

YAMAICHI

Test Solutions



AdvancedMC Connectors



High-Speed Connectors



Factory Automation



Product Guide

Cables and
Assemblies



Photovoltaic



Internal Connectors



I/O Connectors



Card Connectors



Production
Sockets



Test Solutions



Quad Flat Packages

(IC51)*

Clamshell type socket

(IC51) (IC120)

Clamshell and Open Top for PLCC
(with auto eject mechanism)

(IC200)*

Open Top ultra low actuation
force socket, also available
with shoulder contact system

(IC357) (IC500)

Open Top, 2-point contact
system



Dual Side Packages

(IC51)*

Clamshell type socket

(IC189)*

Open Top TSOP

(IC191)

Open Top
for SO / TSOP I

(IC295)*

Open top with single and 2-point
contact system

(IC37) (IC76) (IC121)

DIP / SDIP
for 2.54 and 1.778mm pitch

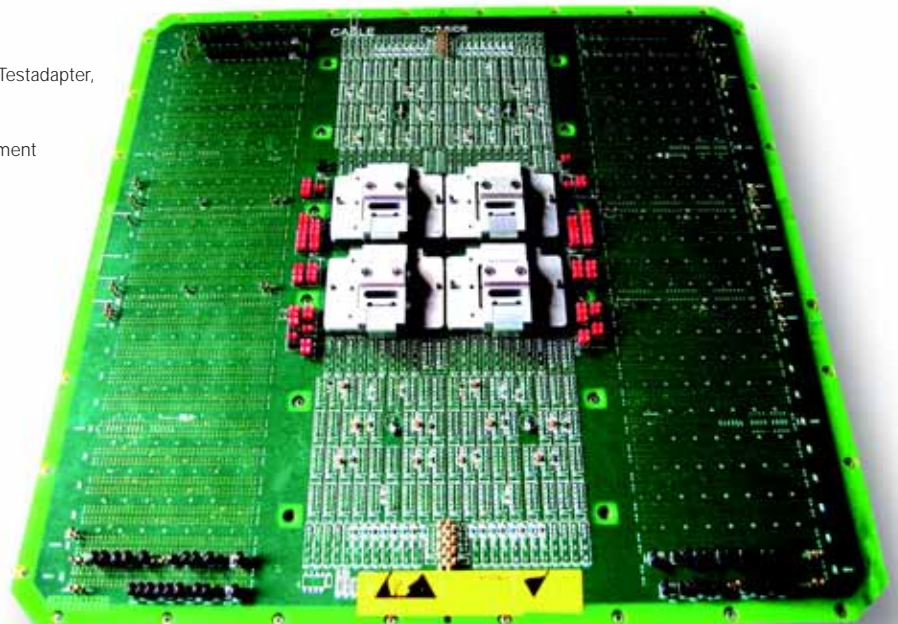
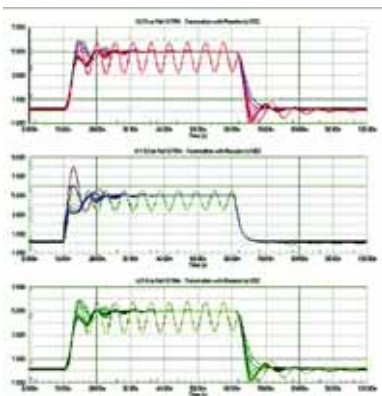
(IC100) (IC107)

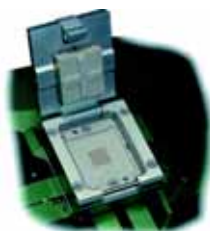
SOJ low insertion force socket for dead and
live bug loading

Another Dimension

PCB Designs

- In-house design and development department
- Fifteen years experiences in test application development (Soft- and Hardware) of Analog- and Mixed Signal integrated circuits
- Exceptional expertise in DUT-Boards, Loadboards / Testboards, Testadapter, Burn-In Boards and Life Test Boards (HAST)
- High-end simulation tool, and state-of-the-art test and lab equipment
- Design and workflows
- Familiar with production test flow and qualification procedures
- Wide range of design variants possible
- Cutting edge design and Manufacturing tools
- Fully tested turnkey solutions





Test Contactors Solutions

(YED274) (YED254) (YED900)

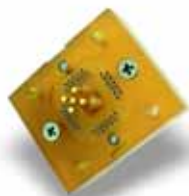
Spring probe contactors for manual and automatic test systems pre-test and HAST applications.

Probe pin sockets in various types and styles

Our contactors can be designed for customer specific requirements.

Socket production in milling and moulded variations

System designs incorporating sockets and boards (Load/DUT, Burn-In, HAST)



Receptacles

Test socket extensions for various footprints and pitches



QFN Packages

(QFN) (NP445) (NP473) (NP506)

Open Top and Clamshell
Leadless Quad Flat Package
0.40 to 1.27mm pitch

Inline Packages

(IC176)*

Single inline memory modules
available with various pin counts

(IC438)*

Dual inline memory modules
pin counts 72 to 240 and
pitches 0.5 to 1.27mm

(IC182)*

For Zig-Zag inline packages
with 1.27, 1.5, 1.78 and 2.54mm pitch

(IC299)

HF SMT Contactor
Y-Shaped contacts



Arrays

(NP276) to (NP383)

Clamshell and Open Top Sockets
for BGA / CSP with pitches from 0.4mm

(NP437) (NP481) (IC511)

Clamshell and Open Top
CSP 0.40mm pitch for SMT compressed mounting

(IC398)* (IC409)

Clamshell and Open Top
CSP 0.50mm pitch for SMT compressed mounting

(NP89) (NP236)

ZIF PGA / SPGA socket
with 3 point contact
system

* Other series and designs are available

AdvancedMC Connectors



AdvancedTCA - (CN074)

AdvancedTCA (Advanced Telecom Computing Architecture) is a series of specifications to support latest requirements of high end communication equipment. AdvancedTCA systems provide core applications with high reliability, availability and serviceability.

The AdvancedTCA shelf accepts up to 14 AdvancedTCA carrier boards (blades).

AdvancedMC (Advanced Mezzanine Card)

Are the primary components of AdvancedTCA and MicroTCA systems. They provide the system with their functional elements. One AdvancedTCA blade can accept up to 8 AdvancedMC's

AdvancedMC connectors for AdvancedTCA (Type B, B+, AB, A+B+)

CN074 supports data transfer between AdvancedMC and AdvancedTCA

Carrier Board (blade) at 12.5Gbps and beyond, optimizing the performance

of the AdvancedTCA system. CN074 not only covers the full range of standard

AdvancedMCs but also allows special pin configuration

to meet your specific needs. A new mid-size

A+B+ type is specially for use in 1U blades.



AdvancedCMT is the quality trademark of Yamaichi Electronics for connectors used in Advanced TCA® and MicroTCA®

 Speed

 Flexibility

 Reliability

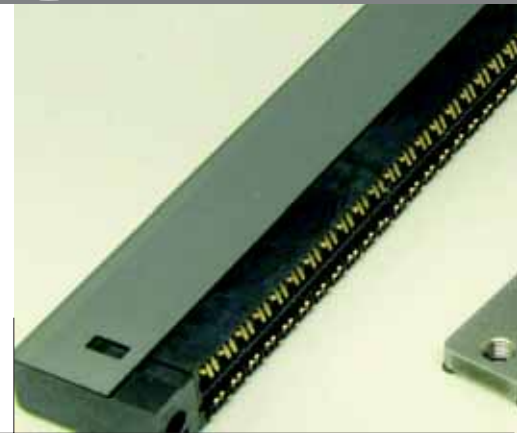


MicroTCA - (CN080)

AdvancedMC connectors for MicroTCA

CN080 carries data signals at 12.5Gbps and beyond between AdvancedMC and MicroTCA backplane.

CN080 is essential to bring the high-performance and reliability of AdvancedTCA to the MicroTCA systems.



MicroTCA - Micro Telecom Computing Architecture

MicroTCA is a series of specifications developed by PICMG to incorporate the key elements of AdvancedTCA for physically smaller edge applications that AdvancedTCA may not apply e.g. next generation equipment for industrial, medical, MIL/aerospace applications



MCH Plug - (CN084)

MicroTCA Carrier Hub Connectors

Different standard variations from single tongue up to four tongue are ready and available.

The modular design concept enables many custom variations.

MCH - MicroTCA Carrier Hub

For the management of the MicroTCA system the MicroTCA carrier hub (MCH) is used

The further Yamaichi product line for ATCA and MicroTCA also includes specific RJ45 and Power Connectors

High Speed Connectors

Non-ZIF High Speed Connector System

Connectors and matching cables for low voltage
Differential signal transmission (LVDS) up to 5 Gbps
Patented push insertion with automatic locking mechanism
Horizontal and vertical contact types

Applications

LVDS Transmission
Car Navigation Systems
Automised Test Equipment
Medical Imaging
Industrial Process Control
Network Systems
High-end Workstations
Digital TV, Studio Cameras
High Speed PC's and Set Top Boxes

High Speed Board Connectors

(HF507S)

- Data rates 5 Gbps possible
- 0.5mm pitch
- Various pin counts 21, 31, 41, 51
- 90° and 180°, shielded and unshielded versions



SPEED

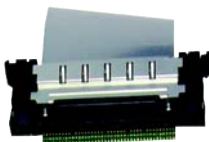
YFB Series Cable Features

- Flexible Printed Circuit - YFLEX®
- High speed transmission 10Gbps
- Differential impedance 100Ω
- Customized special for you application
- LCP based printed circuit cable
- Micro-strip line structure



YFT Series High Speed FFC Features

- High speed transmission 3Gbps
- Differential impedance 100Ω
- Long flexible cable length

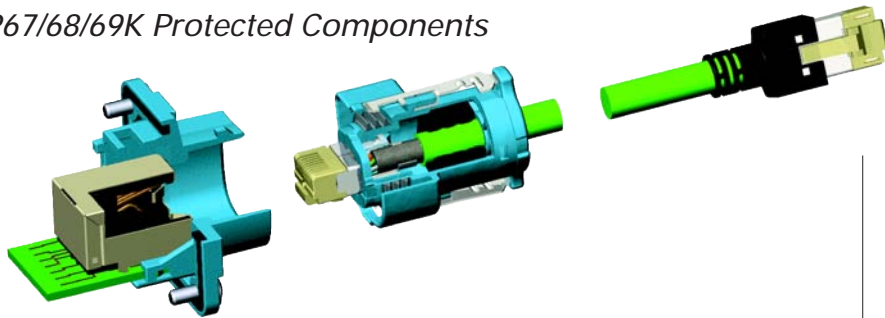


HF507P Adapter for Discrete Wire Features

- Shielded and unshielded version
- Highest flexibility: only adapter or the complete cable assembly can be ordered

Y-Con® Series

IP67/68/69K Protected Components



The Y-ConRJ45 system offers a connector solution for harsh environments and is available in IP20 and IP67/68/69K plastic and metal versions.

The unique addition of 2 power contacts has been integrated alongside the data contacts into both Y-Con plugs and jacks whilst still maintaining the RJ45 size standards, thus making this product fully backwards compatible.



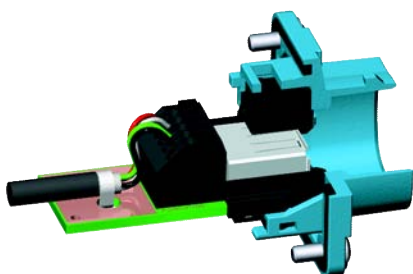
Another Dimension



Y-ConUSB and Y-ConIEEE build on the modular system concept of this series and offer a protected plug-and-play interface for harsh environments.

Using the tried and tested cover and flange from the RJ45 variant, these products offer IP67/68/69K protected high speed data transmission for industrial applications, be it for service functions or as a primary link.

The USB plugs and jacks are all to Hi-Speed standard, transmitting data at up to 480 Mbit/s and the IEEE components allow data rates up to 800 Mbit/s.



Cables and Assemblies / Y-Sol[®] Series



Approved flat and round cables are available in a large variety for all of Yamaichi's interface and internal connectors.

We offer you a complete service for cables and cable assemblies so as to meet customers specific requirements.

Our 100% electrically and mechanically tested cable assemblies enable you to reduce your internal costs of assembly, test, storing and incoming inspection.

Y-Sol[®] Series

Cable Connectors Y-SOL3 and Y-SOL4

are ready-made solar cable assemblies,
"ready-to-plug" in your PV installation.

They are designed according to the latest TÜV (VDE126-3) and UL requirements. The standard cables used are electron beam cross-linked Betaflam cables from Studer. For long life and highest possible weather resistance.



Y-SOL3
Ø 3mm contacts for the transmission of power up to 30A without locking



Y-SOL4
Ø 4mm contacts for the transmission of power up to 30A with locking

Universal J-Box for Silicon Wafer Modules

The Y-Sol[®] Universal J-Box is a junction box featuring SMD diode technology. It is designed according to the latest TÜV (VDE126-5) and UL requirements.

The J-Box can be connected to the panel either by spring force or soldering.

The J-Box design allows automated assembly in an assembly line.

Up to 6 bypass SMD diodes can be integrated as per customer requirements (protection against overheating through shadowing).

Patent Pending*) on contact design.



Universal J-Box for Thin Film Modules

The Y-Sol[®] Thin Film J-Box is a junction box for the automatic assembly on

Thin Film wafer modules. It is designed according to the latest TÜV (VDE126-5) and UL requirements.

The contacting is realised through spring loaded contacts when putting on the lid. One bypass SMD diode

can be integrated optionally as per customer requirement

(protection against overheating through shadowing).

Patent Pending*) on contact design.



Internal Connectors



Internal Connectors

Yamaichi offers a wide range of internal connectors for Board-to-Board and Board-to-Cable connection.

This includes also different types of pitches as well as vertical and horizontal connectors

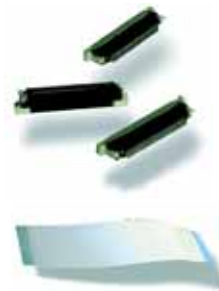
Y-Lock with Pullforce Locking (Y-LPF-C1) (Y-LPF-C5)

- New design for an easy, quick and secure assembly for a Board-to-Board solution
- "One-push lock" system
- Locking mechanism by use of small hooks at the board connector
- Use of standard FFC/FPC with supporting tape
- Reliable contact design
- Very compact size
- Horizontal and vertical types with 0.5 and 1.0mm pitches
- Optional use of an additional stiffener to avoid wrong mating and for high contact security.



ZIF Connectors - (FPC-96212) (FPC-98210)

- 90° and 180° versions
- 0.5 and 1.0mm pitches
- Top and bottom contacts
- "Drawer" for FPC locking
- Matching FFC cable



Another Dimension



(RDP / RDS)*

0.5mm pitch
B-t-B connectors



(NFS / NFP / NDS / NDP / NS* / NP*)

1.27mm pitch, B-to-C
and B-to-B connector series,
low profile and IDC for
25 MIL flat ribbon cable



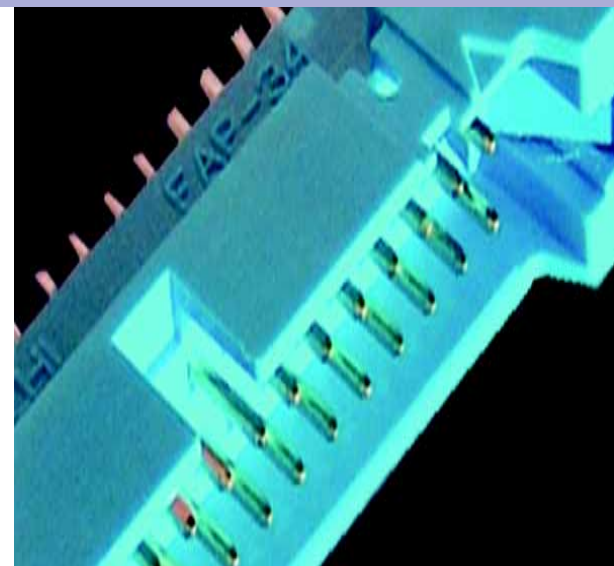
(ZS / ZP)*

2.00mm pitch connector series
for B-to-B and B-to-C, IDC for
1.00mm flat ribbon cable



(FAS / FAP / FCP / FGP / FS* / FP* / UFS)

DIN41651 2.54mm pitch MIL type connector
series, IDC for 50MIL flat ribbon cable



Powerline Connectors

BoardFit3.0 / BoardFit4.2 (P3 / P4)*

Pitches of 3.0mm and 4.2mm B-t-B and B-t-C
connectors in SMT, TH and crimp type connection,
for high current applications up to 5A (P3) and 9A (P4)



MatchCon (M)*

B-t-B and B-t-C solutions 1.27mm pitch
with high contact forces. No fretting and
movements will be absorbed



* Trading Division products

I/O Connectors

(USB)*

USB: A & B type connector series

Mini USB: 4, 5, and 8 pin connector series

Acc. to USB 1.1 and 2.0 standards

(GBS / GBP)*

IEEE1394 connectors

(SAS)*

SAS Receptacles according to SAS standards

(HDMI)* (DVI)*

HDMI connectors

DVI -I and DVI- D plugs and Receptacles.

DVI / VGA adapter

(MDIN)*

MiniDIN circular connectors and receptacles for PCB and panel mount in various designs

(LJE / AJ / TS)*

Earphone and Modular Jacks in various designs in THT and SMT

SCSI Connectors

(NHS / NHP / NHA / RCS / RCP)

1.27mm pitch interface connectors and covers in various designs according to SCSI-2 / -3 and -4 standards

D-Sub (HD and Standard)

(CT / DR / DS / DD)*

Standard and High Density D-Sub connector series and covers

MiniDeltaRibbon

(NCS / NCP / NHA)

1.27mm pitch Mini Delta Ribbon interface connectors and covers in various designs

Battery and 2-Way Miniature Connectors

(CN032) (CN036S)

Another Dimension

* Trading Division products

Card Connectors



microSD - (PJS008)

microSD Card Reader top mount and reversed type with push / push eject mechanism also microSD-to-miniSD adapter



SD / MMC - (FPS009)

Secure Digital and MultiMediaCard connectors manual and push / push eject types. Low profile versions, top mount and reversed types



miniSD - (NMS011)

miniSD Card Reader with push / push eject mechanism. Top mount and reversed types as well as miniSD-to-SD adapter



Another Dimension

Card Connectors

Yamaichi offers a wide product range of Card Readers for all main Flash Memory card types as well as for SIM cards and PCMCIA applications. This high variety from Yamaichi Electronics is able to fulfill the customers requirements in individual applications. Different technologies like the innovative Two-point contact system also offer many advantages



SIM - 8 Pin (FMS008)

Manual and push/push types with different heights and ultra low profiles also the possibility of a SIM with separate switch



SIM - 6 Pin (FMS006)

Push / push, push / lock and push-cover connectors with and without switch also reverse tray type



Combination Connectors - (JCS) (FRS)

2-in-1 for MS / Memory stick
2-in-1 for microSD / SIM
4-in-1 for MS / SD / MMC / xD cards
5-in-1 for MS / SD / MMC / SM / xD cards



PCMCIA (CNS / CNT)*

PCMCIA II slot connectors in SMT or TH
Single and double deck versions



SmartMedia - (CN015)

Card connector system for SSFDC - SmartMedia Card,



MMCmicro - (PGS010)

MMCmicro top mount with push / push ejector,



Compact Flash - (CF)*

Compact Flash, SMT connectors standard and slim types I & II with or without ejector

* Trading Division products

Production Sockets

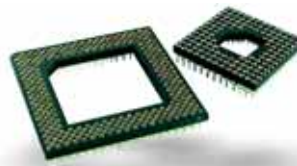
Packages



SOP (IC179)

Low profile SMT socket
with 28 to 44 pins for SOP

Yamaichi production and pre-series trial sockets are for a variety of semiconductor packages, from various manufactures, and offer extended or manual handling, depending on the series.



Arrays

(YED122 / YED210)

Very low insertion force socket
for PGA / SPGA with 6 finger contact

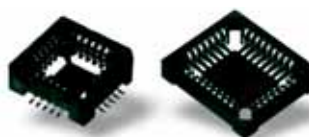


QFP



QFP (IC149 / ICP)

QFP, sockets (SMT) with almost identical
PCB layout and emulation adapter



PLCC (IC160)

Low profile PLCC, SMT production sockets
for automatic handling

Contact Addresses



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