

EM400

PCI Quartet™

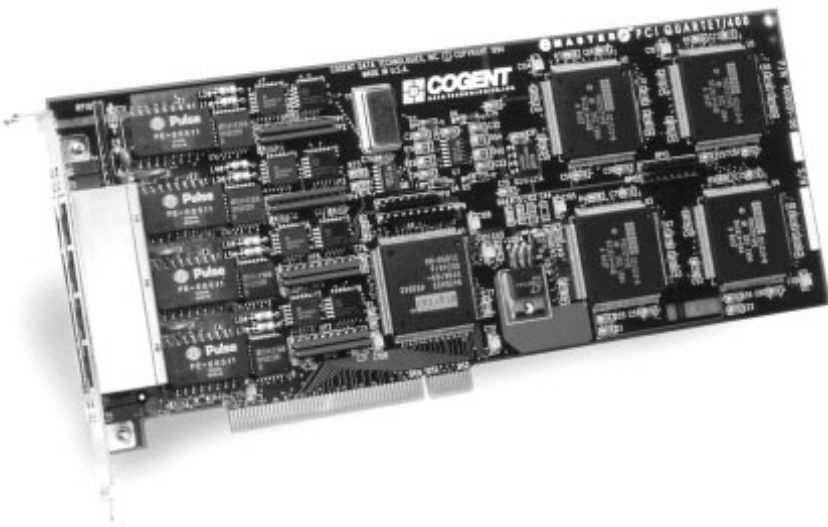
Fast Ethernet

LAN Adapter

PCI Quartet/400

Features

- Supports 100 Mbits/sec. system throughput for IEEE 802.3u 100BASE-TX networks
- Four connectors support four separate network segments
- 132 MBytes/sec. burst data rate across the PCI bus
- Efficient 32-bit bus mastering design enables data transfers across the bus at maximum transfer rates without putting a load on the host CPU
- Predictive Pipelining™ for greater throughput with lower CPU utilization
- Self-configuring design for "plug and go" operation
- Full Duplex capability supports cumulative 800 Mbits/sec. system throughput for switched Ethernet networks (200 Mbits/sec. per channel)
- Four sequential node IDs may be customized at load time
- Drivers for popular networks including NetWare® 3.x, NetWare 4.x, Windows NT™
- Limited lifetime warranty



EM400

PCI Quartet™ Fast Ethernet LAN Adapter

*Quartet/400 is the ultimate performance adapter for PCI servers on 100 Mbit/sec. Fast Ethernet networks. With four channels on a single board and optional Full Duplex support, Quartet/400 has the features today's 32-bit Fast Ethernet servers need to handle Microsoft Windows, graphics, multimedia, database, and mission-critical applications. This innovative adapter provides ample bandwidth for even the most demanding networks. Quartet/400 can support **up to four network segments on separate channels**—for cumulative throughput of **400-800 Mbts/sec.** Add to this the advantages of the PCI Local Bus architecture, and Quartet/400 is clearly the superior Fast Ethernet solution.*

The ultimate innovation in Fast Ethernet

Ten times faster than traditional 10 Mbit/sec. Ethernet adapters, the Quartet/400 adapter is ideal for servers which need high throughput and low CPU utilization to power large amounts of data across the network. 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/400 can handle increased bus latencies with decreased sensitivity to load.

Quartet/400 uses an on-board PCI-to-PCI bridge to extend the machine's internal PCI bus. This minimizes the load on the PCI bus and makes it possible for Quartet/400 to support all four network channels at full cable bandwidth. Each channel is fully independent, and transparent to BIOS except during configuration.

For maximum throughput, Quartet/400 includes Full Duplex Fast Ethernet (FDPE) capability which doubles the cumulative system throughput rate in switched Ethernet networks. FDPE support is easily enabled on each port via software configuration. The Quartet/400 adapter has completely independent transmit and receive circuitry for true 200 Mbts/sec. operation **on each channel** at Minimum Interframe Spacing. Maximum throughput with FDPE on all four channels is **800 Mbts/sec.** Full Duplex Fast Ethernet servers provide workstations with the maximum performance advantage.

Product Specifications

Systems Supported

PCI Local Bus servers, based on Intel, DEC Alpha, MIPS processors in 100BASE-TX networks

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.
Installs in 5.5v PCI slot

Environmental Operating Range

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

Interface Connections

RJ-45 female, supports CAT 3 STP, CAT 5 UTP, and CAT 5 STP cabling

Dimensions

9.75" x 4" (conforms to PCI Long Card specification)

Standards Compliance

IEEE 802.3u 100BASE-TX

Drivers Available

NetWare 3.x, 4.x, SCO UNIX*, IBM LAN Server*, ODI for Windows NT
NDIS 3: Windows NT, Windows NT for DEC Alpha
*Call for availability

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 Information

Order Number	Connectors
EM400	four UTP

Made in U.S.A.

Your local Cogent dealer is:

Cogent Sales

15375 SE 30th Place, Suite 310
Bellevue, WA 98007 U.S.A.
Tel (206) 603-0333
Toll-free in U.S. 1-800-426-4368
Fax (206) 603-9223
E-mail sales@coindentdata.com

Cogent Corporate

175 West St. P.O. Box 926
Friday Harbor, WA 98250 U.S.A.
Tel (360) 378-2929
Fax (360) 378-2882

Cogent Europe

Rosenstraße 7
80331 Munich Germany
Tel [49] 89/231138-88
Fax [49] 89/231138-11

