EM964
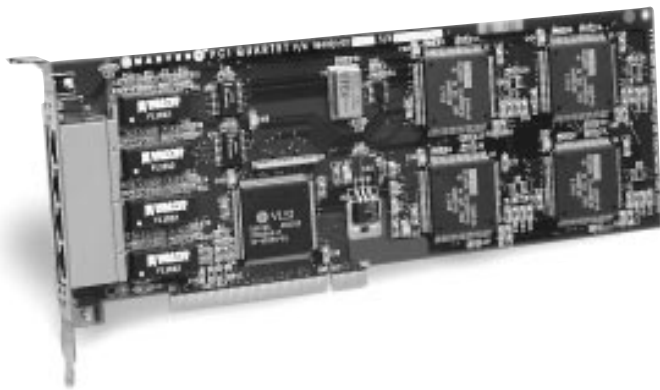
PCI

Quartet™

Ethernet

LAN

Adapter

PCI Quartet

Features

- 132 MBytes/sec. (33 MHz) burst data rate across the PCI bus

- Self-configuring design for "plug and go" operation

- FDE design supports cumulative 80 Mbits/sec. system throughput for switched Ethernet networks (20 Mbits/sec. per port)

- Efficient bus mastering design minimizes CPU utilization

- Predictive Pipelining™ for greater throughput with lower CPU utilization

- Four connectors support four separate network segments at full cable bandwidth

- Four sequential node IDs may be customized at load time

- Server Drivers for all popular networks

- Limited lifetime warranty

cogent®

EM964

PCI Quartet Ethernet LAN Adapter

*EM964 PCI Quartet is a 32-bit bus mastering Ethernet adapter which simply and cost-effectively optimizes PCI Local Bus server performance. The EM964 PCI Quartet adapter can support **up to four network segments on separate channels**— all at full cable bandwidth.*

The advanced solution for expanding networks

Like most PC bus architectures, PCI is electronically limited by the number of slots it can support. PCI machines can have a maximum of five slots, but many have only two or three PCI slots. This restricts the number of network segments a PCI server can handle. The Quartet's four-channel design solves this problem and gives PCI servers the power of four Ethernet adapters in a single board.

Quartet 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 EM964 PCI Quartet to support all four network channel at full cable bandwidth. Each channel is fully independent, and transparent to BIOS except during configuration.

Full Duplex Ethernet (FDE) capability can be easily enabled for each channel to double the cumulative system throughput in switched Ethernet networks. The Quartet adapter has completely independent transmit and receive circuitry for true 20 Mbits/sec. operation **on each channel** at Minimum Interframe Spacing. Cumulative throughput with FDE on all four channels is **80 Mbits/sec.** Full Duplex Ethernet servers using the Quartet adapter can handle receive and transmit requests simultaneously. As a result, workstations can take advantage of faster service.

Product Specifications

Systems Supported
PCI Local Bus IBM PCs or compatible, Intel-, DEC Alpha-, MIPS-based computers

Bus Interface
PCI, 32-bit bus master

Ethernet Controller
DECchip® 21040-AA LAN coprocessor chip

Hardware Interrupts
PCI interrupt A
supports shared interrupts

Base IO or Memory Address
Assigned by BIOS

Reliability
Calculated MTBF>100,000 hours

Power Requirements
+5 volts @ 2 Amp. max.
+5 volts @ 3.5 Amp. max. (EM964 BNC only)

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

Interface Connections
RJ-45 female, BNC

Dimensions
9.75" x 4" (conforms to PCI Long Card specifications)

Standards Compliance
IEEE 802.3 10BASE-2
IEEE 802.3 10BASE-T
FCC A, CE A

Drivers Available
3.5" diskette - Novell NetWare, Windows NT, Windows 95, NDIS 2.0

Diagnostic LEDs
Link Integrity
Network Activity

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

Ordering Information

Order Number	Connectors
EM964 TP	four UTP
EM964 BNC	four BNC

Made in U.S.A.

Your local Cogent dealer is:

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