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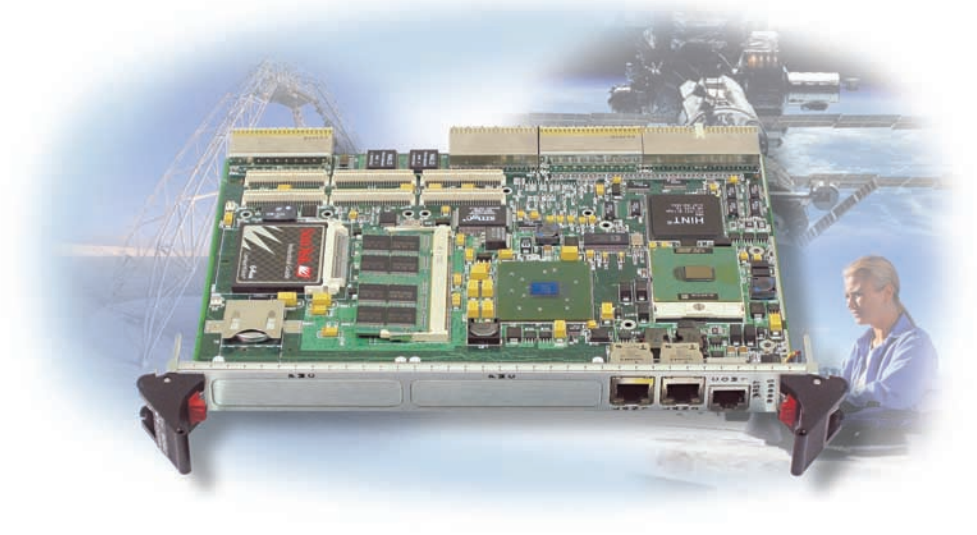
Embedded Systems



VMICPCI-7806

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

GE Fanuc's VMICPCI-7806 is a single slot CompactPCI® single board computer (SBC) offering low power consumption without compromising the robustness, reliability and high performance required for demanding embedded computing applications. Available with either Intel®'s Pentium® M or Celeron® M processor technology, the VMICPCI-7806 features a 400 MHz system bus and incorporates Intel's 855GME graphics memory controller with up to 1 Gbyte Dual Data Rate (DDR) SDRAM.

The VMICPCI-7806 is ideal for I/O intensive applications thanks to Intel's new highly integrated, small footprint 6300ESB I/O controller hub which provides dual PMC sites (64-bit/66 MHz PCI-X and 32-bit/33 MHz PCI), parallel and serial ATA, CompactFlash option, dual integrated serial ports, and dual USB ports.

Product Features

Fully compliant with PICMG® 2.16 CompactPCI Packet Switching Backplane (CompactPCI/PSB) specifications, the VMICPCI-7806 features two Gigabit Ethernet ports, two USB 2.0 ports, two high performance 16550-compatible serial ports, two PMC expansion sites, optional CompactFlash, and IDE and floppy drive interfaces. In addition, the VMICPCI-7806 supports the Intelligent Platform Management Interface (IPMI) architecture (PICMG 2.9).

Additional VMICPCI-7806 features:

- 6U single slot universal controller
- PICMG 2.1 Rev. 2.0 hot swap compliant
- Up to 1 Gbyte DDR SDRAM
- Up to 1 Gbyte CompactFlash
- 64-bit/66 MHz CompactPCI bus interface
- Integrated video controller
- VGA and digital LVDS video available via rear I/O
- User programmable watchdog timer
- Passive heat sink
- Operating system support for Windows® 2000, Windows XP, QNX®, Linux®, and VxWorks®

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VMICPCI-7806 Specifications:

- **CPU**
  - Intel Pentium M processor with either 1.6 GHz or 1.8 GHz or Intel Celeron M at 1.3 GHz
  - Advanced L2 cache
    - 2 MByte (1.8 GHz Pentium M)
    - 1 MByte (1.6 GHz Pentium M)
    - 512 KByte (1.3 GHz Celeron M)
  - 400 MHz system bus
  - Utilizes the Intel 855GME chipset and Intel 6300ESB I/O controller hub
- **SDRAM**
  - Up to 1 Gbyte DDR SDRAM via one SODIMM
- **CompactFlash**
  - Up to 1 Gbyte of CompactFlash
- **Ethernet**
  - Two 10/100/1000BaseT Ethernet ports
    - Software selectable front or rear (PICMG 2.16)
  - 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 64-bit/66 MHz PCI-X PMC
    - No. 2 PMC site is 32-bit/33 MHz PCI
  - IEEE 1386.1 compliant
- **Serial Interfaces**
  - Two 16550-compatible serial ports
    - one accessible via RJ45 connector on front panel
    - both accessible via rear panel
- **Other Interfaces**
  - Parallel and serial ATA via rear panel
  - Two USB 2.0 ports 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 Compliance**
  - Supports Intelligent Platform Management Interface (IPMI) architecture (PICMG 2.9 Rev. 1.0)
  - 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 Rev. 3.0)
- **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 Reuirements**
  - +5 VDC (+5%, -3%, 4.5 A (typical), 6.75 A maximum
  - +3.3 VDC, (+5%, -3%, 1.5 A (typical), 2.0 A maximum
  - +12 VDC (+5%, -3%), 50 mA maximum
  - -12 VDC (+5%, -3%), 50 mA maximum
- **Environmental Specifications**
  - Operating: 0 to +50 °C
  - Storage: -40 to +85 °C
  - Relative humidity: 5% to 95%, noncondensing
- **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
- **Mechanical Specifications**
  - 6U single slot Eurocard form factor
  - Height: 9.2 in. (233.4 mm)
  - Depth: 6.3 in. (160 mm)
  - Thickness: 0.8 in. (20.3 mm)

Ordering Options

October 26, 2004 800-657806-000 B	A	B	C	D	E	F
VMICPCI-7806 –				0	0	0

A = Processor
0 = Reserved
1 = 1.3 GHz Celeron M Processor
2 = 1.6 GHz Pentium M Processor
3 = 1.8 GHz Pentium M Processor

B = DDR SDRAM Memory
0 = 256 Mbyte
1 = 512 Mbyte
2 = 1 Gbyte
3 = Reserved

C = CompactFlash
0 = No CompactFlash
1 = 128 Mbyte CompactFlash
2 = 256 Mbyte CompactFlash
3 = 512 Mbyte CompactFlash
4 = 1 Gbyte CompactFlash

D through F = 0 (Options reserved for future use.)

CompactPCI Rear Transition Utility Board

VMIACC-0584

The VMIACC-0584 installs in the rear transition area of the CompactPCI backplane and provides access to IDE, floppy, COM 2, USB, video and keyboard/mouse functions. The VMIACC-0584 is sold separately.

For Ordering Information, Call:
1-800-322-3616 or 1-256-880-0444 • FAX (256) 882-0859
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Web Address: www.gefanuc.com/embedded

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