
* Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation

Chipset
• Intel® Q965 Graphics Memory Controller Hub (GMCH)
• Intel® 82801HB (ICH8) I/O Controller Hub

BIOS
• Award System BIOS

• Plug & Play support
• 8M-bit flash ROM

On-board LAN
• 2 x Intel® 82573L PCI Express Gigabit Ethernet LAN
• 2 x RJ45 with LED
• Supports Boot From LAN (PXE)
• Supports Wake on LAN
 (When 5Vsb power available, and for LAN 2 only)

Display
• Intel® Q965 GMCH Integrated Intel® GMA 3000
• Max 256 MB of DVMT for graphics memory
• CRT: 1 x DB15 VGA connector, Resolution up to 2048 x 1536

I/O Interface
• USB 2.0: 6 ports, 2 ports through I/O bracket, 4 ports through 1x6 JST
• Serial port: 2 ports, with 2x5 box header (2.0mm) , supports RS232 only
• Parallel port: 1 port, with 2x13 box-header (2.0mm)
• PS2: 1 x 6-pin JST connector (2.0mm) for KB/Mouse
• Fan: 4-pin wafer for CPU; 3-pin wafer for System; 3-pin wafer for MCH

Block Diagram
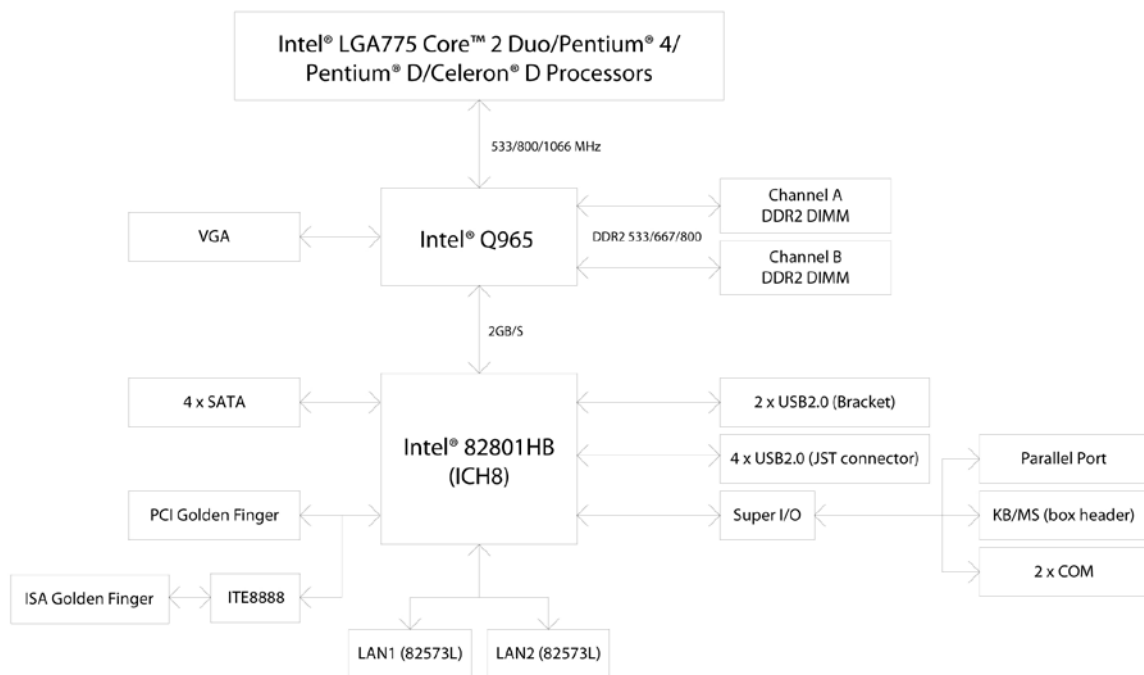
- 2-pin header for SMB; 2-pin header for reset; 2-pin header for power on switch
- 2-pin header for power LED; 2-pin header for HDD LED
- On-board buzzer/IrDA (share with COM2)
- SATA: 4 ports
- I/O on bracket
  1 x DB15 VGA connector
  2 x RJ45 GbE port
  2 x USB2.0

Storage
- SATA: 4 ports (without Raid function)

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds
- Tolerance 15% under room temperature 25°C

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li Battery
- Torrance less than 2sec (24 hours) under 25°C

ISA Support
- Through PCI to ISA Interface (ITE 8888)
- No ISA Master Devices but ISA DMA Devices
- Maximize ISA Slot support up to 3

System Monitor
- 4 voltage (For +3.3V, +5V, +12V, Vcore)
- 3 Temperatures (CPU, two external Temperature Sensor)
- 3 FANs speed (CPU, System and MCH FANs)

Power Input
- Power source from backplane through PCI/ISA Golden Finger
- Supports both AT or ATX Power Supplies
  (Automatically, BIOS default: AT Mode)

- When change to ATX, the BIOS default setting is as follow:
  POWER -SUPPLY TYPE--> [ATX]
  AUTO PWR-FAILURE RESUME -->[ON]
- +3.3V is Converted from +5V and not directly from Backplane or Power Supply
- +5Vsb (Standby power) is connected from Backplane through 3pins Connectors
- 4 Pins +12V Power Input Connector

Dimensions
- 338.58mm (L) x 122mm (W) (13.3" x 4.8")

Environment
- Board level operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90% (Non-condensing)
  Non-operating 5% to 95%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **PEAK 765VL2 (P/N: 10P0765VL01X0)**

  PICMG 1.0 Full-Size SBC, Intel® Q965 Chipset, Intel® LGA775 Core™ 2 Duo/Pentium® 4/Pentium® D/Celeron® D processors with 533/800/1066 MHz, Max. 4GB DDR2 DIMM, VGA integrated, 2 x GbE, 4 x SATA Ports

PEAK 777VL2

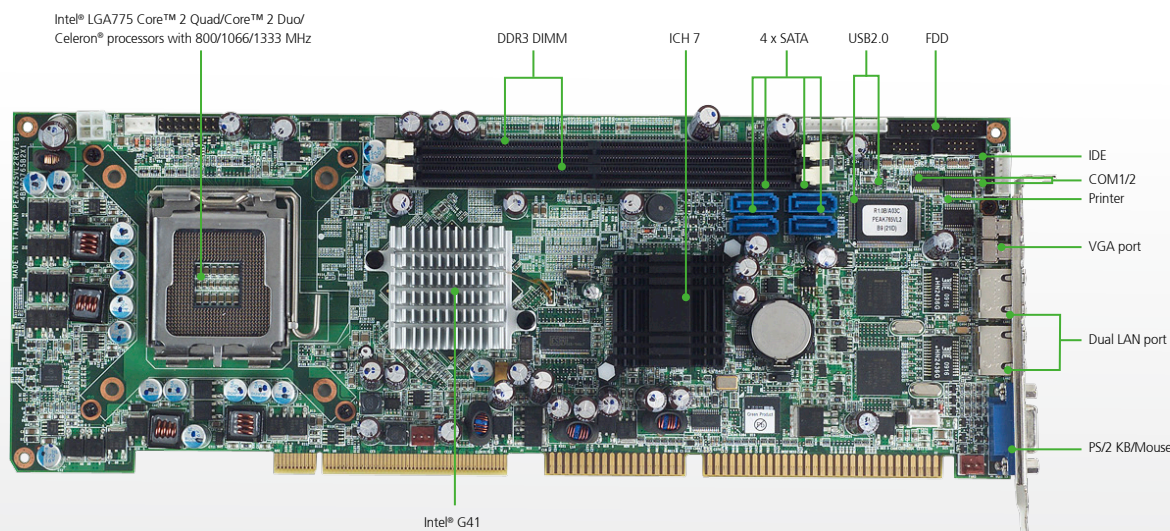Intel® LGA775 Core™ 2 Quad/Core™ 2 Duo/
Celeron® processors with 800/1066/1333 MHz

DDR3 DIMM   ICH 7   4 x SATA   USB2.0   FDD

IDE
COM1/2
Printer

VGA port

Dual LAN port

PS/2 KB/Mouse

Intel® G41

Main Features

- Single Socket LGA775, Support Intel® 45nm/65nm Core™ 2 Duo/ Core™ 2 Quad with 800/1066/1333 MHz FSB
- Intel® G41 and ICH7/ICH7R

- 2 x DIMM, Support DDR3 Memory up to 4GB
- 2 x Intel® 82574L PCI Express Gigabit Ethernet LANs
- 4 x SATA, 8 x USB 2.0, 2 x COM Ports

Product Overview

PEAK 777VL2 is the PICMG 1.0 full-size Single Board Computer (SBC), which support Intel® 45nm Core™ 2 Duo/Quad technology. Featuring Intel® G41 and ICH7 chipsets, the PEAK 777VL2 support socket LGA775 of Intel® Core™ 2 Quad/Core™ 2 Duo/Celeron® processor with 800/1066/1333MHz FSB.

The Intel® G41 supports dual channel non-ECC DDR3 memory up to 4GB maximum with two DIMM slots and an integrated graphics controller. The South Bridge ICH7 manages SATA HDD ports, and parallel. Furthermore, it supports other versatile I/O ports such as two serial ports, six USB ports and two PCI Express Gigabit LAN ports.

Specifications

CPU Support
- Supports Intel® LGA775 Core™ 2 Quad/Core™ 2 Duo/Celeron® processors
- Intel® Embedded Processors List (Intel® Longevity CPU)
  Intel® Core™ 2 Quad Processor Q9400
  Intel® Core™ 2 Duo Processor E8400 & E7400 & E1500
  Intel® Celeron® 440 Processor
- 800/1066/1333 MHz System Bus

Main Memory
- 2 x DIMM, support Dual channel SDRAM DDR3 memory up to 4GB, FSB 1066/800MHz
- * Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation

Chipset
- Intel® G41 Graphics Memory Controller Hub (GMCH)
- Intel® ICH7/ICH7R I/O Controller Hub

BIOS
- Award System BIOS
- Plug & Play support
- 8M-bit flash ROM

On-board LAN
- 2 x Intel® 82574L PCI Express Gigabit Ethernet LAN
- 2 x RJ45 with LED
- Supports Boot From LAN (PXE)
- Supports Wake on LAN (When 5Vsb power available, LAN1 & LAN2)

Display
- Intel® G41 GMCH Integrated
- CRT: 1 x DB15 VGA connector

I/O Interface
- USB 2.0: 6 ports, through 1x6 JST
- Serial port: 2 ports, with 2x5 box header (2.0mm), supports RS232 only
- Parallel port: 1 port, with 2x13 box-header (2.0mm)
- PS2: 1 x 6-pin JST connector (2.0mm) for KB/Mouse
- Fan: 4-pin wafer for CPU; 3-pin wafer for System; 3-pin wafer for MCH
- 2-pin header for SMB; 2-pin header for reset; 2-pin header for power on switch
- 2-pin header for power LED; 2-pin header for HDD LED

Block Diagram
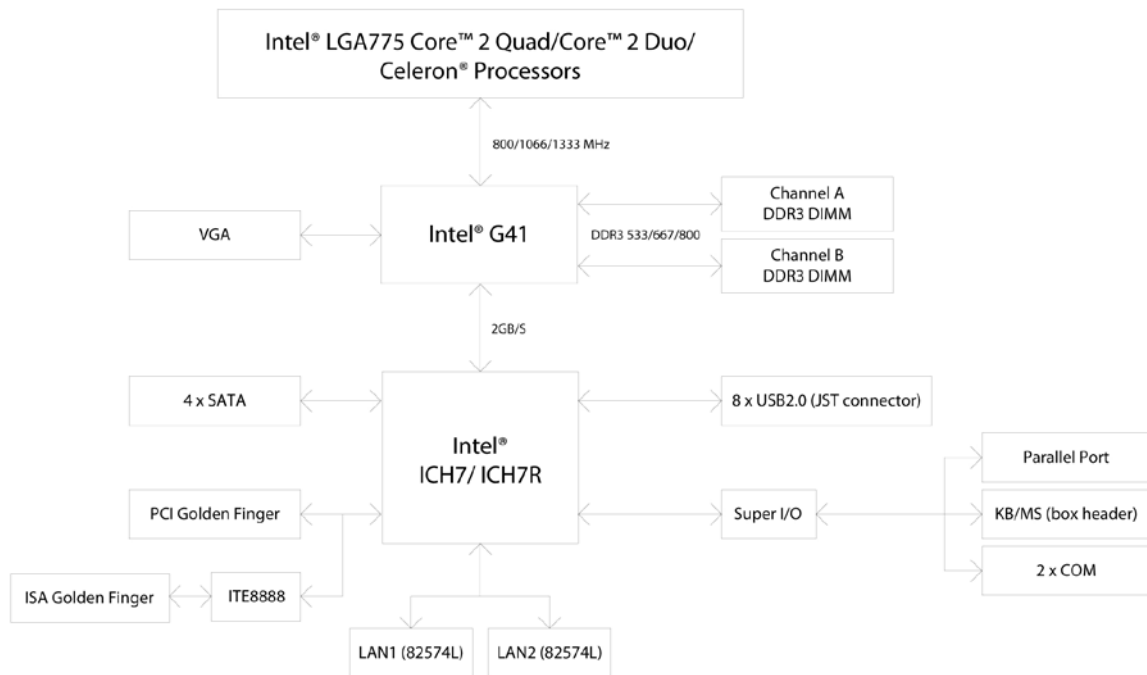
- I/O on bracket
  1 x DB15 VGA connector
  2 x RJ45 GbE port
  1 x PS2
  1 x IDE with 40-pin header
  1 x Floppy with 34-pin header

Storage
- SATA: 4 ports

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds
- Tolerance 15% under room temperature 25°C

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li Battery
- Torrance less than 2sec (24 hours) under 25°C

ISA Support
- Through PCI to ISA Interface (ITE 8888)
- No ISA Master Devices but ISA DMA Devices
- Maximize ISA Slot support up to 3

System Monitor
- 5 voltage (For +1.1V, +1.5V, +3.3V, +5V, +12V, Vcore)
- 3 Temperatures (CPU, two external Temperature Sensor)
- 2 FANs speed (For CPU and System)

Power Input
- Power source from backplane through PCI/ISA Golden Finger
- Supports both AT or ATX Power Supplies (Automatically, BIOS default: AT Mode)
- When change to ATX, the BIOS default setting is as follow:
  POWER -SUPPLY TYPE--> [ATX]
  AUTO PWR-FAILURE RESUME -->[ON]

- +3.3V is Converted from +5V and not directly from Backplane or Power Supply
- +5Vsb (Standby power) is connected from Backplane through 3pins Connectors
- 4 Pins +12V Power Input Connector

Dimensions
- 338.58mm (L) x 122mm (W) (13.3" x 4.8")

Environment
- Board level operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90% (Non-condensing) Non-operating 5% to 95%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **PEAK 777VL (P/N: 10P0777VL00X0)**
  PICMG 1.0 Full-Size SBC, Intel® G41 Chipset, Intel® LGA775 Core™ 2 Quad/Core™ 2 Duo/Celeron® processor with 800/1066/1333MHz, Max. 4GB DDR3, DIMM, VGA integrated, 1xGbE, 4xSATA
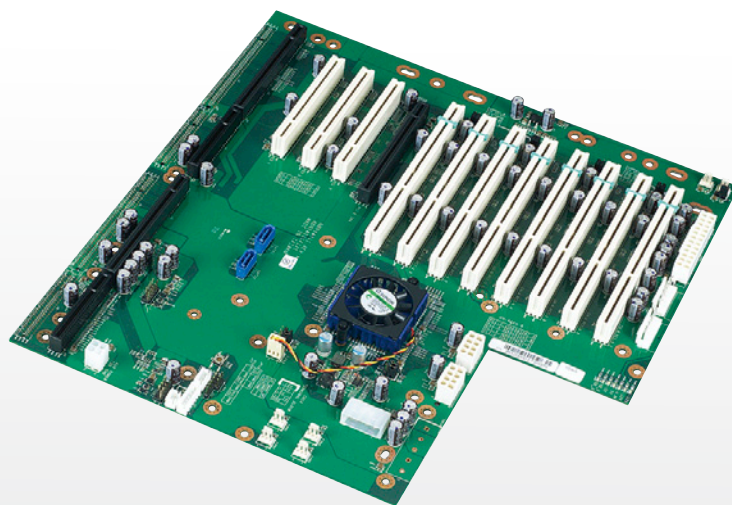
- **PEAK 777VL2 (P/N: 10P0777VL01X0)**
  PICMG 1.0 Full-Size SBC, Intel® G41 Chipset, Intel® LGA775 Core™ 2 Quad/ Core™ 2 Duo/Celeron® processor with 800/1066/1333MHz, Max. 4GB DDR3 DIMM, VGA integrated , 2 x GbE, 4 x SATA Ports

NBP 14111

14-slot Backplane for 4U Chassis with 1 SHB Slot, 3 x PCI Slots, 8 x PCI-X Slots, 1 x PCIe x16

Main Features

- Greater Powers Delivery Capability, Supports High Performance System Host Board and Add-on Card
- Follows PICMG 1.3 Mount Holes and Compatible with GuangHsing's 4U Chassis
- Supports 8 x PCI-X 64-bit/66 MHz with Intel® PCI Express to PCI-X Bridge
- Supports ATX/BTX Power Supply
- Compliance with PEAK 870VL2, PEAK 872VL2 and PEAK 8920VL2

Specifications

System Architecture
- 14-slot backplane

Dimensions
- 328mm (L) x 317mm (W) (12.91 " x 12.48")

Slots
- 1 x PICMG 1.3 (SHB slot)
- 3 x PCI 32bit/33Mhz
- 8 x PCI-X 64bit/66Mhz
- 1 x PCIe x16

I/O Interface
- 4 x USB 2.0 with 2 x 9 pin-header
- 2 x SATA
- 1 x IPMI
- 1 x SMBUS
- 1 x Wake-up
- 6 x 3-pin FAN
- 1 x 6 pin JST NEXCOM Defined front I/O connector for Power LED Connector/Power Switch/Reset Button connector

Power Input
- 1 x 24-pin power connector
- 2 x 8-pin 12V AUX power connector
- 2 x 6-pin 3.3V power connector for PCI-X add-on
- 1 x Terminal Block (Reserved by Manufacturing)

Power Output
- 1 x 4-pins 12V AUX power connector to SBC/SHB
- 1 x 4-pins power connector for system fan

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C

- Relative humidity:
  Operating 10% to 90%, non-condensing
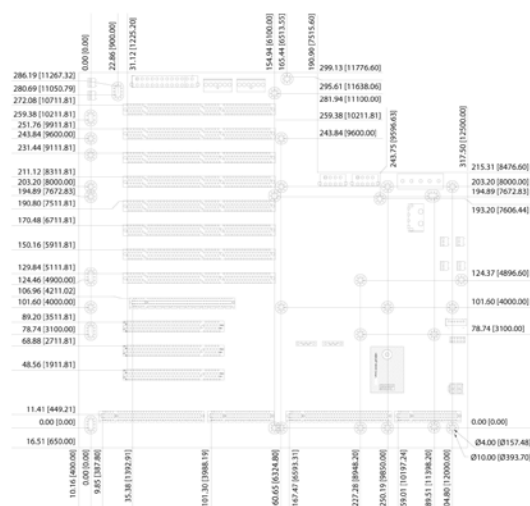 Non-operating 5% to 95%, non-condensing

Certifications
- CE approval
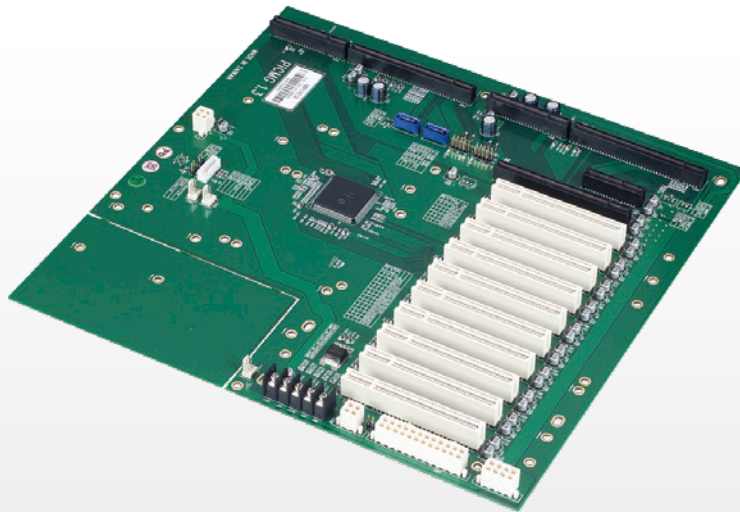- FCC Class A

Ordering Information

- **NBP 14111 (P/N: 10N01411100X0) RoHS Compliant**
  PICMG 1.3 14-slot backplane for 4U chassis w/ 1 SHB slot, 3 x PCI slots, 8 x PCI-X slots, 1 x PCIe x16

Dimension Drawing

NBP 14210

14-slot Backplane for 4U Chassis with 1 SHB Slot, 10 x PCI Slots, 1 PCIe x16, 1 PCIe x4

Main Features

- Follows PICMG 1.3 Mount Holes and Compatible with GuangHsing's 4U Chassis
- 10 x PCI 32-bit/33MHz Supports 7 x PCI Full-sized Add-on Card
- Supports ATX/BTX Power Supply
- Compliance with PEAK 870VL2

Specifications

System Architecture
- 14-slot backplane

Dimensions
- 328mm (L) x 317mm (W) (12.91 " x 12.48")

Slots
- 1 x PICMG 1.3 (SHB slot)
- 10 x PCI 32bit/33Mhz
- 1 x PCIe x16
- 1 x PCIe x4

I/O Interface
- 4 x USB 2.0 with 2 x 9 pin-header
- 2 x SATA
- 3 x 3-pins FAN
- 1 x 6 Pin JST NEXCOM Defined Front I/O Connector for Power LED Connector/Power Switch/Reset Button connector

Power Input
- 1 x 24-pin power connector
- 1 x 8-pin 12V AUX power connector
- 1 x 4-pin 12V AUX power connector

Power Output
- 1 x 4-pins 12V AUX power connector to SBC/SHB

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95%, non-condensing
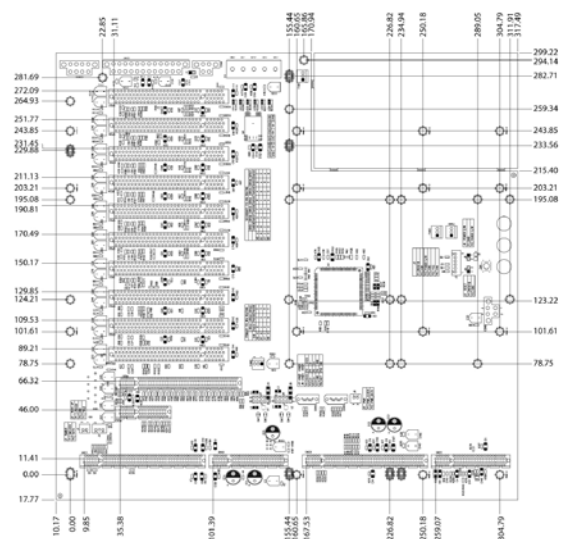
Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 14210 (P/N: 79N1421000X00)**
  PICMG 1.3 14-slot backplane for 4U chassis w/ 1 SHB slot, 10 PCI slots, 1 PCIe x16, 1 PCIe x4
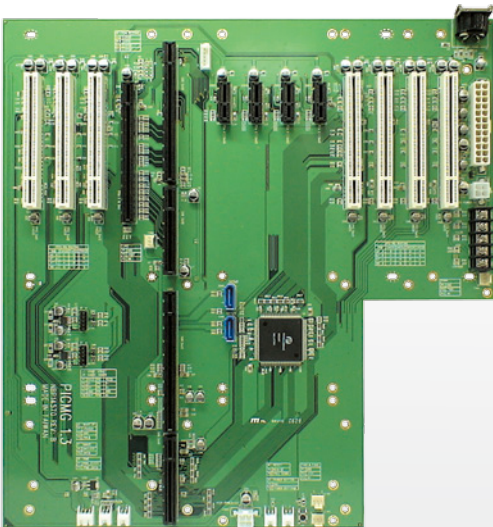
Dimension Drawing

NBP 14570-BX

14-slot Backplane for 4U Chassis with 1 x SHB, 7 x PCI Slots, 4 x PCIe x1, 1 x PCIe x16

Main Features

- 1 x PICMG 1.3 (SHB Slot)/7 x PCI 32-bit/33MHz
- 1 x PCIe x16 Lane/4 x PCIe x1 Lane
- Supports ATX Power Supply

Specifications

System Architecture
- For 14-slot Chassis

Dimensions
- 317mm (L) x 328mm (W) (12.4" x 12.9")

Slots
- 1 x PICMG 1.3 (SHB slot)
- 7 x PCI 32bit/33Mhz
- 1 x PCIe x16
- 4 x PCIe x1

I/O Interface
- 4 x USB 2.0 with 2 x 9 pin-header
- 2 x SATA
- 2 x 3-pin fan
- 1 x 6 Pin JST NEXCOM defined front I/O connector for power LED connector/ power switch/ reset button connector

Power Input
- 1 x 24-pin power connector
- 1 x Terminal Block

Power Output
- 1 x 4-pin 12V AUX power connector to SBC/SHB

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)
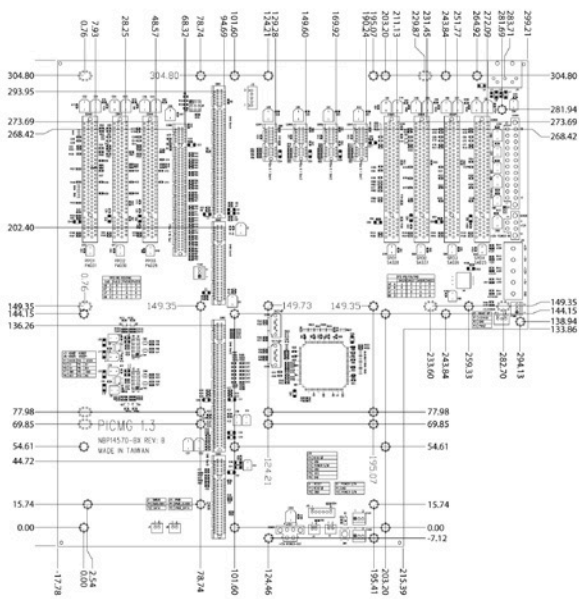
Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 14570-BX (P/N: 79N1457001X00)**
  PICMG 1.3 14-slot backplane for 4U chassis w/ 1 SHB slot, 7 PCI slots, 1 PCIe x16, 4 PCIe x1

Dimension Drawing

NBP 0522

PCIMG 1.3 w/ SBC slot, 1 x PCIe x1, 1 PCIe x1, and 2 x PCI slot
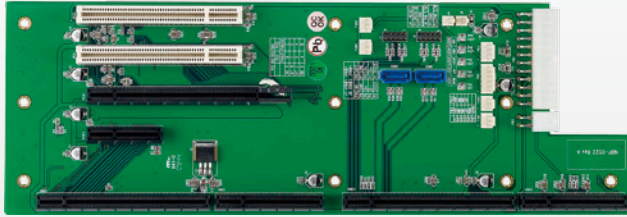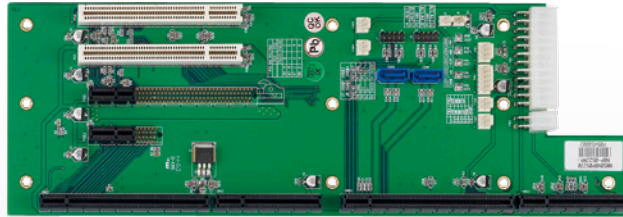
Main Features

- Designed for PEAK870 and PEAK872
- Support 1 PCIe x16/1, 1 PCIe x4/1 and 1 x Full-sized PCI Add-on card
- Compatible with PCIMG 1.3 board

Specifications

System Architecture
- For 5-slot chassis

Dimensions
- 317.5mm(W) x 110.7mm(L)

Slots
- PICMG 1.3 (SBC slot)
- 1 x PCIe x16 (default as PCIe x1)
- 1 x PCIe x4 (default as PCIe x1)
- 2 x PCI 32bit/33MHz

Power Input
- 1 x 24-pin Power connector

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95%, non-condensing

Certifications
- CE approval
- FCC Class A

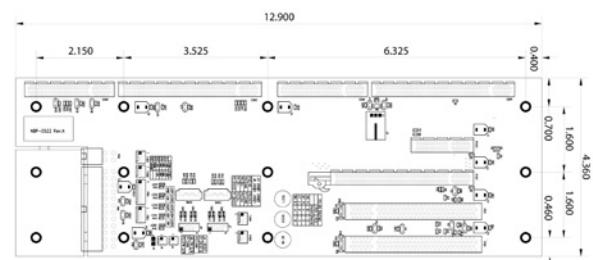## Ordering Information

- **NBP 0522 (P/N: 79N0052200X00)**
  PCIMG 1.3 w/ SBC slot, 1 x PCIe x1, 1 PCIe x1, and 2 x PCI slot

Dimension Drawing

NBP 20016

20-Slot Backplane for 6U Chassis with 1 SHB Slot, 16 x PCI-X Slots
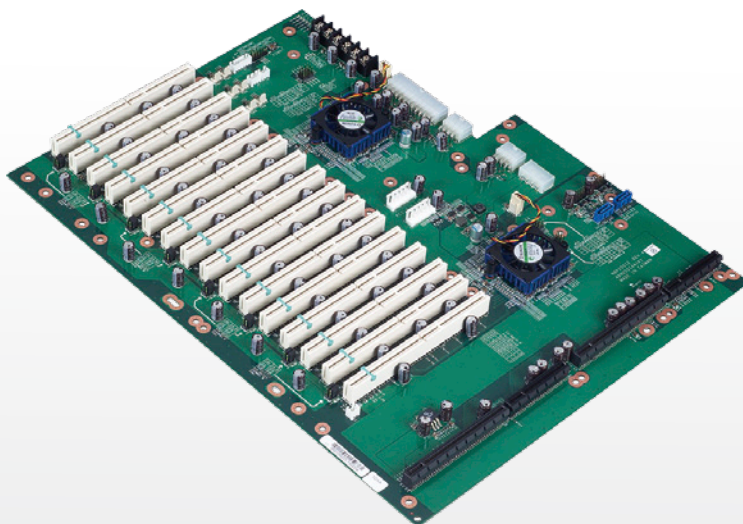
Main Features

- Deliver Greater Power Capacity to Supports High Performance System Host Board and Add-on Card
- Follows PICMG 1.3 Mount Holes and Compatible with GuangHsing's 4U Chassis

- Supports 16 x PCI-X 64-bit/66MHz with Two Intel® PCI Express to PCI-X Bridge
- Supports ATX/BTX Power Supply

Specifications

System Architecture
- 20-slot backplane

Dimensions
- 331mm (L) x 84mm (W) (13.03" x 3.30")

Slots
- 1 x PICMG 1.3 (SHB slot)
- 16 x PCI-X 64bit/66Mhz

I/O Interface
- 2 x SATA
- 1 x IPMI
- 1 x SMBUS
- 1 x Wake-up
- 6 x 3-pins FAN
- 1 x 6 pin JST NEXCOM Defined front I/O connector for Power LED Connector/Power Switch/Reset Button connector
- 4x USB 2.0

Power Input
- 1 x 24-pins power connector
- 2 x 8-pins 12V AUX power connector
- 2 x 6-pins 3.3V power connector for PCI-X add-on
- 1 x Terminal Block (Reserved)

Power Output
- 1 x 4-pins power connector for FAN

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 20016 (P/N: 10N02001600X0)**
  PICMG 1.3 20-slot backplane for 6U chassis w/ 1 SHB slot, 16 PCI-X slots

NBP 202A6

PCIMG 1.3 20-slot backplane for 6U chassis w/ 1 SBC slot, 1 x PCIe x16, 1 PCIe x4, and 16x PCI slot
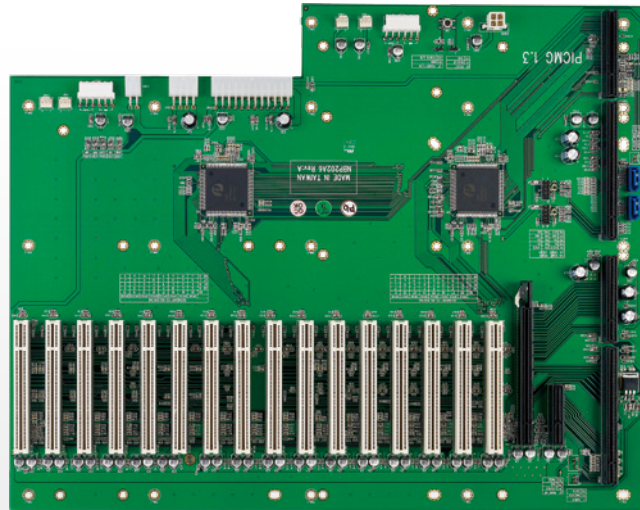
Main Features

- Deliver Greater Power Capacity to support High Performance System Host Board and Add-on Card
- Follow PICMG 1.3 Mount Holes and Compatible with GuangHsing's 4U Chassis

- Support 16 x PCI, 1 x PCIe x4 and 1 x PCIe x16
- Support ATX/BTX Power Supply

Specifications

System Architecture
- 20-slot backplane

Dimensions
- 331mm (L) x 84mm (W)

Slots
- PICMG 1.3 (SBC slot)
- 1 x PCIe x16
- 1 x PCIe x4
- 16 x PCI 32bit/33MHz

I/O Interface
- 2 x SATA
- 4 x 3-pin FAN

Power Input
- 1 x 24-pin Power connector
- 1 x 8-pin 12V AUX Power connector

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95%, non-condensing
- Non-operating 5% to 95%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 202A6 (P/N: 79N202A600X00)**
  PCIMG 1.3 20-slot backplane for 6U chassis w/ 1 SBC slot, 1 x PCIe x16, 1 PCIe x4, and 16x PCI slot

NBP 2U040

2U (Butterfly) Backplane with 1 x SHB, 4 x PCI Slots
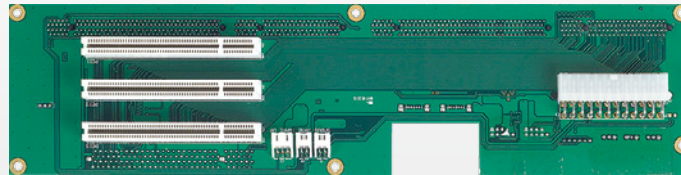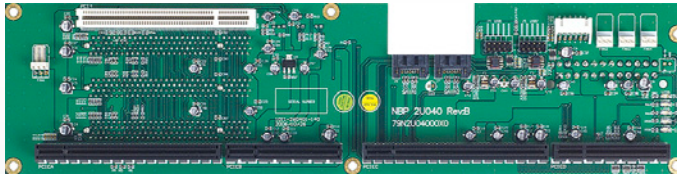
Main Features

- Designed for NEXCOM PBOX 240P with User Friendly Cabling
- Supports 3 Full-sized and 1 Half-sized PCI Add-on Card
- Compatible with GuangHsing's 2U PICMG 1.3 Chassis

Specifications

System Architecture
- 2U (Butterfly) backplane

Dimensions
- 331mm (L) x 84mm (W) (13.0" x 3.3")

Slots
- 1 x PICMG 1.3 (SHB slot)
- 4 x PCI 32bit/33Mhz (3 x Full-Sized/1 x Half-Sized supported)

I/O Interface
- 4 x USB 2.0 with 2 x 9 pin-header
- 2 x SATA
- 1 x IPMI
- 1 x SMBUS
- 1 x Wake-up
- 4 x 3-pins FAN
- 1 x 6 pin JST NEXCOM Defined front I/O Connector in 90 degree, for Power LED Connector/Power Switch/Reset Button connector

Power Input
- 1 x 24-pins power connector

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95%, non-condensing

### Certifications
- CE approval
- FCC class A

Ordering Information

- **NBP 2U040 (P/N: 79N2U04000X00)**
  PICMG 1.3 butterfly backplane for 2U chassis w/ 1 SHB slot, 4 PCI slots

Dimension Drawing

NBP 2U220

Main Features

- Designed for NEXCOM PBOX 240P with User Friendly Cabling
- Supports 1 PCIe x16 and 1 x Full-sized PCIe x4 Lane
- Compatible with GuangHsing's 2U PICMG 1.3 Chassis

Specifications

System Architecture
- 2U (Butterfly) backplane

Dimensions
- 331mm (L) x 84mm (W) (13.0" x 3.3")

Slots
- 1 x PICMG 1.3 (SHB slot)
- 2 x PCI 32bit/33Mhz (1 x Full-Sized/1 x Half-Sized supported)
- 1 x PCIe x16
- 1 x PCIe x4

I/O Interface
- 4 x USB 2.0 with 2 x 9 pin-header
- 2 x SATA
- 1 x IPMI
- 1 x SMBUS
- 1 x Wake-up
- 4 x 3-pins FAN
- 1 x 6 pin JST NEXCOM Defined front I/O connector in 90 degree, for Power LED Connector/Power Switch/Reset Button connector

Power Input
- 1 x 24-pin power connector

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95%, non-condensing

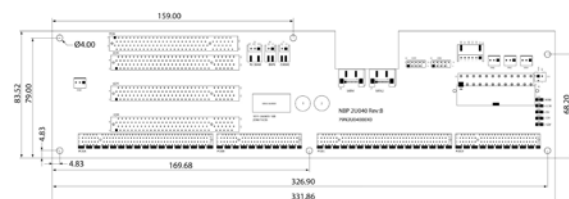### Certifications
- CE approval
- FCC Class A

Ordering Information
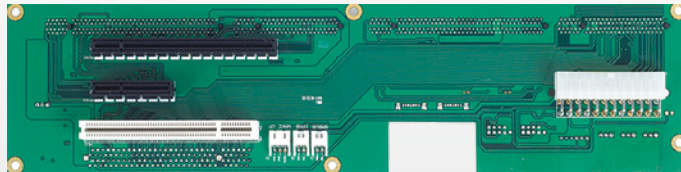
- **NBP 2U220 (P/N: 79N2U22000X00) RoHS Compliant**
  PICMG 1.3 butterfly backplane for 2U chassis w/ 1 SHB slot, 2 PCI slots, 1 PCIe x16 slot, 1 PCIe x4 slots.

Dimension Drawing
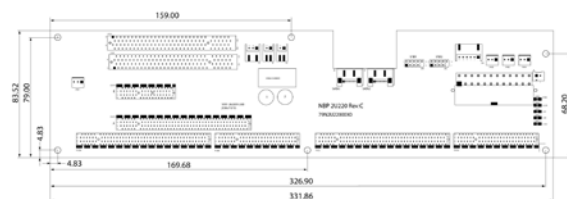
NBP 0807P

8-slot PICMG/ISA/PCI Backplane
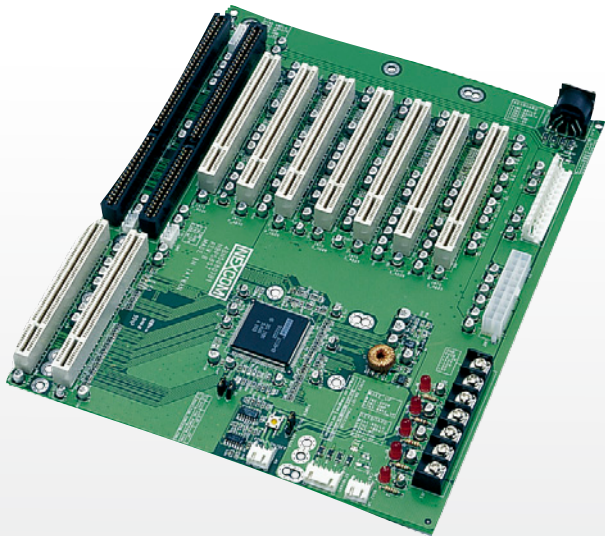
Main Features

- 7 x PCI/2 x PICMG Slots
- Size: 210mm x 260mm
- Supports ATX or AT Power Supply

Specifications

System Architecture
- For 8-slot Chassis

Dimension
- 210mm (L) x 260mm (W) (8.2 " x 10.2 ")

Slot
- PICMG 1.0 (SBC slot)
- 7 x PCI 32bit/33MHz

Power Input
- 1 x 20-pin power connector
- 1 x 12-pin power connector
- 1 x Terminal Block

Environment
- Operating temperature: 0 °C to 60 °C
- Storage temperature: -20 °C to 80 °C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 0807P(LF) (P/N: 10N00807P00X0) RoHS Compliant**
  PICMG 1.0 8-slot backplane for wall-mount shoe box w/ SBC slot, 7 PCI slots

Dimension Drawing
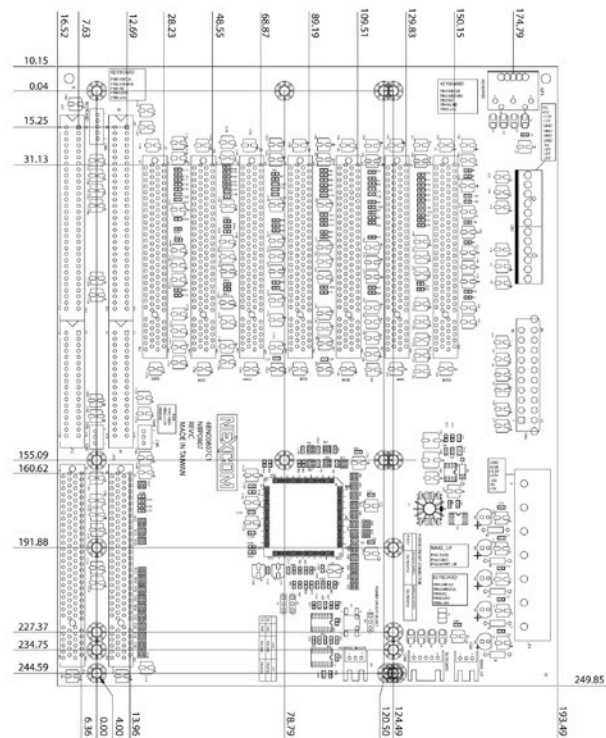
NBP 1407P

14-slot PICMG/ISA/PCI Backplane

Main Features

- 7 x PCI/2 x PICMG/PICMG/5 x ISA Slots
- Size: 315mm x 310mm
- Supports ATX Power Supply

Specifications

System Architecture
- For 14-Slot Chassis

Dimensions
- 315mm (L) x 310mm (W) (12.8" x 12.2")

Slots
- PICMG1.0 (SBC Slot), 7 x PCI, 5 x ISA

Power Input
- 1 x 20-pin power connector
- 1 x Terminal Block

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certification
- CE approval
- FCC Class A

Ordering Information

- **NBP 1407P (LF) (P/N: 79N1407P00X00)**
  PICMG 1.0 14-slot backplane for 4U chassis w/ SBC slot, 7 PCI slots, 5 ISA slots.

Dimension Drawing

NBP 1407-64

14-slot PICMG/ISA/PCI Backplane
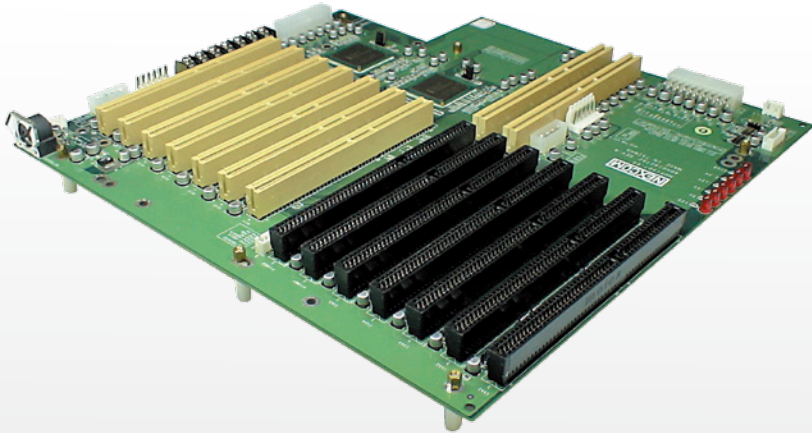
Main Features

- 7 x 64-bit PCI/2 x PICMG/5 x ISA Slots
- Size: 315mm x 310mm
- Supports ATX Power Supply

Specifications

System Architecture
- For 14-slot Chassis

Dimensions
- 315mm (L) x 310mm (W) (12.8" x 12.2")

Slot
- PICMG 1.0 (SBC Slot)
- 7 x PCI-X slots
- 5 x ISA slots

Power Input
- 1 x 20-pin power connector
- 1 x Terminal Block

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 1407-64(LF) (P/N: 10N00140702X0) RoHS Compliant**
  PICMG 1.0 14-slot backplane for 4U chassis w/ SBC slot, 7 PCI-X slots,
 5 ISA slots

Dimension Drawing
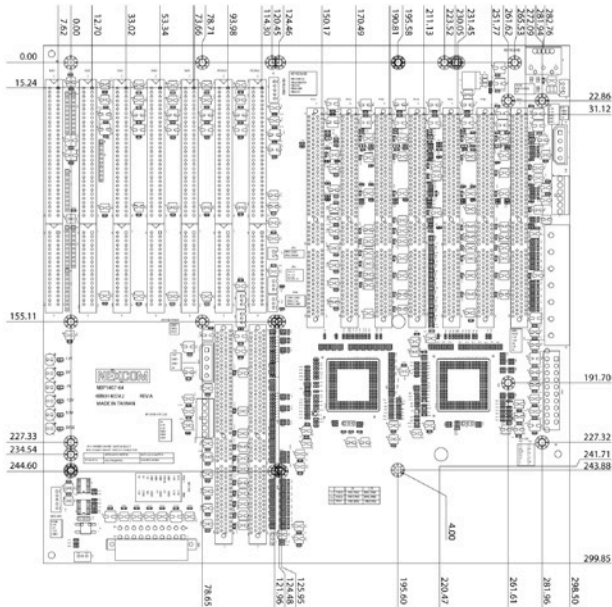
NBP 1412P

14-slot PICMG/ISA/PCI Backplane
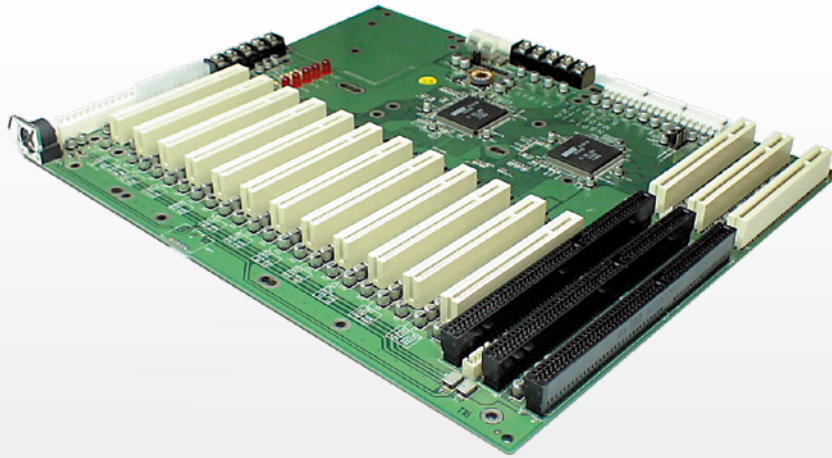
Main Features

* 12 x PCI/3 x PICMG Slots
* Size: 315mm x 260mm
* Supports ATX or AT Power Supply

Specifications

System Architecture
* For 14-slot Chassis

Dimension
* 315mm (L) x 260mm (W) (12.4" x 10.2")

Slots
* PICMG 1.0 (SBC Slot)
* 12 x PCI slots

Power Input
* 1 x 20-pin power connector
* 1 x NEXCOM peripheral power connector
* 1 x Terminal Block

Environment
* Operating temperatures: 0°C to 60°C
* Storage temperatures: -20°C to 80°C
* Relative humidity: 10% to 90% (Non-condensing)

Certifications
* CE approval
* FCC Class A

Ordering Information

* **NBP 1412P(LF) (P/N: 10N01412P00X0)**
  PICMG 1.0 14-slot backplane for 4U chassis w/ SBC slot, 12 PCI slots

Dimension Drawing
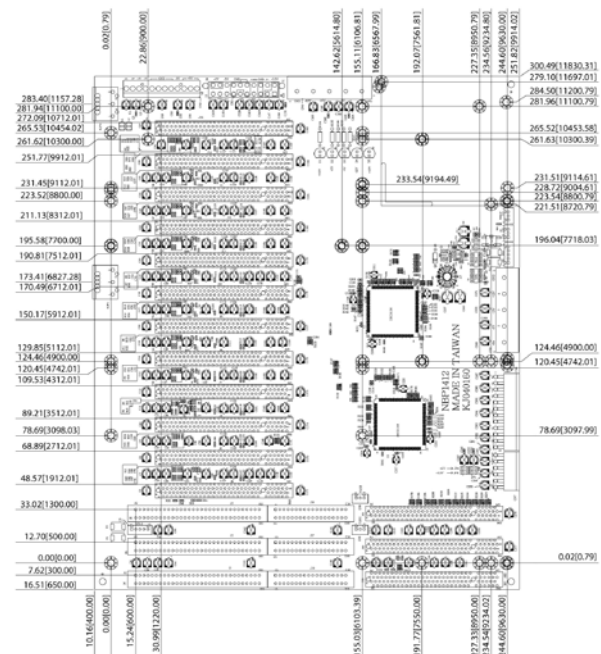
NBP 1412-64

14-slot PICMG/ISA/PCI Backplane
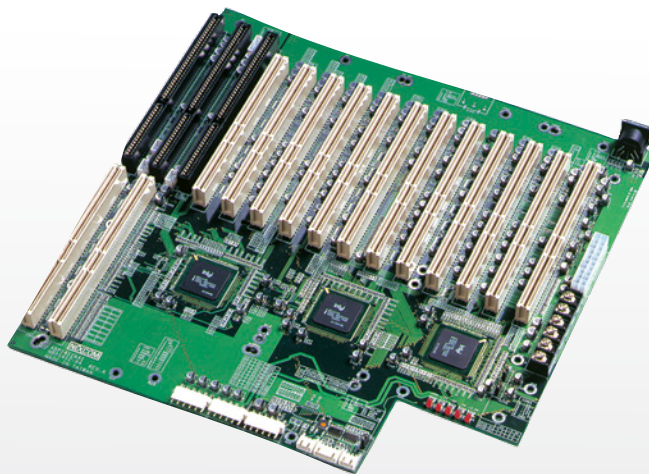
Main Features

- 6 x 64-bit/66 MHz PCI/6 x 64-bit/33 MHz PCI/1 x ISA Slot/
  2 x PICMG Slots
- Size: 315mm x 310mm
- Supports ATX Power Supply

Specifications

System Architecture
- For 14-slot Chassis

Dimension
- 315mm (L) x 310mm (W) (12.4" x 12.2")

Slots
- PICMG 1.0 (SBC Slot)
- 12 x PCI-X slots
- 1 x ISA slot

Power Input
- 1 x 20-pin power connector
- 1 x Terminal Block
- 1 x NEXCOM peripheral power connector

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications
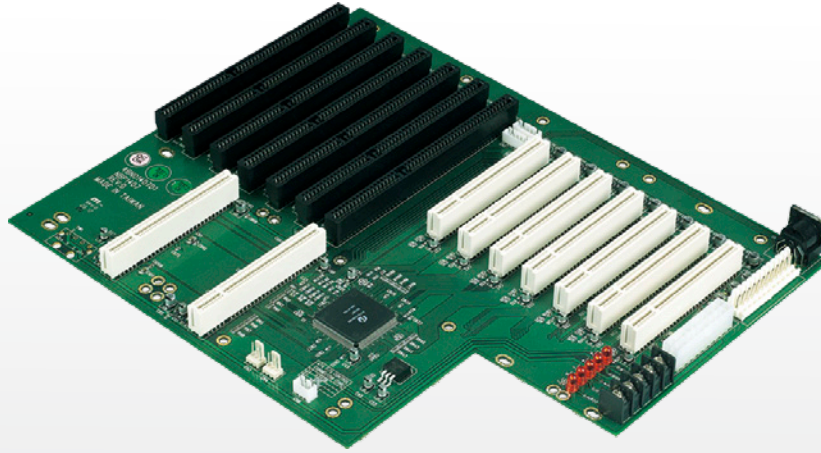- CE approval
- FCC Class A

Ordering Information

- **NBP 1412-64(LF) (P/N: 10N14126400X0)**
  PICMG 1.0 14-slot backplane for 4U Chassis w/ SBC slot, 12 PCI-X
  slots. 1 ISA slot

Dimension Drawing
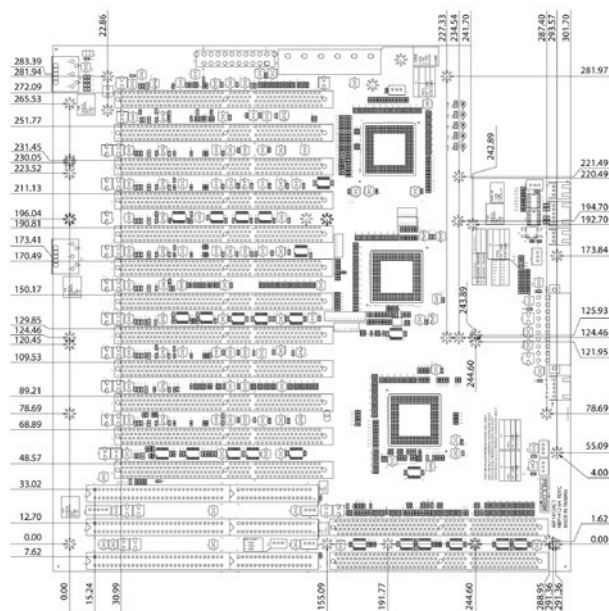
NBP 2027P

20-slot PICMG/ISA/PCI Backplane
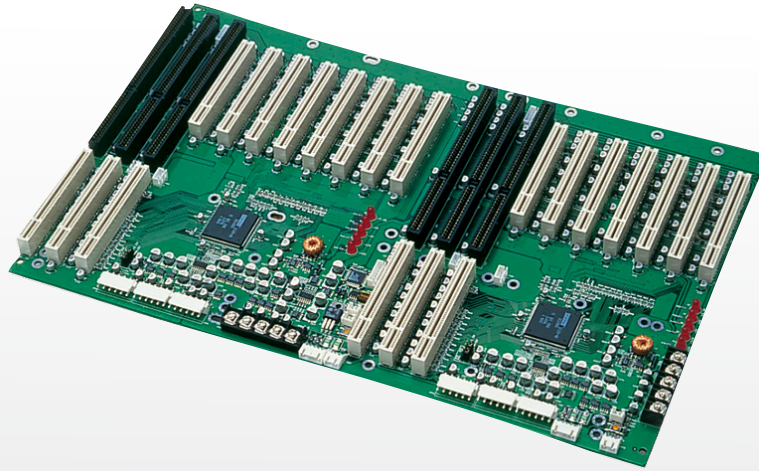
Main Features

- Two Segments Backplane
- 7 PCI Slots Support in Each Segment
- ATX/AT Power Supply

Specifications

System Architecture
- Two segments backplane for 20-slot chassis

Dimensions
- 415mm (L) x 267mm (W) (16.3" x 10.5")

Slots
- Each segment with PICMG 1.0 (SBC slot) and 7 x PCI 32-bit/33MHz

Power Input
- 1 x NEXCOM peripheral power connector/each segment
- 1 x Terminal Block/each segment

Environment
- Operating temperature: 0 °C to 60 °C
- Storage temperature: -20 °C to 80 °C
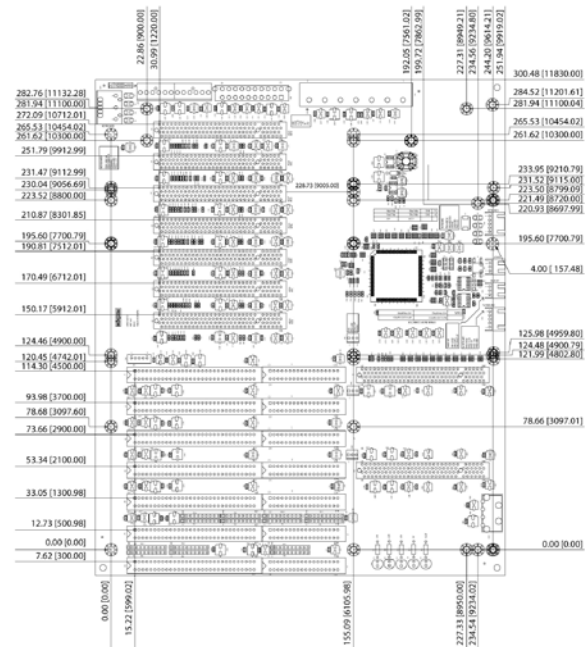- Relative humidity: 10% to 90% (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NBP 2027P(LF) (P/N: 10N02027P00X0)**
  PICMG 1.0 two segment 20-slot backplane For 6U chassis w/ SBC slot, 7 PCI slots for each segment

Dimension Drawing
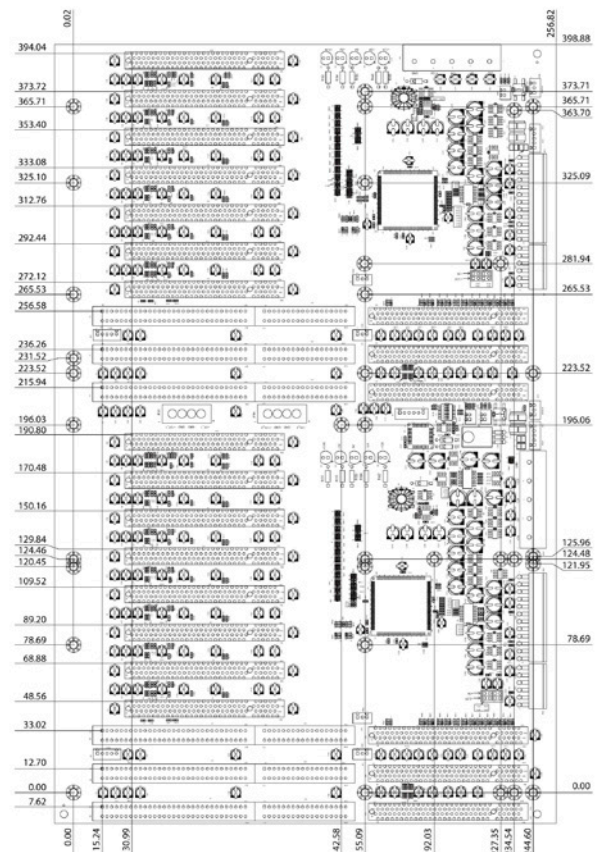
PBOX 100

Intel® Atom™ N270 Embedded Fanless System with DVI/VGA Output

Main Features

- Intel® Atom™ N270 Single-Core Processor
- Intel® 945GSE Chipset
- 1 x DVI Port + 1 x VGA Port

- 1 x PCI + Mini-PCIe Extension Slot
- 1 x Gigabit Ethernet Support
- External 60W Power Adaptor

Product Overview

The PBOX 100 features a compact industrial Computer chassis supporting Atom™ platform. When configured with Atom™, the PBOX system supports 1.6GHz processors.

The PBOX 100 is also available to configure with one PCI card. With Atom™ technology and PCI Express LAN, the PBOX 100 offers a great solution for advanced industrial applications that require superb display and processing performance with VGA and DVI.

Specifications

Chipset + CPU
- Intel® Atom™ N270
- 1.6GHz Single Core with HT
- Intel® 945GSE by 533MHz system bus
- Intel® GMA 950 Graphic Engine

Main Memory
- 1 x DDR2 533 SO-DIMM Slot
- Support up to 2GB unbuffered RAM

Storage
- Support 1 x 2.5" HDD Drive Bay
- Support 1 x SATADOM up to 8GB
- Support 1 x IDE I/F, 2 x SATA I/F

Audio
- Realtek ALC888

I/O Interface-Front
- 1 x Power LED
- 1 x HDD LED

I/O Interface-Rear
- 1 x RS-232 DB9 Port
- 1 x DB15 VGA Port

- 1 x DVI Port
- 4 x USB 2.0 Ports
- 1 x GbE RJ45 Ports
- 2 x Audio Jacks
- 1 x ATX Toggle Switch
- 1 x +12V DC-in Jack

Cooling
- Optional 2 x 40mm Cooling Fans

Extension
- 1 x PCI Slot
- 1 x Mini-PCIe Slot

Dimension
- 300mm x 194mm x 51mm

Power
- External 60W Power Adaptor

Environment
- Operating Temperature: 0°C to 40°C
- Storage Temperature: -20°C to 60°C
- Relative Humidity: 10% to 90% (non-condensing)
- RoHS Compliant

Dimension Drawing
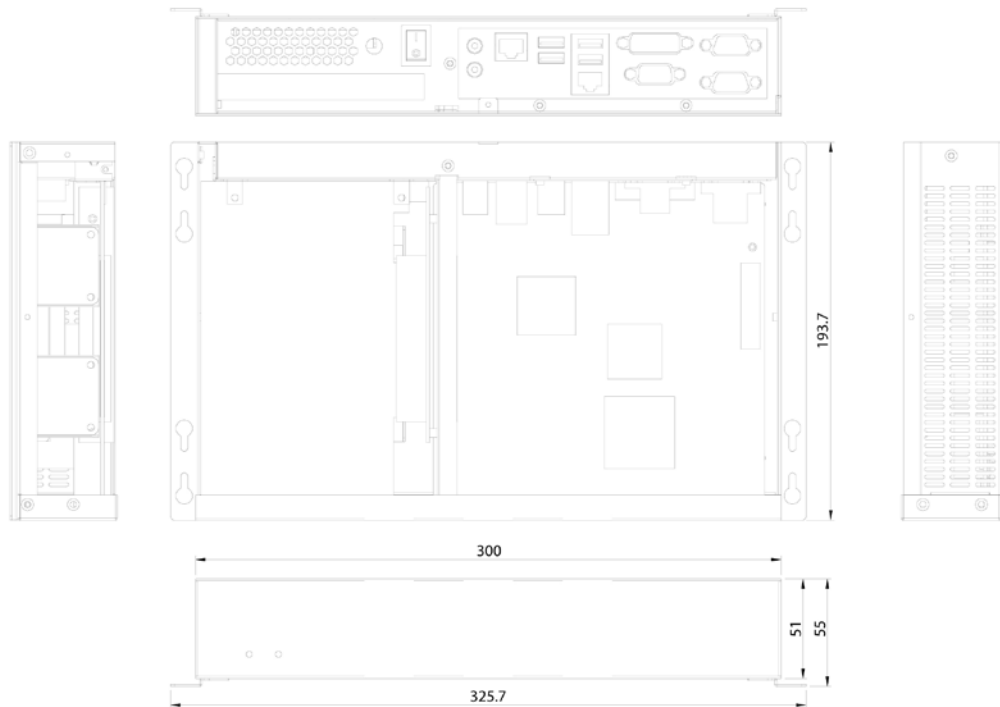
Certificates

• CE approval
• FCC

Ordering Information

• **PBOX 100 (P/N: 79R0010000X00)**

Intel® Atom™ N270 Embedded Fanless System with DVI/VGA Output

PBOX 240P

2U 4 Slots Full-sized PICMG 1.3 Rackmount Chassis

Main Features

- Compact 2U Rackmount Chassis
- Supports 45nm/65nm Intel® Core™ 2 Quad & Core™ 2 Duo Processors with Greater Performance and Energy Efficiency
- Supports One Slim CD-ROM and Two 3.5 Disk Drives

- Front-accessible USB and PS/2 Ports
- Supports the following Butterfly Backplanes Designs:
  NBP 2U040: Four PCI Expansion
  NBP 2U220: Two PCI, One PCIe x4 and One PCIe x16 Expansion

Product Overview

The PBOX 240P features a compact 2U Rackmoumt Industrial Computer chassis supporting PICMG 1.3 SHB Express computers and various backplanes. When configured with PEAK 872VL2 , SHB Express computer, the PBOX system supports Intel® Core™ 2 Quad or Core™ 2 Duo processors.

The PBOX 240P is also available to configure with two PCI card, one PCIe x4, and one PCIe x16 expansion card. With Intel® Core™ 2 Duo technology and PCI Express LAN, the PBOX 240P offers a great solution for advanced industrial applications that require superb display and processing performance.

Specifications

Main Board
- SHB Express: PEAK 872VL2
  PICMG 1.3 Full-Size, Intel® Q45 Chipset, LGA775 Core™ 2 Quad, Core™ 2 Duo support
  Max.4GB DDR3 800/1066/1333 SDRAM, with VGA, Dual GbE LAN, PS2 output
- SHB Express: PEAK 870VL2
  PICMG 1.3 Full-Size, Intel® 945G Chipset, LGA775 Core™ 2 Duo support
  Max. 4GB DDR2 400 DIMM,with VGA, Dual GbE LAN, PS2 output

Backplane Option
- NBP 2U220: 2 PCI slots (1 Full-sized add-on card support)
             1 PCIe x4/1 PCIe x16 Slots
- NBP 2U040: 4 PCI slots (3 Full-sized add-on card support)

Physical Construction
- Form Factor: 2U 19" rackmount industrial computing chassis
- Construction: Heavy-Duty Cold Rolled Electroplated Steel
- Color: Black
- Dimensions (W x H x D): 483mm x 88mm x 450mm (19" x 35" x 17.7")

- Mounting: 2 x Rack Mount Ear
- Cooling System:
  3 x ball-bearing Chassis FAN (80mm x 80mm x 25mm)
  1 x Active CPU Cooler (83mm x 89mm x 68mm)
- Weight: 16Kgs (GW)

Indicator
- Front panel Indicator: 1 x HDD status LED; 1 x Power LED

I/O Interface
- Front panel external I/O:
  1 x power on-off switch
  1 x power reset switch
  2 x USB port
  1 x Keyboard Port

Storage Support
- 2 x 3.5" Drive Bay
- 1 x 5.25" Drive Bay (Slim type)

Power Supply
- Power type: ATX mode
- Input Voltage: 100-240 VAC

Dimension Drawing

Rear out-side view

POWER
Redundant
as example

3.5"HDD

Air Filter

Front out-side view

Slim CD-ROM

3.5"HDD

* Max. Output Power: 400 W
* Power Supply Certifications:
  CE/FCC Class B/UL 60950/TUV EN60950

Environment
* Operating temperature: 0°C to 40°C (32°F to 104°F)
* Operating Humidity: 10% to 90% (Non-condensing)
* Storage Temperature: -20°C to 60°C (-4°F to 140°F)
* Non-Operating Humidity: 10% to 95% @ 40 °C non-condensing

Certifications
* CE approval
* FCC Class A

Ordering Information

* **PBOX 240P-2U220-870 (P/N: 79R00240P01X0) RoHS Compliant**
  Chassis: PBOX 240P, Chassis Fan w/ Filter
  Chassis Color: Black
  Power Supply: 400W ATX
  M/B: PEAK 870VL2
  Backplane: NBP 2U220
  Dimensions: 483mm (W) x 88mm (H) x 450mm (D)
  CPU Cooler included

* **PBOX 240P-2U040-870 (P/N: 79R00240P02X0) RoHS Compliant**
  Chassis: PBOX 240P, Chassis Fan w/ Filter
  Chassis Color: Black
  Power Supply: 400W ATX
  M/B: PEAK 870VL2

Backplane: NBP 2U040
Dimensions: 483mm (W) x 88mm (H) x 450mm (D)
CPU Cooler included

* **PBOX 240P-2U220-872 (P/N: 90R240P0004X0) RoHS Compliant**
  Chassis: PBOX 240P, Chassis Fan w/ Filter
  Chassis Color: Black
  Power Supply: 400W ATX
  M/B: PEAK 872VL2
  Backplane: NBP 2U220
  Dimensions: 483mm (W) x 88mm (H) x 450mm (D)
  CPU Cooler included

* **PBOX 240P-2U040-872 (P/N: 90R240P0003X0) RoHS Compliant**
  Chassis: PBOX 240P, Chassis Fan w/ Filter
  Chassis Color: Black
  Power Supply: 400W ATX
  M/B: PEAK 872VL2
  Backplane: NBP 2U040
  Dimensions: 483mm (W) x 88mm (H) x 450mm (D)
  CPU Cooler included

PBOX 362

Intel® Core™ 2 Duo Embedded System with 1 x PCIe x16 Slot, 2 x PCI Slots, and 4 x RS-232 Ports

Main Features

- Intel® GM45 + ICH9-M Chipset
- Support Intel® Core™ 2 Duo/Celeron®-M 575
- Support 2 x 240-pin DDR3 up to 8GB

- 1 x PCIe x16 + 2 x PCI Extension Slots
- 4 x RS-232 Ports
- 2 x Intel® 82574L GbE

Product Overview

The PBOX 362 features a compact industrial Computer chassis supporting EBC550. When configured with EBC550 , the PBOX system supports Intel® Core™ 2 Duo processors.

The PBOX 362 is also available to configured with two PCI card, and one PCIe x16 expansion card. With Intel® Core™ 2 Duo technology and PCI Express LAN, the PBOX 362 offers a great solution for advanced industrial applications that require superb display and processing performance.

Specifications

Chipset + CPU
- Intel® GM45 + ICH9-M Chipset
- Support Intel® Core™ 2 Duo T9400
- Support Intel® Celeron® M 575

Main Memory
- 2 x DDR3 1066MHz Slots
- Up to non-ECC 8GB RAM

Storage
- Support 1 x 2.5" HDD Drive Bay
- Support SATADOM up to 8GB
- Support 4 x SATA I/F

Audio
- Realtek ALC888

I/O Interface-Front
- 1 x Power LED
- 1 x HDD LED
- 2 x USB 2.0 Ports

I/O Interface-Rear
- 4 x RS-232 DB9 Port
- 1 x PS/2 Port for K/B & Mouse

- 2 x USB 2.0 Ports
- 2 x RJ45 GbE Ports
- 1 x DB15 VGA Port
- 2 x Audio Jacks
- 1 x ATX Toggle Switch

Cooling
- 1 x 60mm Cooling Fan

Extension
- 1 x PCIe 16X Slot
- 2 x PCI Slot

Dimension
- 239mm x 200mm x 126mm

Power
- Internal 180W AC/DC Power Adaptor

Environment
- Operating Temperature: 0°C to 60°C
- Storage Temperature: -20°C to 80°C
- Relative Humidity: 10% to 90% (non-condensing)
- RoHS Compliant

Dimension Drawing
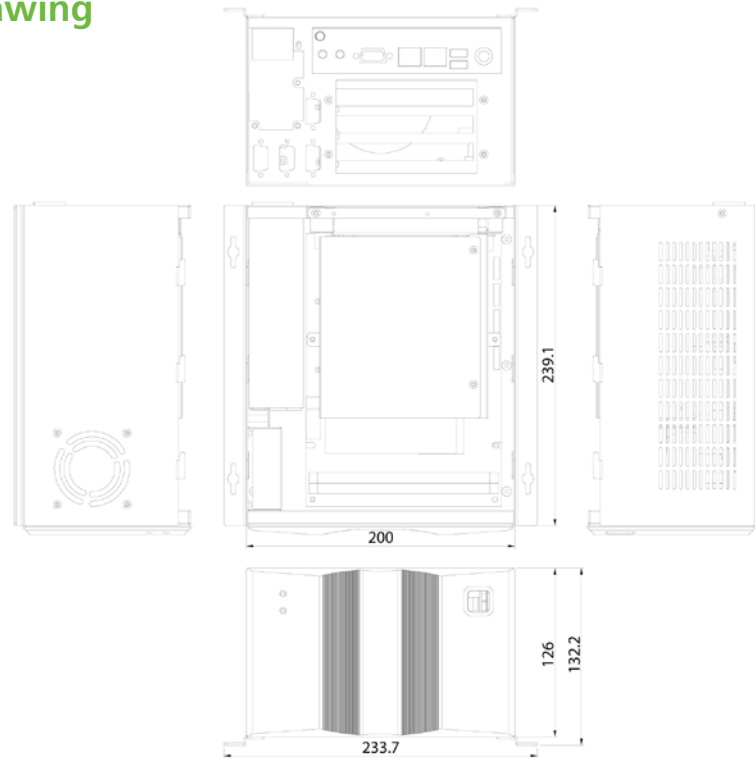
Certificates
- CE approval
- FCC

Ordering Information

- **PBOX 362 (P/N: 79R0036200X00)**
  Intel® Core™ 2 Duo Embedded System with 1 x PCIe x16 Slot, 2 x PCI Slots, and 4 x RS-232 Ports

C

C1

C2

C3

C4

C5

C6

C7

C8

C9

PBOX 440P

4U 14 Slots Full-sized PICMG 1.3 Rackmount Chassis

Main Features

- 19" Rackmount Industrial Chassis
- Supports 45nm/65nm Intel® Core™ 2 Quad & Core™ 2 Duo Processors with Greater Performance and Energy Efficiency
- Supports Three 5.25" and One 3.5 Disk Drives

- Front-accessible USB and PS/2 Ports
- Supports the following 14-slot Backplane:
  NBP14570BX: 7 PCI, 1 PCIe x16 and 4 PCIe x1
  NBP14210: 10 PCI, 1 PCIe x16 and 1 PCIe x4

Product Overview

The PBOX 440P features a 4U 19" Rackmount Industrial Computer chassis supporting two PICMG1.3 SHB-Express computers and various backplanes. When configured with PEAK 872VL2 SHB-Express computer, the PBOX system supports 45nm/65nm Intel® Core™ 2 Quad or Core™ 2 Duo processors with scaleable I/Os on compatible backplanes. The NBP 14210, and NBP 14570 features one PCIe x16 card expansion, up to four PCIe x1 and ten PCI card expansion capability to customize your configuration.

Specifications

Main Board
- SHB Express: PEAK 872VL2
  PICMG 1.3 Full-Size, Intel® Q45 Chipset, LGA775 Core™ 2 Quad, Core™ 2 Duo support
  Max. 4GB DDR3 800/1066/1333 SDRAM, with VGA, Dual GbE LAN, PS2 output
- SHB Express: PEAK 870VL2
  PICMG 1.3 Full-Size, Intel® 945G Chipset, LGA775 Core™ 2 Duo support
  Max. 4GB DDR2 400 DIMM,with VGA, dual GbE, PS2 output

Backplane Option
- NBP 14570-BX
  7 PCI slots
  4 PCIe x1/1 PCIe x16
- NBP 14210
  10 PCI slots
  1 PCIe x4 slots
  1 PCIe x16 slot

Physical Construction
- Form Factor: 4U 19" rackmount industrial computing chassis
- Construction: Heavy-Duty Cold Rolled Electroplated Steel
- Color: Black

- Dimensions (W x H x D): 483mm x 177mm x 451mm (19" x 7" x 17.8")
- Mounting: 2 x Rack Mount Ear
- Cooling System: 2 x 92 mm Ball Bearing Fan
- Weight: 17Kgs (GW)

Indicator
- Front panel Indicator: 1 x HDD status LED; 1 x Power LED

I/O Interface
- Front panel external I/O:
  1 x power on-off switch
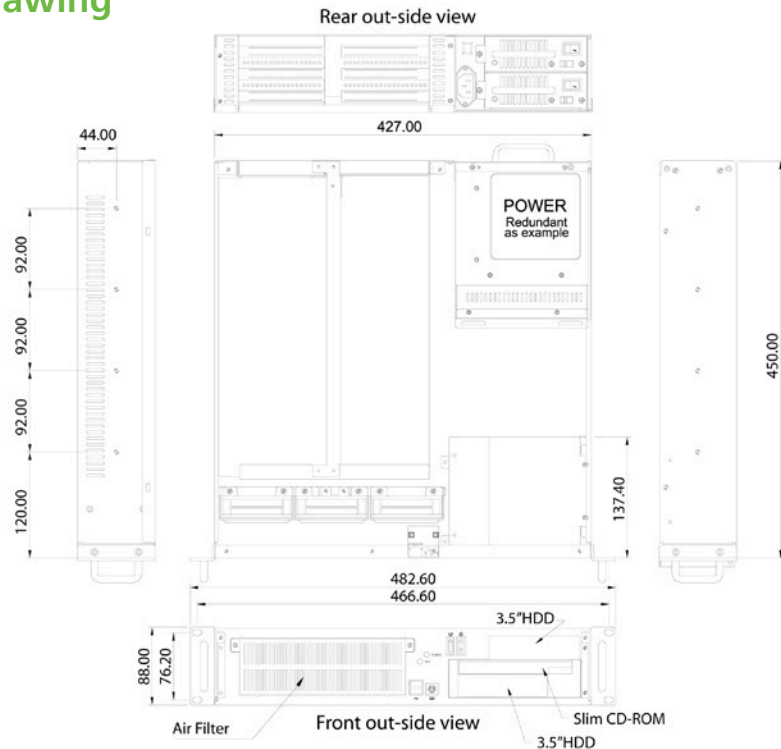 1 x power resetf switch
  2 x USB port
  1 x Keyboard Port

Storage Support
- 1 x 3.5" Drive Bay
- 3 x 5.25" Drive Bay

Power Supply
- Power type: ATX mode
- Input Voltage: 100-240 VAC
- Max. Output Power: 400W (for PEAK870VL2)
- Power Supply Certifications:
  CE/FCC Class B/UL 60950/TUV EN60950

Dimension Drawing

AIR OUT

AIR OUT

FAN

MINI REDUNDANT POWER

451.20

429.80

173.60

Rear view

92.00

92.00

92.00

120.00

Right-side View

Top View

482.60

464.60

37.70

101.60

177.00

Front in-side view

Front out-side view

Environment

- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Operating Humidity: 10% to 90% (Non-condensing)
- Storage Temperature: -20°C to 60°C (-4°F to 140°F)
- Non-Operating Humidity: 10% to 95% @ 40 °C non-condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

- **PBOX 440P-14570-870 (P/N: 79R00440P01X0) RoHS Compliant**

  Chassis: PBOX 440P, Chassis Fan w/ Filter

  Chassis Color: Black

  Power Supply: 400W ATX

  M/B: PEAK 870VL2

  Backplane: NBP 14570-BX

  Dimensions: 483mm (W) x 177mm (H) x 451mm (D)

  CPU Cooler included

- **PBOX 440P-14210-870 (P/N: 79R00440P02X0) RoHS Compliant**

  Chassis: PBOX 440P, Chassis Fan w/ Filter

  Chassis Color: Black

  Power Supply: 400W ATX

  M/B: PEAK 870VL2

  Backplane: NBP 14210

  Dimensions: 483mm (W) x 177mm (H) x 451mm (D)

  CPU Cooler included

- **PBOX 440P-14570-872 (P/N: 90R440P0003X0) RoHS Compliant**

  Chassis: PBOX 440P, Chassis Fan w/ Filter

  Chassis Color: Black

  Power Supply: 400W ATX

  M/B: PEAK 872VL2

  Backplane: NBP 14570-BX

  Dimensions: 483mm (W) x 177mm (H) x 451mm (D)

  CPU Cooler included

- **PBOX 440P-14210-872 (P/N: 90R440P0004X0) RoHS Compliant**

  Chassis: PBOX 440P, Chassis Fan w/ Filter

  Chassis Color: Black

  Power Supply: 400W ATX

  M/B: PEAK 872VL2

  Backplane: NBP 14210

  Dimensions: 483mm (W) x 177mm (H) x 451mm (D)

  CPU Cooler included

PBOX 460P

4U 14/20 Slots Full-sized PICMG 1.3 Rackmount Chassis

Main Features

- 19" Rackmount Industrial Chassis
- Support Dual-core Intel® Xeon® Processor 5100 Series and Quad-core Intel® Xeon® Processor 5300 Series (80W)
- Supports Three 5.25" and One 3.5 Disk Drives

- Front-accessible USB and PS/2 Ports
- Supports the Following Backplane:
  NBP14111: 1 PCI, 1 PCIe X8 and 8 PCI-X (64-bit x 66MHz)
  NBP20016: 16 PCI-X (64-bit x 66MHz)

Product Overview

The PBOX 460P features a 4U 19" rackmount industrial computer chassis supporting two PICMG1.3 SHB-Express computers and various backplanes. When configured with PEAK 8920VL2 SHB-Express computer, the PBOX system supports Intel® XEON 5100/ 5300 series processors with scalable I/Os on compatible backplanes.

Specifications

Main Board
- SHB Express: PEAK 8920VL2 PICMG 1.3 full-size, support dual-core Xeon® LGA771 processor
- 4 x 240-pin four channel DDR 2 FB-DIMM, support ECC/Register DDR2 memory up to 8GB
- 2 x Intel® GbE, 1 x VGA, 4 x USB

Backplane Option
- NBP 14111: 1 PCI, 1 PCIe X8 and 8 PCI-X (64-bit x 66MHz)
- NBP 20016: 16 PCI-X (64-bit x 66MHz)

Physical Construction
- Form factor: 4U 19" rackmount industrial computing chassis
- Construction: Heavy-duty cold rolled electroplated steel
- Color: black
- Dimensions (W x H x D): 483mm x 177mm x 671mm (19"x 7"x 26.5")
- Mounting: 2x rack mount ear
- Cooling system: four 92x 92x 25mm ball bearing fan
- Weight: 24 Kgs (GW)

Indicator
- Front panel Indicator: 1x HDD status LED; 1x power LED

I/O Interface
- Front panel external I/O: 1 x power on-off switch, 1 x power reset switch
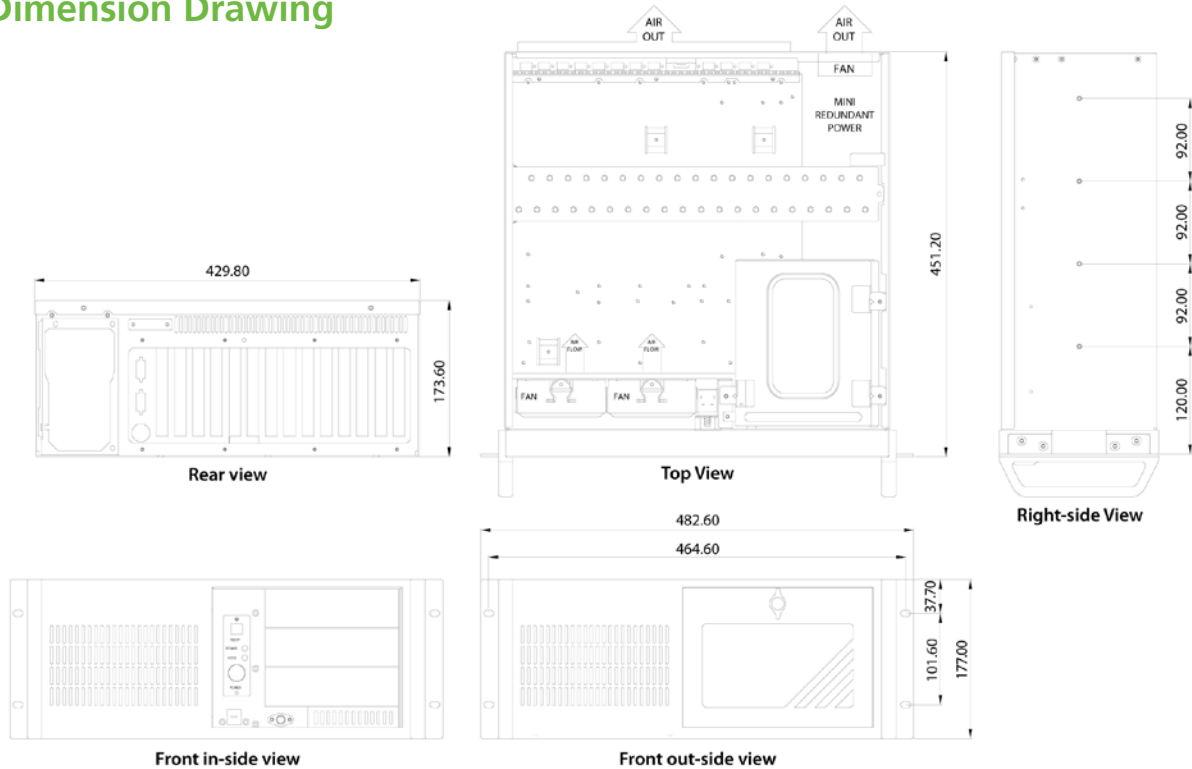
Storage Support
- 1 x 3.5" Drive Bay
- 3 x 5.25" Drive Bay

Power Supply
- Power type: ATX mode
- Input voltage: 100V-240V AC
- Max. output power: 500W
- Power supply certifications: CE/FCC, UL, TUV

Environment
- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Operating humidity: 10% to 90% (Non-condensing)
- Storage temperature: -20°C to 60°C (-4°F to 140°F)
- Non-operating humidity: 10% to 95% @ 40 °C non-condensing

Certifications
- CE approval
- FCC Class A

Dimension Drawing
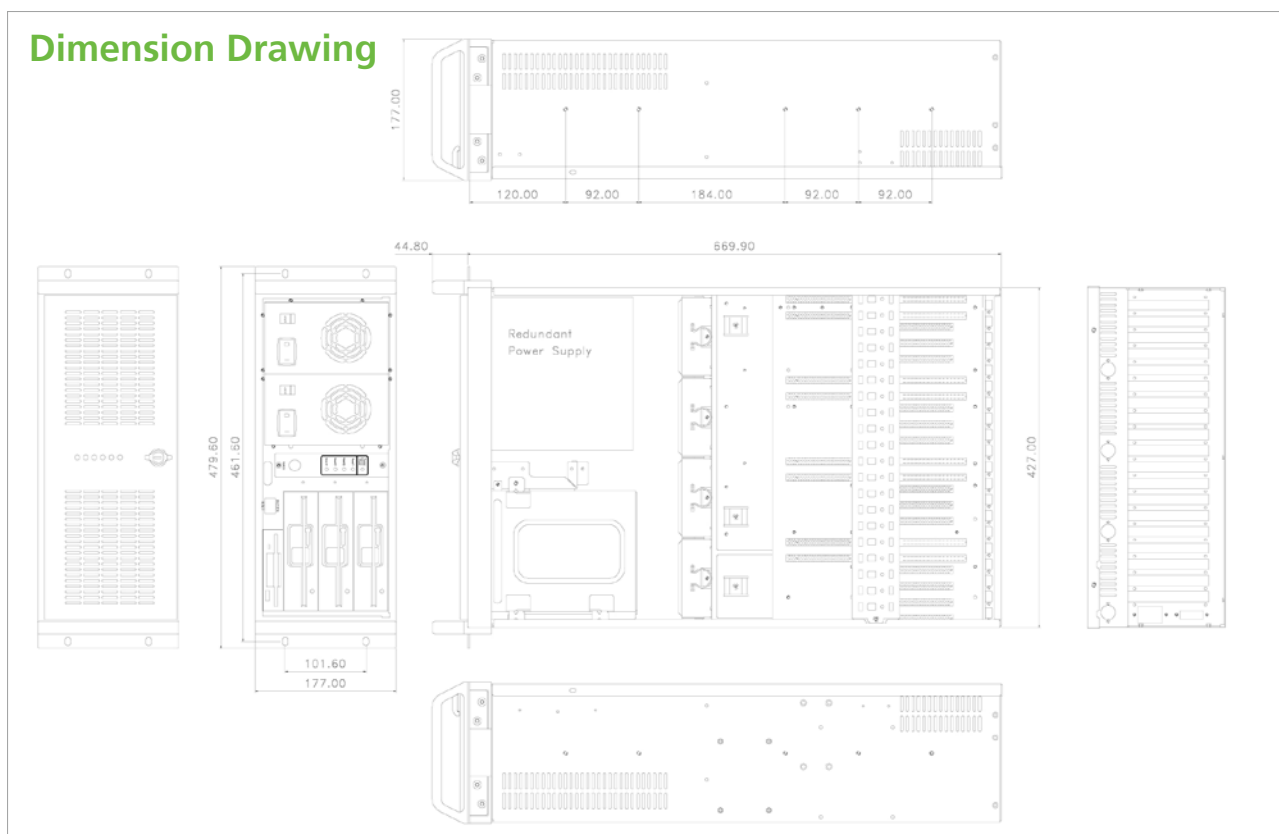
Ordering Information

♦ **PBOX460P-20016-8920 (P/N: 90R460P0000X0) RoHS Compliant**
Chassis: PBOX 460P, chassis fan w/ filter
Chassis Color: black
Power supply: 500W ATX
M/B: PEAK 8920VL2
Backplane: NBP 20016
Dimensions: 483mm (W) x 177mm (H) x 671mm (D)
2x CPU cooler included

♦ **PBOX460P-14111-8920 (P/N: 90R460P0001X0) RoHS Compliant**
Chassis: PBOX 460P, chassis fan w/ filter
Chassis Color: black
Power supply: 500W ATX
M/B: PEAK 8920VL2
Backplane: NBP 14111
Dimensions: 483mm (W) x 177mm (H) x 671mm (D)
2x CPU cooler included

ICES 170
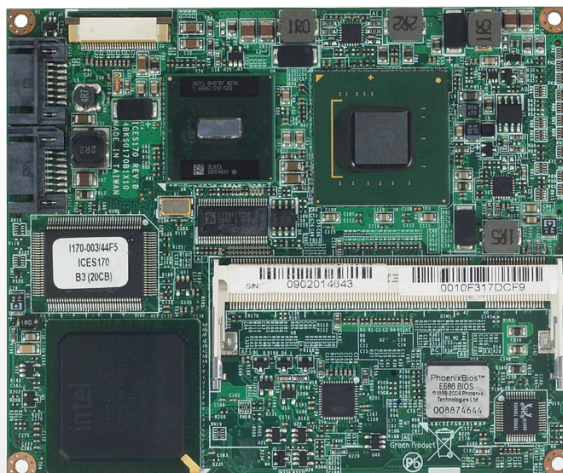
Main Features

- Low Power ETX CPU Module
- On-board Intel® Atom™ N270 1.6GHz Processor
- Intel® 945GSE Chipset
- Support DDR2 400/533 SO-DIMM up to 2GB

- Realtek RTL8111C Gbe LAN Controller with 10/100 Interface
- High Definition Audio ALC888 with AC'97 Interface
- Support LVDS Interface
- Support SDVO Interface

Specifications

CPU Support
- On-board Intel® Atom™ N270 1.6GHz processor

Chipset
- Intel® 945GSE and ICH7M chipsets

Main Memory
- Support one un-buffered non-ECC DDR2 SO-DIMM 400/533 up to 2GB

BIOS
- Award system BIOS
- Advanced Power Management support
- 8M SPI ROM

Display
- Intel® 945GSE integrated graphics solution with dynamic video memory allocation
- Analog monitor resolution up to 1600x1200 @ 85Hz
- Support single or dual channel 18-bit LVDS panel
- SDVO signal down to connector X6

On-board Super I/O
- Winbond W83627

On-board LAN
- Realtek RTL8111C LAN controller
- Support PXE LAN boot function
- 10/100 Ethernet signals down to I/O board

On-board Audio
- High Definition Audio Realtek ALC888
- Support Mic-in/ Line-in/ Line-out

Other Interfaces
- On-board 2 x SATA
- On-board IDE controller for secondary IDE interface
- On-board PCI to ISA controller to support ISA interface

ETX Connector
- X 1 connector
  4 x 32bit/ 33MHz PCI
  Mic-in/ Line-in/ Line-out
  4 x USB 2.0
- X 2 connector
  ISA interface
- X 3 connector
  1 x VGA
  1 x LVDS
  1 x Parallel port or 1 x Floppy
  1 x KB/Mouse
  2 x Serial ports
  1 x IrDA
- X 4 connector
  2 x IDE
  1 x 10/100 LAN interface
  SM bus or I²C bus

Power Requirements
- +5V and +5VSB (for ATX)
- Support both AT and ATX power mode

Block Diagram
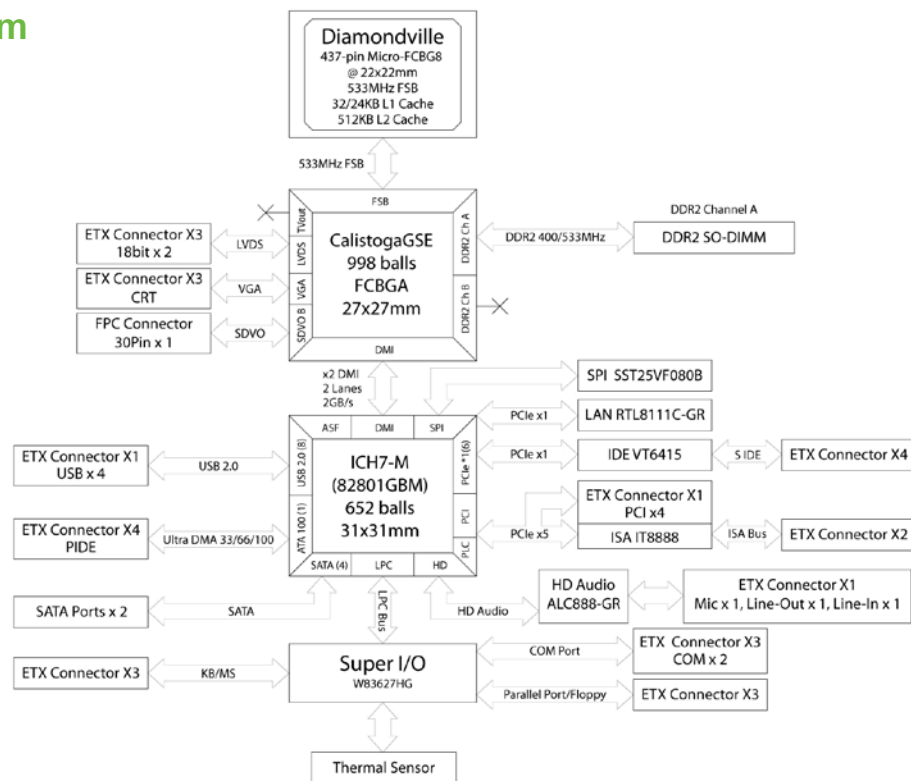
Dimensions
* 95mm (W) x 114mm (L)

Environment
* Operating temperature: 0°C to 60°C
* Storage temperature: -20°C to 80°C
* Relative humidity:
  Operating 10% - 90%, non-condensing
  Non-operating 5% - 95% (non-condensing)

Certifications
* CE approval
* FCC Class A

Ordering Information

* **ICES 170 (P/N: 10K00017000X0)**
  ETX Module with Intel® Atom™ N270/ 945GSE/ DDR2, audio/ COM/ LPT/ USB 2.0/ LAN interface

* **ICEB 3205 (P/N: 10KB0320503X0)**
  ETX evaluation board with PCI/ PC104/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 200
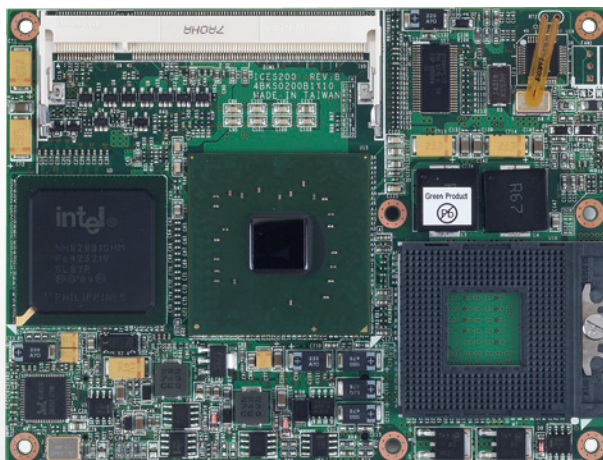
Main Features

- Intel® Socket M, supports Core™ 2 Duo/Core™ 2 Duo LV Processor Family
- Intel® 945GME Chipsets
- One DDR2 SO-DIMM socket support un-buffered non-ECC DDR2 533/667 up to 2GB
- Supports 2 x Serial ATA for high speed drivers, 8 x USB 2.0 for fast peripherals
- Type 2 COM Express Module support up to 21 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN

Product Overview

The ICES 200 is a COM Express Type 2 basic module featuring Intel® 945GME and ICH7M chipset, switch supports Intel® Core™ 2 Duo and Intel® Core™ 2 Duo LV processors with 533/667 MHz FSB and one DDR2 memory socket up to 2GB. The ICES 200 integrated with Intel® Graphics Media Accelerator (GMA950) or expands via PCI Express Graphic 1 x16 lanes to carrier board; it also supports other display types include LFP or Dual channel LVDS.

The high performance ICES 200 COM Express Module supports 2 x SATA, 8 x USB 2.0 and 4 PCIe x1 Lanes through the carrier board; and it is compatible with ICEB 8050 carrier board.

Specifications

CPU Support
- Support Intel® Socket M, Core™ 2 Duo Family Processors
- Supports 533/667 MHz FSB CPU
- Intel® Embedded Processor List (Intel® Longevity CPU):
  Core™ 2 Duo Processor (T7400 2.16GHz)
  Core™ Duo Processor (T2500 2.0GHz)
  Core™ Solo Processor (Celeron® M 440 1.86GHz)

Main Memory
- 1 x DDR2 SO-DIMM socket

Chipset
- Intel® 945GME
- ICH7M I/O Controller Hub

BIOS
- Award System BIOS
- Plug & Play support
- 8M bits Flash ROM

On-board LAN
- Realtek PCI Express GbE 8111C-GR
- Supports PXE LAN boot function
- Supports Wake on LAN

Display
- Integrated with Intel® Graphics Media Accelerator (GMA950) or expand via PCI Express Graphic 1 x16 lanes/Dual SDVO
- CRT resolution up to 2048 x 1536 @ 60Hz, 1600 x 1200 @ 85Hz
- One PCI Express x 16 Lane down to the carrier board
- Supports LFP (local flat panel) LVDS interface resolution up to 1366 x 768
- Supports Single channel for 18 bit/Dual Channel for 18 bit

Audio
- HD Audio Interface

COM Express Connectors
- AB
- VGA/LVDS/8 x USB 2.0/HD Audio/2 x SATA/LAN/GPIO/LPC bus/
- 1 x PCIe x4/1 x PCIe x1/5 x PCIe x1/SMBus (I²C)/SPI BIOS
- CD
- PCIe x16/IDE/PCI

System Monitor
- Derived from HW monitor
- Monitoring of 4 voltages, 2 temperatures and 1 fan Speed
- 4 voltage (For +3.3 V, +5 V, +12 V, Vcore)
- 2 Temperatures (CPU and one external Temperature Sensor)

Block Diagram
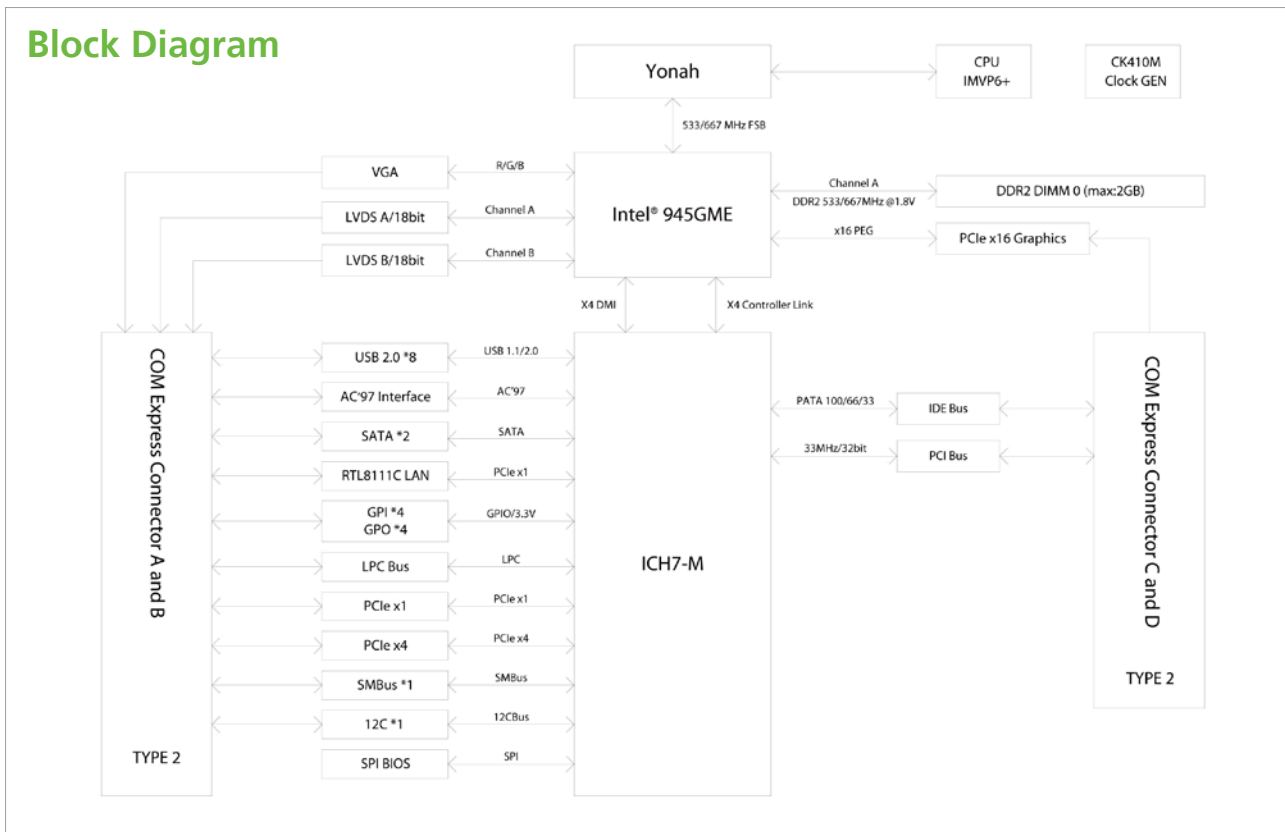
Power Requirements
- + 12 V, + 5 VSB, + 3.3 V RTC

Dimensions
- COM Express Basic Module Type 2
- 95mm x 125mm

Environment
- Board Level Operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
  Operating 10% to 90%, non-condensing
  Non-operating 5% to 95% (non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **ICES 200-SKT (P/N: 10K00020001X0)**
  COM Express Type 2 basic module support socket M, Intel® Core™/ Duo/ Solo/ Celeron® Family Processors

- **ICES 200-423 (P/N: 10K00020002X0)**
  COM Express Type 2 basic module with onboard Celeron® M 1.06GHz Processor

- **ICEB 8050 (P/N: 10KB0805000X0)**
  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 251

COM Express Type 2 Compact Module with Intel® Atom™ N450 1.66GHz
DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ Audio Interface
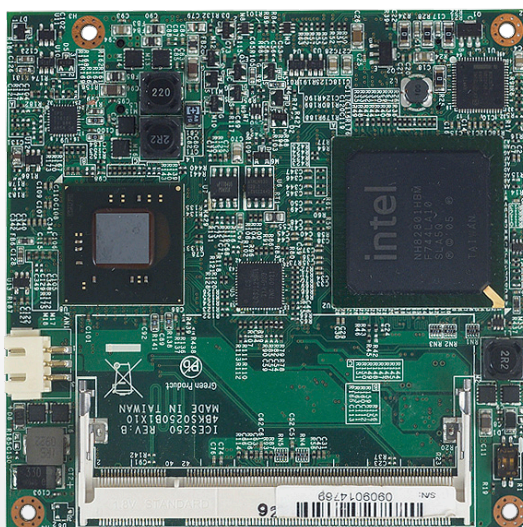
Main Features

- Low Power COM Express CPU Module
- Onboard Intel® Atom™ N450 1.66GHz Processor
- Intel® ICH8M Chipset
- Support DDR2 667 SO-DIMM up to 2GB

- Intel® PCI Express GbE 82574L
- Support 3 x SATA, 1 x IDE, 8 x USB2.0 for fast peripherals
- Micro COM Express Type II supports up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN

Product Overview

ICES 251 is a COM Express Type 2 compact module that features Intel® Atom™ N450 1.66GHz and ICH8M in small foot print. ICES 251 provides outstanding performance in the combination of high computing power and low thermal dissipation.

ICES 251 supports DDR2 667 SO-DIMM memory up to 2GB, and supports 3 x SATA, 1 x IDE, 8 x USB2.0 for fast peripherals.

ICES 251 is type 2 COM Express Module support up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN.

Specifications

CPU Support
- Onboard Intel® Atom™ N450 1.66GHz Processor

Chipset
- Intel® ICH8M chipsets

Main Memory
- Support one un-buffered non-ECC DDR2 SO-DIMM 667 up to 2GB

BIOS
- AMI System BIOS
- SPI ROM
- Plug & Play support
- Advanced Power Management and Advanced Configuration & Power Interface support

Display
- Intel® N450 integrated graphics solution with dynamic video memory allocation
- Analog monitor with pixel resolution up to 1400x1050 @60Hz
- Support Single channel for 18 bit
- LFP (local flat panel) LVDS interface

On-board LAN
- Intel® PCI Express GbE 82574L x 1

- Support PXE LAN boot function
- Support Wake on LAN function

Audio
- HD Configurable Audio bus Interface

Storage
- 3 x SATA
- 1 x IDE

Interface
- Reset signal
- 8 GPIO lines (GPI 0~3 and GPO0~3), CMOS Level (0/3.3V)
- I2C Interface/SMbus Interface
- USB 2.0 x 8
- PATA

Other Interfaces
- One 3pin fan connector (90 degree, 12V)

COM Express Connector
- AB connector
  VGA/ LVDS/8 x USB/ HD Audio interface/3 x SATA/ LAN/ GPIO(3.3V)/ LPC bus/ 1 x PCIe x4/1 x PCIe x1/SMBus/ I2C/SPI BIOS
- CD connector, IDE, PCI

Block Diagram

Power Requirements

- +12Vdc, 3.3V battery, +5Vsb power input
- Support both AT and ATX power supply mode

Power Management

- ACPI 2.0 compliant with battery support. Also supports Suspend to RAM (S3)

System Monitor

- Monitoring of 4 voltages, 2 temperatures and 1 fan Speed.
- 4 voltage (For +5V, +12V, Vcore, +3.3V)
- 2 Temperatures (CPU and one external Temperature Sensor)

Carrier Board

- ICEB 8050

Dimensions

- 95mm (W) x 95mm (L)

Environment

- Operating temperature: -20°C to 60°C (ICES 251)
- Operating temperature: -40°C to 80°C (ICES 251X)
- Storage temperature: -20°C to 85°C (ICES 251)
- Storage temperature: -40°C to 85°C (ICES 251X)
- Relative humidity:
  10% to 97% (operating, non-condensing)
  5% to 97% (non-operating, non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **ICES 251 (P/N: 10K00025100X0)**

  COM Express Type 2 compact module with Intel® Atom™ N450 1.66GHz DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICES 251X (P/N:10K00025102X0)**

  COM Express Type 2 compact module extended -40°C to + 85°Cwith Intel® Atom™ N450 1.66GHz DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICEB 8050 (P/N: 10KB0805000X0)**

 COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 253

**COM Express Type 2 Compact Module with Intel® Atom™ D525
1.8GHz DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ Audio Interface**
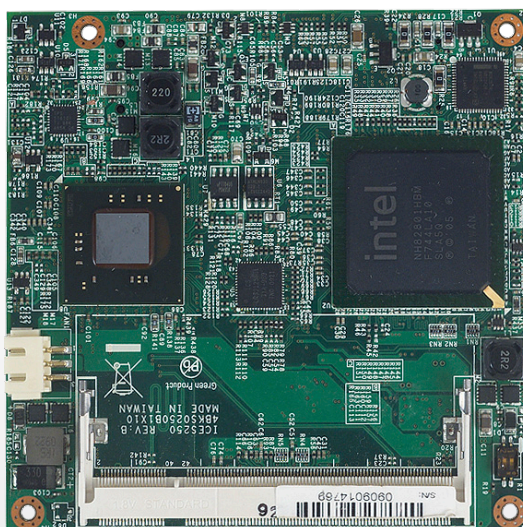
Main Features

- Low Power COM Express CPU Module
- Onboard Intel® Atom™ Dual Core D525 1.8GHz Processor
- Intel® ICH8M Chipset
- Support DDR2 667 and 800 SO-DIMM up to 2GB

- Intel® PCI Express GbE 82574L
- Support 3 x SATA, 1 x IDE, 8 x USB2.0 for fast peripherals
- Micro COM Express Type II supports up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN

Product Overview

The ICES 253 is a COM Express Type 2 compact module that features Intel® Atom™ D525 1.8GHz and ICH8M in small foot print. ICES 253 provides outstanding performance in the combination of high computing power and low thermal dissipation.

ICES 253 supports DDR2 667 SO-DIMM memory up to 2GB, and supports 3 x SATA, 1 x IDE, 8 x USB2.0 for fast peripherals.

ICES 253 is type 2 COM Express Module support up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN.

Specifications

CPU Support
- Onboard Intel® Atom™ Dual Core D525 1.8GHz Processor

Chipset
- Intel® ICH8M chipsets

Main Memory
- Support one un-buffered non-ECC DDR2 SO-DIMM 667 and 800 up to 2GB

BIOS
- AMI System BIOS
- SPI ROM
- Plug & Play support
- Advanced Power Management and Advanced Configuration & Power Interface support

Display
- Intel® Atom™ D525 integrated graphics solution with dynamic video memory allocation
- Analog monitor with pixel resolution up to 2048 x 1536 @60Hz
- Support Single channel for 18 bit
- LFP (local flat panel) LVDS interface

On-board LAN
- Intel® PCI Express GbE 82574L x 1
- Support PXE LAN boot function
- Support Wake on LAN function

Other Interfaces
- One 3pin fan connector (90 degree, 12V)

Storage
- 3 x SATA
- 1 x IDE

Interface
- Reset signal
- 8 GPIO lines (GPI 0~3 and GPO0~3), CMOS Level (0/3.3V)
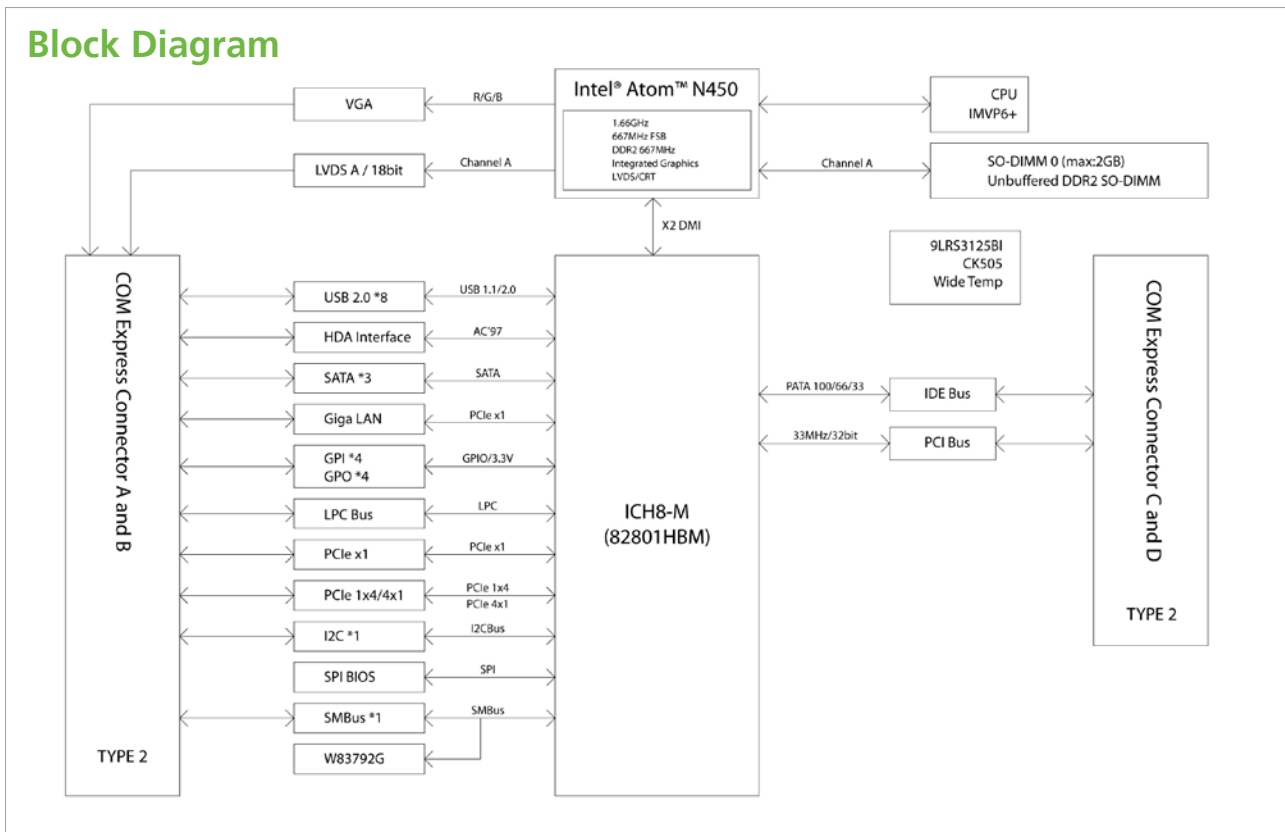- I2C Interface/SMbus Interface
- USB 2.0 x 8
- PATA

Extension
- One 32-bit PCI V2.3 interface
- One PCI express: 5 Lanes (via dip switch for 5 x 1 or 1 x 1+ 1 x 4)

Other Interfaces
- One 3pin fan connector (Reserved, 90 degree, 12V)

Block Diagram
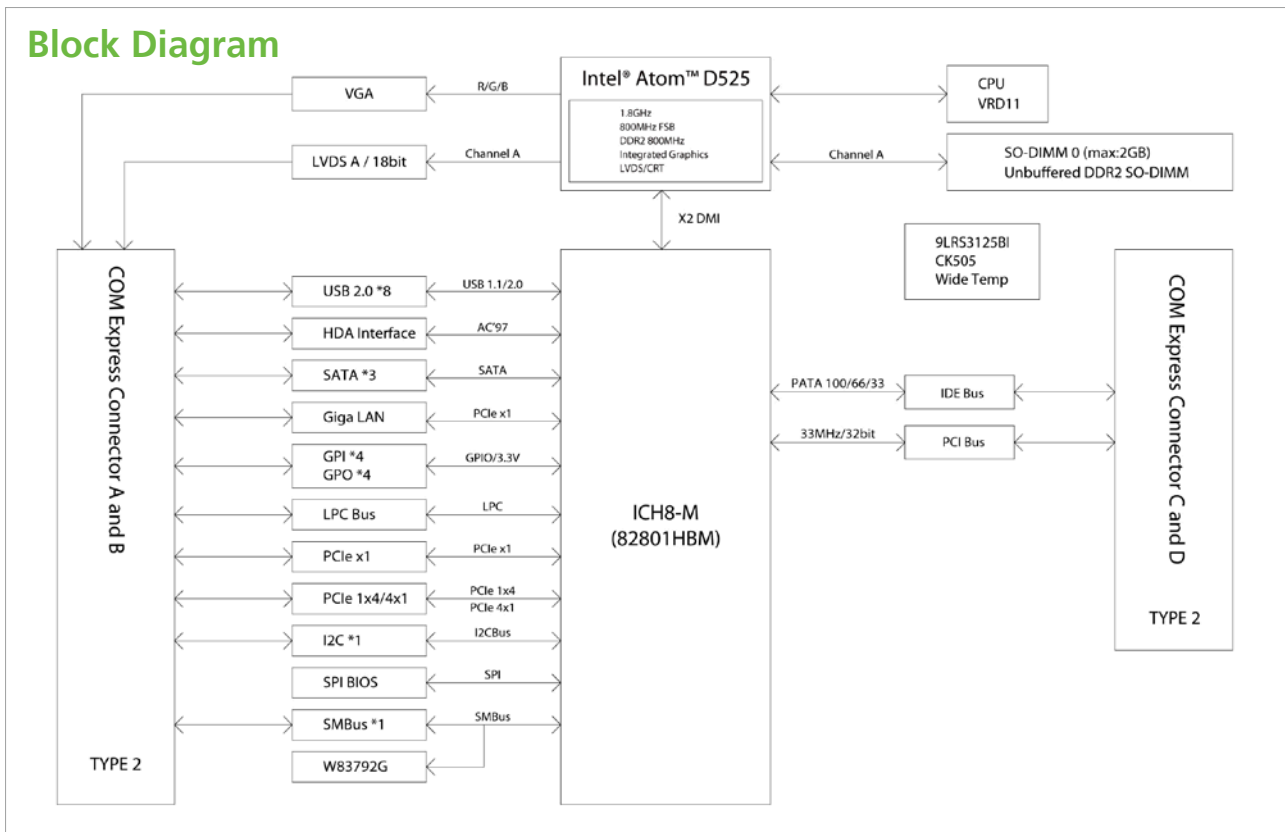
COM Express Connector

- AB connector
  VGA/LVDS/8 x USB/HD Audio interface/3 x SATA/LAN/GPIO(3.3V)/LPC bus/ 1 x PCIe x4/1 x PCIe x1/SMBus/I2C/SPI BIOS
- CD connector, IDE, PCI

Power Requirements

- +12Vdc, 3.3V battery, +5Vsb power input
- Support both AT and ATX power supply mode

Power Management

- ACPI 2.0 compliant with battery support. Also supports Suspend to RAM (S3)

System Monitor

- Monitoring of 4 voltages, 2 temperatures and 1 fan Speed
- 4 voltage (For +5V, +12V, Vcore, +3.3V)
- 2 Temperatures (CPU and one external Temperature Sensor)

Carrier Board

- ICEB 8050

Dimensions

- 95mm (W) x 95mm (L)

Environment

- Operating temperature: -20°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity:
  10% to 97% (operating, non-condensing)
  5% to 97% (non-operating, non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **ICES 253 (P/N: 10K00025300X00)**
  COM Express Type 2 basic module with Intel® Atom™ D525 1.8GHz DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICEB 8050 (P/N: 10KB0805000X0)**
  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 254

COM Express Type 2 Compact Module with Intel® Atom™ D2700 2.13GHz/ ICH10R/ DDR3/ GbE/ 4SATA/ IDE/ LVDS/ 5xPCIe and HDMI

Coming Soon

Main Features

- Intel® Atom™ Dual Core processor D2700, 2.13GHz
- Intel® ICH10R to support Intel® Matrix Storage RAID 0/1/5/10
- 1x DDR3 SO-DIMM socket up to 4GB

- Type 2 COM Express compact size to support 5 Express lanes, 32 bit PCI interface, one IDE, Gigabit LAN and HDMI

Product Overview

The ICES 254 is a COM Express Type 2 compact module that features Intel® Atom™ Dual-Core processor D2700 with ICH10R chipset to support RAID 0/1/5/10, and one DDR3 SO-DIMM memory socket up to 4GB DDR3 SDRAM/ 1067MHz.

The ICES 254 integrates with Intel® HD graphics engine to support dual displays of CRT resolution up to 1920x 1200 @ 60Hz, single channel 18-/ 24-bit LVDS up to 1440x 900 and HDMI 1080p. The high performance ICES 254 COM Express module supports 4x SATA, 8x USB 2.0, IDE, PCI, five PCIe x1 lanes and HDMI through the carrier board. ICES 254 is compatible with NEXCOM in-house designed ICEB 8050 carrier board.

Specifications

CPU Support
- Intel® Atom™ Dual Core processor D2700 2.13Ghz

Chipset
- Intel® ICH10R chipset

Main Memory
- One DDR3 1067MHz SO-DIMM socket up to 4GB

BIOS
- AMI System BIOS
- Plug and play support
- ACPI 3.0b

Display
- Intel® HD graphics with DX10 support
- One HDMI down to the carried board
- Support single channel 18/24-bit LVDS

Audio
- HD audio interface

On-board LAN
- Intel® 82574L GbE controller, support boot from LAN, wake on LAN function
- Signals down to I/O board

COM Express Connector
- AB
  VGA/ LVDS/ GbE/ 8 x USB 2.0/ HD Audio/ 4 x SATA/ LAN/ GPIO (3.3V)/ LPC bus
  Five PCIe X1/ SMBus (I2C)/ SPI BIOS
- CD
  IDE, PCI, HDMI

Power Requirements
- +12V, +5VSB
- Support both AT and ATX power supply mode
- One 3-pins 90 degree edge-connector for DC + 12V fan

Dimensions
- 95mm (W) x 95mm (L)

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
- 10% to 90% (operating, non-condensing)
- 5% to 95% (non-operating, non-condensing)

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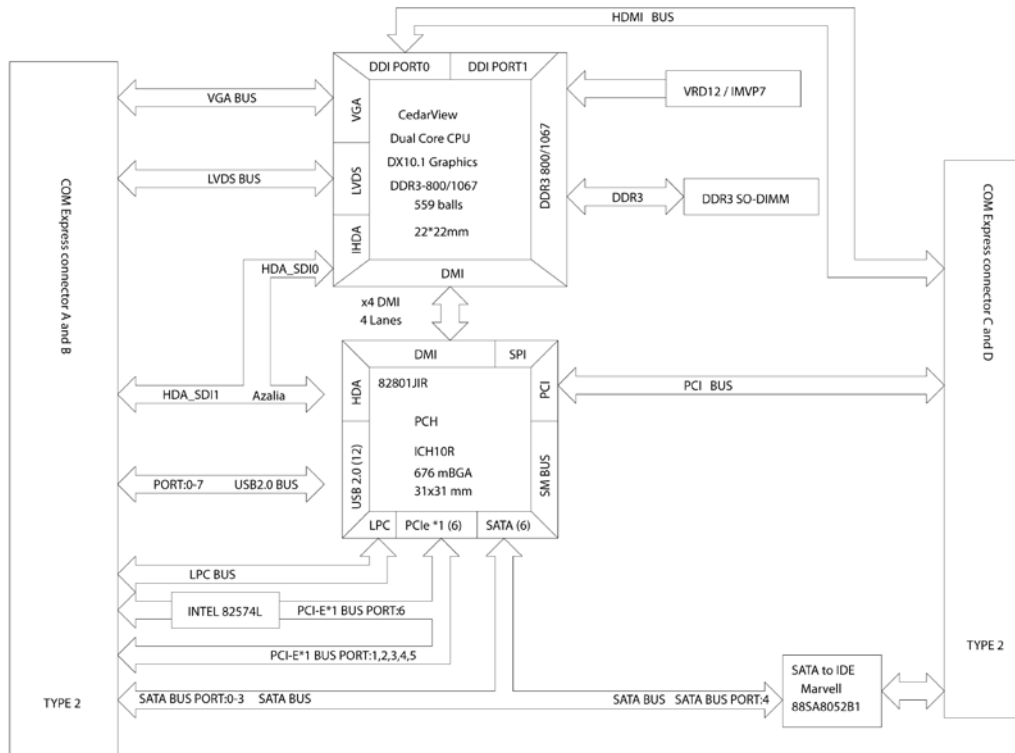
Certifications
- CE approval
- FCC Class A

Ordering Information

- **ICES 254 (P/N:10K00025400X0)**

  COM Express Type 2 basic module with Intel® Atom™ D2700 2.13GHz/ ICH10R/ DDR3/ GbE/ 4SATA/ IDE/ LVDS/ 5xPCIe and HDMI

- **ICEB 8050 (P/N: 10KB0805000X0)**

  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN
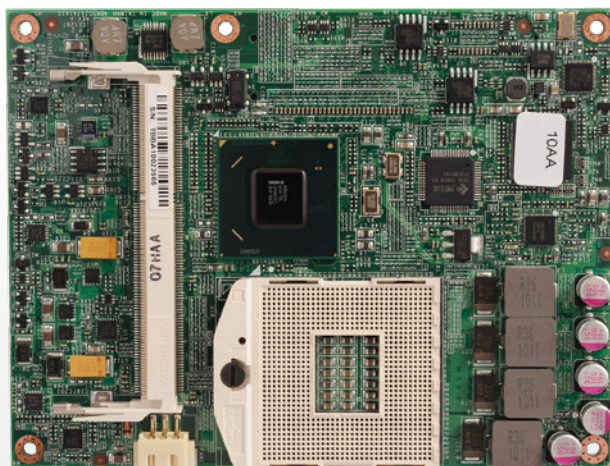
ICES 267

Main Features

- Intel® 2nd Generation Core™ Mobile Processors
- Intel® QM67/HM65 PCH
- 1 x DDR3 SO-DIMM Socket

- Type 2 COM Express Module Support 6 Express Lanes, 32 bit PCI Interface, One IDE and Gigabit LAN

Product Overview

The ICES 267 is a COM Express Type 2 basic module featuring Intel® QM67/HM65 Platform Control Hub, switch supports Intel® 2nd generation Core™ Mobile processors and one DDR3 SO-DIMM memory socket up to 4GB. The ICES 267 integrated with Intel® HD graphics or expands via PCI Express Graphic 1x 16 lane to carrier board; it also supports other display types include LFP or Dual channel LVDS. The high performance ICES 267 COM Express Module supports 4x SATA, 8x USB 2.0 and 6 PCIe x 1 lanes through the carrier board; and it is compatible with ICEB 8050 carrier board.

Specifications

CPU Support
- Support 2nd generation Intel® Core™ Mobile processors, socket FCPGA 998

Main Memory
- One DDR3 1066/1333 MHz SO-DIMM, up to 8GB

Platform Control Hub
- QM67/ HM65

BIOS
- AMI System BIOS
- Plug and play support

Display
- Intel® HD graphics solution
- One PCI Express X 16 Lane down to the carried board
- Drive a standard progressive scan analog monitor with resolution up to 2048 x 1536 @ 60Hz
- Supports LVDS 18/24-bit & single/dual channel interface

Audio
- HD audio interface

On-board LAN
- Intel® 82579LM Gigabit Ethernet, support iAMT 7.0 (supported with QM67 only)

- Support boot from LAN, wake on LAN function
- Signals down to I/O board

COM Express Connector
- AB
  VGA/ LVDS/ 8 x USB 2.0/ HD Audio/ 3 x SATA/ LAN/ GPIO/ LPC bus
  One PCIe X4/ two PCIe X1/ SMBus (I2C)/ SPI BIOS
- CD
  PCIe x 16/ IDE/ PCI

Power Requirements
- +12V, +5VSB, +3.3V RTC power

Dimensions
- 95mm (W) x 125mm (L)

Environment
- Board Level Operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
  10% to 90% (operating, non-condensing)
  5% to 95% (non-operating, non-condensing)

Certifications
- CE approval
- FCC Class A

Block Diagram

Ordering Information

- **ICES 267 (P/N:10K00026700X0)**

  COM Express Type 2 basic module support Intel® Socket FCPGA 998, 2nd generation CoreTM mobile processor family, DDR3/ PCEex16/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICEB 8050 (P/N: 10KB0805000X0)**

  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 267S
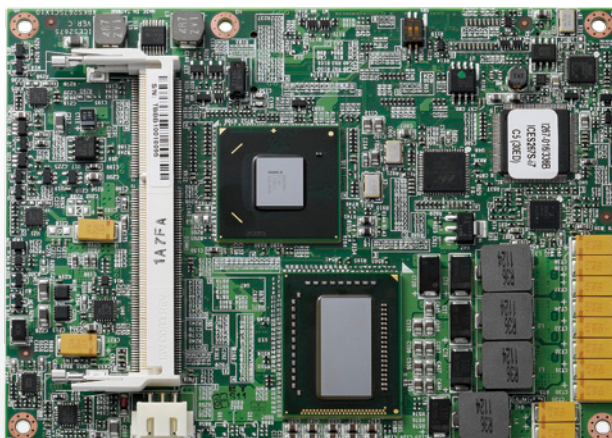
Main Features

- Intel® 2nd generation Intel® Core™ processor family
- Intel® QM67 PCH chipset
- 1x DDR3 SO-DIMM socket support non-ECC DDR3 800/1066/ 1333MHz up to 4GB

- Support SDVO
- Type 2 COM Express 2.0 module support 6 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN

Product Overview

The ICES 267S is a COM Express Type 2 basic module featuring Intel® QM67 PCH chipset, and supports 2nd generation Intel® Core™ processor i5-2515E/ i7-2715QE. ICES 267S gears with DDR3 SO-DIMM memory socket up to 4GB DDR3 800/1066/1333MHz SDRAM single channel with un-buffered non-ECC support.

The ICES 267S integrated with Intel® HD graphics offers display expansion via SDVO to carrier board. In addition, it also supports other display types include LFP or dual channel LVDS. The high performance ICES 267S COM Express module provides 4x SATA, 8x USB 2.0 and 6 PCIe x 1 lanes through the carrier board. It is compatible with ICEB 8050 carrier board.

Specifications

CPU Support
- Support 2nd generation Intel® Core™ processor family

Main Memory
- One DDR3 800/ 1066/ 1333MHz SO-DIMM, up to 4GB

Platform Control Hub
- Intel® QM67 PCH chipset

BIOS
- AMI System BIOS
- Plug and play support
- Advanced power management and advanced configuration & power interface support

Display
- Intel® HD graphics with DX11 support
- One PCI Express x16 Lane down to the carried board
- Drive a standard progressive scan analog monitor resolution up to 2048x1536@60Hz
- LFP LVDS interface to support 18/24-bit & single/dual channel interface

Audio
- HD audio interface

On-board LAN
- Intel® 82579LM Gigabit Ethernet, support iAMT 7.0 (supported with QM67 only)
- Support boot from LAN, wake on LAN function
- Signals down to I/O board

COM Express Connector
- AB
  VGA/ LVDS/ 8x USB 2.0/ HD Audio/ 3x SATA/ LAN/ GPIO/ LPC bus
  One PCIe x4/ two PCIe x1/ SMBus (I2C)/ SPI BIOS
- CD
  IDE/ PCI/ SDVO

Power Requirements
- +12V, +5VSB, +3.3V RTC power

Dimensions
- 95mm (W)x 125mm (L)

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
- 10% to 90% (operating, non-condensing)
- 5% to 95% (non-operating, non-condensing)

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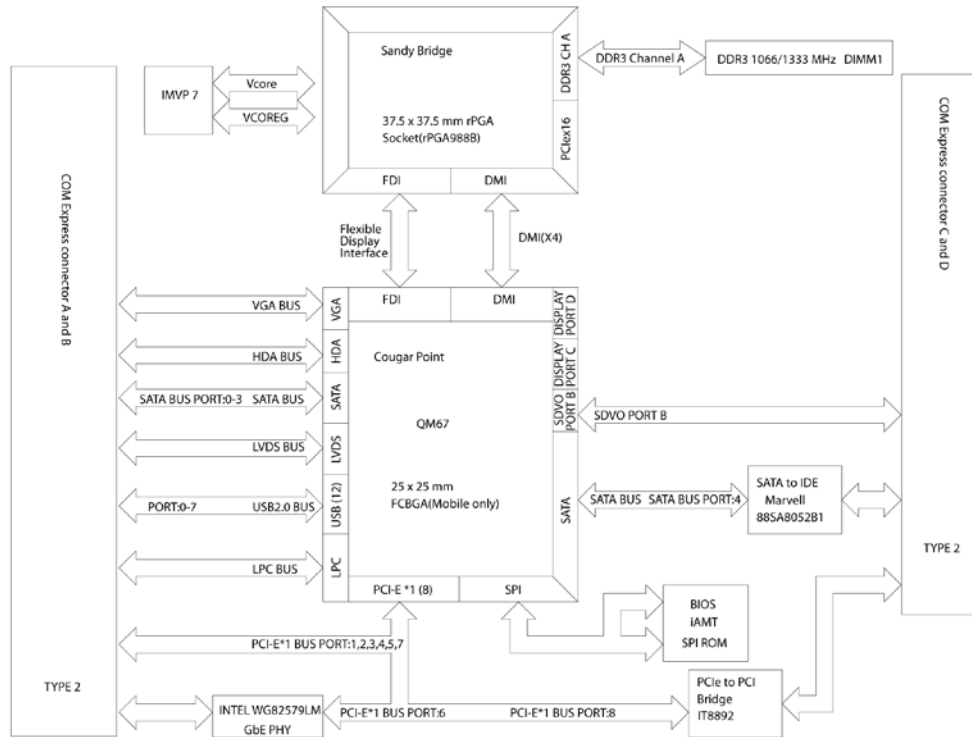
Certifications
- CE approval
- FCC Class A

Ordering Information

- **ICES 267S (P/N: 10K00026701X0)**

  Onboard i5-2515E processor with QM67 Type 2 COM Express basic module, DDR3/ SDVO/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICES 267S-2610UE (P/N: 10K00026708X0)**

  Onboard i7-2610UE processor with QM67 Type 2 COM Express basic module, DDR3/ SDVO/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICES 267S-i7 (P/N: 10K00026704X0)**

  Onboard i7-2715QE processor with QM67 Type 2 COM Express basic module, DDR3/ SDVO/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICES 267S-B810E (P/N: 10K00026705X0)**

  Onboard Celeron® B810E processor with QM67 Type 2 COM Express basic module, DDR3/ SDVO/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICEB 8050 (P/N: 10KB0805000X0)**

  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 268

Coming Soon

Main Features

- Intel® 3rd generation Intel® Core™ processor
- Intel® QM77 PCH chipset with USB3.0 support & SATAIII 6Gbs
- 2x DDR3 SO-DIMM socket supporting non-ECC DDR3 1333/1600 up to 16GB

- Support either PCIe x16 or SDVO
- Type 2 COM Express 2.0 module support 6 Express lanes, 32 bit PCI interface, one IDE and Gigabit LAN

Product Overview

The ICES 268 is a COM Express Type 2 basic module featuring Intel® QM77 PCH chipset and Intel® 3rd generation Intel® Core™ processor. It gears with two DDR3 SO-DIMM memory sockets up to 16GB DDR3 1333/1600 SDRAM with ECC support. The ICES 268 integrates Intel® HD graphics with DX11 support or expands via PCI Express Graphic 1x 16 lane to carrier board. In addition, it also supports other display types including LFP or Dual channel LVDS. The high performance ICES 268 COM Express module supports 4x SATA, 8x USB 2.0/3.0 and 6 PCIe x1 lanes through the carrier board. It is compatible with ICEB 8050 carrier board.

Specifications

CPU Support
- Support 3rd generation Intel® Core™ processor

Main Memory
- Two DDR3 1333/1600 MHz SO-DIMM, up to 16GB

Platform Control Hub
- Intel® QM77 PCH chipset

BIOS
- AMI System BIOS
- Plug and play support
- Advanced power management and advanced configuration & power interface support

Display
- Intel® HD graphics with DX11 support
- One PCI Express x16 lane down to the carried board
- Supports LVDS 18/24-bit & single/dual channel interface

Audio
- HD audio interface

On-board LAN
- Intel® 82579LM Gigabit Ethernet, support iAMT 8.0 (supported with QM77 only)

- Support boot from LAN, wake on LAN function
- Signals down to I/O board

COM Express Connector
- AB
  VGA/ LVDS/ 8 x USB 2.0/ HD Audio/ 4x SATA/ LAN/ GPIO/ LPC bus
  One PCIe X4/ two PCIe X1/ SMBus (I2C)/ SPI BIOS
- CD
  PCIe x 16/ IDE/ PCI

Power Requirements
- +12V, +5VSB, +3.3V RTC power
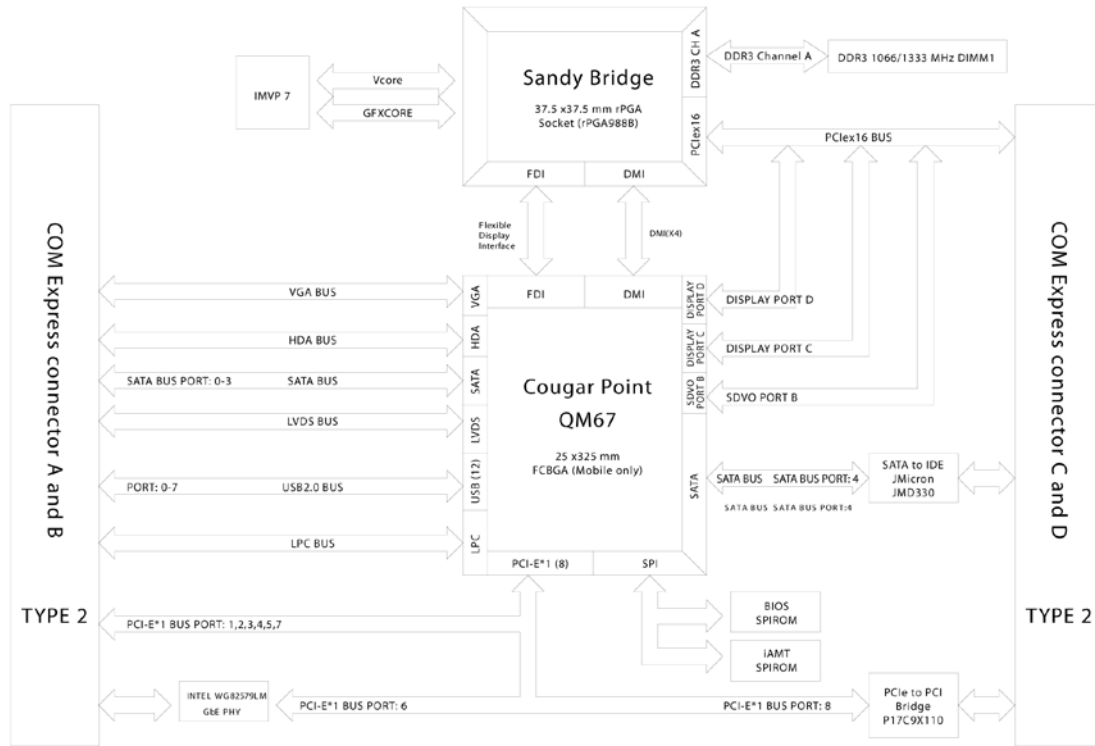
Dimensions
- 95mm (W)x 125mm (L)

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
- 10% to 90% (operating, non-condensing)
- 5% to 95% (non-operating, non-condensing)

Block Diagram

Coming Soon

Certifications
- CE approval
- FCC Class A

Ordering Information

- **ICES 268 (P/N: TBD)**
  Type 2 COM Express basic module QM77 for advanced application

ICES 270
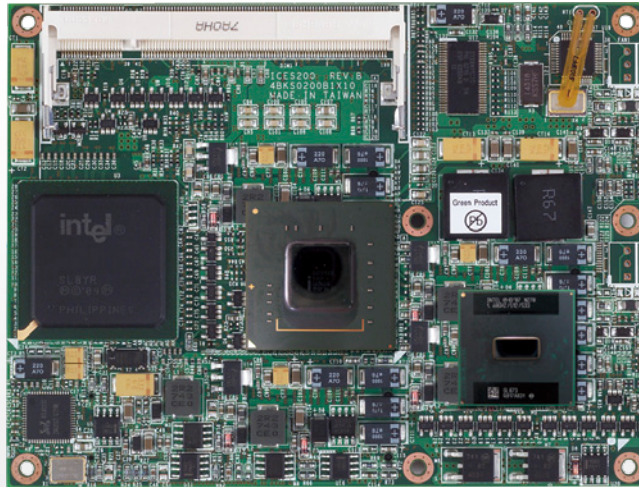
Main Features

- Low Power COM Express CPU Module
- On-board Intel® Atom™ N270 1.6GHz Processor
- Intel® 945GSE Chipset
- Support DDR2 400/533 SO-DIMM up to 2GB

- Realtek RTL8111C GbE LAN Controller
- Support 2 x SATA, 8x USB for fast peripherals
- COM Express Basic Type II Module supports up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN

Specifications

CPU Support
- On-board Intel® Atom™ N270 1.6GHz processor

Chipset
- Intel® 945GSE and ICH7M chipsets

Main Memory
- Support one un-buffered non-ECC DDR2 SO-DIMM 400/533 up to 2GB

BIOS
- Award system BIOS
- Advanced Power Management support
- 8M SPI ROM

Display
- Intel® 945GSE integrated graphics solution with dynamic video memory allocation
- Analog monitor resolution up to 1600x1200 @ 85Hz
- Support single or dual channel 18-bit LVDS panel
- SDVO signal down to connector CD

On-board LAN
- Realtek RTL8111C 10/100/1000 Gigabit LAN controller
- Support PXE LAN boot function
- Support Wake on LAN function
- Signals down to I/O board

Other Interfaces
- One 3-pin 12V FAN connector

COM Express Connector
- AB connector
  VGA/LVDS/8 x USB/HD Audio interface/2 x SATA/LAN/GPIO(3.3V)/
  LPC bus/1 x PCIe x4/1 x PCIe x1/SMBus/I²C/SPI BIOS

- CD connector
  IDE
  PCI
  SDVO B

Power Requirements
- +12V, +5VSB, +3.3V RTC power
- Support AT and ATX power supply

Dimensions
- 95mm (W) x 125mm (L)

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
  10% to 90% (operating, non-condensing)
  5% to 95% (non-operating, non-condensing)

Certifications
- CE approval
- FCC Class A

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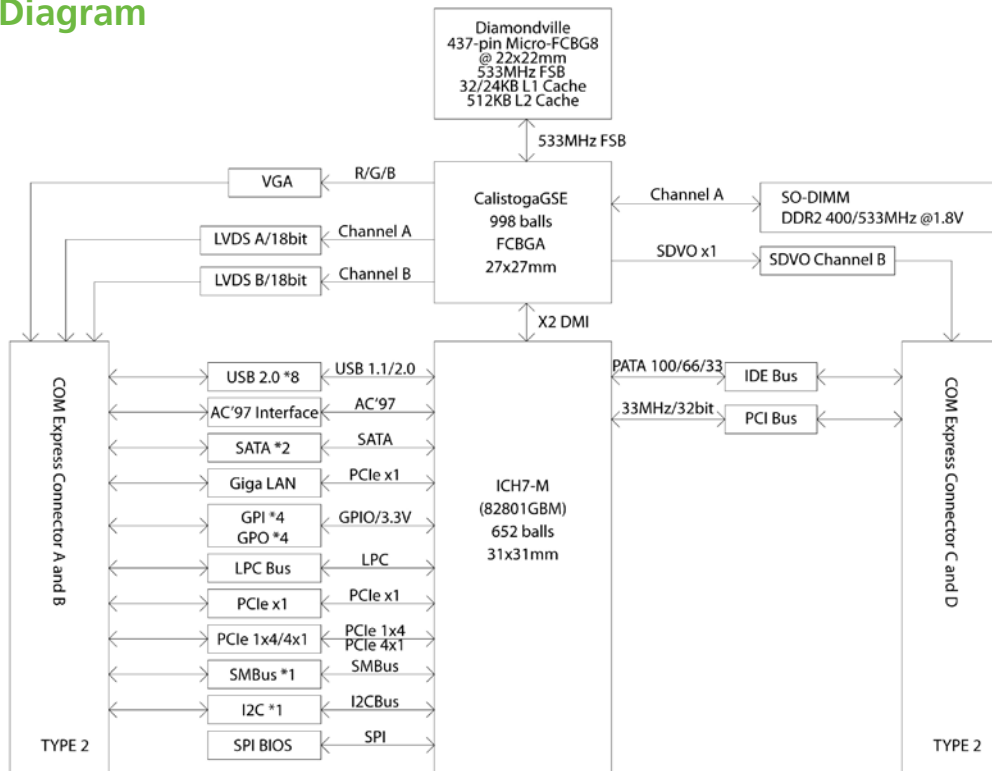
Ordering Information

- **ICES 270 (P/N:10K00027000X0)**

  COM Express Type 2 basic module with Intel® Atom™ N270 1.6GHz/ 945GSE, DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ audio interface

- **ICEB 8050 (P/N: 10KB0805000X0)**

  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

ICES 668

Coming Soon

Main Features

- 3rd generation Intel® Core™ processor
- Intel® QM77 PCH chipset with USB3.0 support & SATAIII 6Gbs
- 2x DDR3 SO-DIMM socket supporting ECC DDR3 1333/1600 up to 16GB

- Type 6 COM Express 2.0 module support PCIe x16, 7x Express Lanes, 12x USB2.0/USB3.0, 3x DDI, and Gigabit LAN
- Intel HD Graphic engine support triple independent displays

Product Overview

The ICES 668 is a COM Express Type 6 basic module featuring Intel® QM77 PCH chipset, and supports Intel® 3rd generation Intel® Core™ processor. It gears with two DDR3 SO-DIMM memory sockets up to 16GB DDR3 1333/1600 SDRAM with ECC support. The ICES 668 integrates Intel® HD graphics with DX11 support or expands via PCI Express Graphic 1x 16 lane to carrier board. In addition, it also supports other display types include LFP or Dual channel LVDS. The DDI interface allows ICES 668 implementing HDMI, DVI, display port, SDVO on customer solution board besides VGA, LVDS interface.

The high performance ICES 668 COM Express module supports 4x SATAII/III, 12x USB 2.0/3.0 and 7 PCIe x1 lanes through the carrier board. It is compatible with ICEB 8060 carrier board.

Specifications

CPU Support
- Support 3rd generation Intel® Core™ processor

Main Memory
- Two DDR3 1333/1600 MHz SO-DIMM, up to 16GB

Platform Control Hub
- Intel® QM77 PCH chipset

BIOS
- AMI System BIOS
- Plug and play support
- Advanced power management and advanced configuration & power interface support

Display
- Intel® HD graphics with DX11 support and supports triple independent displays
- One PCI Express x16 lane down to the carried board
- Supports LVDS 18/24-bit & single/dual channel interface
- 3x DDI supports HDMI, DVI, display port

Audio
- HD audio interface

On-board LAN
- Intel® 82579LM Gigabit Ethernet, support iAMT 8.0 (supported with QM77 only)
- Support boot from LAN, wake on LAN function
- Signals down to I/O board

COM Express Connector
- AB
  VGA/ LVDS/ 8x USB 2.0 / 2x Serial Port / HD Audio/ 4 x SATA/ LAN/ GPIO/ LPC bus, 1x PCIe x4/ 3x PCIe x1/ SMBus (I2C)/ SPI BIOS /SPK out
- CD
  PCIe x 16/ DDI /4x USB 3.0

Power Requirements
- +12V, +5VSB, +3.3V RTC power

Dimensions
- 95mm (W)x 125mm (L)

Block Diagram

Coming Soon

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
  10% to 90% (operating, non-condensing)
  5% to 95% (non-operating, non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **ICES 668 (P/N: TBD)**
  Type 6 COM Express basic module QM77 for advanced application

EBC 500
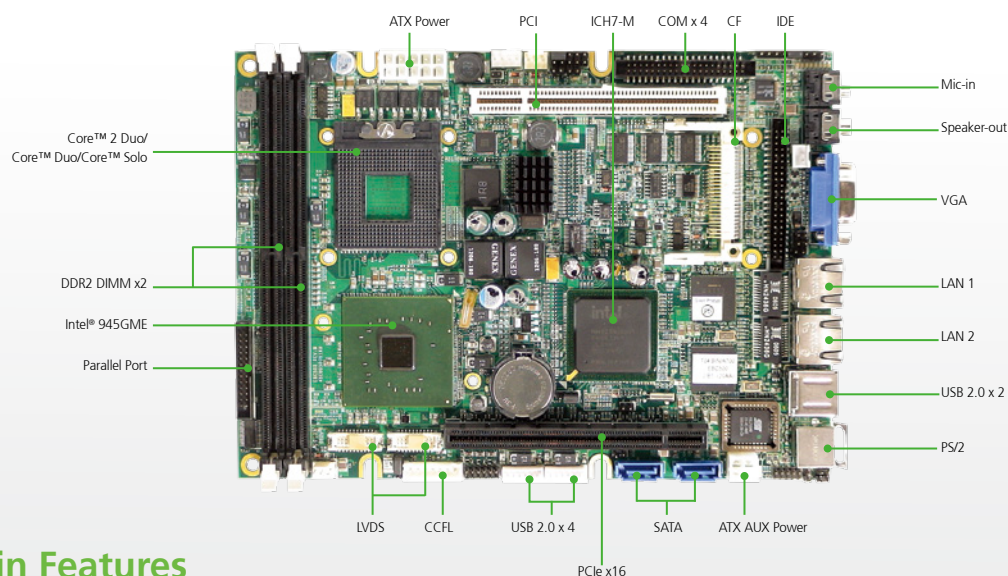
Main Features

- Supports Intel® Core™ 2 Duo, Core™ Duo & Core™ Solo Processor Family
- Intel® 945GME Chipsets
- 2 x 240-pin DDR2 DIMM Sockets Support Un-buffered Non-ECC DDR2 400/533/667 up to 2GB

- 2 x Intel® 82573L PCI Express Gigabit LAN
- Supports LVDS/VGA Display and 1 PCIe x16 Slot
- CompactFlash Socket

Product Overview

The EBC 500 is a 5.25" form factor embedded board computer utilizing the latest Intel® Core™ 2 Duo processor with Intel's 65-nanometer technology and new micro-architecture. EBC 500 supports Intel® Core™ 2 Duo, Core™ Duo, Core™ Solo, and Celeron® M family processors up to 2.17 GHz with 533/667 MHz FSB and up to 4MB L2 cache. The incorporated mobile Intel® 945GME and ICH7-M DH chipset supports two 240-pin DDR2 DIMM socket up to 2GB un-buffered non-ECC DDR2 533/667 MHz, one PCI express x16 slot for superb graphic display and two PCI express x1 Gigabit Ethernet LAN for fastest network connection. The EBC 500 also supports two SATA, IDE, CF, six USB 2.0, VGA & LVDS, four COM, and Parallel port. The RoHS compliant EBC 500 embedded board computer consumes very low power and is designed to deliver higher processing power with greater performance-per-watt to fit in various environments for embedded applications. The new Intel® Core™ 2 Duo processor in the EBC 500 has a flexible design that is able to create new solutions for various environments.

Specifications

CPU Support
- Intel® Socket M
- Supports Intel® Core™ 2 Duo, Core™ Duo,Core™ Solo family processors with 533/667 MHz
- Intel® Embedded Processor List (Intel® Longevity CPU):
  Core™ 2 Duo Processor (T7400 2.16GHz)
  Core™ Duo Processor (T2500 2.0GHz)
  Core™ Solo Processor (Celeron® M 440 1.86GHz)

Main Memory
- 2 x 240-pin DDR2 DIMM socket, up to 2GB un-buffered non-ECC DDR2 400/533/667 SDRAM
- * Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation

Chipset
- Intel® 945GME Graphics Memory Controller Hub (GMCH)
- Intel® 82801 GHM ICH7 Mobile Digital Home (ICH7-M DH)

BIOS
- Award system BIOS
- Supports Soft off, Wake on LAN, Power On by PS2 Keyboard Function Key, RTC alarm Power On
- Power on after power failure
- Plug & Play support

- 4M bits flash ROM

On-board LAN
- 2 x Intel® 82573L PCI Express Gigabit Ethernet
- Supports Boot From LAN (PXE)
- Supports Wake on LAN (When 5Vsb power available). (LAN1 only)
- 2 x RJ45 with LED

Display
- Intel® 945GME chipset with integrated graphics controller, Max. 128MB by Intel® Dynamic Video Memory Technology (DVMT) 3.0
- Analog VGA interface:
  1 x DB15 VGA port Resolution up to 1400X1050 (Tested); Chipset supports up to 2048 x 1536
- LVDS interface: 2 x DF13 20-pin LVDS connector for internal connection, supports single (18bit) or dual pixel (36bit) LVDS panel
- CCFL interface: 1 x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC655 CODEC for AC'97 v2.1 CODECl
- Interface: Mic-in and Speaker-out connector, Line-in with pin header

Expansion
- 1 x PCIe x16 slot
- 1 x PCI slot

I/O Interface
- USB 2.0: 2 ports edge connector

Block Diagram
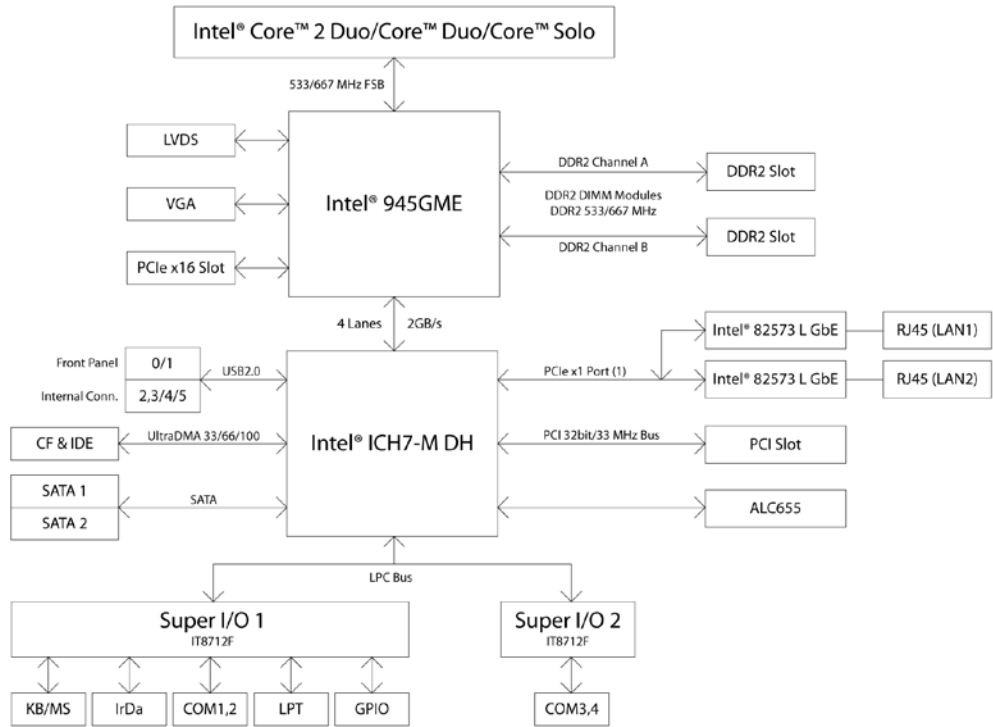
- USB 2.0: 4 ports, by 1x6 2.5mm JST connector
- Serial ports: 4 x SIO, with 2x20 box header (2.0mm)support RS-232 only 1 x jumper to switch 5V and 12V power source
- Parallel port: 1 port, with 2x13 box header (2.0mm)
- PS/2: 1 x Mini-Din Keyboard/Mouse
- GPIO: Support 4 sets of general purpose I/O each with TTL level (5V) interface
- FAN: Two 1 x 3-pin connectors for system Fan, one 1 x 4 pin connector for CPU Fan
- 1 x on-board 5-pin header for IrDA, TX, RX
- SMBus2.0/Reset/On off switch button

Watchdog Timer
- Watchdog Timer is programmable by software from 1 to 255 seconds (Tolerance 10% under room temperature 25°C)

Storage
- 2 x SATA II ports
- 1 x IDE 44-pin connector
- 1 x CF internal socket, supports One Type I& II Compact Flash Card (Primary Master)

System Monitor
- 8 voltage (For +3.3V, +5V, +12V, Vcore and +1.5V, +1.8V, +5VSB, +3 VSB)
- 3 Temperatures (CPU, two external Temperature Sensor)
- 3 FANs speed (CPU and System FANs)

On-board RTC
- On-chip RTC with battery back up
- 1 x External Li-ion Battery
- RTC Tolerance less than 2sec (24 hours) under 25°C environment

Power Requirements
- Supports both AT and ATX Mode (default setting is AT mode)

CPU: P-M 2.17GHz Memory: 2 x 1G DDR2	+12 V	+5 V
Full-Loading Mode	3.25 A	4.97 A
Light-Loading Mode	0.40 A	2.97 A

* NOTE:
  1. Full Loading: Utilize CPU 100% with Burn-in test running
  2. Light Loading: Utilize CPU loading below 5% without data or application running.

Dimensions
- 5.25" form factor: 203mm (L) x 146mm (W) (7.9" x 5.7")

Environment
- Board level operating temperature:0°C to 60°C
- Storage temperature:-20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **EBC 500 (P/N: 10E00050000X0) RoHS Compliant**
  5.25" Embedded Board supporting Intel® Core™ 2 Duo, Core™ Duo and Core™ Solo CPU w/ VGA/LVDS/Audio/4 COMs/6 USB2.0/Dual Gigabit LAN

- **Packing List**

Part No.	Description
60233USB59X00	USB CABLE
60233POW73X00	POWER CABLE (2x10 TO 2x5)
60233POW34X00	POWER CABLE (BIG 4P)
60233MK202X00	PS2 Y CABLE
60233IDE86X00	IDE CABLE 44P TO 40P
60233ATA06X00	SATA CABLE L: 330mm
6023325262X00	PRINT CABLE
6023309402X00	COM CABLE L: 300mm

EBC 540

**5.25" On-board Intel® Atom™ N270 1.6GHz CPU with
Mini-PCIe/ PCI 104/ PCI/ Gigabit LAN x 2/ CF**

Intel® Atom™ N270 · Power Connector · PCI · Intel® ICH7-M · SATA x 2 · PCI 104 · USB 2.0 JST x 2 · Mic-in · Line-out · VGA · GbE LAN x 2 · USB 2.0 x 2 · PS/2 Connector · DIMM · Intel® 945GSE · SDVO 1/2 · Mini-PCIe · CCFL · LVDS · LPT · COM x 2 · COM · CF

Main Features

- Support Intel® Atom™ N270 1.6GHz processor with 533 MHz FSB
- Intel® 945GSE integrated 3D graphics engine GMA950 chipset with CRT and LVDS display
- 1 x 240-pin DDR2 DIMM socket, up to 2GB non-ECC 400/533 MHz DDR2 memory

- Realtek RTL8111C-GR PCI Express Gigabit Ethernet x 2
- Realtek ALC888 Audio CODEC x 1
- USB 2.0 x 4, Serial port x 6 and parallel port x 1
- Mini-PCIe x 1/PCI 104 Interface x 1/PCI slot x 1
- SATA x 2, Compact Flash Socket x 1

Product Overview

The EBC 540 is a 5.25" embedded board with an on-board Intel® Atom™ N270 1.6GHz processor with 512 KB L2 cache by 533 MHz FSB. The EBC 540 features Intel® 945GSE and ICH7-M chipsets, which supports DDR2 400/533 memory, along with integrated GMA950 graphics for large display application to support independent CRT and LVDS interface. The South Bridge ICH7-M provides a Compact Flash socket, six serial ports, four USB 2.0 ports, two PCI Express Gigabit Ethernet LAN ports, two SATA ports, one PCI 104 interface and one PCI slot for application.

The EBC 540 is a great solution featuring a low power consumption processor and small footprint with versatile displays and numerous I/O port support at industrial applications.

Specifications

CPU Support
- Support Intel® Longevity CPU Atom™ N270 1.6GHz processor with 533MHz FSB

Main Memory
- 1 x 240-pin DDR2 DIMM socket, support up to 2GB non-ECC 400/533 DDR2 memory

Chipset
- Intel® 82945GSE Graphic Controller Hub (GMCH)
- Intel® 82801 GBM ICH7 Mobile (ICH7-M)

BIOS
- Award system BIOS
- Plug & Play support
- Advanced Power Management
- Advanced Configuration & Power Interface
- 8M bits SPI ROM

On-board LAN
- 2 x Realtek RTL8111C-GR PCI Express Gigabit Ethernet
- Support Boot From LAN (PXE)
- Wake on LAN (When 5Vsb power available) (LAN1 only)
- 2 x RJ45 with LED

Display
- Intel® 945GSE integrated 3D graphics engine, based on Intel® GMA950 architecture, delivers sophisticated graphics for large display application, dual independent display support, at graphics core speeds up to 166MHz, provides a wealth of options for high-resolution displays
- Analog VGA Interface:
  1 x DB15 VGA port
  Resolution up to 1600x1200 at 85 Hz, 2048x1536 at 75Hz
- LVDS Interface:
  Support 18-bit single channel LVDS, resolution up to 1024 x 768 with maximum pixel depth of 18-bpp
- SDVO Interface (one 30-pin box header):
  SDVO w/ CH7308B or CH7307C daughter board for LVDS or DVI output
- CCFL Interface: 1 x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC888 CODEC for High Definition
- Mic-in and Line-out Connector

Expansion
- 1 x Mini-PCIe slot
- 1 x PCI slot
- 1 x PCI 104 slot

Block Diagram
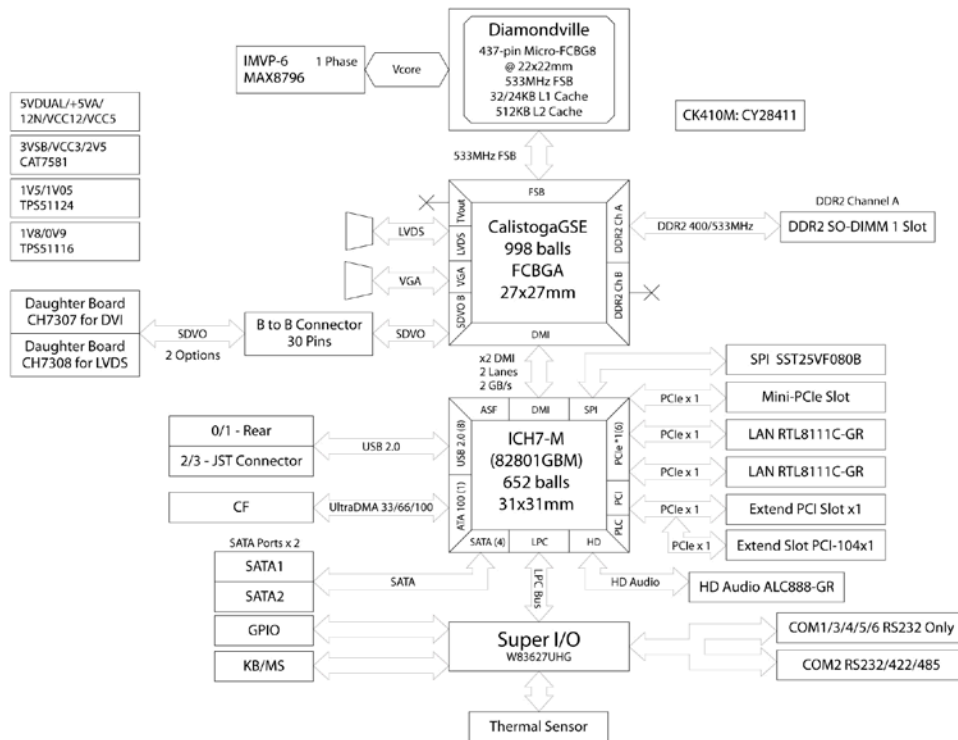
I/O Interface
- USB 2.0: 2 ports connector on front
- USB 2.0: 2 ports, with 1x6 JST (2.5 mm)
- Serial ports: 6x COMs, COM 1/ 3/ 4/ 5/ 6 for RS-232, COM 2 for RS-232/ 422/ 485 (select in BIOS)
- Parallel port: 1 port, with 2x13 box-header (2.0 mm)
- PS/2: 1 x Mini-Din Keyboard/Mouse
- GPIO: Support 4 sets of general purpose I/O each with TTL level (5V) interface
- FAN: 2 x 3-pin FAN connector (CPU and system)
- On-board buzzer /SMBus2.0 / Reset / On & Off switch button/ power LED/ HDD/ Active LED

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 2 x SATA ports
- 1 x CF socket

System Monitor
- Monitoring of 5 voltages and 3 temperatures
- 5 Voltage (+5V, Vcore, +12V, +3.3V, +1.5V)
- 2 Temperatures (CPU, System temperature sensor)

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Requirements
- Supports both AT and ATX Mode (default setting is AT mode)
- Power Supply must provide +12V, +5V at least for AT mode
- Power Supply must provide +12V, +5V, +5Vsb for ATX mode
- Power On CON 6P (Standard) + PS_On JST 3P CON

Dimensions
- 5.25" form factor/203mm (L) x 146mm (W) (7.9"x5.7")

Environment
- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information
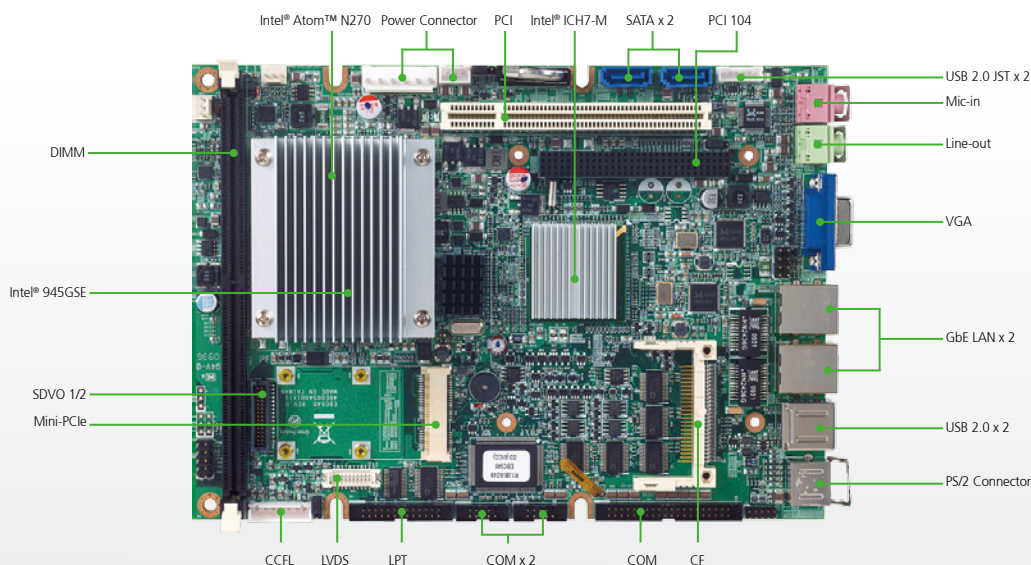
- **EBC 540 (P/N: 10E00054000X0)**
  Low power Embedded Board with Intel® Atom™ N270 processor and based on Intel® 945GSE 3D graphics engine GMA950 w/ VGA/ LVDS/ 4 x USB2.0/ 6 x COMs/2 x PCIe Gigabit LAN/1 x parallel port/1 x Mini-PCIe interface/ 1 x PCI 104 interface/ 1 x PCI slot

- **EBKSDVO1 (P/N: 10E0SDVO100X0)**
  CH7307C daughter board w/ DVI-Single link for DVI output

- **EBKSDVO2 (P/N: 10E0SDVO200X0)**
  CH7308B daughter board for LVDS output

- **Packing List**

Part No.	Description
60233USB59X00	USB CABLE
60233MK202X00	PS2 Y CABLE
6023309402X00	COM CABLE L: 300mm
60233PW145X00	POWER CABLE
60233ATA17X00	SATA CABLE
60233PRT10X00	PRINT CABLE
60233SIO06X00	COM CABLE

EBC 545
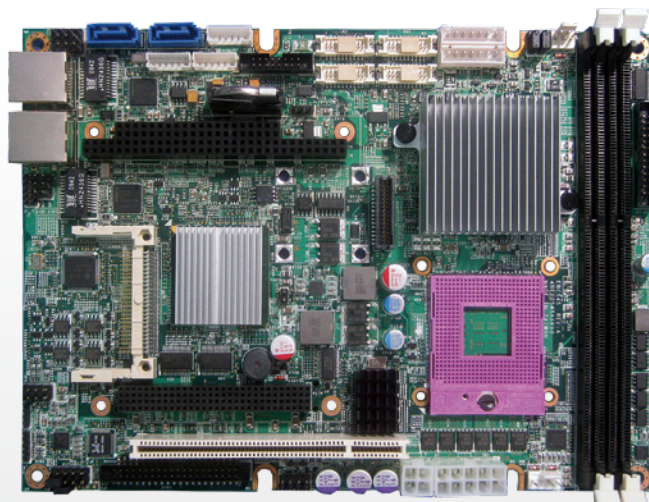
Main Features

- Support Intel® Core™ 2 Quad, Core™ 2 Duo, Celeron® Processor
- Intel® GM45 with GMA4500MHD Graphic Engine
- 2x 240-pin DDR3 DIMM socket, up to 8 GB non-ECC 1066 MHz DRAM
- 2x Intel® 82574L PCI Express Gigabit Ethernet

- 1 x Realtek ALC888 HD CODEC
- 6 x USB 2.0, 4 x Serial port, 2 x SATA
- 1 x PCI Slot/ 1 x PC /104+ slot

Product Overview

The EBC 545 is a 5.25" form factor embedded utilizing Intel® Core™ 2 Quad, Core™ 2 Duo and Celeron® 575 Processor. EBC 545 features Intel® GM45 and ICH9-M chipsets, which supports DDR3 1066 MHz DRAM. The multi expansion features via PCI and PC/104+ for different application at your system device.

The EBC 545 embedded board supports a various operation systems such as Windows7 embedded, Windows XP embedded, Win CE and Linux.

Specifications

CPU Support
- Intel® Core™ 2 Quad (Q9100 2.26GHz) (non longevity CPU)
- Intel® Embedded Processor List (Intel® Longevity CPU):
  Intel® Core™ 2 Duo (T9400 2.53GHz)
  Intel® Celeron® 575 2.0GHz

Main Memory
- 2 x 240-pin DDR3 DIMM Socket, up to 8GB non-ECC1066 MHz DRAM

Chipset
- Intel® GM45
- Intel® ICH9-M

BIOS
- Award System BIOS
- PnP and ACPI support
- 8M bits SPI ROM

On-board LAN
- 2 x Intel® 82574L PCI Express GbE
- Support PXE and Wake on LAN (When 5Vsb available) (LAN1 only)
- 2 x RJ45 (180°/ 90° option)

Display
- Intel® GM45 integrated GMA4500MHD Graphic engine
- Analog VGA Interface:
  One 2 x 8.0mm box header

Resolution up to 1600 x 1200 at 85 Hz, 2048 x 1536 at 75Hz
- LVDS1 Interface:
  2 x DF13 20-pin LVDS connector for internal connection support single (24bit) or dual pixel (48bit) LVDS panel
- LVDS2 (Through SDVOB w/ CH7308B) Interface:
  2 x DF13 20-pin LVDS connector for internal connection support single (24bit) or dual pixel (48bit) LVDS panel
- SDVO Interface (option, one 30-pin box header):
  EBK SDVO1 (SDVOC w/ CH7307C DVI transmitter w/ DVI-Single link output)
- CCFL Interface:
  2 x CCFL for Panel Backlight Inverter
- Composition:
  VGA+LVDS1
  VGA+DVI
  LVDS+DVI
  LVDS1+LVDS2

Audio
- Realtek ALC888 HD CODEC
- 1 x Mic-in/1x Line-out

Expansion
- 1 x PCI
- 1 x PC/104+

Block Diagram
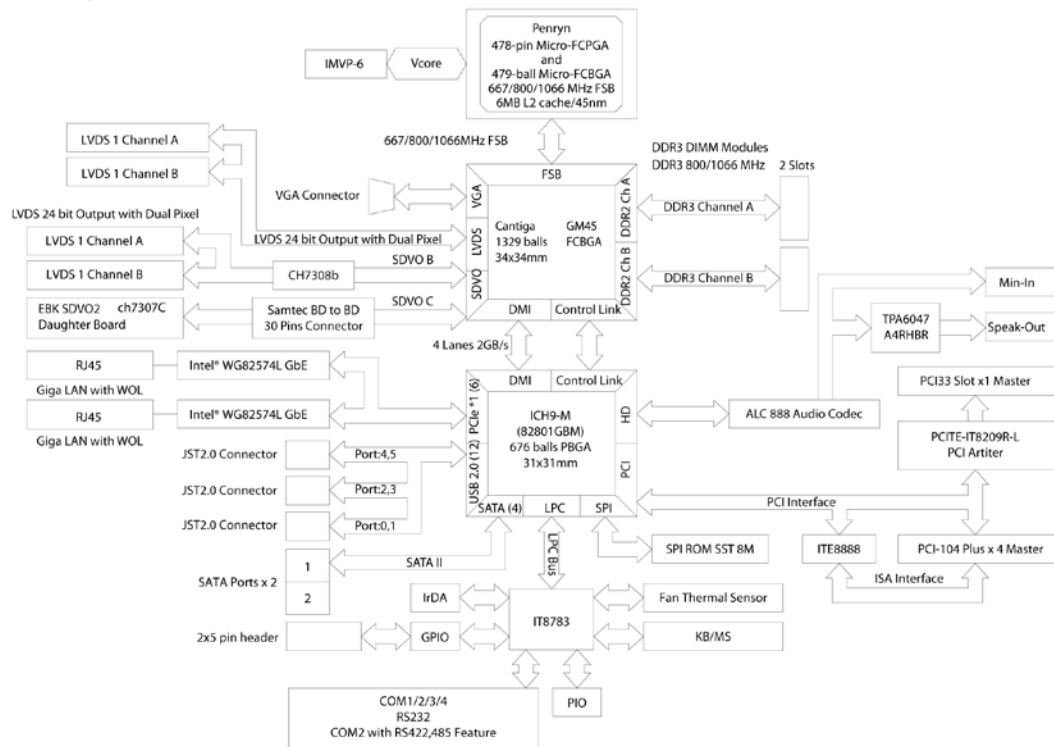
I/O Interface
* Serial port: 3 x COM support RS232 and 1 x COM support RS232/ RS422/ RS485 (BIOS setting)
* Parallel port: 1 x 26-pin box header
* USB 2.0: 6 x ports by JST connector x 3
* 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
* 2 x 2-pin 2.54mm header for Power LED/HDD Active LED
* 1 x 4-pin and 1 x 3-pin Fan connector
* 1 x PS/2 KB/MS via pin header
* On board Buzzer/SMBus2.0 /Reset SW
* 1 x 5-pin header for IrDA

Watchdog Timer
* WDT can be programmable by Software from 1 sec to 255 sec and from 1 min to 255 minutes (Tolerance 15% at 25°C)

Storage
* 2 x SATA port
* 1 x CF socket

System Monitor
* Monitoring of 5 voltages and 2 temperatures and 2 fan speed monitor
* 5 voltage (+5V, Vcore, +12V, +3.3V, +1.5V)
* 2 temperatures (CPU, external temperature)
* 2 fan speed monitor (CPU, system)

Power Requirements
* Supports both AT and ATX Mode (default setting is ATX mode)
* ATX mode:
  2x5pin ATX power connector w/ +12V/-12V/+5V/5Vsb Power In
  2x2pin power connector +12V Power In
  At ATX Mode, the BIOS setting is as follow:
  POWER -SUPPLY TYPE: [ATX]
  AUTO PWR-FAILURE RESUME: [ON]
* AT mode:
  2x5pin ATX power connector w/ +12V/-12V/+5V Power In

No Power On push Button, Software Shutdown function and LAN remote wake up

Dimensions
* 5.25" form factor/203mm (L) x 146mm (W) (7.9"x 5.7")

Environment
* Operation temperatures: 0°C to 60°C
* Storage temperatures: -20°C to 85°C
* Humidity: 10% to 90%, non condensing

Certifications
* CE approval
* FCC Class A

Ordering Information

* **EBC 545 (P/N: 10E00054500X0)**
  5.25" Intel® Core™ 2 Quad, Core™ 2 Duo/Celeron® Embedded CPU Board with Dual Display/1x PCI /1 x PC/104+/2x GbE

* **EBKSDVO1 (P/N: 10E0SDVO100X0)**
  CH7307C daughter board w/ DVI-Single link for DVI output

* **EBKSDVO2 (P/N: 10E0SDVO200X0)**
  CH7308B daughter board for LVDS output

* **Packing List**

Part No.	Description
60233USB59X00	USB CABLE
60233POW73X00	POWER CABLE (2x10 TO 2x5)
60233MK202X00	PS2 Y CABLE
6023309402X00	COM CABLE L: 300mm
60233PRT15X00	PRINT CABLE
60233ATA17X00	SATA CABLE
60233POW22X00	POWER CABLE (BIG 4P)

EBC 550

5.25" Intel® Core™ 2 Quad/ Core™ 2 Duo/ Celeron® Embedded CPU Board with Dual Display/ 1 x PCIe x16/ 1 x PCIe x4/ 1 x PCI/2 x GbE

ATX Power AUX Power PCI 4 x COM Mic-in Line-out Core™ 2 Duo/Celeron® M VGA 2 x DDR3 GM45 2 x GbE LAN LPT 2 x USB 2.0 KB/MS LVDS CCFL PCIe x16 ICH9-M PCIe x4 4 x SATA
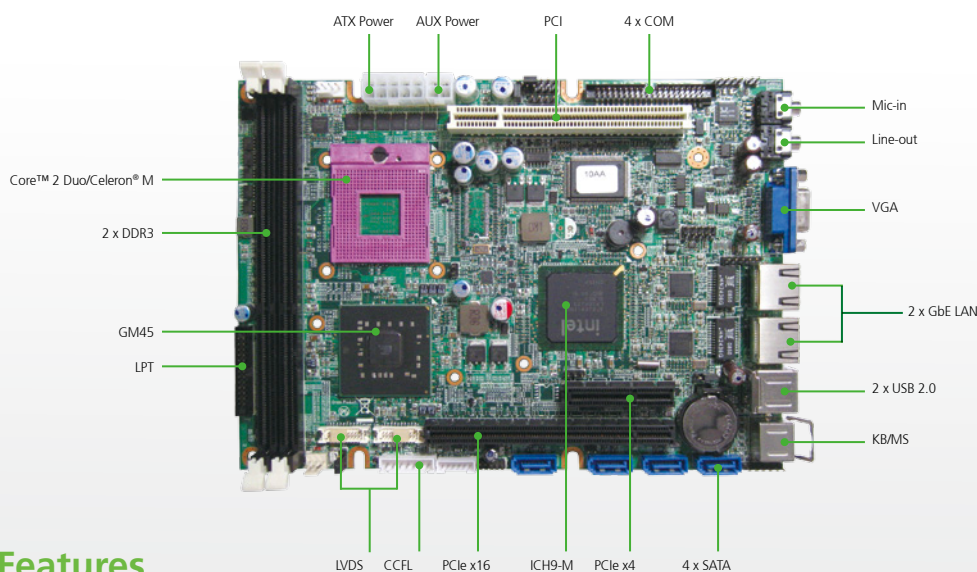
Main Features

- Support Intel® Core™ 2 Quad, Core™ 2 Duo, Celeron® Processor
- Intel® GM45 with GMA4500MHD Graphic Engine
- 2 x 240-pin DDR3 DIMM socket, up to 8GB non-ECC 1066 MHz DRAM

- 2 x Intel® 82574L PCI Express Gigabit Ethernet
- 1 x Realtek ALC888 HD CODEC
- 6 x USB 2.0, 4 x Serial port , 4 x SATA and 1 x Parallel port
- 1 x PCIe x16 Slot/1 x PCIe x4 Slot/1 x PCI slot

Product Overview

The EBC 550 is a 5.25" form factor embedded utilizing Intel® Core™ 2 Quad, Core™ 2 Duo and Celeron® 575 Processor. EBC 550 features Intel® GM45 and ICH9-M chipsets, which supports DDR3 1066 MHz DRAM. The multi expansion features via PCIe x16, PCIe x4 and PCI for different application at your system device.

The EBC 550 embedded board supports a various operation systems such as Windows XP embedded, Win CE and Linux.

Specifications

CPU Support
- Intel® Core™ 2 Quad (Q9100 2.26GHz) (non longevity CPU)
- Intel® Embedded Processor List (Intel® Longevity CPU):
  Intel® Core™ 2 Duo (T9400 2.53GHz)
  Intel® Celeron® 575 2.0GHz

Main Memory
- 2 x 240-pin DDR3 DIMM Socket, up to 8GB non-ECC 1066 MHz DRAM

Chipset
- Intel® GM45
- Intel® ICH9-M

BIOS
- Award System BIOS
- PnP and ACPI support
- 8M bits SPI ROM

On-board LAN
- 2 x Intel® 82574L PCI Express GbE
- Support PXE and Wake on LAN (When 5Vsb available) (LAN1, LAN2 both)
- 2 x RJ45 w/ LED

Display
- Intel® GM45 integrated GMA4500MHD Graphic engine

- Analog VGA Interface:
  1 x DB15 port
  Resolution up to 1600x1200 at 85 Hz, 2048x1536 at 75Hz
- LVDS Interface:
  2 x DF13 20-pin LVDS connector for internal connection, supports Single (24bit) or dual pixel (48bit) LVDS panel, resolution up to 1600 x 1200
- CCFL Interface:
  1 x CCFL for Panel Backlight Inverter

Audio
- Realtek ALC888 HD CODEC
- 1 x Mic-in/1 x Line-out

Expansion
- 1 x PCIe x16
- 1 x PCIe x4
- 1 x PCI

I/O Interface
- Serial port: 4 x COM support RS232 only
- Parallel port: 1x 26-pin box header
- USB 2.0: 6 x ports, 2 x edge ports, 2 ports by JST, 1x pin header for uDOM
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header

Block Diagram

- 1 x 4-pin and 1 x 3-pin Fan connector
- 1 x PS/2 KB/MS Jack
- On board Buzzer/SMBus2.0/Reset SW
- 1 x DB15 VGA port

Watchdog Timer
- WDT can be programmable by Software from 1 sec to 255 sec and from 1 min to 255 minutes (Tolerance 15% at 25°C)

Storage
- 4 x SATA port

System Monitor
- Monitoring of 5 voltages and 2 temperatures and 2 fan speed monitor
- 5 voltage (+5V, Vcore , +12V , +3.3V , +1.5V)
- 2 temperatures (CPU, external temperature)
- 2 fan speed monitor (CPU , system)

Power Supply
- Supports both AT and ATX Mode (default setting is AT mode)
- ATX mode:
  2x5pin ATX power connector w/ +12V/-12V/+5V/5Vsb Power In for EBC550
  2x2pin power connector +12V Power In for PCIe x16 Card
  At ATX Mode, the BIOS setting is as follow:
  POWER -SUPPLY TYPE: [ATX]
  AUTO PWR-FAILURE RESUME: [ON]
- AT mode:
  2x5pin ATX power connector w/ +12V/-12V/+5V Power In for EBC550
  No Power On push Button, Software Shutdown function and LAN remote wake up

Dimensions
- 5.25" form factor/203mm (L) x 146mm (W) (7.9"x5.7")

Environment
- Operation Temp: 0°C to 60°C
- Storage Temp: -20°C to 85°C
- Humidity: 10% - 90%, non condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **EBC 550 (P/N: 10E00055000X0) RoHS Compliant**
  5.25" Embedded Board supporting Intel® Core™ 2 Quad, Core™ 2 Duo and Celeron® Processors w/ Dual display/6 x USB2.0/4 x COMs/2 x PCIe GbE/1 x PCIe x16/1 x PCIe x4/1 x PCI

- **Packing List**

Part No.	Description
60233USB59X00	USB CABLE
60233POW73X00	POWER CABLE (2x10 TO 2x5)
60233MK202X00	PS2 Y CABLE
6023309402X00	COM CABLE L: 300mm
60233PRT15X00	PRINT CABLE
60233ATA17X00	SATA CABLE
60233POW22X00	POWER CABLE (BIG 4P)

EBC 310

Main Features

- Support Intel® Atom™ E600 Series Ultra Low Power Consumption SoC
- On-board DDR2 1GB Main Memory
- Support VGA/LVDS Display
- Support Video Decode (MPEG2, MPEG4, H.264, VC1, WMV9) / Encode (MPEG4, H.264)
- Two Gigabit Ethernet
- One CAN Controller
- 3x COMs, 5x USB 2.0, 2x SATA
- Single DC12V Power Input

Product Overview

The EBC 310 is a 3.5" ECX embedded board with an on-board Intel® Atom™ E640 1.0GHz SoC with L2 cache 512 KB and extreme low power consumption 3.6 watts. The EBC 310 features DDR2 1GB memory on-board, dual display application to support independent CRT and LVDS interface and build-in HD video decoder/ encoder. Intel® PCH EG20T supports 1x CAN and USB 2.0 controller. The EBC 310 embedded board supports a various operation systems such as Windows 7, Windows XP embedded, Win CE and Linux.

Specifications

CPU Support
- On-board Intel® Atom™ E640 1.0GHz SoC (System-On-Chip)

Main Memory
- On-board DDR2 800-MHz 1GB, Non-ECC and Un-buffered

Chipset
- Intel® EG20T (PCH)

BIOS
- AMI BIOS
- Plug and play support

On-board LAN
- 1 x Intel® 82574L Gigabit Ethernet controller
- 1 x Realtek 8211CL Gigabit Ethernet controller
- Support Boot from LAN and Wake on LAN
- 2 x RJ45 with LED

Display
- Intel® Atom™ E600 series integrated graphic engine, support video decode (MPEG2, MPEG4, H.264, VC1, WMV9)/ encode (MPEG4, H.264)
- Analog VGA interface:
  1 x DB15 VGA port, resolution up to 1280 x 1024
- LVDS interface: support Single 18/24-bit LVDS channel, resolution up to 1280 x 768

Audio
- Realtek ALC886 CODEC for High Definition
- 1 x Mic-in and 1 x Line-out pin header

Expansion
- 1 x Mini-PCIe socket

I/O Interface
- Serial port: 3 ports
- 1 x RS232 DB9 Connector (COM1)
- 1 x RS232 with 10-pin box header, 2.0mm pitch (COM3)
- 1 x RS232/422/485 (COM2) with 10-pin box header, 2.0mm pitch
- USB 2.0: 5 ports
  2 ports with USB 2.0 connector
  2 ports with 2 x 2-pin header, 2.54mm pitch
  1 port supports USB DOM
- CAN:
  Integrated CAN 2.0 Controller supporting IEEE1588 over CAN
  External CAN Bus Driver – TJA1050
  2 x 2-pin header, 2.54mm pitch
- 8 x GPIO, 10-pin pin header, (GPI 0~3 and GPO0~3) with TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header
- 1 x 4-pin fan connector (for CPU)
- 6-pin JST connector for PS2 Keyboard/ Mouse
- On board Buzzer/ SMBus2.0/ Reset/ On & Off switch button

Block Diagram

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 2 x SATA connector (support 1 x SATA DOM)

System Monitor
- Monitoring of 5 voltages and 2 temperature
- 5 voltages (12, 5, 3.3, VNN, Vcore)
- 2 temperature (CPU, system)

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input
- Support AT and ATX mode (ATX as the default)

Power Requirements
- Power requirement: +12V DC Input
- One 4-pin power connector

Dimensions
- 3.5" ECX form factor
  146mm (L) x 105mm (W) (5.7" x 4.1")

Environment
- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information
- **EBC 310-01G (P/N: 10E00031000X1) RoHS Compliant**
  Ultra Low power Embedded Board with Intel® Atom™ E640 processor
  On-board DDR2 1GB memory, VGA/ LVDS, 1 x CAN, 2 x GbE,
  1 x Mini-PCIe, 3 x COM, 5 x USB 2.0, DC12V input

EBC 340

3.5" ECX On-board Intel® Atom™ N270 1.6GHz CPU with PCI 104/Gigabit LAN/CF
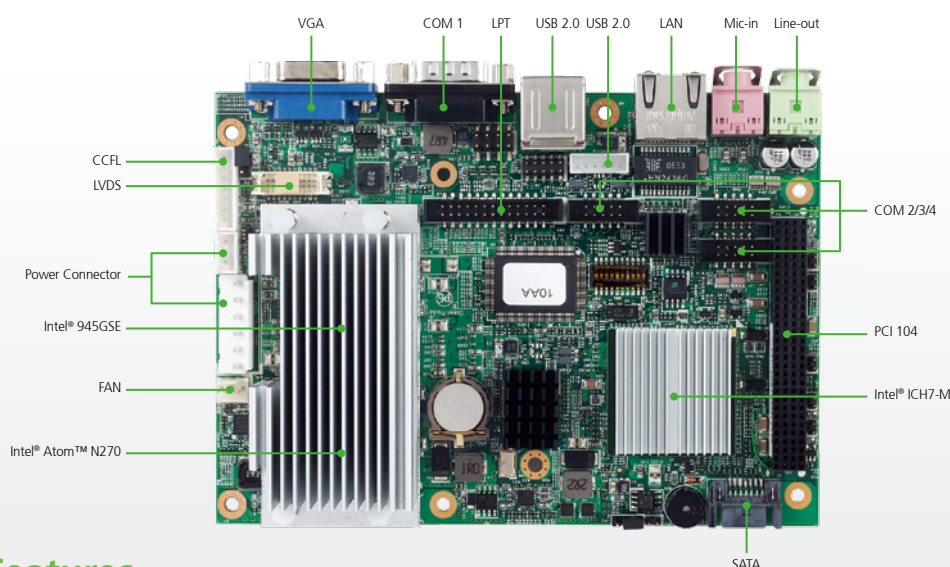
Main Features

- Support Intel® Atom™ N270 1.6GHz processor with 533 MHz FSB
- Intel® 945GSE integrated 3D graphics engine GMA950 chipset with CRT and LVDS display
- 1 x 200-pin SO-DIMM socket, up to 2GB single channel non-ECC 400/533 MHz DDR2 memory

- Realtek RTL8111C-GR PCI Express Gigabit Ethernet x 1
- Realtek ALC888 Audio CODEC x 1
- USB 2.0 x 6, Serial port x 4, SATA x 1 and parallel port x 1
- CompactFlash Socket x 1/PCI 104 Interface x 1

Product Overview

The EBC 340 is a 3.5" ECX embedded board with an on-board Intel® Atom™ N270 1.6GHz processor with 512 KB L2 cache by 533 MHz FSB. The EBC 340 features Intel® 945GSE and ICH7-M chipsets, which supports DDR2 400/533 memory along with integrated GMA950 graphics for large display application to support independent CRT and LVDS interface. The EBC 340 embedded board supports a various operation systems such as Windows XP embedded, Win CE and Linux.

Specifications

CPU Support
- Support Intel® Atom™ N270 1.6GHz processor with 533MHz FSB

Main Memory
- 1 x 200-pin SO-DIMM socket, up to 2GB non-ECC 400/533 DDR2 memory

Chipset
- Intel® 82945GSE Graphic Controller Hub (GMCH)
- Intel® 82801 GBM ICH7 Mobile (ICH7-M)

BIOS
- Award system BIOS
- Plug & Play support
- Advanced Power Management
- Advanced Configuration & Power Interface
- 8M bits SPI ROM

On-board LAN
- 1 x Realtek RTL8111C-GR PCI Express Gigabit Ethernet
- Support Boot From LAN (PXE)
- 1 x RJ45 with LED

Display
- Intel® 945GSE integrated 3D graphics engine, based on IntelGMA950 architecture, delivers sophisticated graphics for large display application, dual independent display support, at graphics core speeds up to 166MHz, provides a wealth of options for high-resolution displays

Analog VGA interface:
- 1 x DB15 VGA port
  Resolution up to 1600x1200 at 85 Hz, 2048x1536 at 75Hz
- LVDS interface:
  Support 18-bit single channel LVDS, resolution up to 1600 x 1200
- CCFL interface:
  1 x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC888 CODEC for High Definition
- 1 x Mic-in and 1 x Line-out Phone Jack

Expansion
- 1 x PCI 104 slot

I/O Interface
- Serial port: 4 port, One DB9 Connector and Three 2x5 2.0mm box header serial, COM2 supports RS232/RS422/RS485
- Parallel port: 1 x 26-pin box header
- USB 2.0: 6 ports, 2 ports edge connector, 2 ports by 2.0mm JST connector (2.0mm pin header option)
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header
- 1 x 3-pin fan connector (for CPU)
- 1 x DB15 VGA connector
- 1 x Keyboard/Mouse pin header
- On board Buzzer/SMBus2.0/Reset SW

NEXCOM

Block Diagram

Intel® Atom™ N270 1.6 GHz
uFCBGA

FSB 533MHz

Intel® 945GSE
FCBGA 998

18bit LVDS Connector

VGA DB15 Connector

400/533MHz — DDR2 (2GB) SO-DIMM*1

DMI up to 1GB

(Option)
0/1
2/3
4/5 u-DOC — USB 2.0 x 6

CF Socket — Ultra DMA 33/66/100

Intel® ICH7M (82801GBM) BGA652

PCIe x1 — RTL8111C-GR GbE RJ45
PCIe x1 — PCI-104 Slot
— HD Realtek ALC888
— SPI

SATA Port x1 — SATA

LPC

GPIO

PS/2 KB/MS

Super I/O
W83627UHG

COM1/3/4 RS232
COM2 RS232/RS422/RS485

Thermal Sensor

LPT
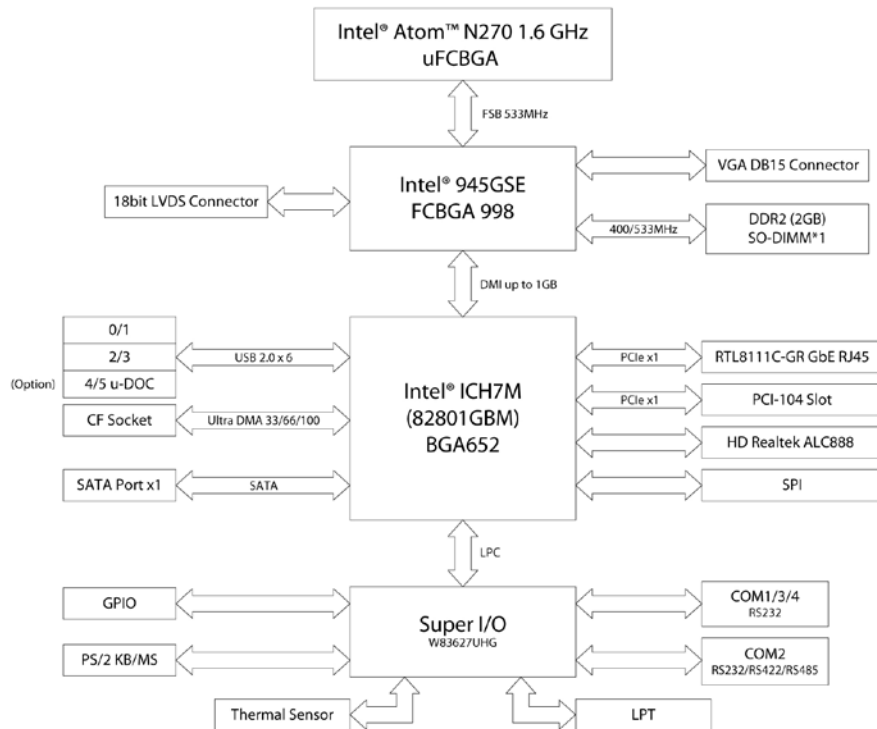
Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 1 x SATA port
- 1 x CF socket
- 1 x uDOC (option)

System Monitor
- Monitoring of 4 voltages and 2 temperatures
- 4 Voltage (Vcore , +12V , +3.3V , +1.5V)
- 2 Temperatures (CPU, System)

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input
- Support AT mode only
- Support AT and ATX power supply
- 6-pin power connector for +5V/+12V power in
- 3-pin Jst connector with PS_ON# directly connected to GND for ATX power supply (Without power on push button function)

Power Requirements

Power Requirement	+5 V	+12 V
Full-Loading Mode	1.26	0.66
Idle Mode	1.15	0.5
Standby Mode	0.86	0.41

Dimensions
- 3.5" ECX form factor/146mm (L) x 105mm (W) (5.7"x4.1")

Environment
- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **EBC 340 (P/N: 10E00034000X0) RoHS Compliant**
  Low power Embedded Board with Intel® Atom™ N270 processor and based on Intel® 945GSE 3D graphics engine GMA950 w/ VGA/LVDS/6 x USB2.0/4 x COMs/1 x PCIe Gigabit LAN/1 x parallel port/1 x PCI 104 interface

- **Packing List**

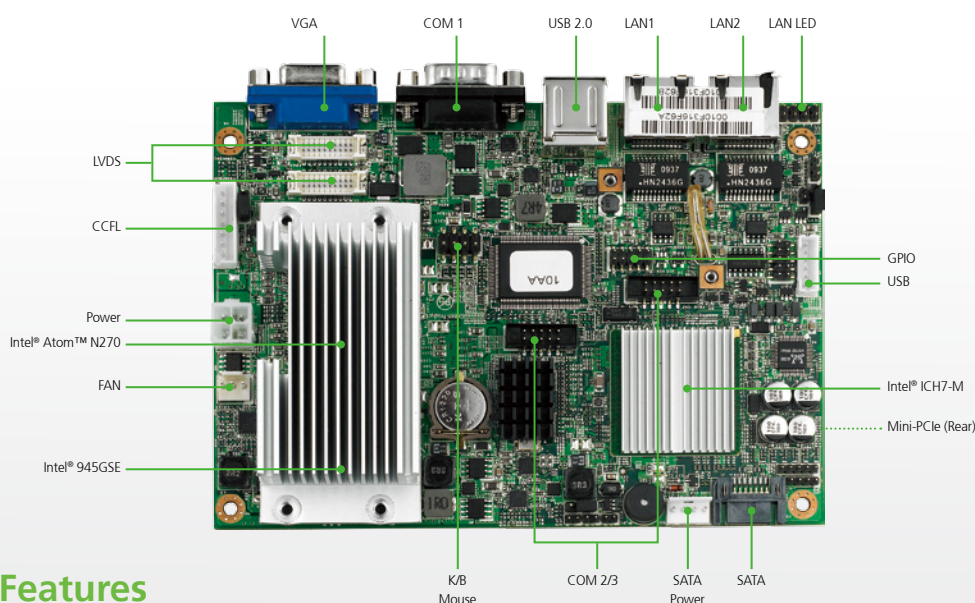| Part No.	Description
60233USB59X00	USB CABLE
60233PW145X00	POWER CABLE
60233ATA17X00	SATA CABLE
6023309101X00	COM PORT CABLE
60233PRT10X00	PRINT CABLE
60233PS203X00	PS/2 CABLE

EBC 342

3.5" ECX On-board Intel® Atom™ N270 1.66GHz CPU
with 24-bit LVDS/Gigabit LAN/CF

Main Features

- Onboard Intel® Atom™ N270 1.6 GHz CPU
- Intel® 945GSE/ICH7-M Chipset
- One 200-pin SODIMM socket supports up to 2 GB DDR2 400/533 MHz SDRAM
- Dual Gigabit Ethernet

- 24-bit LVDs Dual View, 2-CH LVDS
- 5.1-CH Audio
- 1 CF, 1 Mini-PCIe Card
- 1 SATA, 3 COM, 6 USB, 16-bit GPIO

Product Overview

The EBC 342 is a 3.5" ECX embedded board with an on-board Intel® Atom™ N270 1.6GHz processor with 512 KB L2 cache by 533/667 MHz FSB. The EBC 342 features Intel® 945GSE and ICH7-M chipsets, which supports DDR2 400/533 memory, along with integrated GMA950 graphics for large display application to support Multiple Display. The South Bridge ICH7-M provides a Compact Flash socket, four serial ports, six USB 2.0 ports, two Gigabit Ethernet LAN port, one Mini-PCIe interface for application. The EBC 342 is a great solution featuring a low power consumption processor and small footprint with versatile displays and numerous I/O port support at industrial applications.

Specifications

CPU Support
- Support Intel® Atom™ N270 1.6GHz processor with 533MHz FSB

Main Memory
- 1 x 200-pin SO-DIMM socket, up to 2GB non-ECC 400/ 533 DDR2 memory

Chipset
- Intel® 82945GSE Graphic Controller Hub (GMCH)
- Intel® 82801 GBM ICH7 Mobile (ICH7-M)

BIOS
- Award system BIOS
- Plug & Play support
- Advanced Power Management
- Advanced Configuration & Power Interface
- 8M bits SPI ROM

On-board LAN
- 2 x Realtek RTL8111C-GR PCI Express Gigabit Ethernet
- Support Boot From LAN (PXE)
- 2 x RJ45 with LED

Display
- Intel® 945GSE integrated 3D graphics engine, based on Intel®GMA950 architecture, delivers sophisticated graphics for large display application, dual independent display support, at graphics core speeds up to 166MHz, provides a wealth of options for high-resolution displays

- Analog VGA interface:
  1 x DB15 VGA port
  Resolution up to 1600 x 1200 at 85 Hz, 2048x1536 at 75Hz
- LVDS interface:
  SDVO w/ CH7308B single/dual LVDS transmitter to single (24bit) or dual pixel (48bit) LVDS panel, resolution up to 1600 x 1200
  2 x DF13 20-pin LVDS connector for internal connection
- CCFL interface:
  1 x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC888 CODEC for High Definition
- 1 x Mic-in and 1 x Line-out Pin header

Expansion
- 1 x Mini-PCIe

I/O Interface
- Serial port: 3 port, One DB9 Connector and Two 2 x 5 2.0mm box header serial
- Parallel port: 1 x 26-pin box header
- USB 2.0: 6 ports, 2 ports edge connector, 2 ports by 2.0mm JST connector, 2 ports by 2.0mm pin header
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header
- 1 x 3-pin fan connector (for CPU)
- 1 x DB15 VGA connector
- 1 x Keyboard/Mouse pin header
- On board Buzzer/SMBus2.0/Reset SW

Block Diagram

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 1 x SATA port
- 1 x CF socket

System Monitor
- Monitoring of 4 voltages and 2 temperatures
- 4 Voltage (Vcore, +12V , +3.3V , +1.5V)
- 2 Temperatures (CPU, System)

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input
- Support AT and ATX mode

Power Requirements
- Power requirement: +12V DC Input
- One 4-pin power connector

Dimensions
- 3.5" ECX form factor/146mm (L) x 105mm (W) (5.7"x4.1")

Environment
- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information
- **EBC 342 (P/N: 10E00034200X0) RoHS Compliant**
  Low power Embedded Board with Intel® Atom™ N270 processor and based on Intel® 945GSE 3D graphics engine GMA950 w/ VGA/24bit LVDS/6 x USB2.0/3 x COMs/1 x Mini-PCIe/2 x Gigabit LAN/1 x parallel port

EBC 352

3.5" ECX on-board Intel® Atom™ D525 1.8GHz CPU

Main Features

- Support Intel® Atom™ Dual Core D525 Processor
- Support DDR3 SO-DIMM SDRAM, up to 2GB
- Support VGA/ LVDS 18/ 24-bit Display
- Dual Intel Gigabit Ethernet

- Support PCI 104, 1x Mini PCI Express Socket
- 4 x COMs, 6 x USB 2.0
- Single DC12V Power Input

Product Overview

The EBC 352 is a 3.5" ECX board with an on-board Intel® Atom™ dual core D525 with L2 cache 1MB and supports DDR3 SO-DIMM SDRAM module. It features dual display application to support independent CRT and LVDS 18/24-bit interface, dual Gigabit Ethernet, one PCI 104 and one mini PCI Express slot.

Specifications

CPU Support
- On-board Intel® Atom™ Dual Core D525 (1.8GHz, 1M Cache) processor

Main Memory
- 1 x 204-pin DDR3 SO-DIMM socket, DDR3 800 2GB Max., Non-ECC and Un-buffered

Chipset
- Intel® NH82801HBM (ICH8M)

BIOS
- AMI BIOS
- Plug & Play support
- Advanced Power Management
- Advanced Configuration & Power Interface
- 8M bits SPI ROM

On-board LAN
- 2 x Intel® GbE LAN controllers
- Support Boot From LAN (PXE) and Wake on LAN (WoL)
- 2 x RJ45 with LED

Display
- Intel® D425/D525 integrated graphic engine, support Directx*9, with Intel Clear Video Technology on MPEG2 Hardware Acceleration
- Analog VGA interface: 1 x DB15 VGA port, support up to 2048x1563@ 60Hz resolution
- 2x DF-13 20-pin LVDS connector, support single (24-bit) or dual (48-bit) LVDS panel support
- CCFL interface: 1 x 7-pin JST connector, 5V or 12V power source to enable LCD Panel backlight Inverter

Audio
- Realtek ALC888 CODEC for High Definition
- 1 x Mic-in and 1 x Line-out Pin header

Expansion
- 1 x Mini-PCIe socket

I/O Interface
- Serial port: 4 port
  1 x RS232 DB9 Connector
  2 x RS232 with 10-pin box header, 2.0mm pitch
  1 x RS232/422/485 (COM2) with 10-pin box header, 2.0mm pitch
- USB 2.0: 6 ports
  2 ports with USB 2.0 connector
  4 ports with internal JST connector
  8 x GPIO, 10-pin pin header, (GPI 0~3 and GPO0~3) with TTL Level (0/5V)
- On-board Power LED and HDD Active LED Pin Header
- 1 x 3-pin fan connector (for CPU)
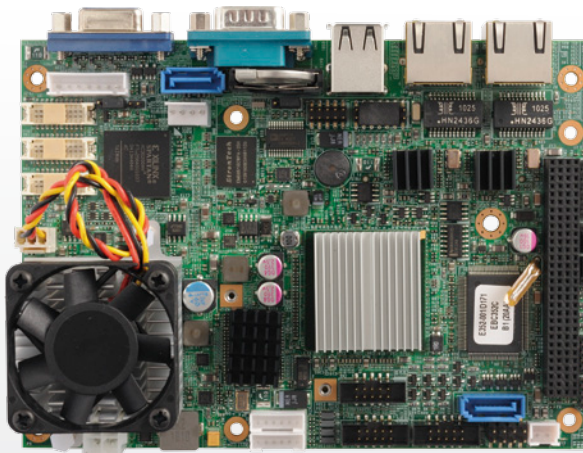- 1 x Keyboard/Mouse pin header
- On board Buzzer/ SMBus2.0/ Reset SW

Block Diagram

Watchdog Timer
+ Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
+ 2 x SATA connector (support 2.5" HDD and SATA DOM)
+ 1 x CF socket

System Monitor
+ Monitoring of 4 voltages and 2 temperatures
+ 4 voltage (Vcore , +12V , +3.3V , +5V)
+ 2 temperatures (CPU, system)

On-board RTC
+ On-chip RTC with battery backup
+ 1 x External Li-Ion battery

Power Input
+ Support AT and ATX mode (ATX as the default)

Power Requirements
+ Power requirement: +12 V DC Input
+ One 4-pin power connector

Dimensions
+ 3.5" ECX form factor
  146mm (L) x 105mm (W) (5.7"x4.1")

Environment
+ Operating temperatures: 0°C to 60°C
+ Storage temperature: -20°C to 85°C
+ Relative humidity: Operating 10% to 90%, non-condensing

Certifications
+ CE approval
+ FCC Class A

Ordering Information
+ **EBC 352 (P/N: 10E00035200X0) RoHS Compliant**
  Low power Embedded Board with Intel® Atom™ Dual Core D525 processor support DDR3 SO-DIMM memory module

EBC 353

Main Features

- Onboard Intel® Atom™ processor D2700 2.13GHz CPU
- Intel® NM10 Express chipset
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM
- Display: VGA & DVI-D & LVDS (1 x DF13 20-pin 24-bit Single channel)
- 1x Mini-PCIe

- 1x PCI-104
- 2x Intel 82574L PCI Express Gigabit Ethernet
- 2x SATA
- 6x USB, 4-in/4-out GPIO, Mic-in , Speak out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

Product Overview

The EBC 353 is a 3.5" ECX embedded board with an on-board Intel® Atom™ processor D2700 2.13GHz CPU with 1MB L2 cache, which supports DDR3 800/1066 memory, along with integrated SGX545 PowerVR Core @ 400/ 640 MHz Enhanced Gfx & Video, support DX*10.1, OpenGL 3.0, Full HD-Decode (MPEG2, VC1, AVC, H.264), along with integrated graphics for large display applications to support multiple displays. Intel® NM10 Express chipset provides two SATA, four serial ports, six USB 2.0 ports, two Gigabit Ethernet LAN port, one PCI-104 , one Mini-PCIe interface for application. Able to support matrix-displays with rich I/O, the EBC 353 is a great solution featuring low power consumption and small footprint for multi-media applications.

Specifications

CPU Support
- Intel® Atom™ processor D2700 2.13GHz CPU

Main Memory
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM

Chipset
- Intel® NM10 Express chipset

BIOS
- AMI BIOS
- Plug & Play support
- Advanced power management
- Advanced configuration & power interface
- 8M bits SPI ROM

On-board LAN
- 2x Intel® PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2x RJ45 with LED

Display
- Intel® Atom™ processor D2700 integrated 3D graphics engine, which enhances Gfx & video, support DX*10.1, OpenGL 3.0 , and Full HD decode (MPEG2,VC1,AVC,H.264), delivers sophisticated graphics for large display applications, supports dual independent displays at graphics base frequency up to 640MHz, and provides multi-options for high-resolution displays
- Analog VGA interface:
  1x VGA within DVI-I connector
  Resolution up to 1920x 1200 75Hz
- DVI interface:
  1x DVI-I connector
  Resolution up to 1920x 1200
- LVDS interface:
  Single (24bit) LVDS panel, resolution up to 1440 x 900 DF13 20-pin LVDS connector for internal connection
- CCFL interface:
  1x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC886 CODEC for High Definition
- 1x Mic-in and 1x Line-out pin header

Expansion
- 1x Mini-PCIe
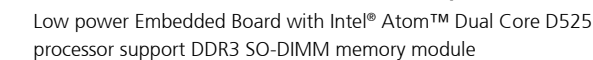- 1x PCI-104

I/O Interface
- Serial port: 4 port
  COM1 support RS232 with DB9 connector
  COM2 support RS232/422/485 with 10-pin box connector
  COM3, 4 support RS232 with 10-pin box connector

Block Diagram

- USB 2.0: 6 ports
  2 ports edge connector
  4 ports by 2.0mm JST connector
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board power LED and HDD active LED pin Header
- 1x 4-pin fan connector (for CPU)
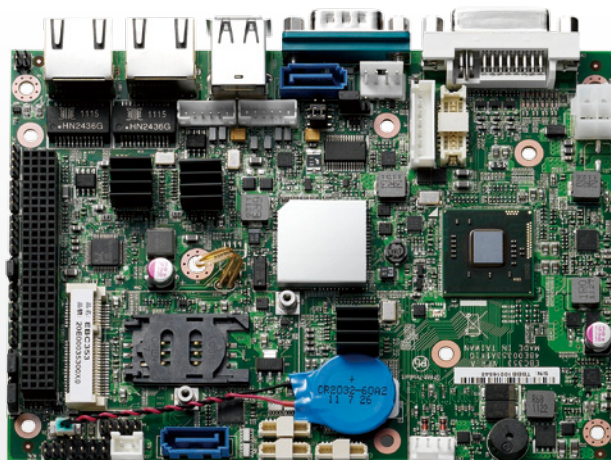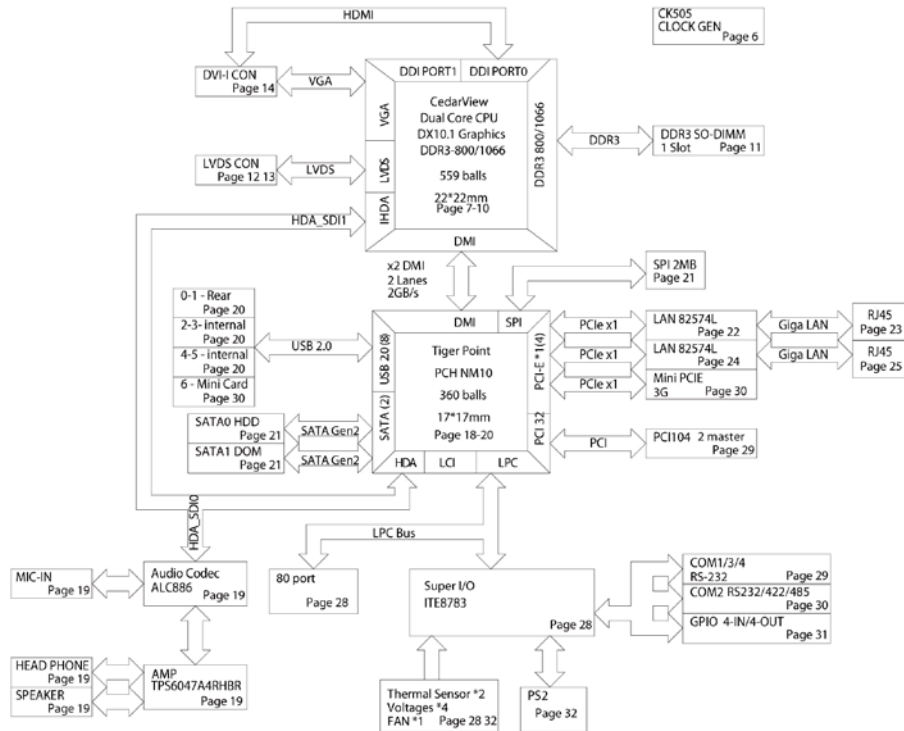- 1x keyboard/mouse pin header
- On board buzzer/ SMBus2.0/ reset SW/ on & off switch button

Edge I/O Interface
- 1x DVI-I connector
- 1x COM1 support RS232 with DB9 connector
- 1x dual stack USB connector
- 2x RJ45 with LED connector

Watchdog Timer
- Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)

Storage
- 2x SATA port

System Monitor
- Monitoring of 4 voltages and 2 temperatures
- 4 voltage (Vcore, +12V , +3.3V , 5V)
- 2 temperatures (CPU, system)
- 1 fan speed detection

On-board RTC
- On-chip RTC with battery backup
- 1x external Li-Ion battery

Power Input
- Support AT and ATX mode

Power Requirements
- Power requirement: +12V DC input
- One 4-pin power connector

Dimensions
- 3.5" ECX form factor/ 146mm (L) x 105mm (W) (5.7"x 4.1")

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **EBC 353 (P/N: 10E00035301X0) RoHS Compliant**
  Low power embedded board with Intel® Atom™ processor D2700 and based on Intel® integrated graphics engine w/ VGA/ 24-bit LVDS/ 6x USB2.0/ 4x COMs/ 1x Mini-PCIe/ 2x Gigabit LAN/ 2x SATA/ 1x PCI-104

- **Packing List**

Part No.	Description
60233USB59X00	USB CABLE EDI:262082060204-RS
60233PS203X00	EBC563IO PS2 KB/MS CABLE EDI:201061080201-RS
60233PW148X00	SATA POWER CABLE BEST:901-0405-300R
60233SIO62X00	COMPORT CABLE CP:NEX-110819-01
60233ATA36X00	SAS CABLE TC&C:T107048071008-1

EBC 354

Main Features

- On-board Intel® Atom™ processor D2700 2.13GHz CPU
- Intel® NM10 Express chipset
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (1x DF13 20-pin 18/24-bit Single channel)

- 2x Mini-PCIe
- 2x Intel® 82574L PCI Express Gigabit Ethernet
- 2x SATA
- 6x USB, 4-in/4-out GPIO, Mic-in , Speak out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

Product Overview

The EBC 354 is a 3.5" ECX embedded board with an on-board Intel® Atom™ processor D2700 2.13GHz CPU with 1MB L2 cache, which supports DDR3 800/1066 memory, along with integrated SGX545 PowerVR Core @ 400/640 MHz Enhanced Gfx & Video, support DX*10.1, OpenGL 3.0, Full HD decode (MPEG2, VC1, AVC, H.264), along with integrated graphics for large display applications to support multiple displays. Intel® NM10 Express chipset provides two SATA, four serial ports, six USB 2.0 ports, two Gigabit Ethernet LAN port, two Mini-PCIe interface for application. Able to support matrix-displays with rich I/O, the EBC 354 is a great solution featuring a low power consumption and small footprint for multi-media applications.

Specifications

CPU Support
- Intel® Atom™ processor D2700 2.13GHz CPU

Main Memory
- One 204-pin SO-DIMM socket supports up to 4 GB DDR3 800/1066 MHz SDRAM

Chipset
- Intel® NM10 Express chipset

BIOS
- AMI BIOS
- Plug & Play support
- Advanced power management
- Advanced configuration & power interface
- 8M bits SPI ROM

On-board LAN
- 2x Intel® PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2x RJ45 with LED

Display
- Intel® Atom™ processor D2700 integrated 3D graphics engine, which enhances Gfx & video, support DX*10.1, OpenGL 3.0 , and Full HD decode (MPEG2,VC1,AVC,H.264), delivers sophisticated graphics for large display applications, supports dual independent displays at

graphics base frequency up to 640MHz, and provides multi-options for high-resolution displays
- Analog VGA interface:
  1 x VGA within DVI-I connector
  Resolution up to 1920x1200 75Hz
- DVI interface:
  1 x DVI-I connector
  Resolution up to 1920x1200
- HDMI interface:
  1 x HDMI connector
  Resolution up to 1920x1200
- LVDS interface:
  Single (24bit) LVDS panel, resolution up to 1440 x 900 DF13 20-pin LVDS connector for internal connection
- CCFL interface:
  1 x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC886 CODEC for High Definition
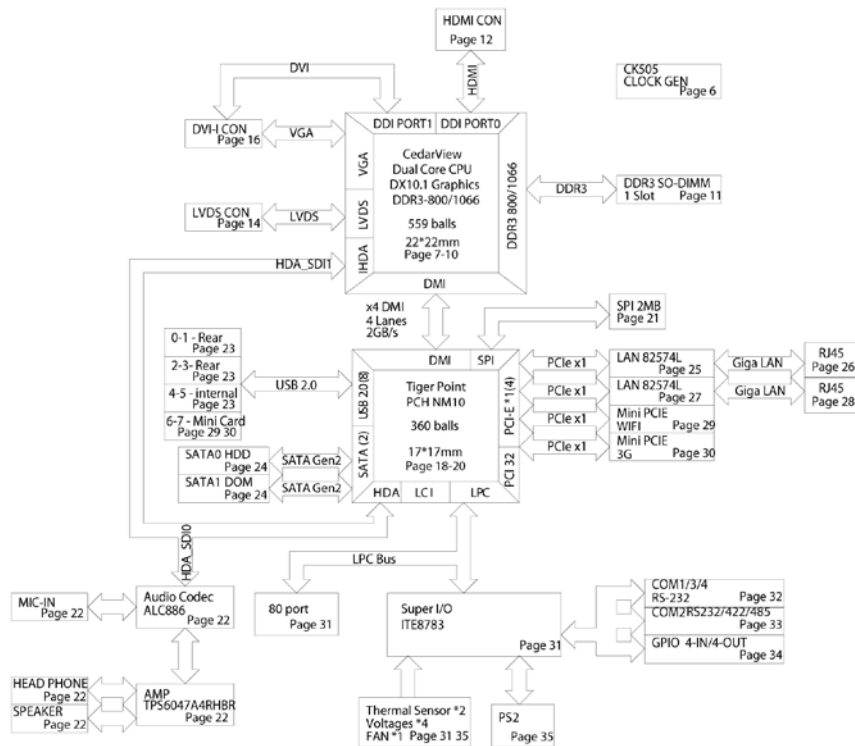- 1 x Mic-in and 1 x Line-out Pin header

Expansion
- 2 x Mini-PCIe

I/O Interface
- Serial port: 4 port
  COM1, 3, 4 support RS232 with 10-pin box header

Block Diagram

COM2 support RS232/422/485 with 10-pin box header
- USB 2.0: 6 ports
  4 ports edge connector
  1 ports by 2.0mm JST connector
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board power LED and HDD active LED pin header
- 1x 3-pin fan connector (for CPU)
- 1x keyboard/ mouse pin header
- On-board buzzer/ SMBus2.0/ reset SW/ on & off switch button

Edge I/O Interface
- 1x DVI-I connector
- 1x HDMI connector
- 2x dual stack USB connector
- 2x RJ45 with LED connector

Watchdog Timer
- Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)

Storage
- 2x SATA port

System Monitor
- Monitoring of 4 voltages and 2 temperatures
- 4 voltage (Vcore, +12V , +3.3V , 5V)
- 2 temperatures (CPU, system)
- 1 fan speed detection

On-board RTC
- On-chip RTC with battery backup
- 1x external Li-Ion battery

Power Input
- Support AT and ATX mode

Power Requirements
- Power requirement: +12V DC Input
- One 4-pin power connector

Dimensions
- 3.5" ECX form factor/ 146mm (L) x 105mm (W) (5.7"x 4.1")

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **EBC 354 (P/N: 10E00035401X0) RoHS Compliant**
  Low power embedded board with Intel® Atom™ processor D2700 and based on Intel® integrated graphics engine w/ VGA/ 24bit LVDS/ 6x USB2.0/ 4x COMs/ 2x Mini-PCIe/ 2x Gigabit LAN/ 2 x SATA

- **Packing List**

Part No.	Description
60233USB59X00	USB CABLE EDI:262082060204-RS
60233PS203X00	EBC563IO PS2 KB/MS CABLE EDI:201061080201-RS
60233PW148X00	SATA POWER CABLE BEST:901-0405-300R
60233SIO62X00	COMPORT CABLE CP:NEX-110819-01
60233ATA36X00	SAS CABLE TC&C:T107048071008-1

NEX 603

Main Features
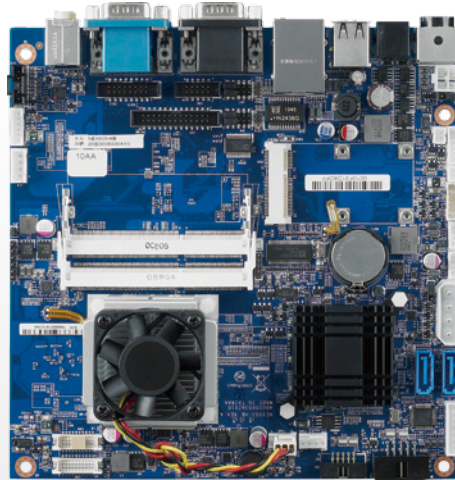
- Support Intel® Atom™ Dual Core D525 Processor
- Support 2x DDR3 SO-DIMM SDRAM, up to 4GB
- Support Dual Display VGA and LVDS
- One Gigabit Ethernet

- Support High Definition Audio Codec with 2W Amplifier
- 6x COMs, 6x USB 2.0, 1x Cash Drawer
- Mini-DIN 4pin DC12V Power Input

Product Overview

The NEX 603 is a mini-ITX board with an on-board Intel® Atom™ Dual Core D525 with L2 cache 1MB and DDR3 SO-DIMM SDRAM module. It features dual display application to support independent CRT and LVDS 18 or 24-bit interface, One gigabit Ethernet, one Mini-PCIe connector.

Specifications

CPU Support
- On-board Intel® Atom® Dual Core D525 (1.8GHz, 1M Cache) processor

Main Memory
- 2 x 204-pin DDR3 SO-DIMM socket, DDR3 800 4GB max., non-ECC and un-buffered

Platform Control Hub
- Intel® NH82801HBM (ICH8M)

BIOS
- AMI System BIOS
- Plug and play support

On-board LAN
- 1 x Realtek 8111C Gigabit Ethernet controller
- Support Wake on LAN
- 1 x RJ45 with LED

Display
- Intel® D525 integrated graphic engine, support Directx*9, with Intel® Clear Video Technology on MPEG2 hardware acceleration
- Analog VGA interface: 1x DB15 VGA port, support up to 2048 x 1563 @ 60Hz
- LVDS interface: support single 18 or 24-bit LVDS channel

Audio
- Realtek ALC886 CODEC for High Definition
- 1 x phone jack for Line-out
- 1 x phone jack for Mic-in
- 1x4 pin-header for Speaker with 2W Amplifier

Expansion
- 1 x Mini-PCIe connector

I/O Interface
- Serial port: 6 ports
- 3 x RS232 DB9 connector (COM1, 2, 3), support RI/+5V/+12V
- 1 x RS232 2x5-pin header, 2.54mm pitch, support RI/+5V/+12V (COM4)
- 2 x RS232 2x5-pin header, 2.54mm pitch, support +12V (COM5, 6)
- USB 2.0: 6 ports
- 2x Dual stack USB 2.0 connector
- 2 ports 1x4-pin header, 2.0mm pitch
- 4 x GPIO, 5-pin pin header, (GPI 1~2 and GPO1~2) with TTL Level (0/5 V)
- On-board power LED and Storage active LED pin header
- 1 x 26-pin connector for parallel port
- 2 x 4-pin fan connector for CPU & System
- 1 x mini-DIN 4-pin for DC12V power input
- 1 x 6-pin JST connector for PS2 keyboard
- 1 x 5-pin JST resistive touch connector
- On board buzzer/ SMBus2.0/ reset
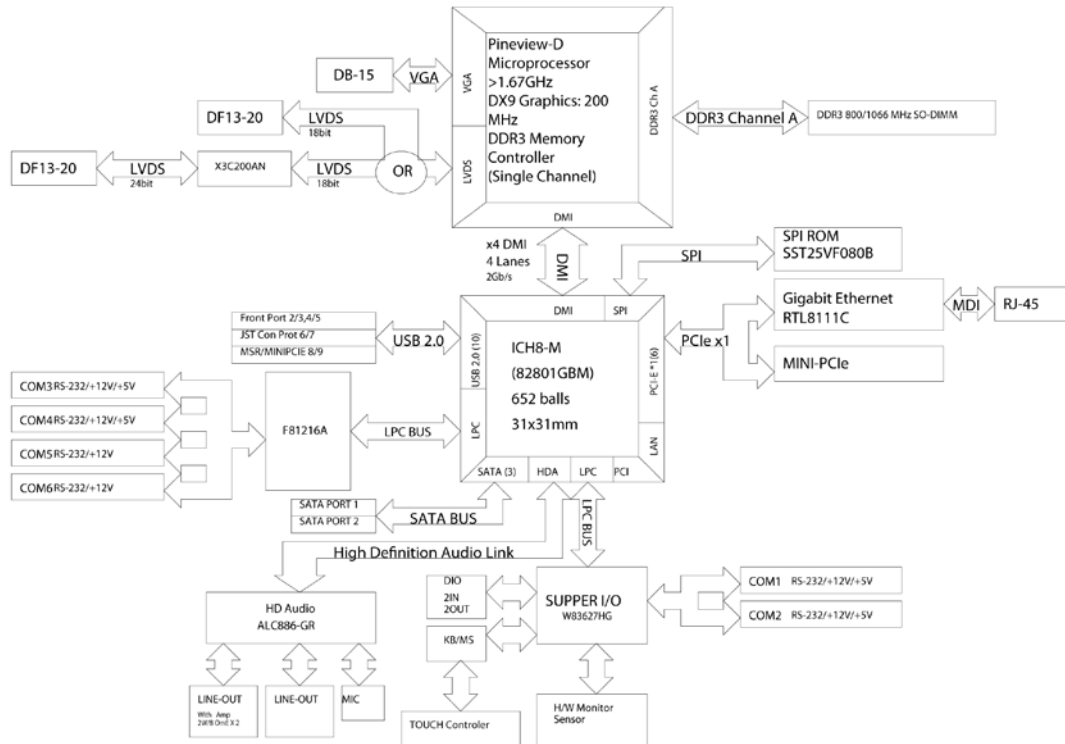
Block Diagram

Watchdog Timer
* Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
* 2 x SATA connectors (from ICH8M)

System Monitor
* 4 voltages (+3.3V, +5V, +12V, Vcore)
* 1 temperatures (1 external temperature sensors)
* 2 fan speed monitors

On-board RTC
* On-chip RTC with battery backup
* 1 x External Li-Ion battery

Power Input
* Support AT and ATX mode (ATX as the default)

Power Requirements
* Power requirement: +12V DC Input
* One 4-pin power connector

Dimensions
* Mini-ITX form factor
* 170mm (L) x 170mm

Environment
* Operating temperatures: 0°C to 60°C
* Storage temperature: -20°C to 8°C
* Relative humidity: Operating 10% to 90%, non-condensing

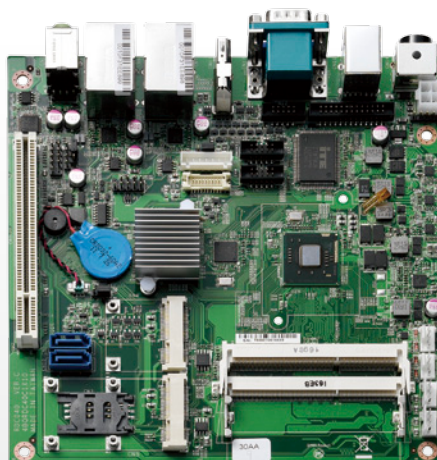## Certifications
* CE approval
* FCC Class A

Ordering Information

* **NEX 603 (P/N: 10G00060305X0)**
  Mini-ITX, Intel® Atom™ Dual Core D525 processor, 2x DDR3 SODIMM, 1x GbE, 6 x COM, 1x mini-PCIe, 1, DC12V input

NEX 604

Mini-ITX, Intel® Atom™ Dual-Core D2700 2.13GHz, 2DDR3, VGA/ LVDS/ HDMI, 2GbE, 2SATA, 4COM, 6USB, 2mPCIe, PCI

Main Features

- Intel® Atom™ Dual-Core D2700/ 2.13GHz processor
- Intel® NM10 Express chipset
- Dual 204-pins DDR3 SO-DIMMs support max. 4GB SDRAM memory
- Support VGA/HDMI, VGA/LVDS or HDMI/LVDS dual displays

- 6x USB, 4x COM, 2x GbE, 2x SATA, 1x LPT, 1x PCI
- Audio Mic-in/ Line- out, (internal Line-in)
- 2x Mini-PCIe (1x full/SIM tray, 1x half-size)
- Single DC +12V input by AT/ ATX mode

Product Overview

NEX 604 is a Mini-ITX industrial MB embedded Intel® Atom™ D2700 2.13GHz dual-core processor, which integrated Intel® HD graphic controller SGX545 to support DX10.1 Gfx, OpenGL 3.0, Full HD decode (MPEG2, VC1, AVC, H.264). NEX 604 supports VGA, LVDS (1x ch. 24-bit up to 1440x 900 @ 60Hz) and HDMI (1080p) by dual displays interface as standard along with two DDR3 SO-DIMMs for max 4GB memory.

NEX 604 is equipped with Intel® NM10 Express chipset to provide two SATA 2.0, eight USB 2.0 (2x USB to 2x mPCIe slots), two GbE by Realtek RTL8111E PCIe LAN controllers, two Mini-PCIe slots for one support full-size card with SIM tray and one half-size slot for standard add-on I/O application. The HDMI and full I/O function supports make NEX 604 well fit for multimedia applications or industrial-grade embedded applications.

Specifications

Embedded Support
- Intel® Atom™ processor D2700 2.13GHz CPU

Main Memory
- Dual 204-pin SO-DIMMs support DDR3 up to 4GB SDRAM 800/1066MHz

Chipset
- Intel® NM10 Express chipset

BIOS
- AMI BIOS
- Plug & Play support
- Advanced power management
- Advanced configuration & power interface
- 16M bits SPI ROM

On-board LAN
- 2x Realtek 81111E PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2x RJ45 with LEDs built-in 2x dual stackable USB type A connectors on edge I/O

Display
- New 2-chips solution 32nm package Intel® Atom™ processor D2700 integrated 3D graphics engine SGX545, which enhances Gfx &

video, support DX*10.1, OpenGL 3.0 , and Full HD decode (MPEG2, VC1, AVC, H.264), delivers sophisticated graphics for large display applications, supports dual independent displays at graphics base frequency up to 640MHz, and provides multi-options for high-resolution displays
- Analog VGA interface:
  1x VGA by DB15 connector
  Resolution up to 1920x 1200 75Hz
- HDMI interface:
  1x HDMI connector
  Resolution up to 1920x1200
- LVDS interface:
- Single (24-bit) LVDS panel, resolution up to 1440x 900 by DF13 20-pin LVDS connector
- Inverter (LVDS panel backlight) interface:
  1x 7-pins CCFL for LCD panel backlight inverter
- Audio:
  Realtek ALC886-GR High Definition codec
  1 x Mic-in/ 1 x Speak-out by audio jack on edge I/O and 1x Line-in by internal 4-pins header
- Expansions:
  2 x Mini-PCIe (1x full-size/ SIM tray and 1x half-size slots)
  1 x PCI slot (32bit/ 33Mhz)

Block Diagram
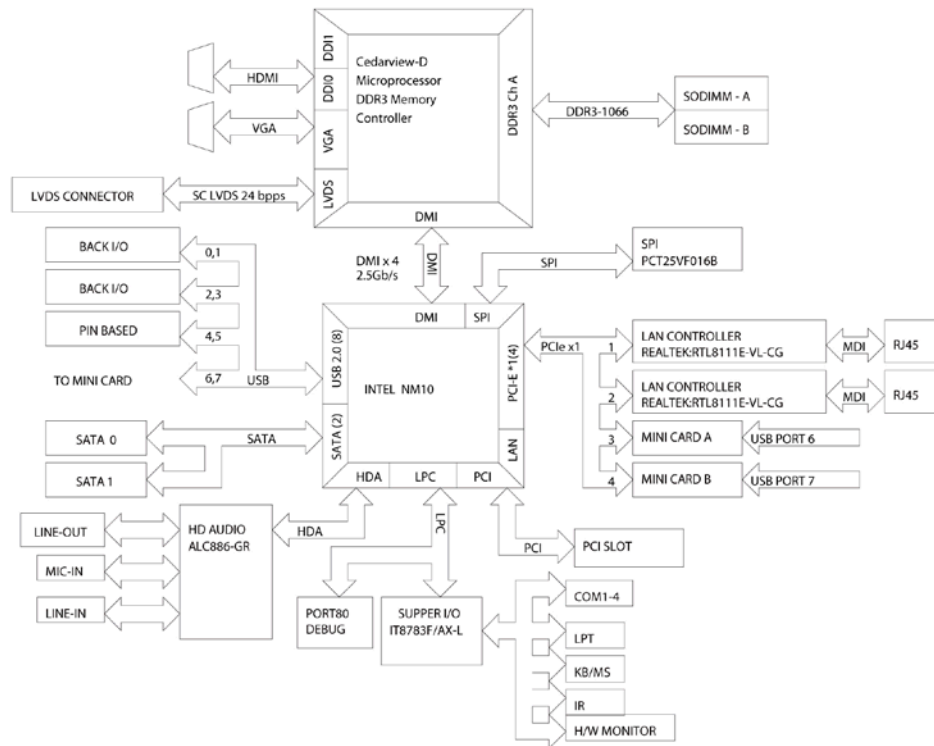
I/O Interfaces- Front

- Serial port: 4 ports
  COM1, RS232 by DB-9 male on edge I/O
  COM2, 3, 4 ports support 3x RS232 by three 2x 5-pins box-headers
- USB 2.0: 8 ports
  4x ports by 2x dual stack USB2.0 on edge I/O (port 0~ 3)
  2x ports by 2x 5-pins header pitch 2.54mm (port 4~ 5)
  2x ports to mini-PCIe slots (port 6, 7)
- 2x 5-pins header for power LED and HDD active LED/ reset/ power on-off
- 2x 4-pins fan connector (for CPU and system)
- 1x 5-pins pin-headers IrDA (Tx/Rx) and 1x 4-pins pin-header for SMbus
- 2x 13-pins box-header for legacy parallel port/ LPT

I/O Interfaces- Rare

- 1x 5-pins AT power connectors for DC + 12V input
- 1x dual stack PS2 for keyboard/ mouse
- 1x dual stack DB9 male for COM1 + DB15 female VGA
- 1x HDMI connector
- 2x RJ45 LAN + dual stack USB connectors
- 1x Mic-in/ 1 x Speak-out Jack

Watchdog Timer

- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes
  (Tolerance 15% under room temperature 25°C)

Storage

- 2x SATA 2.0 ports
- 2x 4-pins power connectors for SATA/ HDD

System Monitor

- Monitoring of 4 voltages and 2 temperatures
- 4 voltage (Vcore, +12V , +3.3V , 5V)
- 2 temperatures (CPU, System)
- 2 fans speed detection

On-board RTC

- On-chip RTC with battery backup
- 1x External Li-Ion battery

Power Input

- Support AT and ATX mode (1x 3pins) by jumper setting

Power Requirements

- Power requirement: DC +12V Input
- 1x 5-pins AT power connector on edge I/O,
- One 2x2-pins ATX power connector

Dimensions

- Mini-ITX form factor/ 170mm (L) x 170mm (W) (6.7"x 6.7")

Environment

- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

- **NEX 604 (P/N: 10G00060400X0) RoHS Compliant**
  Mini-ITX, embedded Intel® Atom™ Dual-Core D2700/ NM10, 2x DDR3, VGA/ LVDS/ HDMI, 2GbE, 2SATA, 4COM, 6USB, 2mPCIe, PCI and DC+12V input
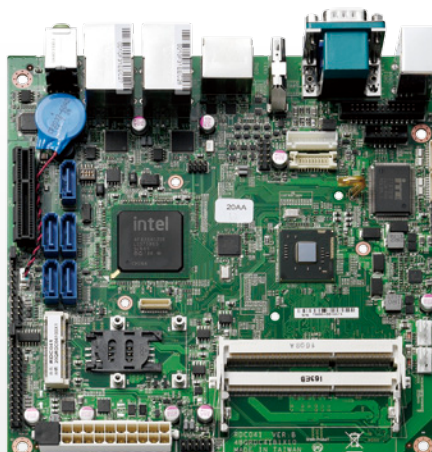
NEX 605

Mini-ITX, Intel® Atom™ Dual-Core D2700 2.13GHz, 2DDR3 VGA/ LVDS/ HDMI, 2GbE, 2eSATA/ 4SATA, 4COM, 8USB, mPCIe, PCIe x4

Main Features

- Intel® Atom™ Dual-Core D2700/ 2.13GHz processor
- Intel® ICH10R to support Intel® Matrix Storage RAID 0/ 1/ 5/ 10
- Dual 204-pins DDR3 SO-DIMMs support max. 4GB SDRAM memory
- Support VGA/HDMI, VGA/LVDS or HDMI/LVDS dual displays

- 8x USB, 4x COM, 2x GbE (Intel), 2x eSATA/ 6x SATA, 8x GPIO, 1x LPT
- Audio Mic-in/ Line- out, (internal Line-in)
- 1x Mini-PCIe (1x full-size/ SIM tray), 1x PCIe x4
- Standard ATX v.2.0 input by AT/ ATX power mode

Product Overview

NEX 605 is a Mini-ITX industrial MB embedded Intel® Atom™ D2700 2.13GHz dual-core processor, which integrated Intel HD graphic controller SGX545 to support DX10.1 Gfx, OpenGL 3.0, Full HD decode (MPEG2, VC1, AVC, H.264). NEX 605 supports VGA, LVDS (1x ch. 24-bit up to 1440x 900 @ 60Hz) and HDMI (1080p) by dual displays interface as standard along with two DDR3 SO-DIMMs for max 4GB memory.

NEX 605 embedded Intel® ICH10R chipset to support Intel® Matrix Storage Technology with six SATA 2.0 for RAID 0/ 1/ 5/ 10 up to 6x SATA/ HDD, two eSATA (RAID 0, 1) support onto edge I/O, eight USB 2.0 (extra 1x USB 2.0 to mPCIe interfaces), two PCIe by Intel 82574L GbE controllers, one Mini-PCIe full-size slot with SIM stray for standard add-on application and one more PCIe x4 slot by add-on PCIe riser card for expansion.

NEX 605 is featuring versatile displays, matrix storage like 6x SATA/ RAID for mass storage and riches I/O support for multimedia as well as critical mission of industrial embedded applications.

Specifications

Embedded Support
- Intel® Atom™ processor D2700 2.13GHz CPU

Main Memory
- Dual 204-pin SO-DIMMs support DDR3 up to 4GB SDRAM 800/1066MHz

Platform Control Hub
- Intel® ICH10R support Intel® Matrix Storage technology of RAID 0/1/5/10 configuration

BIOS
- AMI BIOS
- Plug & Play support
- Advanced power management
- Advanced configuration & power interface
- 16M bits SPI ROM

On-board LAN
- 2x Intel® 82574L PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2x RJ45 with LEDs build-in 2x dual stackable USB type A connectors on edge I/O.

Display
- New 2-chips solution 32nm package Intel® Atom™ processor D2700 integrated 3D graphics engine SGX545, which enhances Gfx & video, support DX*10.1, OpenGL 3.0 , and Full HD decode (MPEG2, VC1, AVC, H.264), delivers sophisticated graphics for large display applications, supports dual independent displays at graphics base frequency up to 640MHz, and provides multi-options for high-resolution displays
- Analog VGA interface:
  1 x VGA by DB15 connector
  Resolution up to 1920x1200 75Hz
- HDMI interface:
  1 x HDMI connector
  Resolution up to 1920x1200
- LVDS interface:
  Single (24-bit) LVDS, resolution up to 1440 x 900 @ 60Hz by DF13 20-pin LVDS
- Inverter (LVDS panel backlight) interface:
  1x 7-pins CCFL for LCD panel backlight inverter
- Audio
  Realtek ALC886-GR High Definition codec
  1x Mic-in/ 1x Speak-out by audio jack on edge I/O and 1x Line-in by internal 4-pins header

Block Diagram
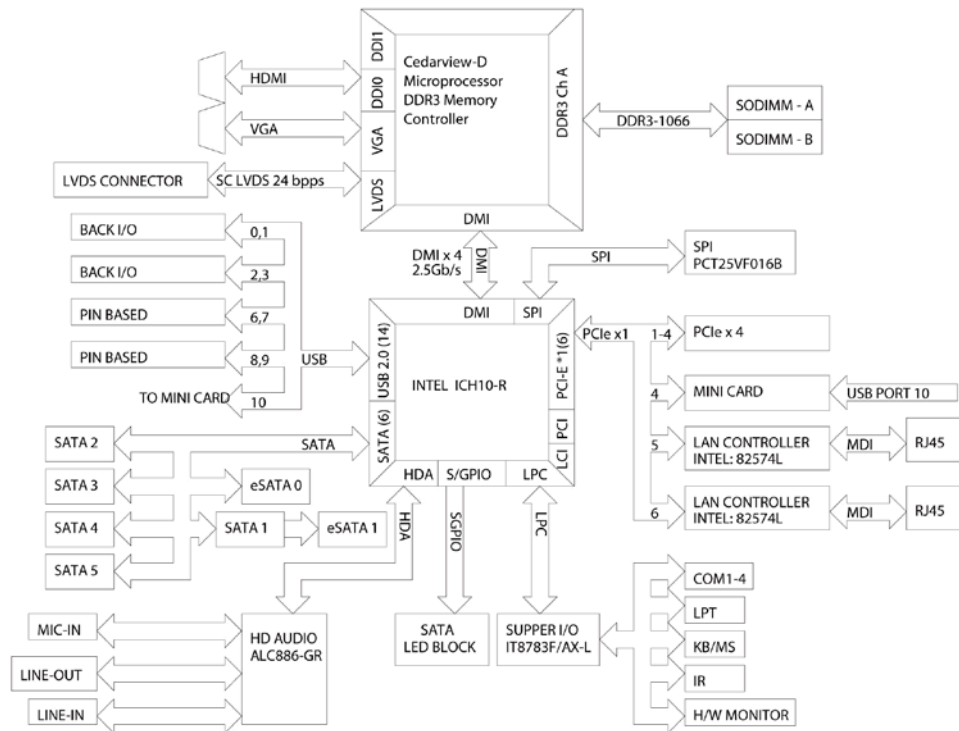
- Expansions
  1 x Mini-PCIe (1x full-size/ SIM tray)
  1 x PCIe x4 slot
- I/O Interfaces
  Serial port: 4 ports
  COM1, RS232 by DB-9 male on edge I/O
  COM2, 3, 4 support 3x RS232 ports by 2x 5-pins box header and
  dual- JST 10pins wafer
- 8x USB 2.0: Use 9 of 14 ports (ICH10R)
  4x ports by 2x dual stack USB2.0 on edge I/O (port 0~ 3)
  4x ports by 2x 5-pins header pitch 2.54mm (port 6~ 9)
- 1x ports to mini-PCIe slots (port 10)
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- Power LED and HDD active LED/ reset/ power on-off by 2x 5-pins
  header
- 2x 4-pins fan connector (for CPU and system)
- On board Buzzer and SMBus 2.0 by 1x 4-pins, IrDA by 1x 5-pins
  header
- 2x 13-pins box header for legacy parallel port/ LPT
- 2x 13-pins header for 6SATA/ 2GbE LEDs connector

Edge I/O Interfaces
- 1x dual stack PS2 for Keyboard/ Mouse
- 1x dual stack DB9 male for COM1 + DB15 female VGA
- 1x HDMI connector
- 1x dual stack eSATA (port 1 is default by eSATA)
- 2x RJ45 LAN + dual stack USB connectors
- 1x Mic-in/ 1 x Speak-out Jack

Watchdog Timer
- Watchdog timeout can be programmable by software from 1 second
  to 255 seconds and from 1 minute to 255 minutes (tolerance 15%
  under room temperature 25°C)

Storage
- Default by 2x eSATA by external edge I/O and internal 4x SATA
  connectors support RAID
- Optional by DIP-SW1 setting to 1x eSATA (on bottom edge I/O) and
  internal 5x SATA
- 2 x 13-pins header for 6x SATA/ 2x LAN LEDs connector

System Monitor
- Monitoring of 4 voltages and 2 temperatures
- 4 voltage (Vcore, +12V , +3.3V , 5V)
- 2 temperatures (CPU, System)
- 2 fans speed detection

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input
- Support AT and ATX mode

Power Requirements
- Power requirement: ATX Input, jumper AT/ ATX (default) mode
- Onboard 2x 12-pins standard ATX version 2.0 power connector

Dimensions
- Mini-ITX form factor/ 170mm (L) x 170mm (W) (6.7"x 6.7")

Environment
- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NEX 605 (P/N: 10G00060500X0) RoHS Compliant**
  Mini-ITX, embedded Intel® Atom™ Dual-Core D2700/ ICH10R,
  2DDR3, VGA/ LVDS/ HDMI, 2GbE, 2eSATA/ 4SATA, 4COM, 8USB,
  mPCIe, PCIex4, ATX input

NEX 607

Coming Soon

Main Features

- 2nd generation Intel® Core™ processor family
- Intel® QM67 chipset
- Two 204-pin SO-DIMM socket supports up to 8 GB DDR3 1066/1333 MHz SDRAM
- Display: VGA & DVI-D & HDMI & LVDS (2 x DF13 20-pin 18/24/36/48-bit dual channel)

- 1x mini-PCIe, 1x PCIe x16 slot
- 2x Intel® Gigabit Ethernet
- 4x SATA
- 10x USB, 4-in/4-out GPIO, Mic-in , Line-out
- Serial port: 3x RS232, 1x RS232/422/485 port
- Support AT/ATX mode and single +12 Vdc input

Product Overview

The NEX 607 is a Mini-iTX board with 2nd generation Intel® Core™ processor family, which supports DDR3 1066/1333 memory and is equipped with integrated graphics controller, Intel® HD Graphics 3000. It makes NEX 607 an ideal multimedia solution for large, multi-display applications. Geared with Intel® QM67 chipset, NEX 607 also provides four SATA, four serial ports, ten USB 2.0 ports, two Gigabit Ethernet LAN port, one PCIe x16 slot, one mini-PCIe interface for applications.

Specifications

CPU Support
- 2nd generation Intel® Core™ processor family

Main Memory
- Two 204-pin SO-DIMM socket supports up to 8 GB DDR3 1066/1333MHz SDRAM Chipset

Chipset
- Intel® QM67 chipset

BIOS
- AMI BIOS
- Plug & play support
- Advanced power management
- Advanced configuration & power interface

On-board LAN
- 2x Intel® PCI Express Gigabit Ethernet
- Support Boot From LAN (PXE)
- 2x RJ45 with LED

Display
- 2nd generation Intel® Core™ processor integrated Intel® HD Graphics 3000 engine. Intel® HD Graphics concluding high-performance graphics and media processing is built in the processor, which is

capable of delivering sophisticated graphics for large, multi-display applications.
- Analog VGA interface: 1 x VGA connector
  Resolution up to 2048x1536 75Hz
- DVI interface: 1 x DVI-I connector
  Resolution up to 1920x1200
- HDMI interface: 1 x HDMI connector
- LVDS1 interface: Dual LVDS panel, 2xDF13 20-pin LVDS connector for internal connection
- LVDS2 interface (option, Through SDVO w/CH7308):
  Dual LVDS panel, 2x DF13 20-pin LVDS connector for internal connection
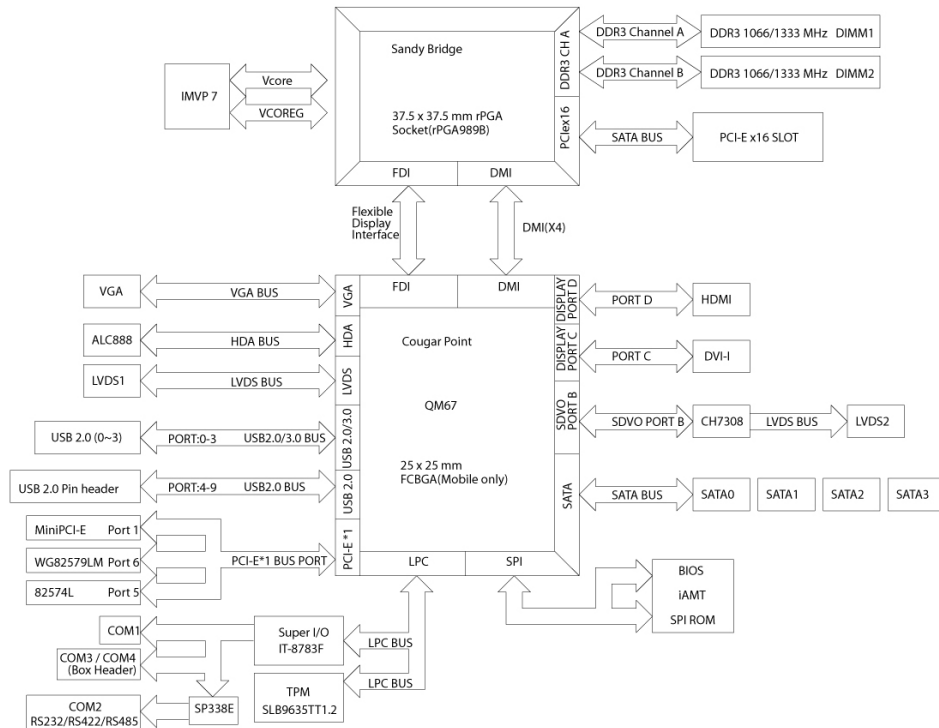- CCFL interface: 2 x CCFL for LCD Panel Backlight Inverter

Audio
- Realtek ALC886 CODEC for High Definition
- 1x phone jack for Mic-In.
- 1x phone kack for Line-out .
- 1x 4 2.0 pitch pin header for Line-In.
- 1x 5 pin 2.0 pitch pin header for speak-out

Expansion
- 1x mini-PCIe
- 1x PCIe x16

I/O Interface

NEXCOM

Block Diagram

- Serial port: 4 port
  COM1: RS232 DB-9 male connector on edge I/O
  COM2: RS232/422/485 DB-9 male connector on edge I/O
  COM3,4: RS232 2x5/2.54mm box header
- USB 2.0: 10 ports
  4 ports edge connector
  6 ports by 2.0mm pin connector
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board power LED and HDD active LED pin header
- 1x 4-pin fan connector (for CPU)
- 1x 3-pin fan connector (for system)
- 1x keyboard/ mouse pin header
- On board buzzer/ SMBus2.0/ reset SW/ on & off switch button

Edge I/O Interface
- 1 x DVI/ VGA connector
- 1x HDMI connector
- 2x dual stack USB and RJ45 connector
- 1x dual stack serial port connector
- 1x Mic-in and Line out phone jack

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 4x SATA port

System Monitor
- Monitoring of 4 voltages and 2 temperatures and 2 fan speed detection
- 4 voltages (Vcore, +12V , +3.3V , 5V)
- 2 temperatures (CPU, System)
- 2 fan speed detection

On-board RTC
- On-chip RTC with battery backup
- 1x External Li-Ion battery

Power Input
- Support AT and ATX mode

Power Requirements
- Power requirement: +12V DC input
- One 4-pin power connector

Dimensions
- Mini-ITX M/B form factor
- 170mm (L) x 170mm (W)

Environment
- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: operating 10% to 90%, non-condensing

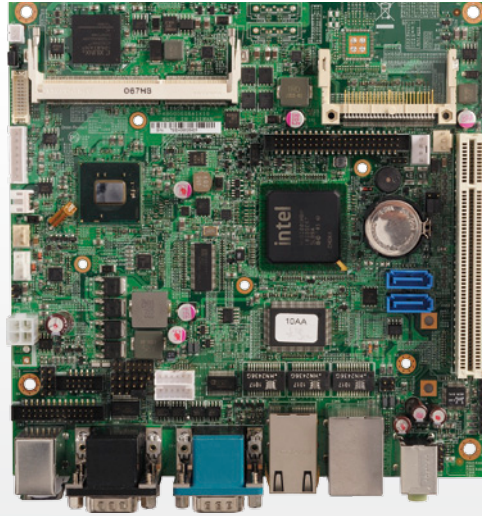**Certifications**
- CE approval
- FCC Class A

Ordering Information

- **NEX 607 (P/N: 10G00060700X0) RoHS Compliant**
  Mini-ITX , 2nd generation Intel® Core™ processor family and based on Intel® integrated graphics engine w/ VGA/dual channel LVDS/ 10x USB2.0/ 4x COMs/ 1x Mini-PCIe/ 1x PCIe x16/ 2x Gigabit LAN/ 4x SATA, DC12V input

NEX 608

Main Features

- Support Intel® Atom™ Dual Core D525 Processor
- Support DDR3 SO-DIMM SDRAM, up to 2GB
- Support VGA/ LVDS 18/ 24-bit Display
- Three Gigabit Ethernet

- Support SATA RAID 0/1
- 4x COMs, 6x USB 2.0, 1x LPT
- Single DC24V Power Input

Product Overview

The NEX 608 is a mini-ITX board with an on-board Intel® Atom™ Dual Core D525 with L2 cache 1MB and DDR3 SO-DIMM SDRAM module. It features dual display application to support independent CRT and LVDS 18/ 24-bit interface, SATA RAID 0/1, three gigabit Ethernet, one PCI slot and one mini PCI Express slot.

Specifications

CPU Support
- On-board Intel® Atom® Dual Core D525 (1.8GHz, 1M Cache) processor

Main Memory
- 1 x 204-pin DDR3 SO-DIMM socket, DDR3 800 2GB max., non-ECC and un-buffered

Platform Control Hub
- Intel® NH82801HBM (ICH8M)

BIOS
- AMI System BIOS
- Plug and play support

On-board LAN
- 3 x Realtek 8111L Gigabit Ethernet controller
- Support boot from LAN and wake on LAN
- 3 x RJ45 with LED

Display
- Intel® D525 integrated graphic engine, support Directx*9, with Intel® Clear Video Technology on MPEG2 hardware acceleration
- Analog VGA interface: 1x DB15 VGA port, support up to 2048 x 1563 @ 60Hz
- LVDS interface: support single 18/24-bit LVDS channel

Audio
- Realtek ALC888 CODEC for High Definition
- 1 x phone jack for Line-out
- 1 x phone jack for Mic-in

Expansion
- 1 x mini-PCIe socket
- 1 x PCI32 slot

I/O Interface
- Serial port: 4 ports
- 2 x RS232 DB9 connector (COM1, 2)
- 1 x RS232/ 422/ 485 DB9 connector (COM3)
- 1 x RS232 2x5 pin box header connector (COM4)
- USB 2.0: 6 ports
- 2 ports with USB 2.0 connector
- 4 ports with 1x6-pin JST connector
- 8 x GPIO, 10-pin pin header, (GPI 0~3 and GPO0~3) with TTL Level (0/5 V)
- On-board power LED and HDD active LED pin header
- 1 x 26-pin connector for parallel port
- 1 x 3-pin fan connector (for CPU)
- 1 x mini-din connector for PS2 keyboard and mouse
- On board buzzer/ SMBus2.0/ reset

Block Diagram

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 2 x SATA connectors (from ICH8M)
- 2 x SATA connectors (from Silicon Image 3132 SATA RAID controller, support RAID 0, 1)

System Monitor
- 4 voltages (+3.3V, +5V, +12V, Vcore)
- 2 temperatures (for CPU and 2 external temperature sensors)
- 2 fan speed monitors

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input
- Support AT and ATX mode (ATX as the default)

Power Requirements
- Power requirement: +24V DC Input
- One 4-pin power connector

Dimensions
- Mini-ITX form factor
- 170mm (L) x 170mm

Environment
- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 8°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NEX 608 (P/N: TBD)**
  Mini-ITX, Intel® Atom™ Dual Core D525 processor, 1x DDR3 SO-DIMM, 3x GbE, 4 x COM, 1x mini-PCIe, 1x PCI, DC24V input

NEX 880

Micro ATX, support 2nd generation Intel® Core™ Desktop processors with Dual Display/ 1 x PCIe x8/ 1 x PCIe x4/ 2 x PCIe X1/ 2 x GbE
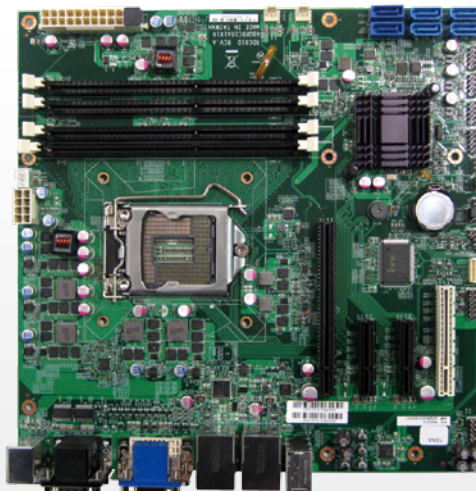
Main Features

- Support 2nd generation Intel® Core™ desktop processors
- 4 x DDR3 DIMM Socket up to 32 GB
- VGA + DVI dual displays
- 2 x Intel® Gigabit Ethernet

- Support Intel® AMT 7.0
- 1x PCIe X16(with PCIe X8 signals), 1x PCIe X8(with PCIe X1 signals), 1xPCIe X4(with PCIe x4 signals) slot, 1xPCIe X4(with PCIe x1 signals) slot
- Support SATA 3.0, 2x RS232

Product Overview

NEX 880 is an industrial motherboard with Micro ATX form factor, which Support 2nd generation Intel® Core™ Desktop processors with Hyper-Threading technology.

The 2nd generation Intel® Core™ Desktop processors support dual channel non-ECC DDR3 1066/ 1333 MHz memory in four DIMM slots and integrated HD graphics controller. The Q67 PCH manages SATA 3.0 ports and USB 2.0 ports. Furthermore, it supports other versatile I/O ports such as two serial ports, ten USB ports, and two Intel PCI Express Gigabit LAN ports. It offers a great solution for advanced industrial application that requires superb display and processing performance.

Specifications

CPU Support
- LGA1155, 2nd generation Intel® Core™ Desktop processors

Main Memory
- 4 x 240-pin DIMM, for up to 32GB dual channel non-ECC un-buffered DIMM 1066/1333 SDRAM

Chipset
- Intel® Q67 Platform Controller Hub

BIOS
- AMI BIOS
- Plug and play support

On-board LAN
- 1 x Intel® 82579LM PHY for AMT 7.0
- 1 x Intel® 82583 PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2 x RJ45 with LED

Display
- 2nd generation Intel® Core™ Desktop processors Integrated HD graphics
- 1x VGA
- 1x DVI-D

Expansion
- 1x PCIe X16 (with PCIe X8 signals) slot
- 1x PCIe X8 (with PCIe X1 signals) slot
- 1x PCIe X4 (with PCIe X1 signals) slot
- 1x PCIe X4 (with PCIe X4 signals) slot

Edge I/O Interfaces
- 1x dual stack mini DIN 6-pin connector for PS2 KB/MS
- 1x dual stack DB9 male connector for COM1 & COM2
- 1x DVI + DB15 female connector VGA
- 2x RJ45 with dual stack USB connectors
- Line-In/Line-Out/MIC phone jack

I/O Interface
- USB 2.0: 10 ports (6 on board pin header, 4 with type A connector for external)
- Serial port: 2 port, with 2x5pin headers (COM 1 and COM 2)
- SATA HDD: 6 ports, port 1, 2 support SATA 3.0, port 3, 4, 5, 6 support SATA 2.0
- Support RAID 0/1/5/10 and Intel® Matrix Storage
- IrDA: on board pin header
- GPIO: Supports 4 sets general purpose I/O each with TTL level (5 V) interface
- On-board buzzer x 1

Block Diagram
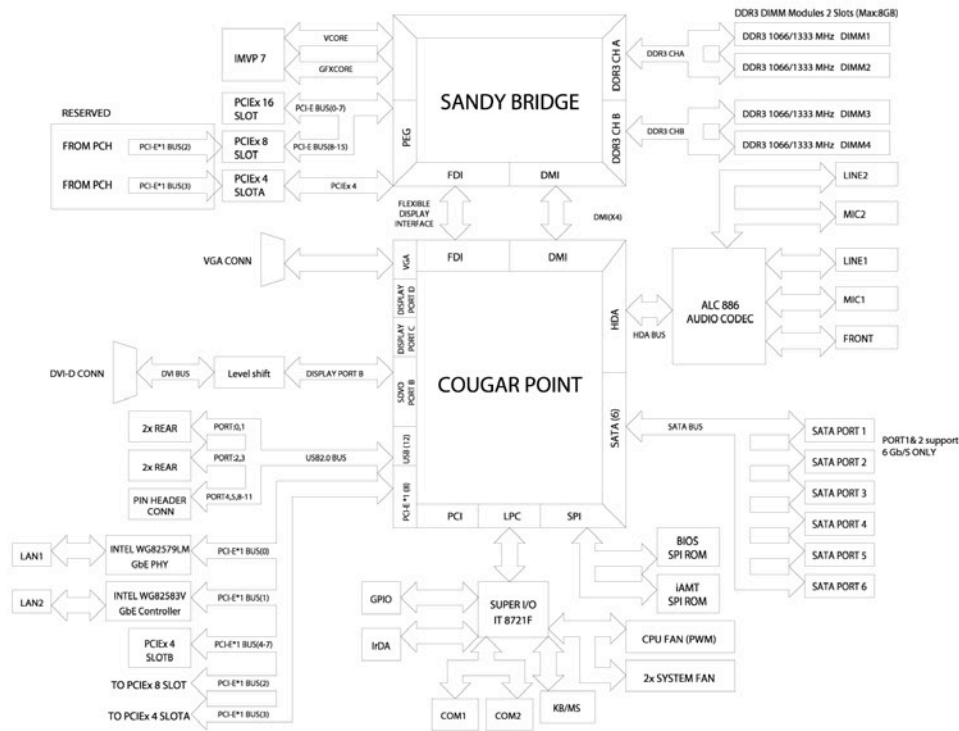
- Power LED/Power On/Reset/HDD LED pin header
- 1 x 4-pin fan connector (for CPU); 2 x 3-pin fan connectors (for System)
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

System Monitor
- 4 voltages (+3.3V, +5V, +12V, Vcore)
- 2 temperatures (For CPU and System)
- 3 fan speed monitors (1 for CPU and 2 for system fan)

Power Input
- Support ATX power supplies
- Standard ATX 24-pin connector for +12V/ +5V/ +3.3V/ +5Vsb/ -12V
- ATX 8-pin connector for +12V

Dimensions
- Micro ATX
- Dimension: 244mm (L) x 244mm (W)

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NEX 880 (P/N : 10G00088000X0)**

  Micro ATX, LGA1155, 2nd generation Intel® Core™ Desktop processors, Q67 DDR3 DIMM x4, VGA, DVI-D, 2x GbE, PCIe X8/PCIe X4/2x PCIe X1, 2x RS232
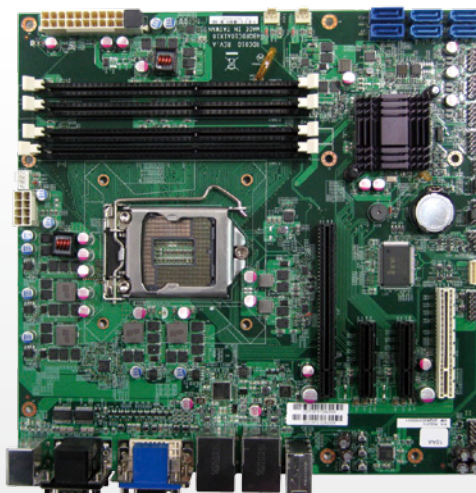
NEX 890

Micro ATX, support 2ⁿᵈ generation Intel® Core™ Workstation processors with Dual Display/ 2 x PCIe x8/ 2 x PCIe x4/ 2 x GbE

Main Features

- Support 2ⁿᵈ generation Intel® Core™ Workstation processors
- 4 x DDR3 DIMM Socket up to 32 GB, support ECC SDRAM
- VGA + DVI dual displays
- 2 x Intel® Gigabit Ethernet
- Support Intel® AMT 7.0
- 1x PCIe X16 (with PCIe X8 signals), 1x PCIe X8, 2x PCIe X4 slots
- Support SATA 3.0, 2x RS232

Product Overview

NEX 890 is an industrial motherboard with Micro ATX form factor, which Support 2ⁿᵈ generation Intel® Core™ Workstation processors with Hyper-Threading technology.

The 2ⁿᵈ generation Intel® Core™ Workstation processors support dual channel ECC DDR3 1066/ 1333 MHz memory in four DIMM slots and integrated HD graphics controller. The C206 PCH manages SATA 3.0 ports and USB 2.0 ports. Furthermore, it supports other versatile I/O ports such as two serial ports, ten USB ports, and two Intel PCI Express Gigabit LAN ports. It offers a great solution for advanced industrial application that requires superb display and processing performance.

Specifications

CPU Support
- LGA1155, 2ⁿᵈ generation Intel® Core™ Workstation processors

Main Memory
- 4 x 240-pin DIMM, for up to 32GB dual channel ECC DDR3 1066/1333 SDRAM

Chipset
- Intel® C206 Platform Controller Hub

BIOS
- AMI BIOS
- Plug and play support

On-board LAN
- 1 x Intel® 82579LM PHY for AMT 7.0
- 1 x Intel® 82583 PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2 x RJ45 with LED

Display
- 2ⁿᵈ generation Intel® Core™ Desktop processors Integrated HD graphics
- 1x VGA
- 1x DVI-D

Expansion
- 1x PCIe X16(with PCIe X8 signals) slot
- 1x PCIe X8 slot
- 2x PCIe X4 slots

Edge I/O Interfaces
- 1x dual stack mini DIN 6-pin connector for PS2 KB/MS
- 1x dual stack DB9 male connector for COM1 & COM2
- 1x DVI + DB15 female connector VGA
- 2x RJ45 with dual stack USB connectors
- Line-In/Line-Out/MIC phone jack

I/O Interface
- USB 2.0: 10 ports (6 on board pin header, 4 with type A connector for external)
- Serial port: 2 port, with 2x5pin headers (COM 1 and COM 2)
- SATA HDD: 6 ports, port 1, 2 support SATA 3.0, port 3, 4, 5, 6 support SATA 2.0
- Support RAID 0/1/5/10 and Intel® Matrix Storage
- IrDA: on board pin header
- GPIO: Supports 4 sets general purpose I/O each with TTL level (5 V) interface
- On-board buzzer x 1
- Power LED/Power On/Reset/HDD LED pin header
- 1 x 4-pin fan connector (for CPU); 2 x 3-pin fan connectors(for System)

Block Diagram

- On-chip RTC with battery backup
- 1 x External Li-Ion battery

System Monitor
- 4 Voltages (+3.3V, +5V, +12V, Vcore)
- 2 Temperatures (For CPU and System)
- 3 FAN speed monitors (1 for CPU and 2 for System FAN)

Power Input
- Support ATX power supplies
- Standard ATX 24-pin connector for +12V/ +5V/ +3.3V/ +5Vsb/ -12V
- ATX 8-pin connector for +12V

Dimensions
- Micro ATX
- Dimension: 244mm (L) x 244mm (W)

Environment
- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NEX 890 (P/N : 10G00089000X0)**

  Micro ATX, LGA1155, 2nd generation Intel® Core™ Workstation processors, C206, DDR3 DIMM x4, VGA, DVI-D, 2x GbE, PCIe X8/PCIe X4/2x PCIe X1, 2x RS232

ICES 251X

Main Features

- Support Wide Range Operating Temperature
- Low Power COM Express CPU Module
- On-board Intel® Atom™ N450 1.66GHz Processor
- Intel® ICH8M Chipset
- Support DDR2 667 SO-DIMM up to 2GB

- Intel® PCI Express GbE 82574L
- Support 3x SATA, 1x IDE, 8x USB2.0 for Fast Peripherals
- Compact COM Express Type II Supports up to 5 Express Lanes, 32 bit PCI Interface and One IDE and Gigabit LAN

Product Overview

The ICES 251X is a COM Express Type 2 compact module that features Extended -40°C to + 85°C operating temperature with Intel® Atom™ N450 1.66GHz and ICH8M in small foot print. ICES 251X supports operating temperature form -40°C to 85°C. It also provides outstanding performance in the combination of high computing power and low thermal dissipation. ICES 251X supports DDR2 667 SO-DIMM memory up to 2GB, and supports 3x SATA, 1x IDE, 8x USB2.0 for fast peripherals. ICES 251X is type 2 COM Express Module support up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN.

Specifications

CPU Support
- On-board Intel® Atom™ N450 1.66GHz processor

Main Memory
- Support one un-buffered non-ECC DDR2 SO-DIMM 667 up to 2GB

Chipset
- Intel® ICH8M chipsets

BIOS
- AMI System BIOS
- SPI ROM
- Plug and play support
- Advanced power management and advanced configuration & power interface support

On-board LAN
- Intel® PCI Express GbE 82574L x 1
- Support PXE LAN boot function
- Support Wake on LAN function

Display
- Intel® N450 integrated graphics solution with dynamic video memory allocation
- Analog monitor with pixel resolution up to 1400x1050 @60Hz
- Support Single channel for 18 bit

- LFP (local fl at panel) LVDS interface

Audio
- HD configurable audio bus interface

Storage
- 3 x SATA
- 1 x IDE

I/O Interface
- Reset signal
- 8 GPIO lines (GPI 0~3 and GPO0~3), CMOS Level (0/3.3V)
- I2C interface/ SMbus interface
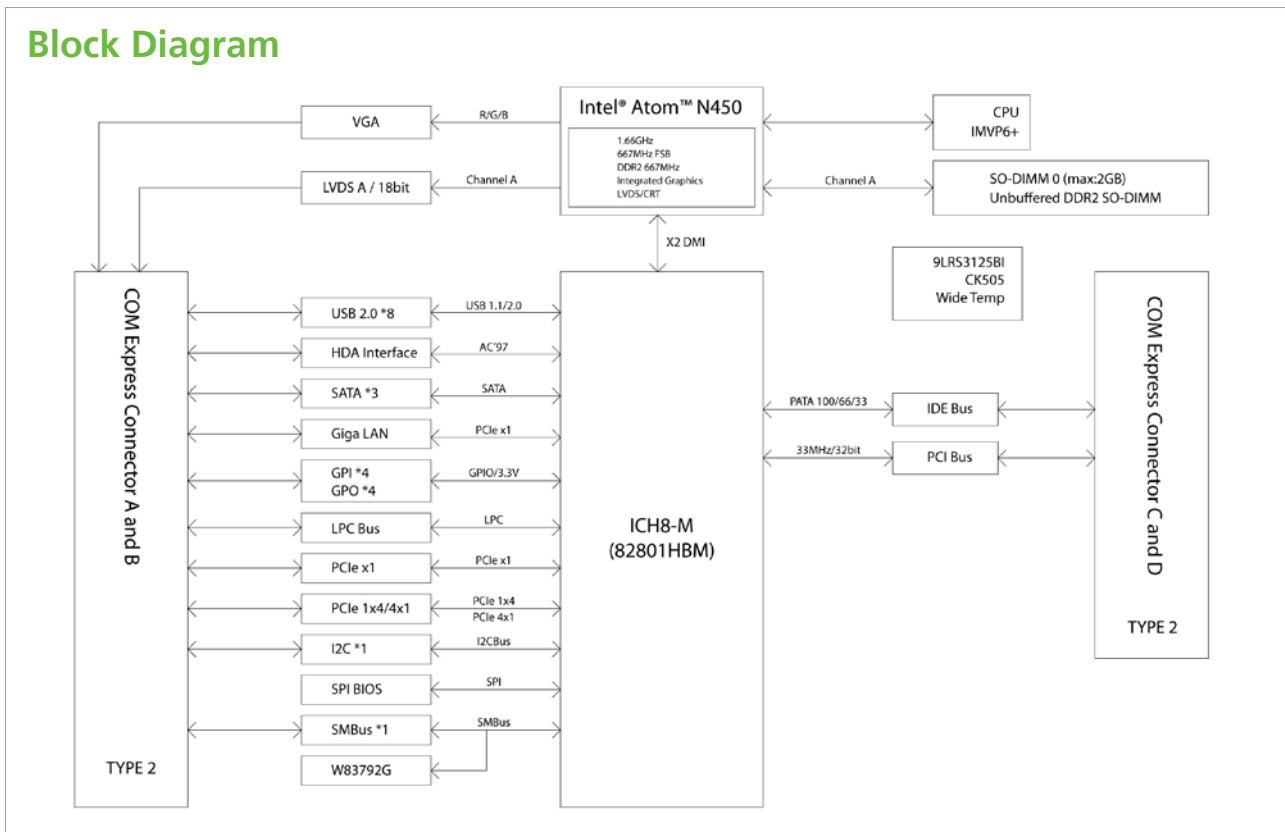- USB 2.0 x 8
- PATA

Other Interfaces
- One 3pin fan connector (90 degree, 12V)

COM Express Connector
- AB connector
  VGA/ LVDS/ 8x USB/ HD audio interface/ 3 x SATA/ LAN/ GPIO (3.3V)/ LPC bus
- 1x PCIe X4/ 1x PCIe X1/ SMBus/ I2C/ SPI BIOS
- CD connector, IDE, PCI

Block Diagram

System Monitor
- Monitoring of 4 voltages, 2 temperatures and 1 fan speed
- 4 voltages (For +5V, +12V, Vcore, +3.3V)
- 2 temperatures (CPU and one external temperature sensor)

Power Requirements
- +12Vdc, 3.3V battery, +5Vsb power input
- Support both AT and ATX power supply mode

Power Management
- ACPI 2.0 compliant with battery support. Also supports suspend to RAM (S3)

Carrier Board
- ICEB 8050

Dimensions
- 95mm (W) x 95mm (L)

Environment
- Operating temperature: -40°C to 85°C
- Storage temperature: -40°C to 85°C
- Relative humidity:
  10% to 97% (operating, non-condensing)
  5% to 97% (non-operating, non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information
- **ICES 251X (P/N:10K00025102X0)**

  COM Express Type 2 Compact Module Extended -40°C to + 85°C with Intel® Atom™ N450 1.66GHz DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ audio interface
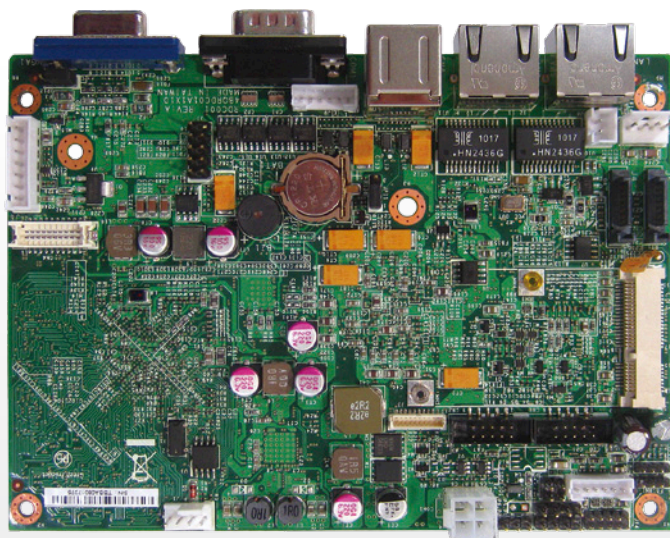
- **ICEB 8050 (P/N:10KB0805000X0)**

  COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN

EBC 310X

Main Features

- Support Wide Range Operating Temperature
- Support Intel® E640TUltra Low Power Consumption SoC
- On-board DDR2 1GB Main Memory
- Support VGA/ LVDS Display
- Two Gigabit Ethernet

- Support Video Decode (MPEG2, MPEG4, H.264, VC1, WMV9) / Encode (MPEG4, H.264)
- One CAN Controller
- 3x COMs, 5x USB 2.0, 2x SATA
- Single DC12V Power Input

Product Overview

The EBC 310X is a 3.5" ECX embedded board with an on-board Intel® Atom™ E640T 1.0GHz SoC with L2 cache 512 KB and extreme low power consumption 3.6 watts. It supports operating temperature form -40°C to 85°C.The EBC 310X features DDR2 1GB memory on-board, dual display application to support independent CRT and LVDS interface and build-in HD video decoder/encoder. Intel® PCH EG20T PCH supports 1x CAN and USB 2.0 controller. The EBC 310X embedded board supports a various operation systems such as Windows 7 and XP embedded, Win CE and Linux.

Specifications

CPU Support
- On-board Intel® Atom™ E640T 1.0GHz SoC (System-On-Chip)

Main Memory
- On-board DDR2 800-MHz 1GB, non-ECC and un-buffered

Chipset
- Intel® EG20T (PCH)

BIOS
- AMI System BIOS
- Plug and play support

On-board LAN
- 1 x Intel® 82574L Gigabit Ethernet controller
- 1 x Realtek 8211CL Gigabit Ethernet controller
- Support Boot from LAN and Wake on LAN
- 2 x RJ45 with LED

Display
- Intel® Atom™ E600 series integrated graphic engine, support video decode (MPEG2, MPEG4, H.264, VC1, WMV9)/ encode (MPEG4, H.264)
- Analog VGA interface: 1 x DB15 VGA port, support resolution up to 1280x 1024

- LVDS interface: support single 18/24-bit LVDS channel, resolution up to 1280x 768

Audio
- Realtek ALC886 CODEC for High Definition
- 1 x Mic-in and 1 x Line-out pin header

Expansion
- 1 x Mini-PCIe socket

I/O Interface
- Serial port: 3 ports
- 1 x RS232 DB9 Connector (COM1)
- 1 x RS232 with 10-pin box header, 2.0mm pitch (COM3)
- 1 x RS232/ 422/ 485 (COM2) with 10-pin box header, 2.0mm pitch
- USB 2.0: 5 ports
  2 ports with USB 2.0 connector
  2 ports with 2x 5-pin header, 2.0mm pitch
  1 port supports USB DOM
- CAN:
  Integrated CAN 2.0 Controller supporting IEEE1588 over CAN
  External CAN Bus Driver – TJA1050
  2x 2-pin header, 2.54mm pitch
- 8 x GPIO, 10-pin pin header, (GPI 0~3 and GPO0~3) with TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header

Block Diagram

- 1 x 4-pin fan connector (for CPU)
- 6-pin JST connector for PS2 keyboard/ mouse
- On-board buzzer/ SMBus2.0/ reset/ On & Off switch button

Watchdog Timer
- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage
- 2 x SATA connector (support 1x SATA DOM)

System Monitor
- Monitoring of 5 voltages and 2 temperature
- 5 voltages (12, 5, 3.3, VNN, Vcore)
- 2 temperature (CPU, system)

On-board RTC
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input
- Support AT and ATX mode (ATX as the default)

Power Requirements
- Power requirement: +12 V DC Input
- One 4-pin power connector

Dimensions
- 3.5"ECX form factor
- 146mm (L) x 105mm (W) (5.7"x4.1")

Environment
- Operating temperatures: -40°C to 85°C
- Storage temperature: -40°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications
- CE approval
- FCC Class A

Ordering Information

- **EBC 310X (P/N: 10E00310X00X0) RoHS Compliant**
  Ultra Low power embedded board with Intel® Atom™ E640T processor, on-board DDR2 1GB memory, VGA/ LVDS, 1x CAN, 2x GbE, 1x mini-PCIe, 3x COM, 6x USB 2.0, DC12V input

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NViS 2140H

Main Features

- On-board Intel® Atom™ Dual Core D525 (1.8GHz, 1M Cache) Processor
- One DDR3 SO-DIMM socket, DDR3 800 2G Memory Module
- 2 x Intel® Gigabit Ethernet Ports
- 4 x USB 2.0 / 1 x VGA

- 4 x Serial port and 2x RS232/ 422/ 485 with Auto-flow Control
- 1 x Mini-PCIe Socket On-board
- One External CF Socket and One External SIM Card Holder
- 9V- 36V DC Input
- 4-channel Full-D1 Display/ Recording

Product Overview

NViS 2140H features an on-board Intel® Atom™ D525 1.8GHz processor. NViS 2140H provides a wide variety of I/O interfaces including 2 x Intel® GbE Ethernet ports, 4 x COM ports, 4 x USB, 1 x GPIO, and audio interface. Mobile DVR Solution with Intel® Atom™ D525, flexible PCI expansion slot for 4 power over Ethernet(PoE) ports for a range of IP surveillance, eases the difficulties of providing different power source for device such IP camera in buses, and sightseeing buses etc.

Specifications

Main Board
- NISB 2100A
- On-board Intel® Atom™ Dual Core D525 FCBGA processor (1.8GHz, 1M Cache)
- Intel® ICH8M PCH

Main Memory
- 1 x 204 -pin SO-DIMM memory, up to 2GB DDR3 800, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- 2 x USB2.0 ports
- 2 x Serial port (RS232)
- 1 x external SIM card holder
- 1 x DB15 GPIO connector
- 2 x Antenna holes (either optional Wi-Fi or mobile wireless module)

I/O Interface-Rear
- 9V- 36V DC input
- 1 x 3-pin for remote power on/ off switch
- 1 x DB15 VGA port
- 2 x Intel® GbE LAN ports

- 1 x Speaker out
- 2 x USB2.0 ports
- 4 x Serial port
  (2 x RS232 and 2 x RS232/422/485 with auto-flow control)

Storage
- 1 x 2.5" HDD driver bay
- One external CF socket

Expansion
- 1 x mini-PCIe socket on-board
  (either optional Wi-Fi or mobile wireless module)

Power Requirements
- ATX power mode
- DC to DC power design on-board, support from 9V- 36V DC
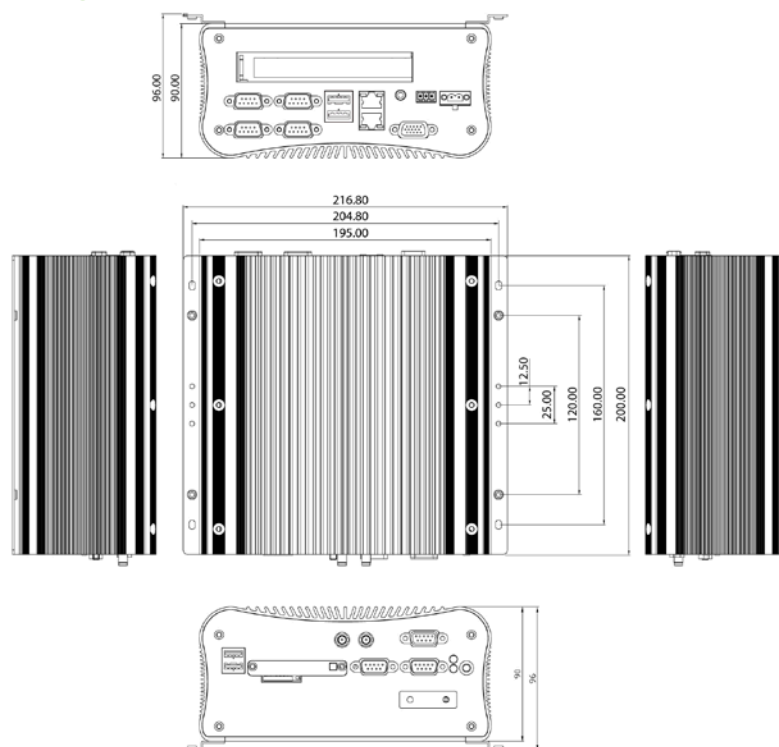- Optional 19V, 65W power adapter

Dimensions
- 195 mm (W) x 200 mm (D) x 90 mm (H) (7.7" x 7.9" x 3.5")

Construction
- Aluminum chassis with fanless design

Dimension Drawing

Environment
- Operating temperature:
  Ambient with air fl ow: -20°C- 70°C
  (with industrial CF &SSD condition)
- Storage temperature: -20°C- 80°C
- Relative humidity: 10% to 93% (non-condensing)

Certifications
- CE approval
- FCC Class A
- e13 mark

Ordering Information

- **NViS 2140H (P/N: 10C2140H00X0) RoHS Compliant**
  Intel® Atom™ Dual Core D525 fanless system

- **19V, 120W AC/DC power adapter w/o power core (P/N: 7410120002X00)**

NViS 2280

Main Features

- Built-in Intel® Atom™ D2700 Dual Core 2.13GHz Processor
- Internal wireless communication (3.5G/ WLAN/ BT/ GPS)
- 2 x 2.5" hot swappable HDD Tray for 750G or Above Video Data
- Dual Local Display by (VGA+HDMI)

- 2 x Intel® 82583V Gigabit Ethernet
- Support 1 x Isolated RS-232 Port
- Optional Power Ignition
- 9~36V wide rang power input

Product Overview

The NVR NViS 2280 is equipped with an Intel® Atom™ D2700 processor in compact design for in-vehicle applications. Incorporating an all-in-one embedded server board, NViS 2280 provides high quality digital recording, real-time display and supports a wide range of megapixel IP cameras.

Specifications

Main Board
- On-board Intel® Atom™ D2700 processor Dual Core 2.13Ghz

Main Memory
- 2 x DDR3 1067MHz SODMIM socket, up to 4G

Platform Control Hub
- Intel® ICH10R

I/O Interface-Front
- Power on/off switch
- HDD access/ power/ LAN status LEDs
- 2 x USB2.0 ports
- 1 x SIM card holder
- 1 x Speaker-out and 1 x Mic-in
- 4-port Gigabit PoE (IEEE802.3af-16.8W per port)

I/O Interface-Rear
- 2 x Intel® 82583V GbE ports
- 2 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x HDMI

- 1 x RS232/422/485 with isolated
- 1 x eSATA
- Reserved for 5 optional antenna holes for GPS/ Wi-Fi/ WWAN
- Built-in G-sensor 3-AXIS digital accelerometer (ADXL345)
- 12V (2A) output for CCVT power source

Communication
- WWAN: through Mini-PCIe for optional 3G/ 3.5G/ GPRS/ GSM module
- WLAN: through Mini-PCIe for optional Wi-Fi module
- PAN: through internal COM for optional BT module
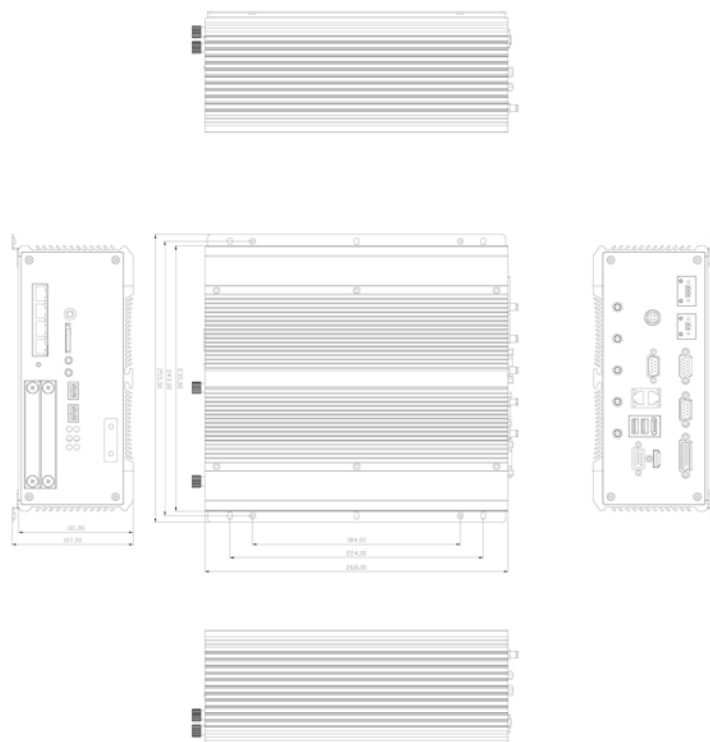- GPS: through internal COM for GPS module
- PoE: for IP camera module

Storage
- 2 x 2.5" HDD driver bay with hot swap
- 1 x SATA DOM for OS (optional)

Power Requirements
- On-board DC to DC power support from 9V to 36V DC
- Optional power adapter

Dimension Drawing

Dimensions
* 235mm(W) x 268 mm(D) x 101mm(H)

Environment
* Operating temperature:
  Ambient with air fl ow: -20°C to 60°C
* Storage temperature: -40°C to 80°C
* Relative humidity: 10% to 90% (non-condensing)
* Vibration: STD-810F-514.5 C3- Composite wheeled vehicle
  (SSD with vibration kit)

Certifications
* CE approval
* FCC Class A
* e13 mark

Ordering Information

* **NViS 2280P4 (P/N: 10C0228000X0) RoHS Compliant**
  PoE Ready, Mobile NVR with Intel® Atom™ D2700 processor

Optional Accessories

* **Anti-vibration kit (P/N: TBD)**

* **9~36VPower ignition module (NISKIG120)
  (P/N:10JKIG12000X0)**

* **VMD 1000-B (P/N: 10VD0100000X0)**
  7-inch WVGA LCD with touch screen vehicle display

NViS 3540

Main Features

- Support Intel® Core™ i7/ i5 Socket Processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet Ports
- Dual VGA or VGA/ DVI Independent Display

- On-board DC to DC Power Design to Support 9V to 30V DC Power Input
- 3 x RS232 and 1 x Rs232/422/485 with Auto flow Control

Product Overview

Utilizing 32nm Intel® Core™ i7/ i5 processor, NViS 3540 series features Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDR3 800/ 1066 memory modules up to 4GB. In addition, NViS 3540 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5 x COM ports, 6 x USB, 8 x GPIO, 2 x SATAII, 2 x eSATA, audio interfaces.

NViS 3540 is designed for a broad range of applications which demand intense graphics performance; these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, and surveillance security applications.

Specifications

Main Board
- NISB 3500
- On-board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA processor (1.86GHz, 2M Cache)

Main Memory
- 2 x 240-pin memory DIMM, up to 4GB DDR3 800/ 1066MHz SDRAM, un-buffered and non-ECC
- * Note: Actual memory size is dynamic based on the OS I/O resource allocation

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- 2 x USB2.0 ports
- 2 x eSATA ports
- 1 x 2.5" HDD with Hot Swap

I/O Interface-Rear
- 2-pin remote power on/off switch
- 9~30V DC input

- 1 x PS/2 for keyboard/ mouse
- 1 x DB15 male connector for GPIO
  (4 x digital-input and 4 x digital-output)
- 1 x DB44 serial port for 4x RS232
  (COM2: RS232/ 422/ 485 with auto flow control)
- 2 x GbE ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-D port
- 1 x Speaker-out and 1 x Mic-in

Storage
- 2 x 2.5" HDD driver bay (support 1 x 2.5 HDD with hot swap)
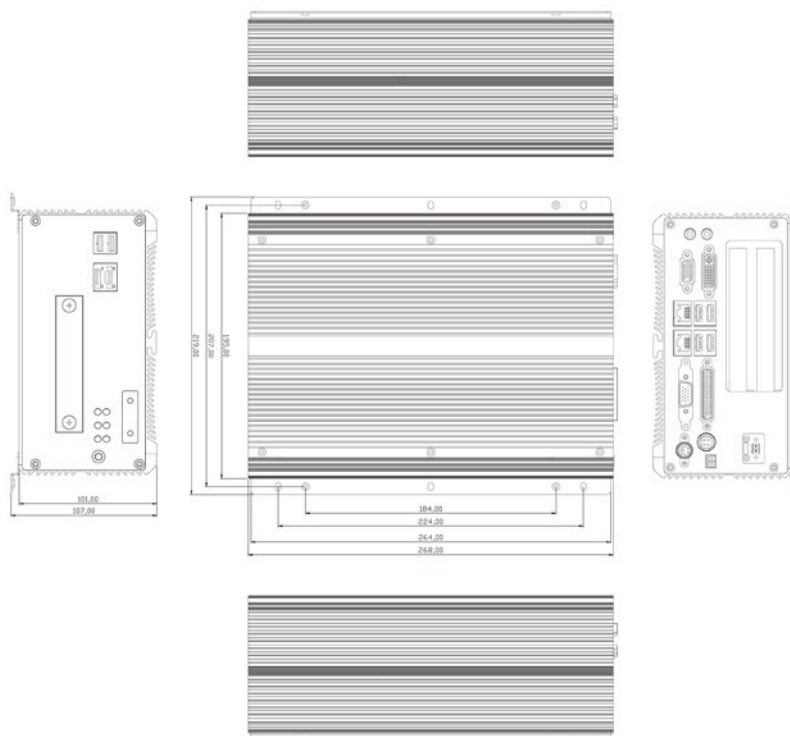
Expansion
- 1 x PCIe x1

Power Requirements
- ATX power mode
- On-board DC to DC power support from 9V to 30V DC
- Optional power adapter

Dimensions
- 195mm (W) x 268 mm (D) x 101mm (H)

Dimension Drawing

Construction
* Aluminum chassis with fanless design

Environment
* Operating temperature:
* Ambient with air flow: -5°C ~ 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (non-condensing)
* Vibration: STD-810F-514.5 C3- Composite wheeled vehicle
  (SSD with vibration kit)

Certifications
* CE approval
* FCC Class B
* e13 Mark

Ordering Information

* **NViS 3540 (P/N: 10C0035400X0) RoHS Compliant**
  Mobile Surveillance System with Intel® Core™ i7/ i5 and one PCIe x1 slot expansion

* **19V, 120W AC/DC power adapter w/o power core (P/N: 7410120002X00)**

NViS 3542

Main Features

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabyte Ethernet ports
- Dual VGA or VGA/DVI independent displays
- 3 x R232 and 1 x R232/422/485 with auto flow control

- On-board DC to DC power design to support 9V to 30V DC power input
- Support ATX power mode and PXE/WoL
- Support 3G/ Wi-Fi/ GPS communications
- 1 x PCIe x1 slot for ANPR / LPR video capture

Product Overview

Utilizing 32nm Intel® Core™ i7/ i5 processor, NViS 3542 series features Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDR3 800/ 1066 memory modules up to 4GB. In addition, NViS 3542 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5 x COM ports, 6 x USB, 8 x GPIO, 2 x SATAII, 2 x eSATA, audio interfaces. NViS 3542 is designed for LPR/ ANPR surveillance or a broad range of applications which demand intense graphics performance; these include medical diagnostic equipment.

Specifications

Main Board
- On-board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA processor (2.66GHz, 4M cache)
- Support Intel® Core™ i5-520M PGA processor (2.4GHz, 3M cache)

Main Memory
- 2 x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- Wireless active LEDs
- 2 x antenna holes
- 2 x USB2.0 ports
- 1 x Line-out and 1 x Mic-in
- 1 x HDMI
- 1 x External SIM card holder

I/O Interface-Rear
- 2-pin remote power on/off switch
- 9~30V DC input
- 1 x PS/2 for keyboard/ mouse

- 1 x DB15 male connector for GPIO
  (4 x input and 4 x output)
- 1 x DB44 serial port for 4 x RS232
  (COM2: RS232/ 422/ 485 with auto flow control)
- 2 x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-D port
- 1 x Speaker-out and 1 x Mic-in

Storage
- 2 x 2.5" HDD driver bay (support 1 x 2.5 HDD with hot swap)

Communications
- WAL: through mini-PCIe for optional 3G/3.5G/GSM module
- WLAN: through mini-PCIe for optional Wi-Fi module (either one)
- GPS: through internal COM for GPS module

Expansion
- 1 x PCIe x1

Dimensions
- 235mm (W) x 268 mm (D) x 101mm (H)
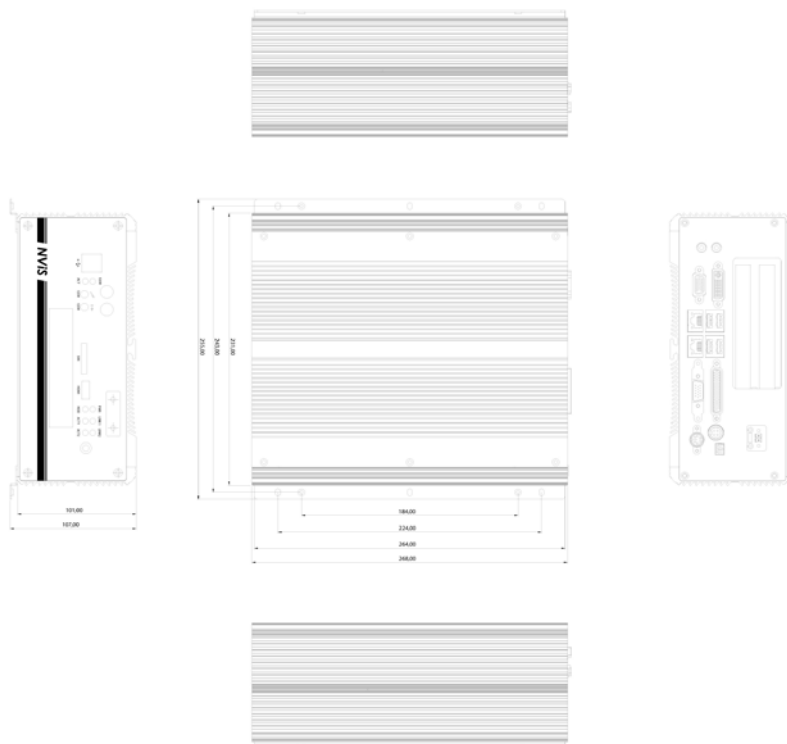
Dimension Drawing

Construction
* Aluminum chassis with fanless design

Environment
* Operating temperature:
* Ambient with air flow: -5°C ~ 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
* Storage temperature: -20°C ~ 80°C
* Relative humidity: 10% to 93% (non-condensing)
* Vibration (random): 2g@5~500 Hz with SSD;
  1g@5~500 Hz with HDD(in operation)
* Vibration: STD-810F-514.5 C3 -Composite wheeled vehicle
  (SSD with vibration kit)

Certifications
* CE approval
* FCC Class A
* e13 Mark

Ordering Information
* **NViS 3542 (P/N: TBD) RoHS Compliant**
  Mobile NVR surveillance system with Intel® Core™ i7/ i5 processor

NViS 3542P4/ 3542P8

4 PoE, Mobile NVR Surveillance System
with Intel® i5/i7 Processor

Main Features

- Support Intel® Core™ i7/ i5 Socket Processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet Ports
- Dual VGA or VGA/ DVI Independent Display
- 3 x R232 and 1 x R232/422/485 with auto flow control
- On-board DC to DC Power Design to Support 9V to 30V DC Power Input
- Support ATX power mode and PXE/WoL
- 4 x PoE ports
- Support 3G/ Wi-Fi/ GPS communications

Product Overview

Utilizing 32nm Intel® Core™ i7/ i5 processor, NViS 3542P4 series features Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDR3 800/ 1066 memory modules up to 4GB. In addition, NViS 3542P4 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5 x COM ports, 6 x USB, 8 x GPIO, 2 x SATAII, 2 x eSATA, audio interfaces. NViS 3542P4 is designed for a broad range of applications which demand intense graphics performance; these include medical diagnostic equipment.

Specifications

Main Board
- NISB 352
- On-board Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA processor (2.66GHz, 4M cache)
- Support Intel® Core™ i5-520M PGA processor (2.4GHz, 3M cache)
- Support Intel® P4500 PGA processor (1.86GHz, 2M Cache)

Main Memory
- 2 x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, un-buffered and non-ECC

I/O Interface-Front
- ATX power on/off switch
- HDD access/ power status LEDs
- Wireless active LEDs
- 2 x antenna holes
- 2 x USB2.0 ports
- 1 x Line-out and 1 x Mic-in
- 1 x HDMI
- 1 x External SIM card holder

I/O Interface-Rear
- 2-pin remote power on/off switch

- 9~30V DC input
- 1 x PS/2 for keyboard/ mouse
- 1 x DB15 male connector for GPIO
  (4 x input and 4 x output)
- 1 x DB44 serial port for 4x RS232
  (COM2: RS232/ 422/ 485 with auto flow control)
- 2 x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-D port
- 1 x Speaker-out and 1 x Mic-in
- 4-port PoE (IEEE802.3af-16.8W per port) NViS 3542P4
- 8-port PoE (IEEE802.3af-16.8W per port) NViS 3542P8

Storage
- 2 x 2.5" HDD driver bay (support 1 x 2.5 HDD with hot swap)
- 2 x 2.5" fix HDD driver bay (NViS 3542P8)

Communication
- WAN: through mini-PCIe for optional 3G/ 3.5G/ GSM module
- WLAN: through mini-PCIe for optional Wi-Fi module (either one)
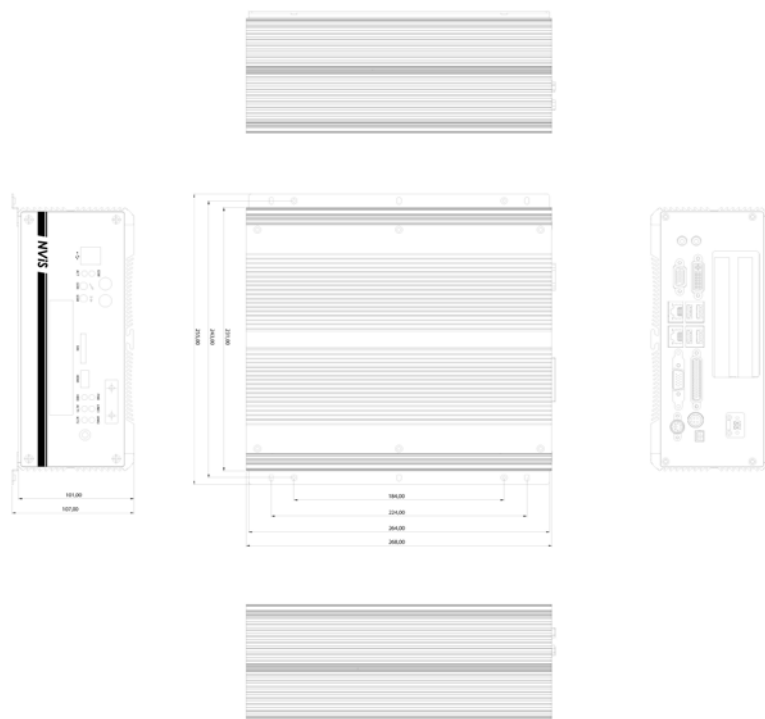- GPS: through internal COM for GPS module

Dimension Drawing

Expansion
• 1 x mini-PCIe socket for 3G/Wi-Fi

Dimensions
• 235mm (W) x 268 mm (D) x 101mm (H)

Construction
• Aluminum chassis with fanless design

Environment
• Operating temperature:
• Ambient with air flow: -5°C ~ 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
• Storage temperature: -20°C ~ 80°C
• Relative humidity: 10% to 93% (non-condensing)
• Vibration (random): 2g@5~500 Hz with SSD;
  1g@5~500 Hz with HDD(in operation)
• Vibration: STD-810F-514.5 C3- Composite wheeled vehicle
  (SSD with vibration kit)

Certifications
• CE approval
• FCC Class A
• e13 Mark

Ordering Information
• **NViS 3542P4 (P/N: 10C00354201X0) RoHS Compliant**
  Mobile NVR surveillance system with Intel® Core™ i7/ i5 and 4 PoE ports
• **NViS 3542P8 (P/N: TBD) RoHS Compliant**
  Mobile NVR surveillance system with Intel® Core™ i7/i5 and 8 PoE ports

Optional Accessories
• **Anti-vibration kit (P/N: TBD)**
• **9~36VPower ignition module (NISKIG120) (P/N:10JKIG12000X0)**

NViS 5240

Main Features

- Built-in Intel® Atom™ D2700 Dual Core 2.13GHz Processor
- 4 x 2.5" HDD Tray for 2T or Above Video Data
- Dual Local Display by (VGA+HDMI)
- 2 x Intel® Gigabit Ethernet
- NViS VMS pre-installed

Product Overview

The NVR NViS 5240 is equipped with an Intel® Atom™ D2700 processor in compact design for retail or SBM applications. Incorporating an all-in-one embedded server board, NViS 5240 provides high quality digital recording, real-time display and supports a wide range of megapixel IP cameras.

Specifications

Main Board
- On-Board Intel® Atom™ D2700 Processor Dual Core 2.13Ghz

Main Memory
- 2 x DDR3 1067MHz SODMIM socket, up to 4G

Platform Control Hub
- Intel® ICH10R

I/O Interface-Front
- HDD access/ power status LEDs
- 2 x USB2.0 ports

I/O Interface-Rear
- 2 x Intel® 82574L GbE ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x HDMI
- 1 x eSATA
- 1 x RS232
- 2 x PS/2 for keyboard and mouse
- Power on/off switch
- 1 x Speaker-out/ Mic-in

Expansions
- 1 x PCI ExpressX4
- 1 x mini-PCIe (either one w/ PCIe)

Storage
- 4 x 3.5" HDD removable driver bay
- 1 x SATA DOM for OS (optional)

Power Input
- 200W ATX power supply AC 100V to 240V

Dimensions
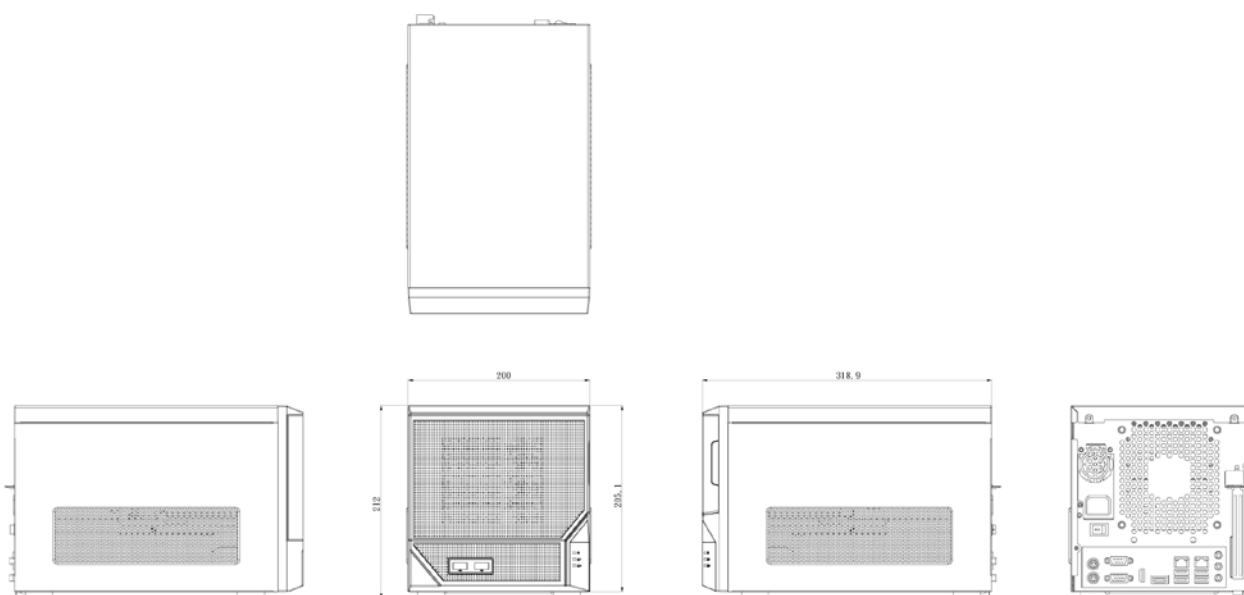- 200mm(W) x 250mm(H) x 303mm(D)

Environment
- Operating temperature:
  Ambient with air flow: 0°C to 45°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)

Certifications
- CE approval
- FCC Class A

Dimension Drawing

VMS Software (Windows)

NViS5240 Specifications			
Model	NViS5240-08	NViS5240-12	NViS5240-16
Software Specifications			
Maximum number of IP camera channels (Recording)	x8	x12	x16
Maximum number of clients	unlimited (networking bandwidth dependent)		
Megapixel camera recording	for all supported models (limited by maximum recording throughput)		
Recording format	H.264, MPEG-4, MJPEG (camera dependent)		
Live view	multi-layout, digital PTZ, snapshot, Audio-in/out, event listing, PTZ control, audio broadcast, instant playback, event playback		
Recording type	scheduled recording, event recording, manual recording		
Audio recording	audio recording synchronized with video (both camera and client inputs)		
Smart search	sequence explorer, search motion, search events		
Playback	synchronized playback (1/2/4 CH), play speed control (x1/2, x1, x2, x4, x8 speed), bookmarking, export video		
IP camera brand support*	etrovision, Messoa, NVIF and any 3rd camera by project base request		
Web client	web client supports iPhone/iPad browser, PC Chrome/ Firefox/ Safari browsers.		

Ordering Information

♦ **NViS 5240 (P/N: 10C0524000X0) RoHS Compliant**
   4 bay, Tower NVR with Intel® D2700™ Processor w/ Win7 Embedded, VMS bundled

♦ **NViS 5240-08 (P/N:TBD)**
   4 bay, Tower NVR with Intel® D2700™ Processor w/ Win7 Embedded, VMS bundled

♦ **NViS 5240-12 (P/N:TBD)**
   4 bay, Tower NVR with Intel® D2700™ Processor w/ Win7 Embedded, VMS bundled

♦ **NViS 5240-16 (P/N:TBD)**
   4 bay, Tower NVR with Intel® D2700™ Processor w/ Win7 Embedded, VMS bundled

NViS 6210

2U, Rack 32CH Hybrid DVR
with Intel® Core™ i3/i5/i7 Desktop Processor

- 2U Rackmount Hybrid DVR with BNC Connectors Published
- Support Intel® Core™ i3/i5/i7 Desktop Processor
- Video Decoder (TW6816) Chips On-board
- Up to 32 CH 960/900FPS@D1 Display & Recording
- 8 x 3.5" HDD Tray

- Dual Local Display by (VGA+DVI), (VGA+ HDMI) or (DVI+HDMI)
- 2 x Intel® Gigabit Ethernet/ Support Intel® AMT 7.0 for Remote Management
- 1 x PCIe x16 Slot, Support SATA3.0, RS232/422/485
- SDK support (Windows platform)

Product Overview

The NViS 6210 hybrid DVR is equipped with an Intel® Core™ i3/i5/i7 processor. Incorporating an all-in-one embedded server board and video chips on-board, NViS 6210 provides high quality digital recording on 32-channel D1 resolution, real-time display (NTSC 720X480, PAL 720/576) and SDK supported.

Specifications

Main Board
- NEX 882

CPU Support
- Intel® Core™ i7 2600 desktop processor (8M cache 3.4 GHz, LGA 1155)
- Intel® Core™ i5 2400 desktop processor (6M cache 3.1 GHzr, LGA 1155)
- Intel® Core™ i3 2120 desktop processor (3M cache 3.3 GHzr, LGA 1155)

Main Memory
- 4 x 240-pin memory DIMM sockets, up to 16GB DDR3 1066/1333 MHz SDRAM, un-buffered and non-ECC

Platform Control Hub
- Intel® Q67

Capture Chip
- 8 x Techwell 6816 video decoder chip on-board (32CH)
- 4 x Techwell 6816 video decoder chip on-board (16CH)

I/O Interface-Front
- Power on/ off switch
- HDD access/ power status LEDs
- 2 x USB2.0 ports

I/O Interface-Rear
- 2 x GbE ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-D port
- 2 x DVI port for video and audio input
- 1 x HDMI port
- 1 x speaker-out and 1 x Mic-in/ Line-in
- 32CH BNC connectors
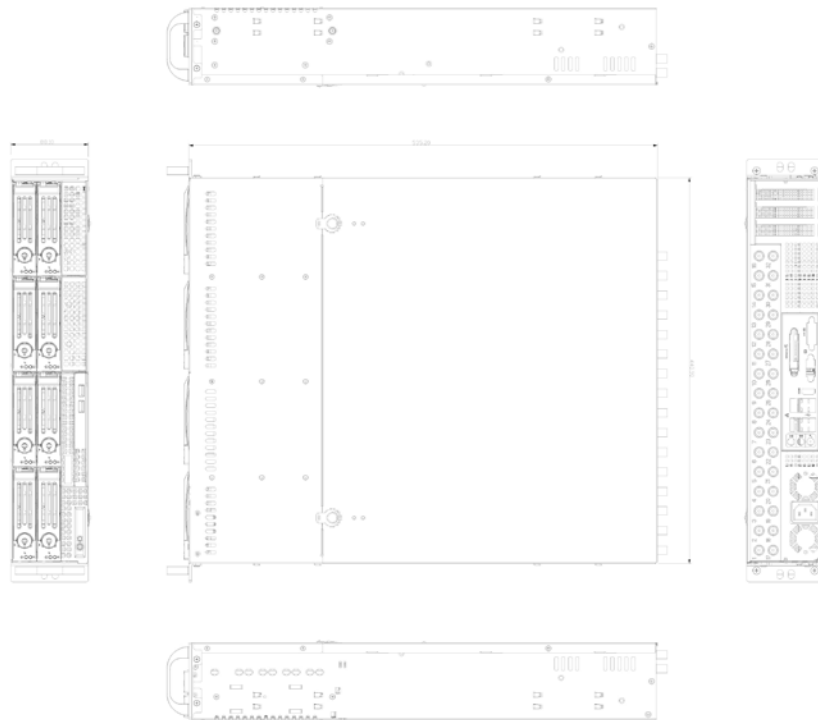- 1 x RS232/ 1 x RS232/422/485 (internal)

Expansions
- 1 x PCIe x16 (internal use)
- 1 x mini-PCIe (internal use)

Storage
- 8 x 3.5" HDD driver bay

Dimension Drawing

Cooling System
* 2 x 80mm fan for system cooling
* 1 x copper heatsink with fan for CPU cooling

Power Input
* 600W ATX power supply AC 100V to 240V

Dimensions
* 437mm(W) x 648mm(D) x 89mm(H)

Construction
* 2U rackmount, heavy-duty steel chassis

Environment
* Operating temperature:
  Ambient with air flow: 0°C to 50°C
* Storage temperature: -20°C to 80°C
* Relative humidity: 10% to 90% (non-condensing)

Certifications
* CE approval
* FCC Class A

Digital Video Specifications

Product	NViS6210-16CH	NViS6210-32CH
Video Input	16	32
Audio Input	16	32
Video Format (Display)	NTSC	PAL
	YUY2	
	720×480×30FPS	720×576×25FPS
	640×480×30FPS	640×576×25FPS
	720×240×30FPS	720×288×25FPS
	640×240×30FPS	640×288×25FPS
	320×240×30FPS	320×288×25FPS
Video Recording	NTSC	PAL
	S/W MPEG4 or S/W H.264	
	720×480×30FPS	720×576×25FPS
	640×480×30FPS	640×576×25FPS
	720×240×30FPS	720×288×25FPS
	640×240×30FPS	640×288×25FPS
	320×240×30FPS	320×288×25FPS
Audio Format	MONO/ 8- 16BITS / 8000- 48000HZ	
I/O	Yes (optional)	
SDK	VC++/ .NET/ BCB / VB/ V4L2	

Ordering Information

* **NViS 6210-16 (P/N: 10C0621000X0) RoHS Compliant**
  2U, 16CH hybrid DVR with Intel® Core™ i3/i5/i7 processors

* **NViS 6210-32 (P/N: 10C621001X0) RoHs Compliant**
  2U, 32CH hybrid DVR with Intel® Core™ i3/i5/i7 processors

NViS 6220

2U, Rack NVR with Intel® Core™ i3/i5/i7 Desktop Processor

Main Features

- 2U Rackmount NVR with 1x PCIe x16 Expansion Slots Available
- Support Intel® Core™ i3/i5/i7 Desktop Processors
- 8 x 3.5" HDD Tray for 16T or Above Video Data
- Dual Local Display by (VGA+DVI), (VGA+ HDMI) or (DVI+HDMI)

- 2 x Intel® Gigabit Ethernet/Support Intel® AMT 7.0 for Remote Management
- 1 x PCIe x16 slot, support SATA 3.0, RS232/422/485

Product Overview

The NVR NViS 6220 is equipped with an Intel® Core™ i3/i5/i7 processor. Incorporating an all-in-one embedded server board, the NViS 6220 provides high quality digital recording on high-resolution IP cameras.

Specifications

Main Board
- NEX 882L

CPU Support
- Intel® Core™ i7 2600 desktop processor (8M cache 3.4 GHz, LGA 1155)
- Intel® Core™ i5 2400 desktop processor (6M cache 3.1 GHzr, LGA 1155)
- Intel® Core™ i3 2120 desktop processor (3M cache 3.3 GHzr, LGA 1155)

Main Memory
- 4 x 240-pin memory DIMM sockets, up to 16GB DDR3 1066/1333 MHz SDRAM, un-buffered and non-ECC

Platform Control Hub
- Intel® Q67

I/O Interface-Front
- Power on/off switch
- HDD access/ power status LEDs
- 2 x USB2.0 ports

I/O Interface-Rear
- 2 x GbE ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-D port
- 1 x RS232/ 1 x RS232/422/485 (internal)
- 1 x HDMI
- 1 x Speaker-out/ 1 x Line-in and 1 x Mic-in

Expansion Slot
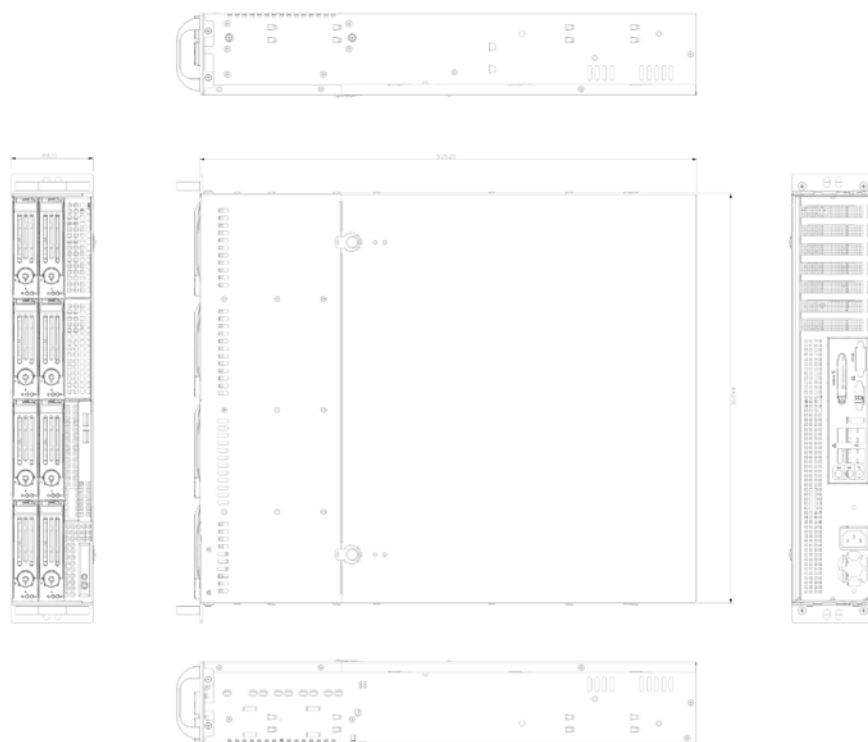- 1 x PCI Express X16
- 1 x mini-PCI Express

Cooling System
- 2 x 80mm fan for system cooling
- 1 x copper heatsink with fan for CPU cooling

Power Input
- 600W ATX industrial-grade power supply
- AC 100V to 240V

Dimension Drawing

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C1
C2
C3
C4
C5
C6
C7
C8
C9

Dimensions
- 437mm(W) x 648mm(D) x 89mm(H)

Construction
- 2U rackmount, heavy-duty steel chassis

Environment
- Operating temperature:
  Ambient with air flow: 0°C to 50°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NViS 6220 (P/N: 10C0622000X0) RoHS Compliant**
  2U, 32CH NVR with Intel® Core™ i3/i5/i7 processors

NViS 8480

Main Features

- 4U 19-inch rackmount standard
- Supports Intel® Core™ i7/i5 Quad Core processors
- Four DDR3 DIMM Sockets, up to 16GB DDR3 1066/1333 MHz SDRAM
- Dual Intel® Gigabit Ethernet ports

- 6 x USB2.0 / 1 x VGA/ 1 x DVI-D
- 4 x PCIe expansion slots
- 6 x 3.5" SATA HDD bays for external
- Supported up to 8-cahnnal HDcctv

Product Overview

NEXCOM expands its security surveillance offerings to HDcctv with NViS 8480. Powered by Intel® Core™ i7/i5 Quad Core processors with C206 chipset, NViS 8480 is able to display and playback Full HD videos through 8 channels. In addition, the storage capacity NViS 8480 holds can be as large as 12TB when all of its six 3.5" SATA HDDs are utilized, offering massive storage capacity with good value.

Specifications

Main Board
- NEX 880

CPU Support
- Intel® Desktop Core™ i7 2600 Quad Core processor (3.4 GHz, LGA 1155)
- Intel® Desktop Core™ i5 Quad Core processor (2.6 GHzr, LGA 1155)

Main Memory
- 4 x 240-pin memory DIMM sockets, up to 16GB DDR3 1066/1333 MHz SDRAM, un-buffered and non-ECC

Platform Control Hub
- Intel® Q67

I/O Interface-Front
- 6 x 3.5" external HDD try
- 4 x USB 2.0 ports
- System status LEDs

I/O Interface-Rear
- AC 100V to 240V input
- 1 x VGA DB-15 connector
- 1 x DVI-D port
- 4 x USB 2.0 ports
- 1 x Speaker-out / 1 x Line-in and 1 x Mic-in
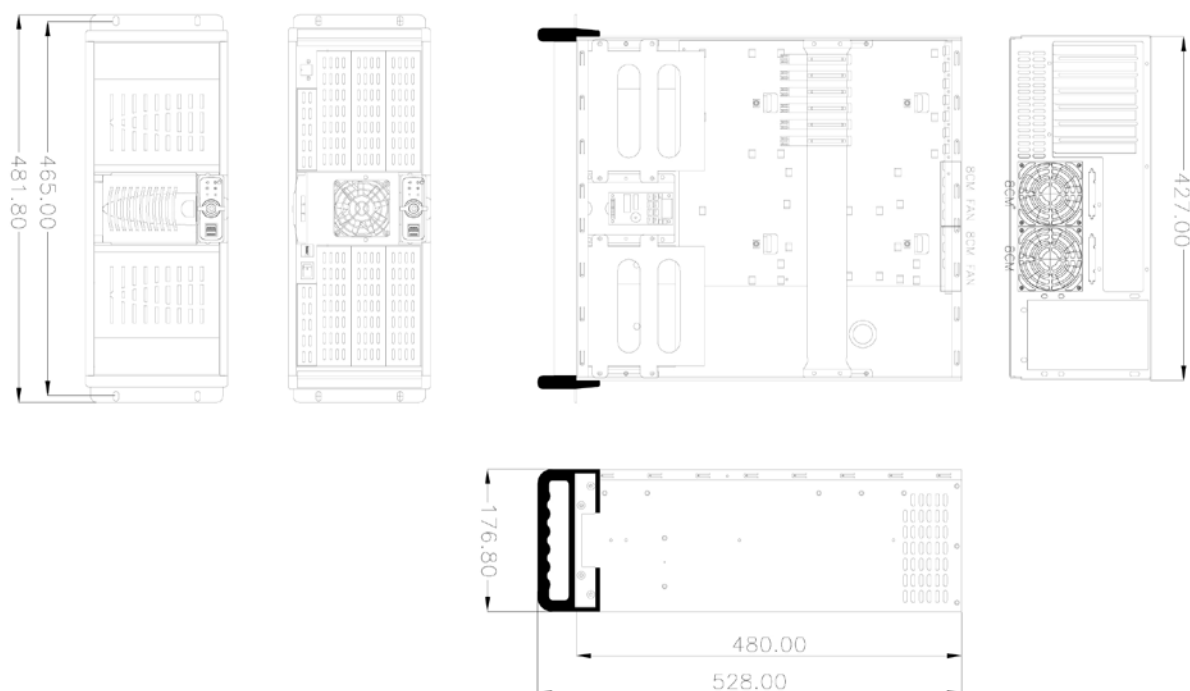- 2 x COM port

Storage
- 6 x 3.5" SATA HDD driver bay

Expansion
- 1 x PCIe x8
- 1 x PCIe x4
- 1 x PCIe x1
- 1 x PCIe x1

Dimensions
- 427mm (W) x 480 mm (D) x 176mm (H)

Dimension Drawing

Construction
- 4U rackmount, heavy-duty steel chassis

Environment
- Operating temperature:
  Ambient with air flow: 0°C- 45°C
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C- 70°C
- Relative humidity: 10%- 90% (non-condensing)

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NViS 8480 (P/N: 90C00848000X0) RoHS Compliant**
  4U HDcctv Security Surveillance System with 2nd Generation Intel®
  Core™ i7/i5 Processor

- **Optional HDcctv capture card (P/N: 757CAPT004X00)**
  Live data-4ch HD software compression card

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C6
C7
C8
C9

NPT 1500

High Value Fanless Point-of-Sales 15" TFT LCD Terminal

Main Features

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory

- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Water spill resistant front bezel
- Optional VESA 75 x 75mm mounting support

Product Overview

The NPT 1500 is a high value Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The fanless design is quiet and offers low power consumption and minimal maintenance. Removable HDD design provides an easy maintenance method and saving your service cost. The DC-12V output provides enough power for your 2nd display from POS terminal, and offers better cable routing and high-integration for the 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of display head, 75x75mm, provides an option for wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provide restaurant and retail conditions with continuous operation.

Specifications

Panel
- LCD Size: 15", 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85 (right)
- Backlight: CCFL
- Touch screen: 5-wire resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 (default), optional support up to 4GB DDR3 800, non-ECC and un-buffered
- Hard disk drive: one 2.5" 160GB SATA HDD, removable type
- Expansion: 1x mini-card socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash Drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-12V input, mini-DIN 4 pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Audio
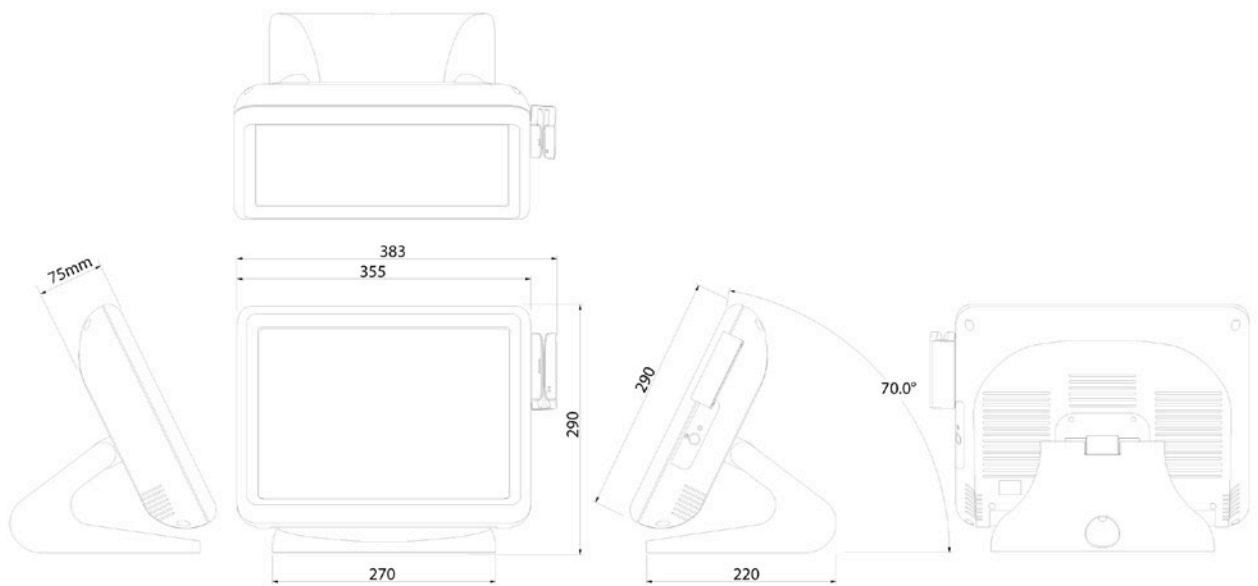- High Definition audio codec: Realtek ALC886-GR
- Internal audio: one 3W speaker
- External audio: Line-out audio jack

Ethernet
- LAN chip: Realtek® RTL8111C-VC-GR Gigabit LAN

Dimension Drawing

- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
- Color: dark gray
- Mounting: desktop type, optional VESA 75 x 75mm wall-mount when detaching the stand
- Power input: DC-12V
- Power adapter: AC to DC Power Brick (DC-12V/ 8.33A, 100W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 355(W)*290(H)*220(D) mm (no MSR), 83(W)*290(H)*220(D) mm (with MSR)
- Weight: 8.0kg
- Tilt angle: 0° ~ 70°

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NPT 1500-010 (P/N: 10Y00150009X0)**
  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire resistive touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick

- **NPT 1500-014 (P/N: 10Y00150010X0)**
  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire resistive touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick.
  MSR: ISO 3-track MSR w/ USB & RS-232 combo I/F

NPT 1550

High Value Fanless Point-of-Sales 15" TFT LCD Terminal

Main Features

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Optional kits for MSR/ fingerprint/ VFD
- Optional VESA 100x 100mm mounting for wall-mount application

Product Overview

NPT 1550 is a high value Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The fanless design is quiet and offers low power consumption and minimal maintenance. Removable HDD, MSR, fingerprint and VFD kit design provides an easy maintenance method, which saves your service cost. The DC-12V output provides sufficient power for your 2nd display from POS terminal, and offers better cable routing and high-integration for the 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of Display Head, only 100x 100mm, provides an option for wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation.

Specifications

Panel
- LCD Size: 15", 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85 (right)
- Backlight: CCFL
- Touch screen: 5-wire resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 (default), optional support up to 4GB DDR3 800, non-ECC and un-buffered
- Hard Disk Drive: One 2.5" 160GB SATA HDD, removable type
- Expansion: 1x mini-card socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 Powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash Drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-12V input, mini-DIN 4 pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Audio
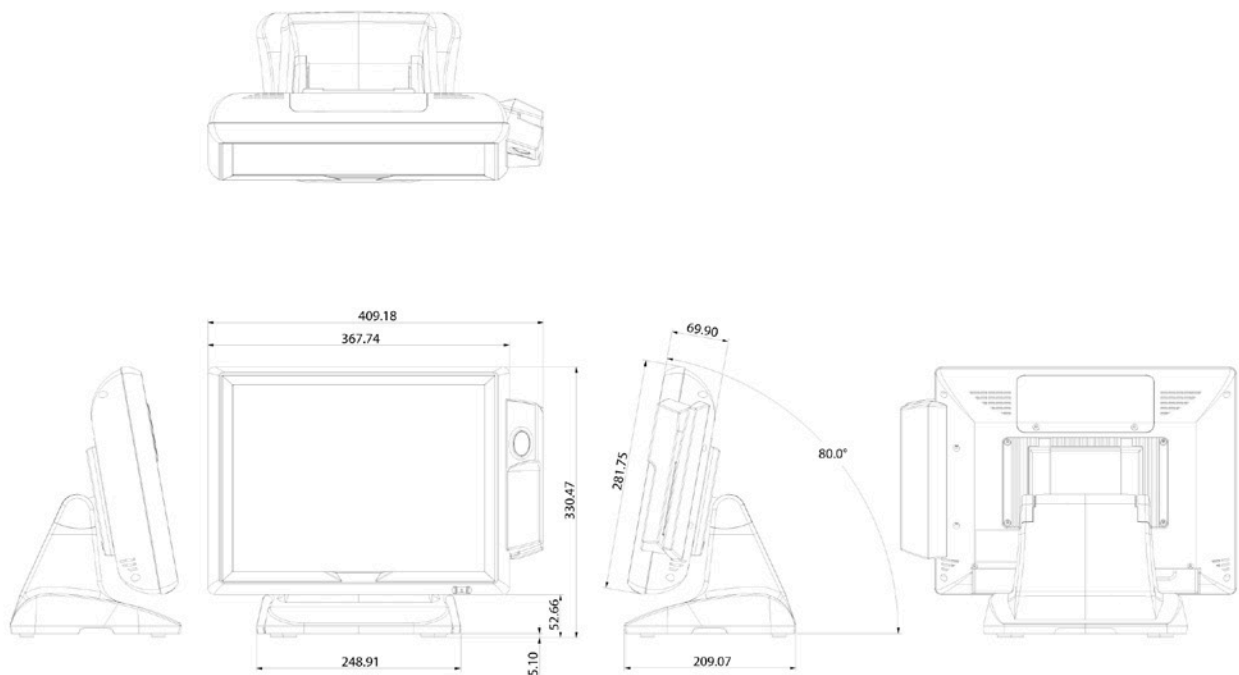- High Definition audio codec: Realtek ALC886-GR
- Internal audio: one 3W speaker
- External audio: Line-out audio jack

Ethernet
- LAN chip: Realtek® RTL8111C-VC-GR Gigabit LAN
- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Dimension Drawing

Mechanical & Environment
- Color: dark gray
- Mounting: desktop type, optional VESA 100x 100mm wall-mount when detaching stand
- IP protection: front bezel complies with IP-65 protection standard
- Power input: DC-12V
- Power adapter: AC to DC power brick (DC-12V/ 8.33A, 100W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 368(W)*331(H)*210(D) mm (no MSR), 410(W)*331(H)*210(D) mm (with MSR)
- Weight: 9.0kg
- Tilt angle: 0° ~ 80°

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NPT 5850-010 (P/N: TBD)**
  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ Touch: 15" XGA 1024x768 250nits/ ELO 5-wire Resistive Touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick

- **NPT 5850-014 (P/N: TBD)**
  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ touch: 15" XGA 1024x 768 250nits/ ELO 5-wire resistive touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick
  MSR kit: ISO 3-track MSR w/ USB & RS-232 combo I/F

NPT 1551

Main Features

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive true flat touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory
- 2.5" removable SATA HDD

- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

Product Overview

The NPT-1551 is a high value Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The stylish zero bezel design makes it easy for your POS terminal to fit the modern store design.

The fanless design is quiet and offers low power consumption and minimal maintenance. Removable HDD, MSR, fingerprint and VFD kit design provides an easy maintenance method, which saves your service cost. The DC-12V output provides sufficient power for your 2nd display from POS terminal and offer better cable routing and high-integration for 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of display head, only 100x 100mm, provides an option for wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation.

Specifications

Panel
- LCD Size: 15", 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85 (right)
- Backlight: CCFL
- Touch screen: 5-wire true flat (zero bezel) resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 (default), optional support up to 4GB DDR3 800, non-ECC and un-buffered

- Hard disk drive: one 2.5" 160GB SATA HDD, removable type
- Expansion: 1x mini-card socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash Drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-12V input, mini-DIN 4 pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Audio
- High Definition audio codec: Realtek ALC886-GR
- Internal audio: one 3W speaker

Dimension Drawing

- External audio: Line-out audio jack

Ethernet
- LAN chip: Realtek® RTL8111C-VC-GR Gigabit LAN
- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
- Color: pantone black C
- Mounting: desktop type, optional VESA 75 x 75mm wall-mount when detaching the stand
- IP protection: front bezel complies with IP-65 protection standard
- Power input: DC-12V
- Power adapter: AC to DC Power Brick (DC-12V/ 8.33A, 100W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 366(W)*331(H)*210(D) mm (no MSR),
  419(W)*331(H)*210(D) mm (with MSR)
- Weight: 8.5kg
- Tilt angle: 0° ~ 80°

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NPT 5851-010 (P/N: TBD)**

  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire true flat resistive touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick

- **NPT 5851-014 (P/N: TBD)**

  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire true flat resistive touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick.
  MSR kit: ISO 3-track MSR w/ USB & RS-232 combo I/F

NPT 1552

Main Features

- Intel® Core™ i3/i5/i7 mobile processor, 2.1 GHz
- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" projected capacitive true flat touch screen
- Fanless POS terminal
- Intel® Atom™ D525 Dual-Core processor, 1.8GHz
- Support DDR3 SO-DIMM memory

- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Optional kits for MSR/ fingerprint/ VFD
- Optional VESA 100x 100mm mounting for wall-mount application

Product Overview

The NPT 1552 is a high value Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The stylish zero bezel design makes it easy for your POS terminal to fit the modern store design. Projected capacitive touch screen is the best reliable solution, and minimizes service efforts on touch screen.

The fanless design is noise-free, features low power consumption, and requires minimal maintenance. Removable HDD, MSR, fingerprint and VFD kit design provides an easy maintenance method, which saves your service cost. The DC-12V output provides sufficient power for your 2nd display from POS terminal, which offers better cable routing and high-integration for 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of display head, 100x 100mm, provides an option for wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation.

Specifications

Panel
- LCD Size: 15", 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85 (right)
- Backlight: CCFL
- Touch screen: projected capacitive true flat (zero bezel)
- Touch light transmission: 91%
- Touch interface: USB

System
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 (default), optional support up to 4GB DDR3 800, Non-ECC and Un-buffered

- Hard disk drive: one 2.5" 160GB SATA HDD, removable type
- Expansion: 1 x mini-card socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-12V input, mini-DIN 4 pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Audio
- High Definition audio codec: Realtek ALC886-GR
- Internal audio: one 3W speaker

Dimension Drawing

* External audio: Line-out audio jack

Ethernet
* LAN chip: Realtek® RTL8111C-VC-GR Gigabit LAN
* Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
* Color: Beige
* Mounting: desktop type, optional VESA 100x 100mm wall-mount when detaching stand
* IP protection: front bezel complies with IP-65 protection standard
* Power input: DC-12V
* Power adapter: AC to DC power brick (DC-12V/ 8.33A, 100W)
* Operating temperature: 0°C to 40°C
* Storage temperature: -20°C to 60°C
* Operating humidity: 20%~80% relative humidity, non-condensing
* Dimension: 366(W)*331(H)*210(D) mm (no MSR), 419(W)*331(H)*210(D) mm (with MSR)
* Weight: 8.5kg
* Tilt angle: 0° ~ 80°

Certifications
* CE approval
* FCC Class A

Ordering Information

* **NPT 5852-010 (P/N: TBD)**

  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ Touch: 15" XGA 1024x768 250nits/ Projected Capacitive True Flat Touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick

* **NPT 5852-014 (P/N: TBD)**

  CPU: Intel® Atom™ D525, Dual-Core 1.8GHz L2 1MB;
  LCD/ touch: 15" XGA 1024x 768 250nits/ projected capacitive true flat touch;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-12V/ 100W power brick
  MSR kit: ISO 3-track MSR w/ USB & RS-232 combo I/F

NPT 5850

High Performance Point-of-Sales 15" TFT LCD POS Terminal

Main Features

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive touch screen
- Intel® Core™ i3/i5/i7 mobile processor, 2.1GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD

- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

Product Overview

The NPT 5850 is a high performance Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The 2nd generation Intel® Core™ i3/i5/i7 mobile processor platform is a best choice for high-end POS hardware solution.

Removable HDD, MSR, fingerprint and VFD kit design provides an easy maintenance method and saving your service cost. The DC-12V output provides sufficient power for your 2nd display from POS terminal and offers better cable routing and high-integration for the 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of display head, only 100x 100mm, provides another option for wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation.

Specifications

Panel
- LCD Size: 15" , 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85 (right)
- Backlight: CCFL
- Touch screen: 5-wire Resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Core™ i3/i5/i7 mobile processor, 2.1GHz
- BIOS: AMI BIOS
- System chipset: Intel® HM65
- System memory: 1x 204-pin DDR3 1333 SO-DIMM socket, 2GB DDR3 (default), optional two sockets support up to 8GB DDR 3 1333, non-ECC and un-buffered

- Hard disk drive: One 2.5" 160GB SATA HDD, removable type
- Expansion: 1x mini-card socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-19V input, mini-DIN 4Pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Audio
- High Definition audio codec: Realtek ALC886-GR
- Internal audio: One 3W speaker

Dimension Drawing

- External audio: Line-out audio jack

Ethernet
- LAN chip: Intel® PHY WG82579LM Gigabit LAN
- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
- Color: Dark Gray
- Mounting: desktop type, optional VESA 100 x 100mm wall-mount when detaching stand
- IP protection: front bezel complies with IP-65 protection standard
- Power input: DC-19V
- Power adapter: AC to DC power brick (DC-19V/ 6.315A, 120W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 368(W)*331(H)*210(D) mm (No MSR), 410(W)*331(H)*210(D) mm (with MSR)
- Weight: 9.0kg
- Tilt angle: 0° ~ 80°

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NPT 5850-010 (P/N: TBD)**

  CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache;

  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire resistive touch;

  Memory: 2GB DDR3 SO-DIMM;

  HDD: 160GB 2.5" SATA 5,400rpm;

  Power: DC-19V/ 120W power brick

- **NPT 5850-014 (P/N: TBD)**

  CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache;

  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire resistive touch;

  Memory: 2GB DDR3 SO-DIMM;

  HDD: 160GB 2.5" SATA 5,400rpm;

  Power: DC-19V/ 120W power brick;

  MSR kit: ISO 3-track MSR w/ USB & RS-232 combo I/F

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NPT 5851

Main Features

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" 5-wire resistive true flat touch screen
- Intel® Core™ i3/i5/i7 mobile processor, 2.1 GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD

- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

Product Overview

The NPT 5851 is a high performance Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The 2nd generation Intel® Core™ mobile processor platform is a best choice for high-end POS hardware solution. The stylish zero bezel design makes it easy for your POS Terminal to fit the modern store design.

Removable HDD, MSR, fingerprint and VFD kit design provides an easy maintenance method, which saves your service cost. The DC-12V output provides sufficient power for your 2nd display from POS terminal, and offers better cable routing and high-integration for the 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of display head, only 100x 100mm, provides another option for wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation

Specifications

Panel
- LCD Size: 15" , 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85 (right)
- Backlight: CCFL
- Touch Screen: 5-wire true flat (zero bezel) resistive
- Touch light transmission: 80%
- Touch interface: USB

System
- CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache
- BIOS: AMI BIOS
- System chipset: Intel® HM65
- System memory: 1x 204-pin DDR3 1333 SO-DIMM socket, 2GB DDR3 (default), Optional two sockets support up to 8GB DDR3 1333, non-ECC and un-buffered

- Hard disk drive: One 2.5" 160GB SATA HDD, removable type
- Expansion: 1 x mini-card Socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-19V input, mini-DIN 4Pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Audio
- High Definition audio codec: Realtek ALC886-GR
- Internal audio: one 3W speaker

Dimension Drawing

- External audio: Line-out audio jack

Ethernet
- LAN chip: Intel® PHY WG82579LM Gigabit LAN
- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
- Color: pantone Black C
- Mounting: desktop type, optional VESA 100x 100mm wall-mount when detaching stand
- IP protection: front bezel complies with IP-65 protection standard
- Power input: DC-19V
- Power adapter: AC to DC power brick (DC-19V/ 6.315A, 120W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 366(W)*331(H)*210(D) mm (no MSR),
  419(W)*331(H)*210(D) mm (with MSR)
- Weight: 8.5kg
- Tilt angle: 0° ~ 80°

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NPT 5851-010 (P/N: TBD)**

  CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache;

  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire true flat resistive touch;

  Memory: 2GB DDR3 SO-DIMM;

  HDD: 160GB 2.5" SATA 5,400rpm;

  Power: DC-19V/ 120W power brick

- **NPT 5851-014 (P/N: TBD)**

  CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache;

  LCD/ touch: 15" XGA 1024x768 250nits/ ELO 5-wire true flat resistive touch;

  Memory: 2GB DDR3 SO-DIMM;

  HDD: 160GB 2.5" SATA 5,400rpm;

  Power: DC-19V/ 120W power brick;

  MSR kit: ISO 3-track MSR w/ USB & RS-232 combo I/F

NPT 5852

Main Features

- 15" 4:3 XGA (1024*768) TFT LCD panel
- 15" projected capacitive true flat touch screen
- Intel® Core™ i3/i5/i7 mobile processor, 2.1GHz
- Support DDR3 1333 SO-DIMM memory
- 2.5" removable SATA HDD

- Powered COM(4), USB(4), printer port (1), VGA(1), GbE LAN(1), cash drawer(1)
- Front bezel complies with IP-65 protection standard
- Option kits for MSR/ Fingerprint/ VFD
- Optional VESA 100 x 100mm mounting for wall-mount application

Product Overview

The NPT 5852 is a high performance Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. The 2nd generation of Intel® Core™ i3/i5/i7 mobile processor platform is a best choice for high-end POS hardware solution. The stylish zero bezel design makes it easy for your POS Terminal to fit the modern store design. Projected Capacitive Touch Screen is the best reliable solution and minimum service effort on Touch Screen.

Removable HDD, MSR, fingerprint and VFD kit design provides an easy maintenance method and saving your service cost. The DC-12V output provides enough power for your 2nd display from POS terminal, and offers better cable routing and high-integration for the 2nd display. Small footprint is ideal for installations where space is compact in stores. The VESA mounting design of display head, only 100x100mm, provides an option for Wall-mounting application when detaching the stand of terminal. The design offers a spill resistant and high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation.

Specifications

Panel
- LCD Size: 15" , 4:3
- Resolution: XGA 1024x768
- Luminance: 250cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 80 (upper), 80 (lower), 85 (left), 85(right)
- Backlight: CCFL
- Touch screen: projected capacitive true flat (zero bezel)
- Touch light transmission: 91%
- Touch interface: USB

System
- CPU: Intel® Core™ i3/i5/i7 mobile processor, 2.1GHz
- BIOS: AMI BIOS
- System chipset: Intel® HM65
- System memory: 1x 204-pin DDR3 1333 SO-DIMM socket, 2GB DDR3 (default), optional two sockets support up to 8GB DDR3 1333, non-ECC and un-buffered

- Hard disk drive: One 2.5" 160GB SATA HDD, removable type
- Expansion: 1x mini-Card Socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x DB-9 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps
- VGA: 1x DB-15 2nd VGA port
- Cash Drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-19V input, mini-DIN 4Pin lock type
- DC-OUT: 1x DC-12V output for 2nd display power (12V, Max 3.0A)

Ethernet
- LAN chip: Intel® PHY WG82579LM Gigabit LAN

Dimension Drawing

- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
- Color: Beige
- Mounting: desktop type, optional VESA 100 x 100mm wall-mount when detaching stand
- IP protection: front bezel complies with IP-65 protection standard
- Power input: DC-19V
- Power adapter: AC to DC power brick (DC-19V/ 6.315A, 120W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 366(W)*331(H)*210(D) mm (no MSR), 419(W)*331(H)*210(D) mm (with MSR)
- Weight: 8.5kg
- Tilt angle: 0° ~ 80°

Certifications
- CE approval
- FCC Class A

Ordering Information

- **NPT 5852-010 (P/N: TBD)**

  CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache;

  LCD/ touch: 15" XGA 1024x768 250nits/ projected capacitive true flat touch;

  Memory: 2GB DDR3 SO-DIMM;

  HDD: 160GB 2.5" SATA 5,400rpm;

  Power: DC-19V/ 120W power brick

- **NPT 5852-014 (P/N: TBD)**

  CPU: Intel® Core™ i3/i5/i7 mobile processor, 2C/2T, 2.10 GHz, 2MB cache;

  LCD/ touch: 15" XGA 1024x768 250nits/ projected capacitive true flat touch;

  Memory: 2GB DDR3 SO-DIMM;

  HDD: 160GB 2.5" SATA 5,400rpm;

  Power: DC-19V/ 120W power brick;

  MSR kit: ISO 3-track MSR w/ USB & RS-232 combo I/F

NPB 3550

High Value Fanless Point-of-Sales Box System

Coming Soon

Main Features

- Fanless POS box system
- Slim and compact enclosure design
- Intel® Atom™ processor D2700, 2.13GHz
- Support DDR3 1066 SO-DIMM memory

- 2.5" removable SATA HDD
- Powered COM(4), USB(4), printer port (1), VGA(1),DVI(1), GbE LAN(1), cash drawer(1)
- Optional wall-mount kit for compact space accommodation

Product Overview

The NPB 3550 is a high value Point-of-Sale (POS) hardware solution to fulfill your POS hardware requirement. This POS box system is reshaping point of sale with a breakthrough design that delivers an exceptional combination of performance, reliability and energy efficiency, all at an incredibly affordable price.

The fanless design is quiet and offers low power consumption and minimal maintenance. Removable HDD provides an easy maintenance method which saves your service cost. Small footprint is ideal for installations where space is compact in stores. Wall-mount kit let you accommodate this box easily in anywhere compact space. The design offers a high integration for POS peripherals, which provides restaurant and retail conditions with continuous operation.

Specifications

System
- CPU: Intel® Atom™ processor 2700, 2.13GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH10R
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 1066 (default), optional support up to 4GB DDR3 1066, non-ECC and un-buffered
- Hard disk drive: One 2.5" 160GB SATA HDD, removable type
- Expansion: 1x mini-card socket for mini-PCIe and USB interface

Rear I/O
- USB: 4x USB2.0 port
- COM: 4x RJ-45 powered RS-232 port, adjust RI/ 5V/ 12V by BIOS setting
- Ethernet: 1x RJ-45, 10/100/1000 Mbps, optional 1 x RJ-45 for 2nd LAN
- VGA: 1x DB-15 2nd VGA port
- DVI: 1x DVI-D port
- Cash drawer: 1x RJ-11 port, support two cash drawers (24V, Max 1.1A)
- PS/2: 1x PS/2 port

- Parallel: 1x DB-25 printer port
- Audio: 1x Line-out jack
- DC-IN: 1x DC-19V input, mini-DIN 4 pin lock type

Audio
- High Definition audio codec: Realtek ALC886-GR
- External audio: Line-out audio jack

Ethernet
- LAN chip: Realtek® RTL8111C-VC-GR Gigabit LAN
- Ethernet interface: 10/100/1000 Based-TX Ethernet compatible

Mechanical & Environment
- Color: dark gray
- Mounting: desktop type, optional wall-mount Kit
- Power input: DC-19V
- Power adapter: AC to DC power brick (DC-19V/ 3.42A, 65W)
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 60°C
- Operating humidity: 20%~80% relative humidity, non-condensing
- Dimension: 270 (W)* 220 (D)* 50 (H) mm

Dimension Drawing

Coming Soon

* Weight: 2.5kg

Certifications
* CE approval
* FCC Class A

Ordering Information

* **NPT 3550-010 (P/N: TBD)**
  CPU: Intel® Atom™ processor D2700, Dual-Core 2.13GHz L2 1MB;
  Memory: 2GB DDR3 SO-DIMM;
  HDD: 160GB 2.5" SATA 5,400rpm;
  Power: DC-19V/ 65W power brick

NCS

Network and Communication Solutions

Network and Communication Security

Network Application Appliances
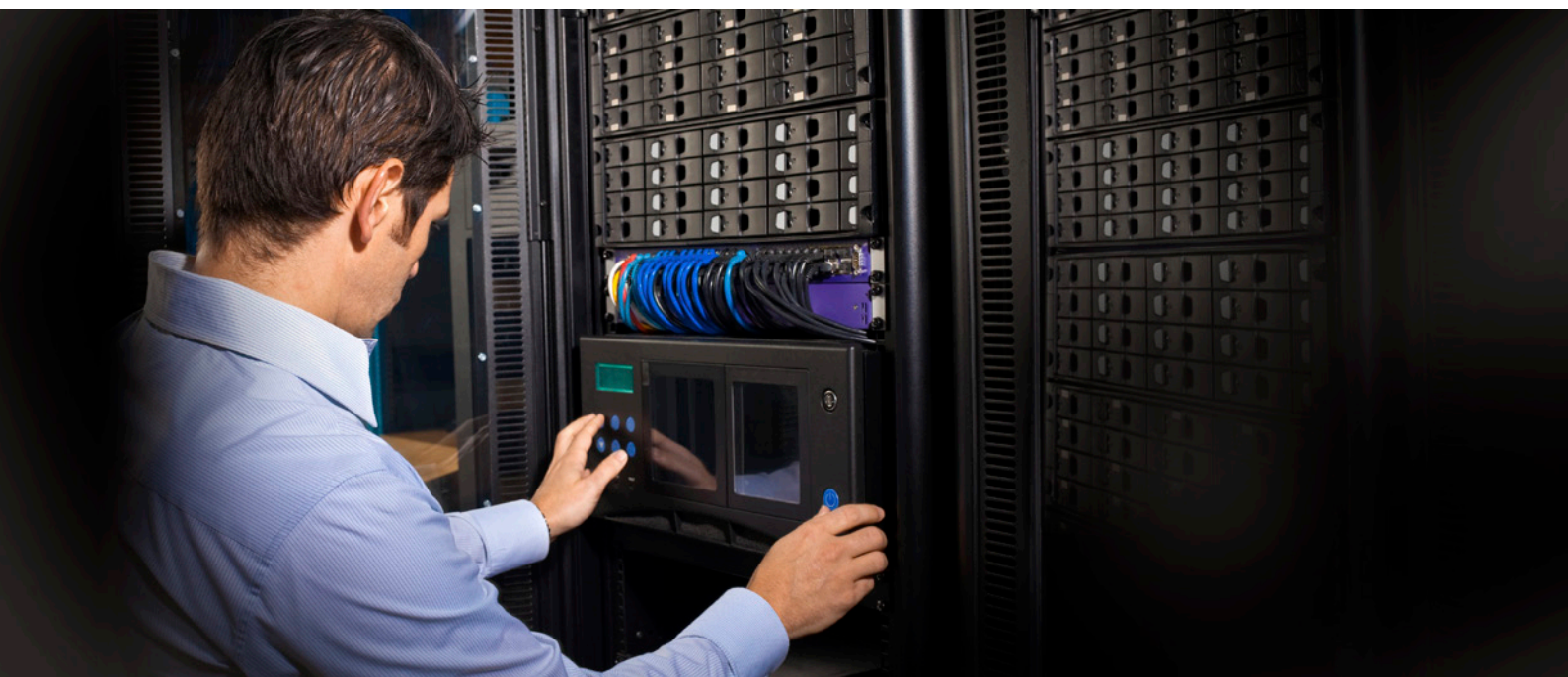
The Diversify Network Application Solutions

As consumers demand more sophisticated services over increasingly advanced networks, managing complexity is becoming more challenging. While enterprises and service providers alike may dream of simply replacing existing networks, the reality is that most legacy installations still work beautifully, forcing networks from various generations to co-exist and interconnect seamlessly for the foreseeable future.

NEXCOM offers a media appliance that interconnects different types of media streams to create a transparent end-to-end path for voice, video, and data in corporations and service provider environments. Available in a range of functionality and sizes, these gateways may also include premier bandwidth and codec optimization that can reduce costs significantly in the access and core portions of the network.

Rising to this interwork challenge, NEXCOM supplies a full suite of products ready to deliver video calls, text messaging, and location-based services and many other high-demand services over mobile, VoIP, and traditional networks. Whatever the need- from switching to transport- NEXCOM supplies the technology to create, manage and security control, voice, video, and data sessions simultaneously to meet your business.

VoIP Application Diagram
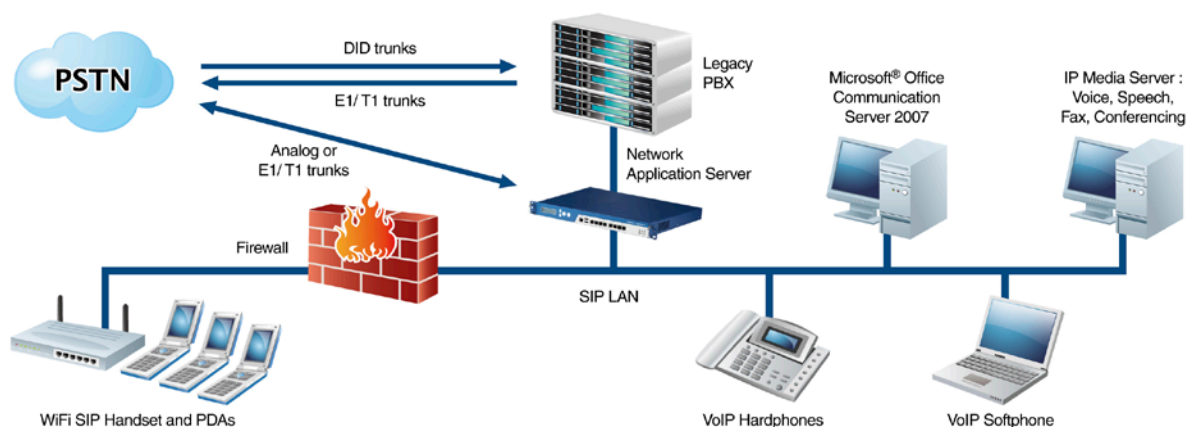
Network Security Appliance

Is Your Info Protected?

The invention of the Internet has broken down geographic barriers and created numerous business opportunities, however the Internet has also exposed businesses to the catastrophic danger of web attack. In the e-business generation, a company's daily operation relies on the Internet. Without proper Internet and network protection, an organization operation could be severely damaged by Internet attack, such as malicious hacking and security breach. Where a security breach occurs, the true cost of the incident is often difficult to measure, but could include the cost of server down time, stolen or lost data and subsequent loss of an organizations reputation.

The Most Trustworthy Network Security Solutions

To protect all of your valuable investments, NEXCOM offers a full range of network security platforms. Designed to fit various Network environments, NEXCOM's Network Security Appliances are designed to act as the solid foundation on which to host Virtual Private Network (VPN) as well as load balancing and Intrusion Detection System/ Intrusion Prevention System (IDS/IPS). NEXCOM's network security solutions provide highly secure platforms to ensure the normal operation of your critical business systems.
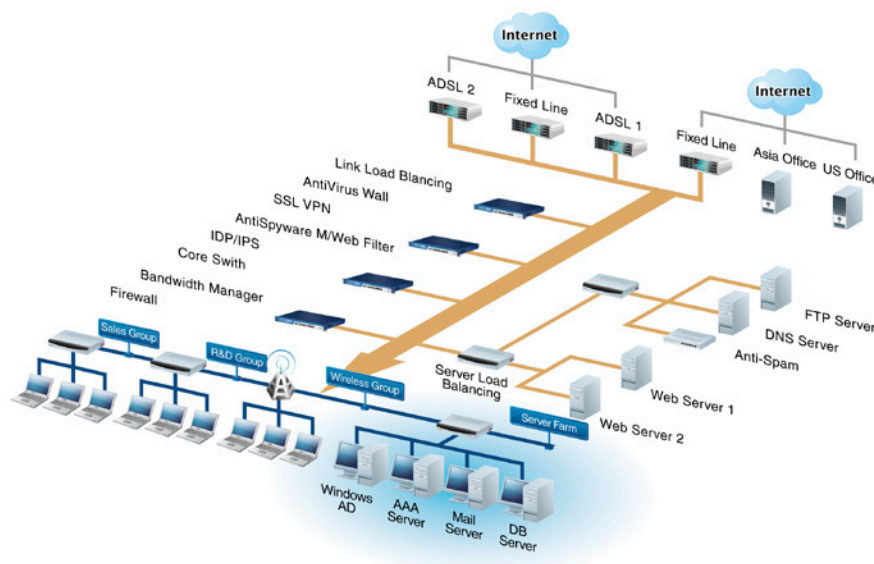
Applications

- SSL VPN
- Link Load Balancing
- IDP/IPS
- Bandwidth Management
- Firewall
- Anti-Spyware
- UTM
- Network Access Control
- Web Filter
- AntiVirus Wall
- Core Switch
- Server Load Balancing
- IM Filter (Instant Message)
- Anti-Spam
- AAA Server

2012 New Products

NSA 5130
Mainstream Platform

- 1U rackmount network platform
- 2nd generation Intel® Core™ processor family/ Intel® Xeon® E3 family
- Support up to 16GB of 1066/1333 DDR3 SDRAM memory in 4 slots
- 8 GbE LAN ports
- Support one LAN module
- Support one PCIe x8 expansion
- Internal one 3.5" HDD bay/ two 2.5" HDD bay (optional)
- Support redundant power supply (optional)

NSA 3130
Entry Platform

- 1U rackmount network platform
- 2nd generation Intel® Core™ processor family
- Support up to 8GB of 1066/1333 DDR3 SDRAM memory in 2 slots
- 8 GbE LAN ports
- Support one PCIe x8 expansion
- Internal one 3.5" HDD bay/ two 2.5" HDD bay (optional)

Coming Soon

DNA 110/110A
Desktop Platform

- Fanless desktop network platform
- On-board Intel® Atom™ E620 CPU
- Intel® EG20T chipset
- On-board 512MB DDR2 667/800 memory, up to 1GB
- 3 GbE LAN ports
- One mini-PCIe Expansion for Wi-Fi
- One SATA 2.5" SSD/ one SATA-DOM

OSA 5130
VoIP/ Network Security Platform

- 1U rackmount network platform
- 2nd generation Intel® Core™ processor family/ Intel® Xeon® E3 family
- Support up to 16GB of 1066/1333 DDR3 SDRAM memory in 4 slots
- Support two PCIe x8 expansion
- Internal one 3.5" HDD bay/ two 2.5" HDD bay (optional)
- Support redundant power supply (optional)

Product Selection Guide

Gateway to Communication

NEXCOM delivers the trusted and reliable platforms for network security appliances. Building upon the standard x86 architecture, our products allow network security software vendors to create their own professional appliances easier without additional efforts in BIOS and drivers. With the integration of leading technology from x86 CPU, PCI-Express and I/O accelerations, the security and performance of customers' applications are greatly improved.

Features and Benefits

■ **RoHS compliance:** commit to produce green products and services compliant with EU RoHS directive 2002/95/EU.

■ **PCIe based GbE LAN:** our PCIe based network security appliances can be enhanced to utilize 10 Gigabit networks to boost network performance.

■ **Dual/ quad core processors with I/O acceleration:** greatly improve CPU computing bandwidth in complex and intensive security computing. With sufficient processing power, they are appropriate for connection/ control-oriented and threat management-oriented network security appliances.

■ **Modular design platforms:** can cope with diverse connection types from copper to fiber or from 2 ports to multi port. Security software vendors can focus on per port performance or increased connectivity with high port density.

■ **LAN bypass:** enable connection fault tolerance for appliances, which act as the transparent bridges among networks. Users will hardly sense the network inaccessible when the appliances stops working due to hardware or software detects.

Applications and Market Focus

- Firewall/ VPN
- Anti-Virus/ Anti-Spyware
- Voice & Date Convergence
- E-mail Filtering & Anti-Spam
- Traffic Load Balance
- Unified Threat Management
- Intrusion Detection & Prevention
- Bandwidth Management

Full Range of Product Coverage

	Model	3-port	4-port	6-port	8-port	10-port	12-port
Performance	NSA 7110W		v	v	v	v	v
	NSA 2189N8		v	v	v	v	v
Mainstream	NSA 5110		v		v		
	NSA 5120		v		v	v	v
	NSA 5130		v		v	v	v
	OSA 5130		V		V		
Entry Level	NSA 3111		v		v	v	v
	NSA 3110		v		v		
	NSA 3130		V		V		
	NSA 1120		v				
	NSA 1110		v				
Desktop Level	DNA 110	v					
	DNA 1110		v				
	DNA 1120		v				
	DNA 2120			v			

Network Security Appliance

Model	NSA 7110W	NSA 2189N8	NSA 5110	NSA 5120
CPU	Support Intel® Xeon™ 5500/5600 series processors QPI speed series processors with up to 6.4GT/s 1066/1333 MHz FSB	Support Intel® 5100/5200/5300/5400 series processors with 1066/1333 MHz FSB	Support Intel® Xeon™/ Core™ 2 Duo/ Pentium® D with 1066/1333 MHz FSB	Support Intel® Xeon™ 3400, i7/i5/i3 series processors
RAM	6 x DDR3 800/1066 UDIMM and RDIMM, up to 24GB	4 x DDR2 533/ 667/800 Fully Buffered DIMM (FB-DIMM), up to 8GB	4 x DDR2 667/800 DIMM, up to 8GB	4 x DDR3 1066/1333 DIMM , up to 16GB
Chipset	Intel® 5520 + Intel® ICH10R	Intel® 5000P + ESB2	Intel® 3210 + ICH9R	Intel® 3450 PCH
LAN Chip	Intel® 82574L, 82575EB, 82580EB, 82598EB, 82599EB	Intel® 82575EB Intel® 82598EB	Intel® 82574L Intel® 82575EB	Intel® 82574L
GbE	Max 26 ports	Max 24 ports	8 ports	Max 8 + 8 ports
HDD	3.5" HDD Bay x 4	3.5" HDD Bay x 2	3.5" HDD Bay x 1 or 2.5" HDD x 2 (Option)	3.5" HDD Bay x 1 or 2.5" HDD x 2 (Option)
CF	1	1	1	1
DOM	SATA DOM x 1	SATA DOM x 1	SATA DOM x1	SATA DOM x1
Serial	1 at front (RJ-45 Connector)	1 at front (RJ-45 connector)	1 at front (RJ-45 connector)	1 at front (RJ-45 connector)
IDE/SATA	0/6	1/2	0/3	0/4
USB	2 at front	2 at front	2 at front	2 at front
Expansion	PCIe slot x 1 LAN Module Bay x 3	PCI-X slot x 1 LAN Module Bay x 3	PCIe slot x 1	PCIe slot x 1 LAN Module Bayx 1
LCM Module	2 x 16, PIO	2 x 16, PIO	2 x 16, PIO	2 x 16, PIO
Indicators	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED
Power	460W ATX redundant power supply	460W ATX redundant power supply	250W ATX power supply	250W ATX power supply
Form Factor	2U	2U	1U	1U
Dimensions (mm)	426 x 580 x 88	426 x 600 x 88	426 x 458 x 44	426 x 450 x 44

NSA 5130	OSA 5130	NSA 3110	NSA 3111
2ⁿᵈ generation Intel® Core™ processor family/ Intel® Xeon® E3 family	2ⁿᵈ generation Intel® Core™ processor family/ Intel® Xeon® E3 family	Support Intel® Core™ 2 Quad/ Core™ 2 Duo/ Pentium® Dual-Core/Celeron® processors, LGA775 socket, 800/1066/1333 MHz FSB	Support Intel® Core™ 2 Quad/ Core™ 2 Duo/ Pentium® Dual-Core/Celeron® processors, LGA775 socket, 800/1066/1333 MHz FSB
4 x DDR3 1066/1333 DIMM, up to 16GB	4 x DDR3 1066/1333 DIMM, up to 16GB	2 x DDR3 1066 DIMM, up to 4GB	2 x DDR2 667/800 DIMM, up to 4GB
Intel® C206 PCH	Intel® C206 PCH	Intel® G41 + ICH7R	Intel® G41 + ICH7R
Intel® 82583V	Intel® 82583V	Intel® 82574L	Intel® 82574L
Max 8 + 8 ports	8 ports	8 ports	Max 6 + 8 ports
3.5" HDD Bay x 1 or 2.5″ HDD x 2 (Option)	3.5" HDD Bay x 1 or 2.5″ HDD x 2 (Option)	3.5" HDD Bay x 1 or 2.5″ HDD x 2 (Option)	2.5" HDD Bay x 1
1	1	1	1
SATA DOM x 1	SATA DOM x 1	SATA DOM x 1	SATA DOM x 1
1 at front (RJ-45 Connector)	1 at front (RJ-45 Connector)	1 at front (RJ-45 Connector)	1 at front (RJ-45 Connector)
0/3	0/3	0/3	0/3
2 at front	2 at front	2 at front	2 at front
PCIe slot x 1 LAN Module Bay x 1	PCIe slot x 2	PCIe slot x 1 Mini-PCI slot x 1	PCI slot x 1 LAN Module Bay x 1 Mini-PCI slot x 1
2 x 16, PIO	2 x 16, PIO	2 x 16, PIO	2 x 16, PIO
Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED
200W ATX power supply, 200W ATX redundant power supply (Option)	200W ATX power supply, 200W ATX redundant power supply (Option)	200W ATX power supply	200W ATX power supply
1U	1U	1U	1U
426 x 450 x 44	426 x 450 x 44	426 x 365 x 44	426 x 450 x 44

Product Selection Guide

Network Security Appliance

		NSA 3130	NSA 1083/ 1043	NSA 1110	NSA 1120
Model		Comming Soon			
CPU		2nd generation Intel® Core™ processor family	Support Intel® Core™ 2 Duo/ Pentium 4/ Celeron® D processors	Intel® Atom™ D510/D410 processor	Intel® Atom™ D525/ D425 processors
RAM		2 x DDR3 1066/1333 DIMM, up to 8 GB	2 x DDR2 533/ 667/800 DIMM, up to 4GB	1 x DDR2 667/800 DIMM, up to 2GB	1 x DDR3 800 SO-DIMM, up to 2GB
Chipset		Intel® H61 PCH	Intel® Q965 + ICH8	Intel® ICH8M	Intel® ICH8M
LAN Chip		Intel® 82583V	Intel® 82573L Intel® 82541PI	Intel® 82583V	Intel® 82583V
GbE		8 ports	8/4 ports	6 ports	6 ports
HDD		3.5" HDD Bay x 1 or 2.5″ HDD x 2 (Option)	3.5" HDD Bay x 1 or 2.5" HDD x 2 (Option)	3.5" HDD Bay x 1 or 2.5" HDD x 2 (Option)	3.5" HDD Bay x 1 or 2.5" HDD x 2 (Option)
CF		1	1	1(Option)	1(Option)
DOM		SATA DOM x 1	N/A	SATA DOM x 1	SATA DOM x 1
Serial		1 at front (RJ-45 Connector)	1 at front (RJ-45 connector)	1 at front (RJ-45 connector)	1 at front (RJ-45 connector)
IDE/SATA		0/3	1/2	1/2	1/2
USB		2 at front	2 at front	2 at front	2 at front
Expansion		PCIe slot x 1	PCI-X slot x 1	PCI slot x 1	PCI slot x 1
LCM Module		2 x 16, PIO	2 x 16, PIO	2 x 16, PIO	2 x 16, PIO
Indicators		Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass, Programmable LED	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED
Power		200W ATX power supply	350W ATX power supply	100W ATX power supply	100W ATX power supply
Form Factor		1U	1U	1U	1U
Dimensions (mm)		426 x 365 x 44	426 x 458 x 44	426 x 238 x 44	426 x 238 x 44

Model					
	DNA 110	**DNA 1110**	**DNA 1120**	**DNA 2120**	**DNA 1501**
CPU	Intel® Atom™ E620 CPU	Intel® Atom™ D510/D410 processors	Intel® Atom™ D525/ D425 processor	Intel® Atom™ D525/ D425 processor	RMI XLS208 600MHz, Dual cores
RAM	On-board 512MB DDR2 667/800 memory, up to 1GB	1 x DDR2 667/800 DIMM, up to 2GB	1 x DDR3 800 SO-DIMM, up to 2GB	On-board 2GB DDR3 667/800 memory, 1 x DDR3 800 DIMM ,up to 4GB	1 x DDR2 533/667 SO-DIMM, up to 1GB
Chipset	Intel® EG20T chipset	Intel® ICH8M	Intel® ICH8M	Intel® ICH8M	Netlogic SOC integrated
LAN Chip	Intel® 82583V	Intel® 82583V	Intel® 82583V	Intel® 8253V	Marvell® 88E1111 x 1 for WAN, 5 Port Marvell® 88E616110/ 100/1000 GbE switch x 1
GbE	3 ports	4 ports	4 ports	6 ports	5 ports
HDD	N/A	2.5" HDD Bay x 1	2.5" HDD Bay x 1	2.5" HDD Bay x 1	N/A
CF	N/A	1	1	1	1
DOM	SATA DOM x 1	SATA DOM x 1	SATA DOM x 1	SATA DOM x 1	N/A
Serial	1 at rear (RJ-45 Connector)	1 at rear (RJ-45 connector)	1 at rear (RJ-45 connector)	1 at rear (RJ-45 connector)	1 at rear (RJ-45 connector)
IDE/SATA	0/2	0/2	0/2	0/2	0/0
USB	2 at rear	2 at rear	2 at rear	2 at rear	2 at rear
Expansion	Mini-PCIe slot x 1	PCI Slot x 1, Mini-PCI slot x1	PCI Slot x 1, Mini-PCI slot x1	Mini-PCIe slot x 1	Mini-PCI slot x 1
LCM Module	N/A	N/A	N/A	N/A	N/A
Indicators	Power, GPIO LED	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED	Power, HDD, Bypass LED, GPIO LED	Power, Flash, LAN
Power	40W power adaptor	45W power adaptor	45W power adaptor	40W power adaptor	60W power adaptor
Form Factor	Desktop	Desktop	Desktop	Desktop	Desktop
Dimensions (mm)	179.9 x 111.9 x 37.5	272 x 195 x 44	272 x 195 x 44	250 x 194 x 40	330 x 220 x 44

Continued

Model					
	NSA 1041N7	**NSA 1042N8**	**DNA 950**	**DNA 940**	**DNA 840**
Chipset	VIA C7/ Eden V4+ CN700	Intel® 915GME + ICH6M	Intel® EP80579	Intel® 915GME + ICH6M	VIA C7 +CN700
Form Factor	1U Rack mount	1U Rack mount	Desktop	Desktop	Desktop
Ethernet	4GbE	4GbE	4GbE	4GbE	4 x 10/100 FE
Bypass	Yes	Yes	Yes	Yes	Yes

NSA 7110W

Main Features

- Ultra High Performance with Quad-Core Processors and IOAT3 Function
- Support DDR3 800/1066 ECC & REG/ Non-ECC Memory, up to 24GB
- Modular Design Support 3 PCIe LAN Modules
- Support 10G XFP/ SFP+, 1GbE Copper/SFP LAN

- Support PCIe EM Ethernet Card
- Support PCI-X and PCIe x8 Expansion Slot
- On-board CF Socket
- Four Swappable 3.5" Support SATA/SAS HDD
- Support (1 + 1) Redundant Power Supply
- Support LCD Module

Specifications

Main Board
- NSB 7110W
- Support Intel® Xeon™ 5500/5600 series processors, LGA1366 socket
- Support 4.8/5.86/6.4 GT/s QPI speed
- Intel® 5520 and ICH10R chipset

Main Memory
- 6 x 240-pin DDR3 800/1066 DIMM slots, up to 24GB ECC&REG and non-ECC SDRAM

LAN Features
- Swappable LAN modules
- LAN chip: Intel® 82574L/ 82575EB/ 82580EB/ 82598EB/ 82599EB
- Support 10/100/1000/10G link speed
- LAN Bypass: ** Please see LAN module list information

Expansion
- 1 x PCIe x8 slot (Default)
- 2 x PCIe x4 solt (Optional)
- 2 x PCI-X solt (Optional)

I/O Interface-Front
- Support 2 x 16 characters LCD module, PIO interface
- Power status/ HDD status/ LAN status/ Bypass status LEDs
- 4 x 3.5" HDD swappable bays
- 3 x LAN module bays
- 2 x USB 2.0 ports
- 1 x RJ45 type console port
- 1 x software button
- 1 x management LAN ports

I/O Interface-Rear
- 2 x swappable system FANs
- 1 x expansion slot for PCIe x8
- 2 x expansion slots for PCI-X (Optional)

- 2 x expansion slots for PCIe x4 (Optional)
- 1 x VGA Port

Devices
- 1 x on-board CompactFlash socket
- 1 x SATA-DOM device space

Power Input
- 460W 1+1 ATX redundant power supply

Chassis Dimensions
- Chassis dimension: 430mm x 580mm x 88mm
- Carton dimension: 640mm x 800mm x 310mm

Weight
- Without packing: 19kg
- With packing: 25kg

Certifications
- CE approval
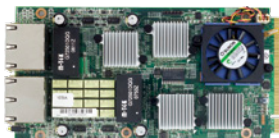- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 7110W (P/N:10S00711002X0)**

  Support Intel® Xeon™ 5500/5600 series processors, 6 DDR3 memory slots, Max. 25 Gigabit LAN ports, CompactFlash socket, VGA, USB port, one PCIe x8 expansion slot
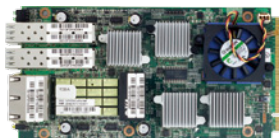
NSK 5175-C8

PCIe GbE module with 8 copper ports base on Intel® 82575EB chipset and 2 pairs dual latch Bypass

NSK 5175-F8

PCIe GbE module with 8 SFP ports base on Intel® 82575EB chipset

NSK 5175-C4F4

PCIe GbE module with 4 copper and 4 SFP ports base on Intel® 82575EB chipset and 2 pairs dual latch Bypass

NSK 5198-F2

PCIe 10G module with 2 XFP ports base on Intel® 82598EB chipset

	P/N	Controller	Interface Type	Port number	Bypass/segment	Expansion Slot	Location Slot
NSK 5176-C4	10SK0517601X0	Intel® 82576EB	PCIe x8	4 Copper	Dual Latch/2	None	All Slot
NSK 5176-F4	10SK0517603X0	Intel® 82576EB	PCIe x8	4 SFP	None	None	All Slot
NSK 5175-C8	10SK0517509X0	Intel® 82575EB	PCIe x8	8 Copper	Dual Latch/2	None	All Slot
NSK 5175-F8	10SK0517510X0	Intel® 82575EB	PCIe x8	8 SFP	None	None	All Slot
NSK 5175-C4F4	10SK0517511X0	Intel® 82575EB	PCIe x8	4 Copper/4 SFP	Dual Latch/2	None	All Slot
NSK 5198-F2	10SK0519803X0	Intel® 82598EB	PCIe x8	2 XFP	None	None	All Slot
NSK 5198-EMB	10SK0519804X0	Intel® 82575EB	PCIe x8	2 fiber on board	1	None	All Slot
NSK5180-C8	10SK0518000X0	Intel® 82580EB	PCIe x8	8 Copper	Dual Latch/2	None	All Slot
NSK5180-F8	10SK0518001X0	Intel® 82580EB	PCIe x8	8 SFP	None	None	All Slot
NSK5180-C4F4	10SK0518002X0	Intel® 82580EB	PCIe x8	4 Copper/4 SFP	Dual Latch/2	None	All Slot
NSK5199-F2	10SK0519900X0	Intel® 82599EB	PCIe x8	2 SFP+	None	None	All Slot
NIO 1101	10SK0110100X0	Aspeed	NEXCOM	1 for IPMI	None	None	IPMI Slot
NSK 3100-1 (PCIe Riser) Default	20SK0310000X0	None	PCIe x8	None	None	1 x PCIe x8	Riser Card
NSK 3102 (PCIe Riser)	20SK0310200X0	None	PCIe x8	None	None	2 x PCIe x4	Riser Card
NSK 3201-2 (PCI-X Riser)	20SK0320101X1	PERICOM	PCIe x8	None	None	2 x PCI-X	Riser Card

NSA 1083/1043

NSA 1083

NSA 1043

Main Features

- 1U Rackmount Network Platform
- Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/Celeron® 400 Series Processors
- Support DDR2 533/667/800 Memory, up to 4GB
- 8/4 x GbE LAN ports

- One PCI-X Expansion Slot
- On-board CF Socket
- Internal one 3.5" HDD Bay/two 2.5" HDD Bay (Optional)
- Support LCD Module

Specifications

Main Board
- NSB 1083/ 1043
- Support Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/Celeron® 400 Series Processor, LGA775 socket
- Support 800/1066 MHz FSB
- Intel® Q965 and ICH8 Chipset

Main Memory
- 2 x 240-pin DDR2 533/667/800 DIMM slots, up to 4GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82573L/ 82541PI
- Support 10/100/1000 link speed
- LAN Bypass: 3 pairs

Expansion
- 1 x Mini-PCI Slot
- 1 x PCI-X Slot

I/O Interface-Front
- Support 2 x 16 Characters LCD module, PIO interface
- Power status/HDD status/LAN status/Bypass status LEDs
- 2 x USB 2.0 ports
- 1 x RJ45 type Console port
- 1 x software button
- 8 x Copper LAN ports

I/O Interface-Rear
- 1 x Expansion slot
- 1 x USB 2.0 port
- 1 x VGA port

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 3.5" HDD bay

Power Input
- 350W ATX Power Supply

Chassis Dimensions
- Chassis Dimension: 426mm x 458mm x 44mm
- Carton Dimension: 560mm x 620mm x 190mm

Weight
- Without Packing: 8kg
- With Packing: 11.5kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 1083L (P/N: 10S01083L00X0)**

  Support Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/Celeron®, 2 DDR2 memory slots, 8 Gigabit LAN ports, CompactFlash Socket, VGA, USB port, One PCI-X Expansion Slot

- **NSA 1043L (P/N: 10S01043L00X0)**

  Support Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/Celeron®, 2 DDR2 memory slots, 4 Gigabit LAN ports, CompactFlash Socket, VGA, USB port, One PCI-X Expansion Slot

NSA 5110

Intel® Xeon™/ Core™ 2 Duo Series Processors
1U Rackmount with 8 PCIe GbE LAN

Main Features

- 1U Rackmount Network Platform
- Intel® UP Xeon™/Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual Core/Celeron® with 800/1066/1333 MHz FSB
- Supports DDR2 667/800 Memory, up to 8GB
- Support one PCIe x8 Expansion
- Internal one 3.5" HDD Bay
- Support LCD Module

Specifications

Main Board
- NSB 5110
- Supports Intel® Xeon™/Core™ 2 Duo/Pentium® Dual-Core/Celeron® Processors, LGA775 socket, max 95w
- Support 800/1066/1333 MHz FSB
- Intel® 3210 and ICH9R Chipset

Main Memory
- 4 x 240-pin DDR2 667/800 DIMM slots, up to 8GB ECC/ Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82574L and 82575EB
- Support 10/100/1000 link speed
- LAN Bypass: 4 pairs

Expansion
- 1 x PCIe x8 Slot

I/O Interface-Front
- Support 2 x 16 Characters LCD module, PIO interface
- Power status/HDD status/LAN status/Bypass status LEDs
- 2 x USB 2.0 ports
- 1 x RJ45 type Console port
- 1 x software button
- 8 x Copper LAN ports

I/O Interface-Rear
- 1 x Expansion slot
- 1 x USB 2.0 port
- 1 x VGA port

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 3.5" HDD bay
- 1 x SATA-DOM device space

Power Input
- 250W ATX Power Supply

Chassis Dimensions
- Chassis Dimension: 426mm x 457mm x 44mm
- Carton Dimension: 560mm x 620mm x 190mm

Weight
- Without Packing: 8kg
- With Packing: 12kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 5110 (P/N: 10S00511000X0)**

  Support Intel® Xeon™/Core™ 2 Duo/Pentium® Dual-Core/Celeron®, 4 DDR2 memory slots, 8 Gigabit LAN ports, CompactFlash Socket, VGA, USB port, One PCIe x8 Expansion Slot

- **NSA 5110-C6F2 (P/N: 10S00511002X0)**

  Support Intel® Xeon™/Core™ 2 Duo/Pentium® Dual-Core/Celeron®, 4 DDR2 memory slots, 6 Copper Ports and 2 Fiber Ports, CompactFlash Socket, VGA, USB port, One PCIe x8 Expansion Slot

NSA 5120

Main Features

- 1U Rackmount Network Platform
- Intel® Xeon™ 3400/i7/i5/i3 Processors
- Support DDR3 1066/1333 Memory, up to 16GB

- Support One LAN Module, One PCIe x8 Expansion
- Internal one 3.5" HDD Bay/two 2.5" HDD Bay (Optional)
- Support LCD Module (Optional)

Specifications

Main Board
- NSB 5120
- Support Intel® Xeon™ 3400/i7/i5/i3 series Processors, Max 95watt
- Intel® 3450 PCH

Main Memory
- 4 x 240-pin DDR3 1066/1333MHz DIMM slots, Up to 16GB ECC/ Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82574L
- Support 10/100/1000 link speed
- LAN Bypass: 4 pairs
- LAN module (Optional)

Expansion
- 1 x PCIe x8 Slot

I/O Interface-Front
- Support 2 x 16 Characters LCD Module, PIO interface (Optional)
- Power status/HDD status/LAN status/Bypass status LED
- 2 x USB 2.0 Ports
- 1 x software button
- 1 x RJ45 type Console Port
- 8 x Copper LAN Ports
- 1x LAN Module Support (Optional)

I/O Interface-Rear
- 1 x Expansion Slot
- 2 x USB 2.0 Ports
- 1 x VGA Port

Devices
- 1 x On-board CompactFlash Socket
- 1 x Internal 3.5" HDD bay
- 1 x SATA-DOM device space

Power Input
- 200W ATX Power Supply

Dimensions
- Chassis Dimension: 426mm x 450mm x 44mm
- Carton Dimension: 560mm x 620mm x 190mm

Weight
- Without Packing: 8Kg
- With Packing: 12Kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 5120 (P/N: 10S00512000X0)**
  Support Intel® Xeon™ 3400/i7/i5/i3 series processors, 4 DDR3 memory slots, 8 PCIe GbE LAN ports, CompactFlask Socket, USB ports, VGA port, One PCIe x8 Expansion Slot, w/o LCM

Options

- **NSA 5120 LCM & MEMBRANE (P/N: 88S00512000X0)**

NSK 5275-C8

PCIe GbE module with 8 copper ports base on Intel® 82575EB chipset and 2 pairs dual latch bypass
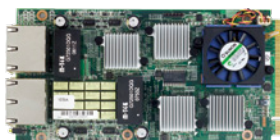
NSK 5275-F8

PCIe GbE module with 8 SFP ports base on Intel® 82575EB chipset

NSK 5275-C4F4

PCIe GbE module with 4 copper and 4 SFP ports base on Intel® 82575EB chipset and 2 pairs dual latch bypass
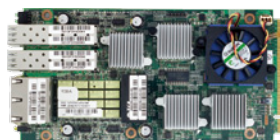
NSK 5298-F2

PCIe 10G module with 2 XFP ports base on Intel® 82598EB chipset

	P/N	Controller	Interface Type	Port number	Bypass/segment
NSK5275-C4	10SK0527500X0	Intel® 82575EB	PCIe x8	4 Copper	Dual Latch/2
NSK5275-F4	10SK0527501X0	Intel® 82575EB	PCIe x8	4 SFP	None
NSK5276-C2	10SK0527600X0	Intel® 82576EB	PCIe x8	2 Copper	Dual Latch/1
NSK5276-F2	10SK0527601X0	Intel® 82576EB	PCIe x8	2 SFP	None
NSK5275-F8	10SK0527503X0	Intel® 82575EB	PCIe x8	8 SFP	None
NSK5275-C4F4	10SK0527505X0	Intel® 82575EB	PCIe x8	4 Copper/ 4 SFP	Dual Latch/2
NSK5298-C2	10SK0529800X0	Intel® 82598EB	PCIe x8	2 CX4	None
NSK5298-F2	10SK0529801X0	Intel® 82598EB	PCIe x8	2 XFP	None

NSA 5130

2nd Generation Intel® Core™ Processor Family/ Intel® Xeon® E3 Family, 1U Rackmount with 8 PCIe GbE LAN

Main Features

- 2nd Generation Intel® Core™ Processor Family/ Intel® Xeon® E3 Family
- Support up to 16GB of 1066/1333 DDR3 SDRAM Memory in 4 slots
- Support One PCIe x8 Expansion
- Internal One 3.5" HDD Bay/ Two 2.5" HDD Bay (Optional)

Specifications

Main Board
- NSB 5130
- Support 2nd generation Intel® Core™ processor family/ Intel® Xeon® E3 family, Max 95watt
- Intel® C206

Main Memory
- 4 x 240-pin DDR3 1066/1333MHz DIMM slots, up to 16GB

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000M/10G link speed
- LAN Bypass: 4 pairs
- LAN module (optional)

Expansion
- 1 x PCIe x8 Slot

I/O Interface-Front
- Power status/ HDD status/ LAN status/ Bypass status LED
- 2 x USB 2.0 ports
- 1 x RJ45 type console port
- 8 x Copper LAN ports
- 1 x LAN module (Option)

I/O Interface-Rear
- 1 x expansion slot
- 2 x USB 2.0 ports (option)
- 1 x VGA port (option)

Devices
- 1 x on-board CompactFlash socket
- 1 x internal 3.5" HDD bay/ two 2.5" HDD Bay (optional)
- 1 x SATA-DOM device space

Power Input
- 200W ATX Power Supply

Dimensions
- Chassis Dimension: 426mm x 450mm x 44mm
- Carton Dimension: 560mm x 620mm x 190mm

Weight
- Without Packing: 8Kg
- With Packing: 12Kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 5130 (P/N: 10S00513000X0)**

  Support 2nd generation Intel® Core™ processor family/ Intel® Xeon® E3 family, 4 DDR3 memory slots, 8 PCIe GbE LAN ports, CompactFlask socket, USB ports, VGA port, one PCIe x8 expansion slot, w/o LCM

- **NSA 5130HA (P/N: TBD)**

  Support 2nd generation Intel® Core™ processors, 4 DDR3 memory slots, 8 PCIe GbE LAN ports, CompactFlask socket, USB ports, VGA port, one PCIe x8 expansion slot, w/o LCM, 200W 1+1 redundant power supply

Option

- **NSA 5130 LCM & MEMBRANE (P/N: 88S00513003X0)**

NSK 5380-C8

PCIe GbE module with 8
copper ports base on Intel®
NH82580EB chipset and 2 pairs
dual latch bypass
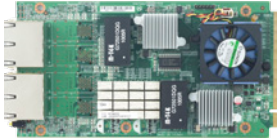
NSK 5380-F8

PCIe GbE module with 8
SFP ports base on Intel®
NH82580EB chipset

NSK 5399-F2

PCIe GbE module with 2 SFP+
ports base on Intel® JL82599ES
chipset
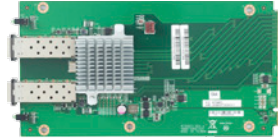
	P/N	Controller	Interface Type	Port number	Bypass / segment
NSK5380-C8	10SK0538000X0	INTEL® 82580EB	PCIe x8	8 Copper	Dual Latch/2
NSK5380-F8	10SK0538001X0	INTEL® 82580EB	PCIe x8	8 SFP	None
NSK5380-C4F4	10SK0538002X0	INTEL® 82580EB	PCIe x8	4 Copper/ 4 SFP	Dual Latch/2
NSK5380-F4	10SK0538003X0	INTEL® 82580EB	PCIe x8	4 SFP	None
NSK5399-F2	10SK0539900X0	INTEL® 82599EB	PCIe x8	2 SFP+	None

NSA 5131

Coming Soon

Main Features

- 1U Rackmount Network Platform
- 2ⁿᵈ Generation Intel® Core™ Processor Family/ Intel® Xeon® E3 Family
- Support DDR3 1066/1333 Memory, up to 16GB
- 8 x GbE LAN Ports
- Support One PCIe x8 Expansion
- Internal One 3.5" HDD Bay/ Two 2.5" HDD Bay (Optional)

Specifications

Main Board
- NSB 5131
- Support 2ⁿᵈ generation Intel® Core™ processor family, Max 95watt
- Intel® C206

Main Memory
- 4 x 240-pin DDR3 1066/1333MHz DIMM slots, up to 16GB ECC/ non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82576V
- Support 10/100/1000 link speed
- LAN Bypass: 2 pairs

I/O Interface-Front
- Power status/ HDD status/ LAN status/ Bypass status LED
- 2 x USB 2.0 ports
- 1 x RJ45 type console port
- 6 x copper LAN ports
- 2 x fiber LAN ports

I/O Interface-Rear
- 2 x USB 2.0 ports
- 1 x VGA port

Devices
- 1 x internal 3.5" HDD bay
- 3 x SATA device space

Power Input
- 200W ATX power supply

Dimensions
- Chassis Dimension: 426mm x 450mm x 44mm
- Carton Dimension: 560mm x 620mm x 190mm

Weight
- Without Packing: 8Kg
- With Packing: 12Kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 5131 (P/N: 10S00513100X2)**

  Support 2ⁿᵈ generation Intel® Core™ processor family/ Intel® Xeon® E3 Family, 4 DDR3 memory slots, 8 PCIe GbE LAN ports, USB ports, VGA port, w/o LCM

Option

- **NSA 5131 LCM & MEMBRANE (P/N: 88S00513100X0)**

NSA 1110

Intel® Atom™ D510 Dual Core/ D410 Single Core 1.66GHz Processors
1U Rackmount with 6 PCIe GbE LAN Ports

Main Features

- 1U Rackmount Network Platform
- Intel® Atom™ D510 Dual Core/D410 Single Core 1.66 GHz Processor
- Support DDR2 667/800 Memory, up to 2GB

- 6 x GbE LAN Ports
- Support LAN Bypass
- Internal one 3.5" HDD Bay/ two 2.5" HDD Bay (Optional)
- Support LCD Module (Optional)

Specifications

Main Board
- NSB 1110
- Support Intel® Atom™ D510 Dual Core/D410 Single Core 1.66GHz Processor
- Intel® ICH8M Chipset

Main Memory
- 1 x 240-pin DDR2 667/800 DIMM slot, up to 2GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 2 pairs

Expansion
- 1 x PCI Slot (Optional)

I/O Interface-Front
- Support 2 x 16 Characters LCD Module, PIO interface (Optional)
- Power status/HDD status/LAN status/Bypass status LED
- 2 x USB 2.0 Ports
- 1 x RJ45 type Console Port
- 1 x software button
- 6 x Copper LAN Ports
- 1 x PCI Expansion (Optional)

I/O Interface-Rear
- 2 x USB 2.0 Ports
- 1 x VGA Port

Devices
- 1 x CompactFlash Socket (Optional)
- 1 x Intelnal 3.5" HDD bay
- 1 x SATA-DOM device space

Power Input
- 100W ATX Power supply

Dimensions
- Chassis Dimension: 426mm x 238mm x 44mm
- Carton Dimension: 556mm x 384mm x 185 mm

Weight
- Without Packing: 5.6kg
- With Packing: 8kg

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NSA 1110 (P/N: 10S00111000X0)**
  Intel® Atom™ D410 Single Core 1.66GHz Processor, 1 DDR2 memory slot, 6 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

- **NSA 1110A (P/N: 10S00111001X0)**
  Intel® Atom™ D510 Dual Core 1.66GHz Processor, 1 DDR2 memory slot, 6 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

- **NSA 1110-C4 (P/N: 10S00111002X0)**
  Intel® Atom™ D410 Single Core 1.66GHz Processor, 1 DDR2 memory slot, 4 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

- **NSA 1110A-C4 (P/N: 10S00111003X0)**
  Intel® Atom™ D510 Dual Core 1.66GHz Processor, 1 DDR2 memory slot, 4 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

Options

- **NSA 1110/ NSA1110A LCM & MEMBRANE (P/N: 88S00111000X0)**

- **NSA 1110-C4/ NSA 1110A-C4 LCM & MEMBRANE (P/N: 88S00111001X0)**

NSA 1120

Intel® Atom™ D525 Dual Core/ D425 Single Core 1.8GHz Processor
1U Rackmount with 6 PCIe GbE LAN Ports

Main Features

- 1U Rackmount Network Platform
- Intel® Atom™ D525 Dual Core/ D425 Single Core 1.8GHz Processor
- Support DDR3/800 Memory, up to 2GB

- 6 x GbE LAN Ports
- Support LAN Bypass
- Internal one 3.5" HDD Bay/ two 2.5" HDD Bay (Optional)
- Support LCD Module (Optional)

Specifications

Main Board
- NSB 1120
- Support Intel® Atom™ D525 Dual Core/ D425 Single Core 1.8GHz Processor
- Intel® ICH8M Chipset

Main Memory
- 1 x 204-pin DDR3 800 SO-DIMM slot, up to 2GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 2 pairs

Expansion
- 1 x PCI Slot (Optional)

I/O Interface-Front
- Support 2 x 16 Characters LCD Module, PIO interface (Optional)
- Power status/HDD status/LAN status/Bypass status LED
- 2 x USB 2.0 Ports
- 1 x RJ45 type Console Port
- 1 x software button
- 6 x Copper LAN Ports
- 1 x PCI Expansion (Optional)

I/O Interface-Rear
- 2 x USB 2.0 Ports
- 1 x VGA Port

Devices
- 1 x CompactFlash Socket (Optional)
- 1 x Intelnal 3.5" HDD bay
- 1 x SATA-DOM device space

Power Input
- 100W ATX Power supply

Dimensions
- Chassis Dimension: 426mm x 238mm x 44mm
- Carton Dimension: 556mm x 384mm x 185 mm

Weight
- Without Packing: 5.6kg
- With Packing: 8kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 1120 (P/N: 10S00112000X0)**
  Intel® Atom™ D425 Single Core 1.8 GHz Processor, 1 DDR3 memory slot, 6 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

- **NSA 1120A (P/N: 10S00112001X0)**
  Intel® Atom™ D525 Dual Core 1.8 GHz Processor, 1 DDR3 memory slot, 6 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

- **NSA 1120-C4 (P/N: 10S00112002X0)**
  Intel® Atom™ D425 Single Core 1.8 GHz Processor, 1 DDR3 memory slot, 4 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

- **NSA 1120A-C4 (P/N: 10S00112003X0)**
  Intel® Atom™ D525 Dual Core 1.8 GHz Processor, 1 DDR3 memory slot, 4 Gigabit LAN ports with two pairs bypass, VGA, USB port, w/o LCM

Options

- **NSA 1120/ NSA 1120A LCM & MEMBRANE (P/N: 88S00112000X0)**
- **NSA 1120-C4/ NSA 1120A-C4 LCM & MEMBRANE (P/N: 88S0011201X0)**

NSA 3110

Intel® Core™ 2 Quad/ Core™ 2 Duo/ Pentium® Dual-Core/ Celeron®
1U Rackmount with 8 PCIe GbE LAN

Main Features

- 1U Rackmount Network platform
- Supports Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual Core/ Celeron® Processor
- Supports DDR3 1066 Memory, up to 4GB

- 8 x GbE LAN ports
- One PCIe 8x Expansion
- Internal one 3.5" HDD Bay/two 2.5" HDD Bay (Optional)
- Support LCD Module (Optional)

Specifications

Main Board
- NSB 3110
- Support Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/ Celeron® Processors, LGA775 socket
- Support 800/1066/1333 MHz FSB
- Intel® G41 and ICH7R Chipset

Main Memory
- 2 x 240-pin DDR3 1066 DIMM slots, up to 4GB Non-ECC SDRAM

LAN Features
- LAN Chipset: Intel® 82574L
- Support 10/100/1000 link speed
- LAN Bypass: 4 pairs

Expansion
- 1 x PCIe x8 Slot
- 1 x Mini-PCI Slot

I/O Interface-Front
- Support 2 x 16 Characters LCD module, PIO interface (Optional)
- HDD status/Power/LAN status/Bypass status LEDs
- 2 x USB 2.0 ports
- 1 x RJ45 type Console port
- 1 x Software button
- 8 x Copper LAN ports

I/O Interface-Rear
- 1 x Expansion slot
- 1 x VGA port

Devices
- 1 x On-board CompactFlash Socket
- 1 x Internal 3.5" HDD bay

Power Input
- 200W ATX Power Supply

Dimensions
- Chassis Dimension: 426mm x 365mm x 44mm
- Carton Dimension: 560mm x 570mm x 190mm

Weight
- Without packing: 6.5kg
- With packing: 10kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 3110 (P/N: 10S00311000X0)**
  Support Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/ Celeron®, 2 DDR3 memory slots, 8 Gigabit LAN ports, Compactflash Socket, VGA, USB port, One PCIe x8 Expansion slot, w/o LCM

- **NSA 3110-C4 (P/N: 10S00311003X0)**
  Support Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual-Core/ Celeron®, 2 DDR3 memory slots, 4 Gigabit LAN ports, Compactflash Socket, VGA, USB port, One PCIe x8 Expansion slot, w/o LCM

Options

- **NSA 3110 LCM & MEMBRANE (P/N: 88S00311000X0)**
- **NSA 3110-C4 LCM & MEMBRANE (P/N: 88S00311001X0)**

NSA 3111

Intel® Core™ 2 Duo/ Pentium® Dual-Core/ Celeron®
1U Rackmount with 4/6+8 PCIe GbE LAN

NSA 3111-C6

NSA 3111-C4

Main Features

- 1U Rackmount Network Platform
- Supports Intel® Core™ 2 Duo/Pentium® Dual Core/Celeron® Processor
- Supports DDR2 667/800 Memory, up to 4GB

- 4/6 GbE LAN Ports
- Support one LAN Module, one PCI Expansion Slot
- Internal one 2.5" HDD Bay

Specifications

Main Board
- NSB 3111
- Support Intel® Core™ 2 Duo/Pentium® Dual-Core/Celeron® Processors, LGA775 socket
- Support 800/1066/1333 MHz FSB
- Intel® G41 and ICH7R Chipset

Main Memory
- 2 x 240-pin DDR2 667/800 DIMM slots, up to 4GB Non-ECC SDRAM

LAN Features
- Lan Chipset: Intel® 82574L
- Support 10/100/1000 link speed
- LAN Bypass: 2 pairs

Expansion
- 1 x PCI Slot
- 1 x Mini-PCI Slot

I/O Interface-Front
- HDD status/Power/GPIO status LEDs
- 2 x USB 2.0 ports
- 1 x RJ45 type Console port
- 1 x software button
- 4~6 Copper LAN ports
- 1 x LAN Module Support (Optional)

I/O Interface-Rear
- 1 x Expansion slot

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 2.5" HDD bay
- 1 x Internal 44 pin IDE interface

Power Input
- 200W ATX Power Supply

Dimensions
- Chassis Dimension: 426mm x 450mm x 44mm
- Carton Dimension: 560mm x 640mm x 200mm

Certifications
- CE approval
- FCC Class A

Ordering Information

Barebone

- **NSA 3111-C6 (P/N: 10S00311101X0)**

  Support Intel® Core™ 2 Duo/Pentium® Dual-Core/Celeron®, 2 DDR2 memory slots, 6 Gigabit LAN ports, Compactflash Socket, VGA, USB port, One PCI Expansion slot, One LAN Modular, w/o LCM & Membrane

- **NSA 3111-C4 (P/N: 10S00311100X0)**

  Support Intel® Core™ 2 Duo/Pentium® Dual-Core/Celeron®, 2 DDR2 memory slots, 4 Gigabit LAN ports, Compactflash Socket, VGA, USB port, One PCI Expansion slot, One LAN Modular, w/o LCM & Membrane

	Controller	Interface Type	Port number	Bypass / segment
NSK5175-C8	Intel® 82575EB	PCIe x8	8 Copper	Dual latch / 2
NSK5175-F8	Intel® 82575EB	PCIe x8	8 SFP	None

NSA 3130

Intel® 2nd Generation Core™ Processor Family 1U Rackmount with 8PCIe GbE LAN

Coming Soon

Main Features

- 1U Rackmount Network Platform
- 2nd Generation Intel® Core™ Processor Family
- Support DDR3 1066/1333 Memory, up to 8GB
- 8 x GbE LAN Ports

- Support One PCIe x8 Expansion
- Internal One 3.5" HDD Bay/ Two 2.5" HDD Bay (Optional)

Specifications

Main Board
- NSB 3130
- Support 2nd generation Intel® Core™ processor family
- Intel® H61

Main Memory
- 2 x 240-pin DDR3 1066/1333MHz DIMM slots, up to 8GB ECC/ non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 4 pairs

Expansion
- 1 x PCIe x 8 Slot

I/O Interface-Front
- Power status/ HDD status/ LAN status/ bypass status LED
- 2 x USB 2.0 ports
- 1 x RJ45 type console port
- 8 x Copper LAN ports

I/O Interface-Rear
- 1 x expansion slot
- 2x USB 2.0 ports
- 1x VGA port

Devices
- 1 x internal 3.5" HDD bay/ Two 2.5" HDD Bay (Optional)
- 1 x SATA-DOM device space
- 1 x CFast socket/ 1x CompactFlash Socket

Power Input
- 200W ATX power supply

Dimensions
- Chassis Dimension: 426mm x 365mm x 44mm
- Carton Dimension: 560mm x 570mm x 190mm

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **NSA 3130 (P/N: TBD)**

  Support 2nd generation Intel® Core™ processor family, 2 DDR3 memory slots, 8 PCIe GbE LAN ports, CompactFlask socket, CFast socket ,USB ports, VGA port, one PCIe x8 expansion slot, w/o LCM

Option

- **NSA 3130 LCM & MEMBRANE (P/N: TBD)**

NEXCOM

DNA 110/110A

Desktop Intel® Atom™ E620 CPU

with 3 GbE LAN

Main Features

- Desktop Network Platform
- On-board Intel® Atom™ E620 CPU
- Intel® EG20T Chipset
- On-board 512MB DDR2 667/800 Memory, up to 1GB
- Support 3 GbE LAN Ports

- One Mini-PCIe Expansion for WiFi
- One SATA 2.5"SSD/ One SATA-DOM
- Fanless Design

Specifications

Main Board
- DNA110
- Support Intel® Atom™ E600 series processor
- Intel® EG20T chipset

Main Memory
- On-board 512MB/1GB DDR2 667/800 memory

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed

Expansion
- 1 x Mini-PCIe Slot

I/O Interface-Front
- 2 x GPIO LEDs

I/O Interface-Rear
- 1 x software reset button
- 1 x RJ45 type console port
- 2 x USB 2.0 ports
- 3 x RJ45 ports
- 2 x hole for wireless antenna

Devices
- 1 x SATA 2.5" SSD space
- 1 x SATA-DOM device space

Power Input
- 40W power adapter

Chassis Dimensions
- Chassis dimension: 179.9mm x 111.9mm x 37.5mm
- Carton dimension: 235mm x 200mm x 100mm

Weight
- Without packing: 1kg
- With packing: 2kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **DNA110 (P/N: 10L00011000X0)**

  Intel® Atom™ E620 processor, on-board 512MB DDR2 667/ 800 memory, 3 Gigabit LAN ports with one Mini-PCIe expansion for Wi-Fi, USB port

- **DNA110A (P/N: 10L00011002X0)**

  Intel® Atom™ E620 processor, on-board 1GB DDR2 667/ 800 memory, 3 Gigabit LAN ports with one Mini-PCIe expansion for Wi-Fi, USB port

DNA 940

Destop Intel® Celeron® M Processor with 4 PCIe GbE LAN

Main Features

- Desktop Network Platform
- Intel® Celeron® M 600MHz Processor
- Supports DDR2 400/533 Memory, up to 2GB
- 4 x GbE LAN ports

- Support LAN Bypass
- One mini-PCI Expansion
- On-board CF Socket
- Internal one 2.5" HDD Bay

Specifications

Main Board
- DNB 940
- On-board Intel® Celeron® M 600MHz Processor
- Intel® 910GME and ICH6M Chipset

Main Memory
- 1 x 240-pin DDR2 400/533 DIMM slot, up to 2GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82573L
- Support 10/100/1000 link speed
- LAN Bypass: 1 pair

Expansion
- 1 x Mini-PCI Slot

I/O Interface-Front
- Power status/HDD status/LAN status LEDs

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type Console port
- 2 x USB 2.0 ports
- 4 x Copper LAN ports
- 2 x Reserved holes for wireless antenna

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 2.5" HDD bay

Power Input
- 60W Power Adaptor

Chassis Dimensions
- Chassis Dimension: 272mm x 195mm x 44mm
- Carton Dimension: 430mm x 300mm x 170mm

Weight
- Without Packing: 2kg
- With Packing: 4kg

Certifications
- CE approval
- FCC Class B
- UL

Ordering Information

Barebone

- **DNA 940 (P/N: 10L00094000X0)**

  Intel® Celeron® M 600MHz, 1 DDR2 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash Socket, VGA, USB port, One Mini-PCI Expansion Slot

- **DNA 940-RB (P/N: 10L00094001X0)**

  Intel® Celeron® M 600MHz, 1 DDR2 memory slot, 4 Gigabit LAN ports without bypass, CompactFlash Socket, VGA, USB port, One Mini-PCI Expansion Slot

DNA 950

Main Features

- Desktop Network Platform
- Intel® EP80579 integrated 600MHz Processor
- Support DDR2 533/667/800 Memory up to 2GB
- 4 x GbE LAN ports

- Support LAN Bypass
- One Mini-PCIe Expansion
- On-board CF Socket

Specifications

Main Board
- DNB 950
- On Board Intel® EP80579 integrated 600MHz Processor
- Support 600MHz/1.2GHz CPU with Acceleration (Optional)
- Intel® SOC integrated MCH and ICH

Main Memory
- 1 x 240-pin DDR2 533/667/800 DIMM slot, up to 2GB Non-ECC SDRAM

LAN Features
- LAN Chip: 1 x Intel® 82573L and 3 x GbE by integrated by Intel® EP80579
- Support 10/100/1000 link speed
- LAN Bypass: 1 pair

Expansion
- 1 x Mini-PCIe Slot

I/O Interface-Front
- Power status/HDD status/LAN status LEDs

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type Console port
- 2 x USB 2.0 ports
- 4 x Copper LAN ports
- 2 x Reserved holes for wireless antenna

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 2.5" HDD bay

Power Input
- 60W Power Adapter

Chassis Dimensions
- Chassis Dimension: 272mm x 195mm x 44mm
- Carton Dimension: 430mm x 300mm x 170mm

Weight
- Without Packing: 2kg
- With Packing: 4kg

Certifications
- CE approval
- FCC Class B
- UL

Ordering Information

Barebone

- **DNA 950 (P/N: 10L00095000X0)**

    Intel® SOC 600MHz without Acceleration, 1 DDR2 memory slots, 4 Gigabit LAN ports with one pair Bypass, CompactFlash Socket, USB port, One Mini-PCIe Expansion Slot

- **DNA 950-RB (P/N: 10L00095003X0)**

    Intel® SOC 600MHz without Acceleration, 1 DDR2 memory slots, 4 Gigabit LAN ports without Bypass, CompactFlash Socket, USB port, One Mini-PCIe Expansion Slot

DNA 1110

**Desktop Intel® Atom™ D510 Dual Core/ D410 Single Core
1.66GHz Processor with 4 PCIe GbE LAN**

Main Features

- Desktop Network Platform
- Intel® Atom™ D510 Dual Core/D410 Single Core 1.66GHz Processor
- Support DDR2 667/800 Memory up to 2GB
- 4 x GbE LAN Ports
- Support LAN Bypass
- One PCI Expansion
- On-board CF Socket
- Internal one 2.5" HDD Bay

Specifications

Main Board
- DNB 1110
- On board Intel® Atom™ D510 Dual Core/D410 Single Core 1.66GHz Processor
- Intel® ICH8M Chipset

Main Memory
- 1 x 240-pin DDR2 667/800 DIMM slot, up to 2GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 1 pair

Expansion
- 1 x PCI Slot
- 1 x Mini-PCI Slot

I/O Interface-Front
- Power status/HDD status/LAN status LEDs

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type Console port
- 2 x USB 2.0 ports
- 4 x Copper LAN ports
- 1 x PCI Expansion Slot

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 2.5" HDD bay

Power Input
- 45W Power Adaptor

Dimensions
- Chassis Dimension: 272mm x 195mm x 44mm
- Carton Dimension: 430mm x 300mm x 170mm

Weight
- Without Packing: 2kg
- With Packing: 4kg

Certifications
- CE approval
- FCC Class B
- UL

Ordering Information

Barebone

- **DNA 1110 (P/N: 10L00111000X0)**

  Intel® Atom™ D410 Single Core 1.66GHz Processor, 1 DDR2 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash Socket, VGA, USB port, One Mini-PCI Slot, one PCI expansion slot

- **DNA 1110A (P/N: 10L00111001X0)**

  Intel® Atom™ D510 Dual Core 1.66GHz Processor, 1 DDR2 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash Socket, VGA, USB port, One Mini-PCI Slot, one PCI expansion slot

DNA 1120

Desktop Intel® Atom™ D525 Dual Core/ D425 Single Core
1.8 GHz Processor with 4 PCIe GbE LAN

Main Features

- Desktop Network Platform
- Intel® Atom™ D525 Dual Core/D425 Single Core 1.8GHz Processor
- Support DDR3 800 Memory up to 2GB
- 4 x GbE LAN Ports

- Support LAN Bypass
- One PCI Expansion
- On-board CF Socket
- Internal one 2.5" HDD Bay

Specifications

Main Board
- DNB 1120
- On board Intel® Atom™ D525 Dual Core/ D425 Single Core 1.8 GHz Processor
- Intel® ICH8M Chipset

Main Memory
- 1 x 204-pin DDR3 800 SO-DIMM slot, up to 2GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 1 pair

Expansion
- 1 x PCI Slot
- 1 x Mini-PCI Slot
- 1x PCI-e Slot (Optional)
- 1x mini-PCIe Slot (Optional)

I/O Interface-Front
- Power status/HDD status/LAN status LEDs

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type Console port
- 2 x USB 2.0 ports
- 4 x Copper LAN ports
- 1 x PCI Expansion Slot

Devices
- 1 x on-board CompactFlash socket
- 1 x Internal 2.5" HDD bay
- 1 x SATA DOM device

Power Input
- 45W Power Adaptor

Dimensions
- Chassis Dimension: 272mm x 195mm x 44mm
- Carton Dimension: 430mm x 300mm x 170mm

Weight
- Without Packing: 2kg
- With Packing: 4kg

Certifications
- CE approval
- FCC Class B
- UL

Ordering Information

Barebone

- **DNA 1120 (P/N: 10L00112000X0)**
  Intel® Atom™ D425 Single Core 1.8GHz Processor, one DDR3 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash Socket, VGA, USB port, One Mini-PCI Slot, one PCI expansion slot

- **DNA 1120A (P/N: 10L00112001X0)**
  Intel® Atom™ D525 Dual Core 1.8GHz Processor, one DDR3 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash Socket, VGA, USB port, One Mini-PCI Slot, one PCI expansion slot

- **DNA 1120E (P/N: 10L00112002X0)**
  Intel® Atom™ D425 Single Core 1.8GHz Processor, one DDR3 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash socket, VGA, USB port, one mini-PCIe Slot, one PCIe expansion slot

- **DNA 1120AE (P/N: 10L00112003X0)**
  Intel® Atom™ D525 Dual Core 1.8GHz Processor, one DDR3 memory slot, 4 Gigabit LAN ports with one pair bypass, CompactFlash socket, VGA, USB port, one mini-PCIe slot, one PCIe expansion slot

DNA 1500/1501/1505

**Desktop Netlogic XLS 108/ 208 Processors
with WAN x 1, Switch LAN x 5**

Main Features

- Desktop Network Platform
- Netlogic XLS 108 750MHz/XLS 208 600 MHz Processors
- Support DDR2 SO-DIMM
- 6 x GbE LAN ports

- Switch LAN: 5 ports GbE
- Support LAN Bypass
- On-board CF Socket
- Support Mini-PCIe Interface

Specifications

Main Board
- DNB 1500/DNB 1501
- On Board Netlogic XLS 108 750MHz/On Board Netlogic XLS 208 Dual Core 600 MHz Processors

Main Memory
- 1 x 200-pin DDR2 SO-DIMM slot, up to 1GB SO-DIMM

LAN Features
- LAN Chip: 1 x Marrell 88E1111, 1 x Marrell 7395
- Support 10/100/1000 link speed
- LAN Bypass: 1 pair

Expansion
- 2 x Mini-PCIe Slot

I/O Interface-Front
- Power status/HDD status/LAN status LEDs

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type Console port
- 2 x USB 2.0 ports
- 6 x Copper LAN ports

Devices
- 1 x on-board CompactFlash socket
- 1 x on-board 128MB flash memory

Power Input
- 60W ATX Power Supply

Certifications
- CE approval
- FCC Class B

Chassis Dimensions
- Chassis Dimension: 330mm x 220mm x 44mm
- Carton Dimension: 430mm x 300mm x 170mm

Weight
- Without Packing: 2kg
- With Packing: 4kg

Ordering Information

Barebone

- **DNA 1500 (P/N: 10L00150000X0)**
  Desktop Netlogic XLS 108 750MHz, GbE WAN x 1,
  GbE Switch LANs x 5

- **DNA 1501 (P/N: 10L00150100X0)**
  Desktop Netlogic XLS 208 Dual Core 600 MHz, GbE WAN x 1,
  GbE Switch LANs x 5

DNA 2120

Desktop Intel® Atom™ D525 Dual Core/ D425 Single Core
1.8GHz Processor with 6 PCIe GbE LAN Ports

Main Features

- Desktop Network Platform
- Intel® Atom™ D525 Dual Core/ D425 Single Core 1.8GHz Processor
- 2GB on board 800 DDR3 Memory, up to 4GB of 800 DDR3 SO-DIMM in one slot
- 6 x Intel 82583V GbE LAN Ports
- Support LAN Bypass
- Internal one 2.5" HDD Bay/ one SATA DOM (Optional)
- Fanless design

Specifications

Main Board
- DNB 2120
- Support Intel® Atom™ D525 Dual Core/ D425 Single Core 1.8GHz Processor
- Intel® ICH8M Chipset

Main Memory
- Onboard 2GB DDR3 800 Memory (Default)
- 1 x 204-pin DDR3 800 SO-DIMM slot, up to 4GB Non-ECC SDRAM

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 1 pairs

Expansion
- 1 Mini-Pcie Slot (Option)

I/O Interface-Front
- Power status/LAN status/Bypass status LED

I/O Interface-Rear
- 1 x Power button
- 1 x RJ45 type Console Port
- 2 x USB 2.0 Ports
- 6 x Copper LAN Port
- 2 x holes for Wireless Antenna

Devices
- 1 x CompactFlash Socket (Optional)
- 1 x 2.5" HDD bay
- 1 x SATA-DOM device space

Power Input
- 40W Power Adapter

Dimensions
- Chassis Dimension: 250mm x 194mm x 40mm
- Carton Dimension: 430mm x 300mm x 170mm

Weight
- Without Packing: 2kg
- With Packing: 3.3kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **DNA 2120 (P/N: 10L00212000X0)**
  Intel® Atom™ D425 Single Core 1.8 GHz Processor, 1 DDR3 SO-DIMM memory slot, 6 Gigabit LAN ports with two pairs bypass, USB port

- **DNA 2120A (P/N: 10L00212001X0)**
  Intel® Atom™ D525 Dual Core 1.8 GHz Processor, 1 DDR3 SO-DIMM memory slot, 6 Gigabit LAN ports with two pairs bypass, USB port

OSA 5130

2nd Generation Intel® Core™ Processor Family/ Intel® Xeon® E3 Family 1U Rackmount with 8 PCIe GbE LAN

Main Features

- 1U Rackmount Network Platform
- 2nd Generation Intel® Core™ Processor Family/ Intel® Xeon® E3 Family
- Support up to 16GB of 1066/1333 DDR3 SDRAM Memory in 4 Slots
- Support Two PCIe x8 Expansion
- Internal One 3.5" HDD Bay/ Two 2.5" HDD Bay (Optional)
- Support Redundant Power Supply (Optional)

Specifications

Main Board
- OSB 5130
- Support 2nd generation Intel® Core™ processor family/ Intel® Xeon® E3 family
- Intel® C206

Main Memory
- 4 x 240-pin DDR3 1066/1333MHz DIMM slots, up to 16GB

LAN Features
- LAN Chip: Intel® 82583V
- Support 10/100/1000 link speed
- LAN Bypass: 4 pairs

Expansion
- 2 x PCIe x8 Slot

I/O Interface-Front
- Power status/HDD status/LAN status/Bypass status LED
- 2 x USB 2.0 ports
- 1 x RJ45 type console port
- 8 x Copper LAN ports

I/O Interface-Rear
- 2 x expansion slots
- 2 x USB 2.0 ports (option)
- 1 x VGA port (option)

Devices
- 1 x On-board CompactFlash socket
- 1 x internal 3.5" HDD bay/ two 2.5" HDD Bay (optional)
- 1 x SATA-DOM device space

Power Input
- 200W ATX power supply/ 200W 1+1 redundant power supply (optional)

Dimensions
- Chassis Dimension: 426mm x 450mm x 44mm
- Carton Dimension: 560mm x 620mm x 190mm

Weight
- Without Packing: 8Kg
- With Packing: 12Kg

Certifications
- CE approval
- FCC Class A
- UL

Ordering Information

Barebone

- **OSA 5130 (P/N: 10SV0513000X0)**
  Support Intel® 2nd generation Core™ processors, 4 DDR3 memory slots, 8PCIe GbE LAN ports, CompactFlask socket, USB ports, , two PCIe X8 expansion slot, w/o LCM, 200W ATX power supply

- **OSA 5130 HA (P/N: TBD)**
  Support Intel® 2nd generation Core™ processors, 4 DDR3 memory slots, 8PCIe GbE LAN ports, CompactFlask socket, USB ports, ,two PCIe X8 expansion slot, w/o LCM, 200W 1+1 redundant power supply

Option

- **OSA 5130 LCM & MEMBRANE (P/N: 88SV0513000X0)**

2012
Product Selection Book

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