



CPCI-7808

Intel® Pentium® M/Celeron® M Universal CompactPCI® Single Board Computer

Features

- Processor speeds up to 1.8 GHz
- Up to 2 GB DDR SDRAM
- IDE Interface for hard disk drive and Compact-Flash support via rear I/O
- Dual 10/100/1000BaseTX Ethernet
- 64-bit/66 MHz CompactPCI bus interface
- Integrated video controller
- VGA and digital LVDS video available via rear I/O
- User programmable watchdog timer
- Operating system support for Windows® 2000, Windows XP, QNX®, Linux®, and VxWorks®

The CPCI-7808 is GE Fanuc Embedded Systems' answer to the expanding array of embedded computing challenges facing many industries today. This SBC is the market leader in performance, with benefits including:

- User configurable PICMG® 2.16, providing Ethernet across the backplane as well as supporting IPMI PICMG 2.9
- Pentium M 1.4 GHz option for the most power sensitive applications
- Extensive serial connections via optional rear transition board allows for utmost flexibility

GE Fanuc Embedded Systems' CPCI-7808 is a single slot CompactPCI single board computer (SBC) that offers low power consumption via Intel's Pentium M, but still delivers a solution with the robustness, reliability and high performance required for your demanding embedded computing applications. The CPCI-7808 features a 400 MHz system bus and incorporates Intel's 855GME graphics memory controller with up to 2 GB Dual Data Rate (DDR) SDRAM.

The CPCI-7808 is ideal for I/O intensive applications, offering dual PMC sites (64-bit/66 MHz PCI and 32-bit/33 MHz PCI), parallel and serial ATA, CompactFlash option (available on rear transition utility board), dual integrated serial ports, and three USB ports.

Specifications

CPU

- Intel Pentium M processor with 1.6 GHz or 1.8 GHz
- Advanced L2 cache
 - 2 MB (1.8 GHz Pentium M)
 - 1 MB (1.6 GHz Pentium M)
- 400 MHz system bus
- Utilizes the Intel 855GME chipset and Intel 6300ESB I/O controller hub

SDRAM

- Up to 2 GB DDR2 SDRAM via one SODIMM

Compact Flash

- Up to 1 GB of CompactFlash via the optional ACC-0591

Ethernet

- Two 10/100/1000BaseT Ethernet ports
 - Front panel Ethernet Interface is software selectable front or rear (PICMG 2.16)
 - Second interface is PICMG 2.16 compatible only
- Intel 82546EB Ethernet controller

Graphics

- Intel 855GME graphics memory controller
- Up to 1600 x 1200 resolution
- VGA and digital LVDS video available via rear I/O

PMC Expansion

- Two PMC expansion sites
 - No. 1 PMC site is 3.3 V 64-bit/66 MHz PCI
 - No. 2 PMC site is 5.0 V 32-bit/33 MHz PCI
- IEEE 1386.1 compliant

Serial Interfaces

- Two 16550-compatible serial ports
 - One accessible via RJ45 connector on front panel
 - Second serial port available via rear I/O



CPCI-7808 Intel® Universal CompactPCI® SBC

Specifications

Other Interfaces

- One USB 2.0 port on front panel
- Two USB 2.0 ports via rear panel
- Dual serial ATA via rear panel
- One PS/2 port for keyboard and mouse
- IDE and floppy disk support
- Hardware reset on front panel
- Status LEDs on front panel
- User programmable watchdog timer

PICMG

- Supports Intelligent Platform Management Interface (IPMI) architecture (PICMG 2.9 Rev. 1.5)
- High availability hot swap (PICMG 2.1 Rev. 2.0)
- Ethernet on the backplane (PICMG 2.16 Rev. 1.0)
- Universal signaling support (PICMG 2.0)

Front Panel Status LEDs

- Primary IDE interface activity
- Board status
- Power
- Hot swap
- LAN activity (located on each RJ45)

Operating System Support

- Windows 2000
- Windows XP
- QNX
- Linux
- VxWorks

Power Requirements (Pentium M 1.4 GHz)

- +5 VDC (+5%, -3%), 3.2 A (typical), 6.4 A maximum
- +3.3 VDC (+5%, -3%), 2.1 A (typical), 4.2 A maximum
- ±12 VDC (+5%, -3%), 50 mA maximum

Power Requirements (All Other Processors)

- +5 VDC (+5%, -3%), 4A (typical), 8.8 A maximum
- +3.3 VDC (+5%, -3%), 2.1 A (typical), 5.2A maximum
- ±12 VDC (+5%, -3%), 50 mA maximum

Environmental Specifications

- Operating: up to 0° to +65° C
- Storage: -40° to +85° C
- Relative humidity: 5% to 95%, non-condensing

Shock

- 10 Gs, 16 ms half sine, 6 axis, 10 pulses each

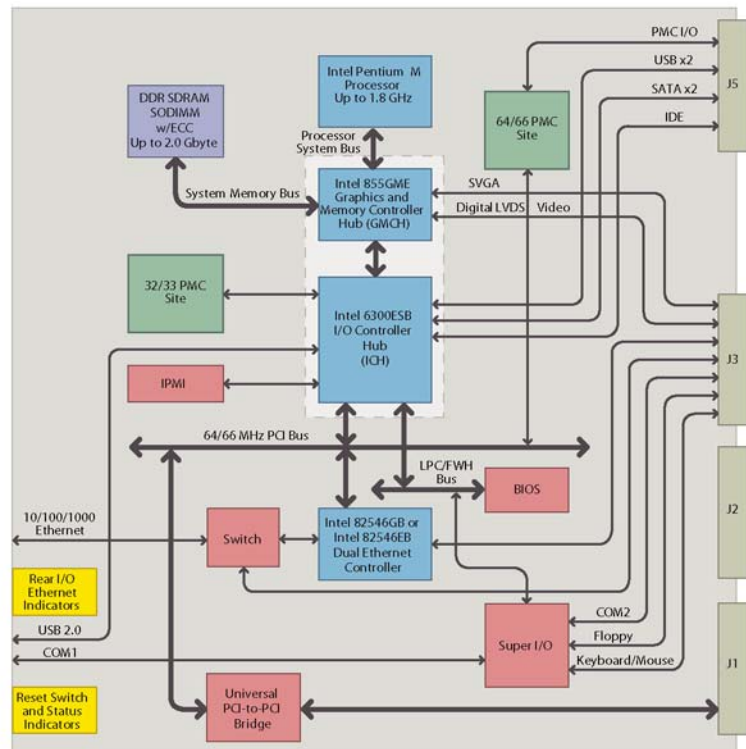
Vibration

- 6 Gs RMS (20 – 2000 Hz) random, 0.0185 G2 per Hz spectrum

Dimensions

- 6U single slot Eurocard form factor
- Height 9.2 in. (233.4mm)
- Depth 6.3 in. (160mm)
- Thickness 0.8 in. (20.3mm)

Block Diagram



Ordering Information

VMICPIC-7808-410000

6U CPCI PICMG 2.16 SBC with 1.6 GHz Pentium M processor, 512 MB DDR SODIMM, Ethernet, SATA, serial ports, PMC sites, 64-bit/66 MHz bus Interface, IPMI, USB

VMICPIC-7808-510000

6U CPCI PICMG 2.16 SBC with 1.8 GHz Pentium M, 1 GB DDR SDRAM, Ethernet, SATA, serial ports, PMC, 64-bit/66 MHz bus interface, IPMI, USB

CompactPCI Rear Transition Utility Board:

The ACC-0591 installs in the rear transition area of the CPCIbus backplane. The ACC-0591 is sold separately.

Note: All CPCI single board computer products come standard with a CPCI specification compliant front panel. Other OEM configurations are available, please contact the factory for additional ordering options.

About GE Fanuc

GE Fanuc Embedded Systems is a leading global provider of embedded computing solutions for a wide range of industries and applications. Our comprehensive product offering includes many types of I/O, single board computers, high performance signal processors, fully integrated, rugged systems including flat panel displays, plus high speed networking and communications products. The company is headquartered in the U.S. and has design, manufacturing and support offices throughout the world. Whether you're looking for one of our standard products or a fully custom solution, GE Fanuc Embedded Systems has the breadth, experience and 24/7 support to deliver what you need. For more information, visit www.gefanucembedded.com or call 1-800-GE Fanuc.

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Additional Resources

For more information, please visit the GE Fanuc Embedded Systems web site at:

www.gefanucembedded.com/

