



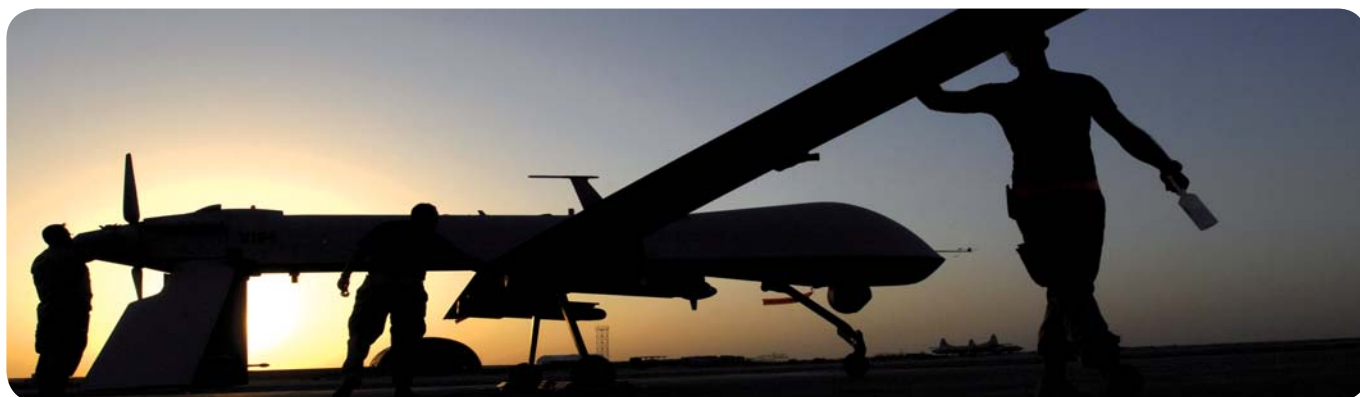
» VME «

- » 6U & 3U Processor Boards
- » XMCs / PMCs
- » 19" & ATR Racks
- » Software
- » Harsh Environments
- » Support Services

Kontron and VME

VMEbus is a flexible open-ended bus system which makes use of the Eurocard standard. It was intended to be a flexible environment supporting a variety of computing intensive tasks and has become a very popular architecture in the computer industry. Being one of the early pioneers of VMEbus, Kontron has over 20 years experience in standard and custom VME products. As an active member of VITA (VMEbus International Trade Association) and driving force of the Freescale Design Alliance, Kontron is leading the

way to a brighter future in VME technology. Whether you're looking for standard or rugged VME products, Kontron offers boards and integrated platforms for applications in military, aerospace, transportation, industrial and communications.



Integrated Platforms

Kontron's full-line of integrated platforms offers a complete range of High-Performance Embedded Computer (HPEC) platforms ideal for radar, sonar, image computing, data control, and electronic warfare applications in ships, aircraft, and ground vehicles. There is an Integrated platform for each phase of design – from application development and integration to deployment and support. Each Integrated platform is a high-performance, low-cost, COTS-based solution and consists of a distinctive combination of Multi-Core Pentium® SBCs and 32-bit and 64-bit PowerPC boards with Altivec units.

Additionally, Kontron PICMG 2.16 switches also meet VITA 31.1 requirements. Kontron products such as the CP6930 and CP6923 can also be used in VME VITA 31.1 compliant backplanes.

Built for Customization

A complete offering of features and services allows Kontron to create customer-driven derivative versions of Integrated platforms, merging top level computing technology with legacy mechanical and digital requirements.

Evaluate



Develop



Deploy



Easy Turnkey Systems



6U Processor Boards

PowerNode5

6U VME PowerPC Computing Node



- » Dual 64-bit PowerPC 970FX
- » Outstanding Memory Bandwidth
- » Onboard Serial RapidIO Switch Fabric
- » Air Cooled and Conduction Cooled Versions
- » Linux 2.6.9 SMP and VxWorks 6.2 Support

PowerNode3 | 3+

6U VME PowerPC Computing Node



- » Dual PowerPC 7457 | Dual PowerPC 7448
- » Outstanding Computing Performance
- » VME 2eSST Capability
- » Air Cooled and Conduction Cooled Versions

VM6250

6U VME PowerPC Computer



- » Freescale Dual-Core PMC8641 with Altivec
- » Support of FPGA with FMC Module (VITA 57)
- » Designed for all the Environmental Conditions
- » VxWorks, LynxOS and Linux Support

PowerEngine7

6U VME PowerPC SBC



- » Single or Dual PowerPC 750GX/FX
- » VME 2eSST Capability
- » Very Low Power Dissipation
- » Available in 4 Environmental Ruggedization Levels
- » VxWorks, LynxOS, Green Hills Integrity, Linux and SYSGO ElinOS Support

PENTXM2 | PENTXM4

6U VME x86 SBC



- » Single | Twin Intel® Dual-Core Xeon® ULV
- » IPMI VITA 38 System Management
- » VITA 31.1 Backplane Networking
- » Air-cooled and Rugged Conduction-Cooled Variants
- » Linux 2.6, VxWorks, LynxOS, Windows and QNX Neutrino Support

VCE405

6U VME PowerPC Connectivity Engine



- » Single PowerPC 405GPr
- » I/O-oriented SBC
- » Ultra Low Power Consumption (less than 7 W)
- » VxWorks, LynxOS, Green Hills Integrity and Linux Support

3U Processor Boards

VMP3

High-End PowerPC Computing Module



- » Freescale PowerPC MPC8541 at 660/800 MHz
- » 256 Mbyte DDR-SDRAM, 16 Mbyte Flash, 1 Mbyte SDRAM
- » Dual Gigabit Ethernet, 1 Fast Ethernet

VMP2

VME PowerPC Computing Module



- » Freescale PowerPC MPC8245 at 330 MHz
- » Fast Ethernet
- » 2 serial interfaces
- » PCI Expansion connector

VMP1

VME PowerPC Computing Module



- » Freescale MPC8240 PowerPC at 250 MHz
- » Fast Ethernet
- » 2 serial interfaces
- » PCI Expansion connector

XMCs / PMCs

- » Extensive range of COTS standard XMCs and PMCs
- » Available in air-cooled and rugged conduction-cooled variants
- » Supported interfaces: MIL-STD-1553, ARINC 429, Graphics, Gigabit Ethernet

XMC401

Dual 10 Gigabit Ethernet XMC



- » Outstanding Performance & CPU Offload by Intel Niantic 82599 10GbE Controller
- » Flexibility by PCIeExpress x8 Host and SFP + Ethernet Interface
- » Cost Effective by Integrated Single Chip Solution

XMC-ETH2

Dual Gigabit Ethernet XMC



- » General Purpose Long Life Ethernet XMC
- » x4 PCI Express XMC and PCI PMC interface to Host

XMC-G72

Dual Head Graphics XMC



- » x8 PCI-Express Interface to Host
- » 1600x1200 Resolution DVI Interface
- » Low Power Dissipation

PMC-6L

Avionics I/O PMC



- » ARINC 429 Interface
- » MIL-STD-1553
- » Serial Lines
- » General Purpose I/O

PMC-HTLK

1Gbaud HOTLink-2 PMC



- » Several supported speeds, software selectable
- » HOTLink-2 Transmitter/Receiver channels, and 32-bit parallel Data Port P4DP
- » LynxOS and VxWorks Support

PMC-FPDP

Front Panel Data Port PMC



- » Compliant with ANSI / VITA-17 1998
- » EIA-422 version available

PMC-1553

MIL-STD-1553B PMC



- » Avionics I/O PMC
- » Two Independent Dual Redundant MIL6STD61553B Channels

19" & ATR Racks

Kontron racks have been designed to minimize integration time. These very flexible products can be used in numerous environments, from development to deployment, under various operating conditions.

- » 19" racks with P0 1U 2 slots to 11U 21 slots. Rugged version conform to TRCA / DO-160
- » ATR Airborne 6U VME64x racks



Software

Thanks to its large experience in the defense market, Kontron understands how a solid software base can positively impact military and aerospace systems' time to market. This is why we place a premium on providing the most comprehensive offering in software.

IDE and SDE

Software development efficiency is at the heart of cost savings in this industry. Kontron software is compatible with popular development environments such as Wind River Workbench® and Greenhills-Multi®. Tools designed for our products are compatible with the Eclipse® framework.

Real-Time OS

Kontron is continuously refining the critical interface between computer boards and the OS. Uninterrupted partnerships with the industries' most acclaimed vendors allow us to offer a "one stop shop" approach to support. Our BSPs include dynamic reconfiguration and can run on any product of the same family. We support VxWorks, LynxOS and Integrity.

Linux OS

Kontron provides Linux BSPs. They can be used with any Linux vendor distribution (Sysgo, Wind River, LinuxWorks, TimeSys, etc.). For PowerPC, our BSPs are developed and tested against Fedora Core. For Intel embedded servers, Kontron has partnered with Red Hat on Enterprise Linux. With this partnership, Kontron provides a Linux solution with guaranteed lifetime, server-critical quality and unmatched compatibility with PC software.

Middleware

Kontron integrated platforms offer an extensive middleware approach for both the data plane (zero copy MPI) and the control plane (SNMP, IPMI, http).

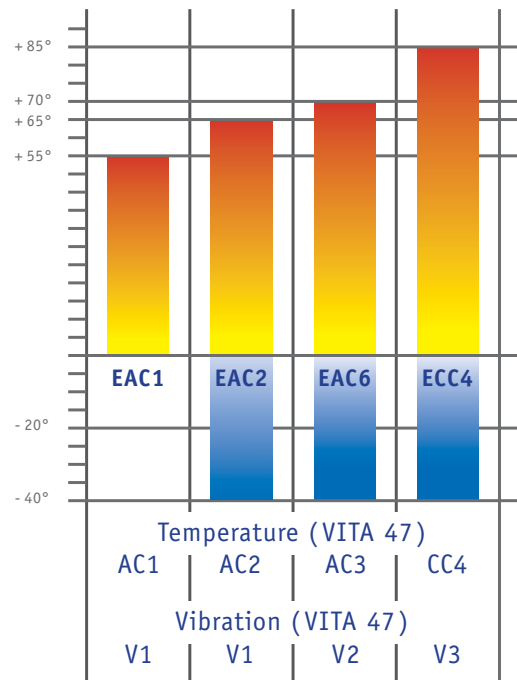
Software Integration

Kontron offers an integrated approach to delivery and support covering entire LRU sets. The functional LRU is delivered and maintained as a single unit, with the baseboard, operating system, mezzanine cards, and drivers all included. On customers' request this integrated approach can also cover third party products.

Harsh Environments

To fulfill the demanding environmental requirements of the defense and other mission-critical markets, Kontron VME boards are manufactured in four classes: SA, WA and RA (Air-Cooled), and RC (Conduction-Cooled). All classes are 100% software compatible.

VITA 47:



Support Services

Kontron offers standard Support and Services such as hotline, repairs, on-site technical assistance, training, long-term support (over 15 years), Pre-planned Program Technology Insertion (P3I), and dedicated support (e.g., frozen configurations). Our team of experienced engineers offers customers one-stop shopping for custom and system-level solutions.

Our Partners:



