

IBC 2807

6U cPCI Single-Slot Intel Pentium-M Server Blade

PICMG 2.16 Compliant



Ordering Information

IBC 2807 -1600-Mx

1.6GHz Pentium-M

IBC 2807 -1800-Mx

1.8GHz Pentium-M

IBC 2807 -1600-Mx-1

1.6GHz Pentium-M, no support for SCSI

IBC 2807 -1800-Mx-1

1.8GHz Pentium-M, no support for SCSI

Mx = size of SDRAM memory
Up to 2GB

IBC2707

Rear I/O Transition Board for IBC2807 with SCSI

IBC2707-1

Rear I/O Transition Board for IBC2807 without SCSI

Specifications

Microprocessor

- Single Pentium-M processor at speeds up to 1.8GHz
- Supports future Intel speed upgrades

Cache

- 32KB L1 Instruction and Data Cache
- up to 2MB L2 Advanced Transfer Cache

Chipset

- E7501/ICH4 chipset
- 400 MHz FSB - 1.6 GB/s bandwidth

Memory

- Up to 2GB DDR200/266 SDRAM
- Registered, ECC

PCI Mezzanine Card (PMC) Extension

- 32/64-bit 33/66 MHz PCI slot on board
- PICMG 2.3 R1.0 compliant

CompactPCI Bus Master

- 32-bit/33 MHz : up to 7 expansion slots
- 64-bit/66 MHz : up to 4 expansion slots
- Stand-alone mode to operate as server blade

Onboard Storage options

- 2.5"HDD up to 80GB, or
- CompactFlash device up to 1GB, or
- MicroDrive device up to 4GB

Dual SCSI interface option (available on IBC2706)

- Dual Adaptec 7902 Ultra320 SCSI controller
- 1GB/s Hub Link 2.0 interface via J4 connector
- Rear accessible only

BIOS

- AMI BIOS version 8
- Boot from network, USB, IDE or SCSI
- Console redirection to support headless operation

Hot Swap and IPMI Support

- PICMG 2.1 Hot Swap
- PICMG2.12 Hot Swap Infrastructure
- PICMG 2.12 Intelligent Platform Management Interface

Quad Ethernet Interfaces

- Two Intel 82546EB GigaBit Ethernet controllers on a 64-bit/100MHz PCI-X bus
- Two 10/100/1000Base-T Ethernet ports accessible via RJ-45 connector for external I/O (channel A)
- Two 10/100/1000Base-T Ethernet ports provide PICMG 2.16 Packet Switching Backplane capability (channel B)

Video Interface

- ATI® M6-C16H video controller with 16MB integrated video DDR memory
- Support resolution up to 1600 x 1200 (UXGA)

Dual ATA/100 Interfaces

- Each interface supports up to two IDE drives
- Support synchronous ATA mode transfers up to 100MB/s
- Rear access only via IBC2706

Quad USB 2.0 ports

- Two front accessible USB 2.0 ports
- Two rear accessible USB 2.0 ports

Standard I/O

- Floppy drive interface
- Two high-speed serial ports
- PS/2 mouse/keyboard interface (rear access only)
- Programmable watchdog timer

Mechanicals

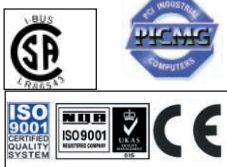
- 1-Slot (4HP) x 6U **CompactPCI®** Compliant
- **CompactPCI®** compliant Rear I/O board

Operating Environment

- Operating temperature: 0 ~ 55 degree C
- Storage temperature: -20 ~ 70 degree C
- Cooling: Passive heat Sink

Approvals

- UL1950, CAN/CSA Number 950-95
- EN55022:1994/A2:1997 Class A
- EN55024, EN6100-6-2:1999, EN61000-3-2:2001



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The IBC2807 is a compact PCI server blade with the Intel Pentium M processor CPU on board to comply with CompactPCI Packet Switching Backplane (cPSB) systems. Supporting the PICMG 2.16 specification, it is an ideal platform for the emerging switch-fabric applications blade server, mission critical and computing intensive applications such as third-generation (3G) wireless, voice over internet protocol (VoIP), networking image processing, and other demanding telecom/data communication applications.

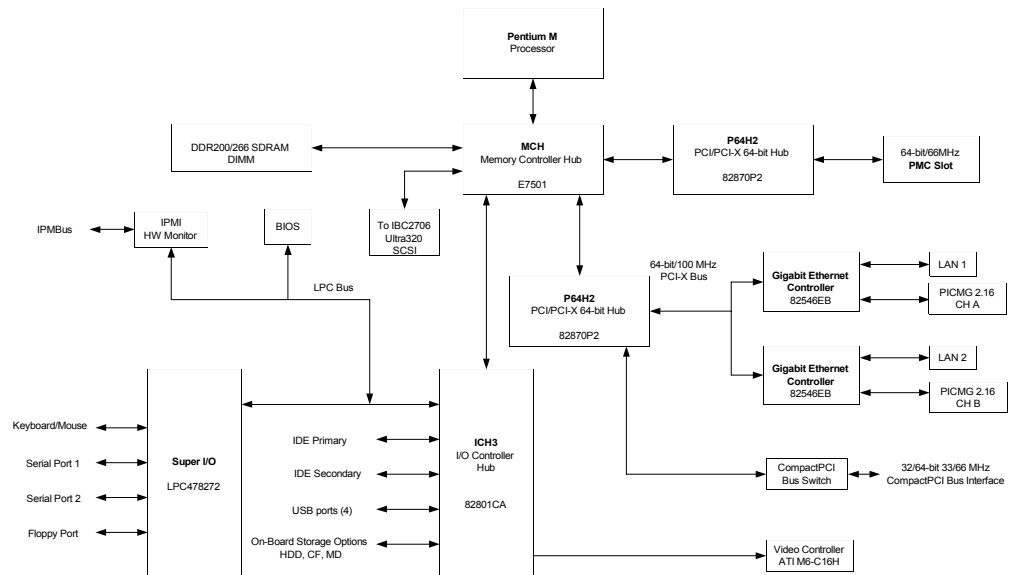
The IBC2807 architecture meets customer's high performance requirements for both CPU's and I/O's. The new IBC2807 has been optimized for the Intel Pentium M processor and Intel E7501 chipset. It represents the next step in high performance platforms with minimum heat dissipation, delivering uncompromising performance with a high performance micro architecture which includes 32KB L1 Instruction and Data Caches, up to 2MB L2 Advanced Transfer Cache, and dual high performance DDR memory channels across a 400 MHz Front Side System Bus. It also provide four Gigabit Ethernet channels ; two dedicated to external upload and download traffic, two connect to the the PICMG 2.16 Packet Switching Backplane for inter-server transfers. With on-board 2.5 " HDD, each blade server may include up to 80GB of high performance disk storage for operating system and applications. With the 2707 RIO board option, two Ultra320 SCSI controllers may be added to the system platform for connecting to a very large capacity external RAID subsystem.

As the mission-critical demand increases in the next generation networking and telecommunication equipments, the IBC2807 is optimized to play as a system master in a cPCI system platform. It could also reside in a peripheral slot as a standalone server blade, isolated from the cPCI bus, communicating with other blades in the system through Gigabit Ethernet switching fabric on the back plane. The IBC2807 is designed in compliance with PICMG 2.1, R 2.0 Hot Swap specification and PICMG 2.12, R 2.0 Hot Swap Infrastructure specification. It supports Intelligent Platform Management Interface (IPMI) as specified in PICMG 2.9.

IBC2707



IBC2807 Block Diagram



■ For Further Information



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