EM440

PCI Quartet[™]

10/100

Fast Ethernet

LAN Adapter

Features

- Supports 10 Mbits/sec. system throughput for IEEE 802.3 10BASE-T networks
- Supports 100 Mbits/sec. system throughput for IEEE 802.3u 100BASE-T4 networks
- Full Duplex 20 Mbits/sec. on 10BASE-T supports cumulative 80 Mbits/sec. system throughput
- NWAY compatible AutoSensing of maximum line speed
- Easy migration from 10BASE-T to 100BASE-T4 Fast Ethernet
- Runs on Category 3, 4, or 5 UTP cable for maximum compatibility
- 132 MBytes/sec. burst data rate across the PCI bus for maximum performance and low CPU utilization
- Self-configuring design for "plug and go" operation
- Integrated 2 KByte transmit and 4 KByte receive FIFOs (First In, First Out memory) on each channel
- Predictive Pipelining[™] for greater throughput with lower CPU utilization
- All popular networks supported
- Comprehensive setup and diagnostics utility
- Limited lifetime warranty



Quartet/440 is the ultimate performance adapter for PCI servers on 100 Mbit/sec. Fast Ethernet networks. With four channels on a single board and support for voice grade CAT 3 UTP cabling, Quartet/440 has the features today's 32-bit Fast Ethernet servers need to handle the most demanding networks. Quartet/440 can support **up to four network segments on separate channels**– for cumulative throughput of **400 Mbits/sec.** This high speed adapter multiplies flexibility, performance and cabling compatibility **by four** to provide the easiest migration possible from 10BASE-T to 100BASE-T4 Fast Ethernet.

AutoSense configuration provides flexibility

The AutoSense feature of Quartet/440 allows the adapter to detect the maximum line speed of your network automatically. Simply connect the Quartet/440 into any existing 10BASE-T or 100BASE-T4 network device of any speed; no adapter configuration is necessary. For maximum flexibility, this AutoSense feature is compatible with all 10 and 100 Mbits/sec. devices, including those without NWAY line speed negotiation.

Catagory 3 UTP support provides low-cost upgrade

T4 support means that you don't have to upgrade your cabling plant. Quartet/440 will run on the voice grade cable you are currently using for 10BASE-T. Run the Quartet/440 now at 10 Mbits/sec., or 20Mbits/sec. Full Duplex, and in the future run at 100 Mbits/sec. using the same adapter and the same cable.

Design innovation for Fast Ethernet

Quartet/440 moves large amounts of data across multiple network segments simultaneously using a combination of high throughput and low CPU utilization. Independent 2 KByte transmit and 4 KByte receive FIFOs (First In, First Out memory) on-board for each channel, and powerful DMA capability mean that Quartet/440 can handle increased bus latencies with decreased sensitivity to load.

Quartet/440 uses an on-board PCI-to-PCI bridge to extend the machine's internal PCI bus. This easy-to-use design is like having the power of four Fast Ethernet adapters, all operating at full cable bandwidth within your system, while using only one slot.

EM440 PCI Quartet™ 10/100 Fast Ethernet LAN Adapter

Product Specifications

Systems Supported PCI Local Bus servers, based on Intel, DEC Alpha, MIPS, and PowerPC processors

Bus Interface PCI, 32-bit bus master

Ethernet Controller DECchip® 21140 LAN coprocessor chip

Hardware Interrupts PCI interrupt A supports shared interrupts

Base IO or Memory Address Assigned by BIOS

PCI Configuration Space Supports DWORD, WORD, and BYTE access

Reliability Calculated MTBF>100,000 hours

Power Requirements +5 volts @ 3.5 Amp. max.

Environmental Operating Range

Temperature: 0°C to 50°C Relative Humidity: 5% to 85% non-condensing Altitude: 3000m maximum

Interface Connections RJ-45 female (4) supports CAT 3, 4, and 5 UTP and STP Type 1 cabling Dimensions

12" x 4.2" (conforms to PCI Long Card specification)

Standards Compliance IEEE 802.3u 10BASE-T IEEE 802.3u 100BASE-T4

Drivers Available

3.5" diskette NetWare 3.x, 4.x, IBM LAN Server, OS/2 Warp, Windows NT for Intel, DEC Alpha, MIPS, and PowerPC

Diagnostic LEDs Link Integrity for each channel Network Activity for each channel

Warranty All EMASTER+ series adapters are protected by a limited lifetime warranty

Ordering InformationOrder NumberConnectorsEM440RJ-45 (4)

Made in U.S.A.

Your local Cogent dealer is:

Cogent offers Ethernet products to meet every adapter and repeater environment, including 10BASE-2, 10BASE-T, 100BASE-TX, 100BASE-T4, and 100BASE-FX (fiber).

Cogent Sales

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