

CP3-Quad100TX

Hot Swap Capable Quad 10/100 Fast Ethernet Card

Features

- Four independent 10BaseT/100BaseTX Ethernet ports
- Full hot swap capability compliant with PICMG 2.1 revision 1.0
- 3U CompactPCI® format
- 64-bit /66 MHz PCI interface
- Combined data rate up to 800 Mb/s full duplex, 400 Mb/s half-duplex
- Front-panel I/O via RJ45
- Auto-negotiating protocol selection
- LED indicators for link and activity for all ports
- 3 Kbytes of transmit and 3 Kbytes of receive FIFOs for each port
- Drivers available for Windows® NT, VxWorks®, Linux®, and FreeBSD for Intel® x86 platforms
- VxWorks driver is available for PowerPC™ platforms.

CP3-Quad100TX is a full hot swap capable, 64-bit/66 MHz 10/100 Ethernet card for high-density 3U CompactPCI computing applications.

The CP3-Quad100TX provides four independent, high-performance 10BaseT/100BaseTX Ethernet interfaces. CP3-Quad100TX's 64-bit/66 MHz PCI interface supports 66 MHz host systems with no degradation of backplane performance. The single slot installation and compact design of the CP3-Quad100TX is well-suited for small, rackmounted systems.

The CP3-Quad100TX supports combined data rates of up to 800 Mb/s full-duplex and 400 Mb/s half-duplex. Back-to-back transmission with minimal interface latency is facilitated with 3 KB of transmit and 3 KB of receive FIFO for each port. The built-in Physical Layer Interface Unit in the Ethernet controller supports auto-negotiating protocol selection, collision detection, link detection, Manchester encoding/decoding (10BaseT), 4B/5B encoding/decoding (100BaseTX), and scrambling/descrambling (100BaseTX) as well as an auto-detection CSMA/DC interface controller. Four front-panel RJ45 connectors allow direct network connectivity. LED status indicators for monitoring the link and activity of each port are located on the front-panel. The Ethernet network interface complies with the IEEE 802.3 specification for 10BaseT and 100BaseTX.

The CP3-Quad100TX was designed for zero downtime tolerant applications where space is at a premium such as in the industrial automation, transportation, server, and telecommunications markets.

A VxWorks® driver for PowerPC platforms is available from SBS Technologies. Available drivers for Intel x86 platforms include: Windows® NT, Linux® (eeepro100 driver included in the kernel), and FreeBSD (driver included in the kernel).

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Specifications

Form Factor

- 3U CompactPCI

Full Hot Swap Conformance

- CompactPCI PICMG 2.1 R1.0 Hot Swap Specification

CPCI Conformance

- 32-bit CompactPCI Specification PICMG 2.1 R1.0

PCI Interface

- 32/64-bit, 33/66 MHz master and slave
- 3.3/5V signaling PCI Specification, Revision 2.2

PCI Controller

- Intel 21154

Number of Ports

- Four, independent

Ethernet Controllers

- Intel 82559ER

Protocols

- Ethernet 10BaseT
- Ethernet 100BaseTX

Receive/Transmit FIFOs

- 3 Kbytes each

Front Panel I/O Access

- Four RJ45

Indicators

- Activity, link

Power Requirements

- +5 VDC, 50 mA typical
- +3.3 VDC, 500 mA typical

Temperature

- Operating: 0° to 70°C
- Storage: -40° to +85°C

Humidity

- 5% to 95% non-condensing

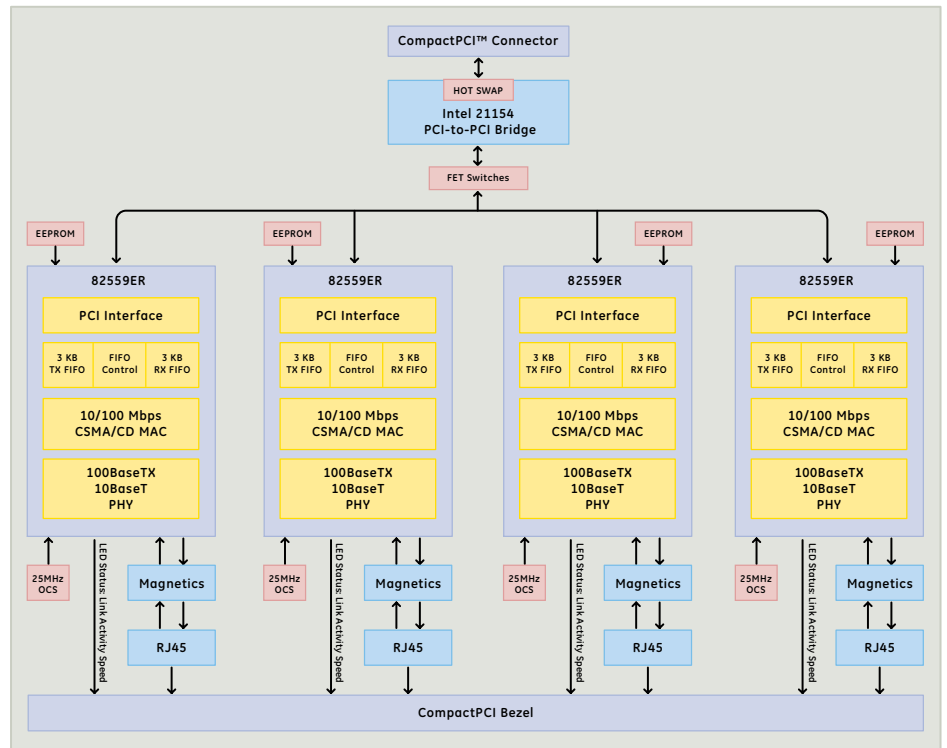
Weight

- 0.09 kg (0.2 lb)

Dimensions

- 100.0 mm x 160.0 mm

Block Diagram



Software Drivers

VxWorks 5.4

SBS Technologies (Model VD-FEIEND)

Windows® NT

Intel (<http://developer.intel.com/design/network/drivers/82559erdrivers17.htm>)

Linux

EEPRO 100 Driver included in the kernel

FreeBSD

Driver included in the kernel

About GE Fanuc Embedded Systems

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.

GE Fanuc Embedded Systems Information Centers

Americas:
1 800 322 3616 or 1 256 880 0444

Asia Pacific:
86 10 6561 1561

Europe, Middle East and Africa:
+49 821 5034-0

Additional Resources

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

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