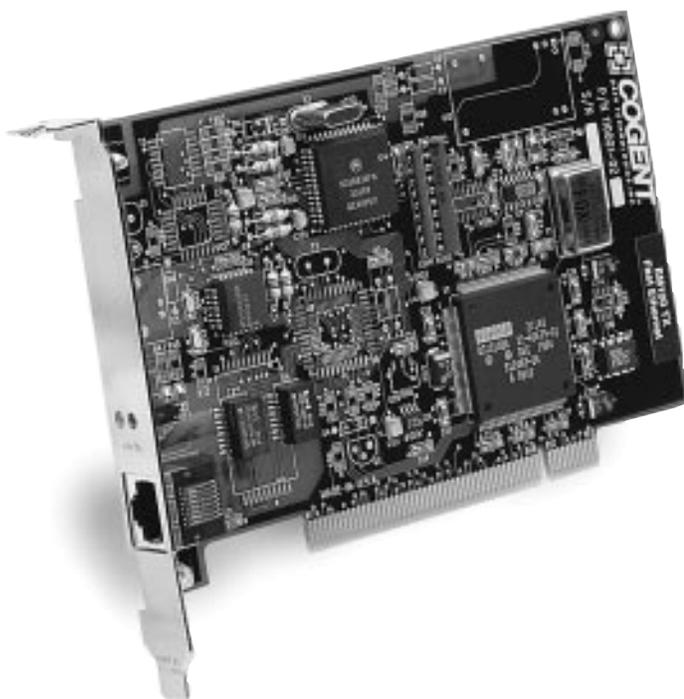**TX**

EM100 TX

Fast Ethernet

Adapters

Fast Ethernet

EM100 TX ISA, EISA and PCI Adapters

- Support for 100 Mbits/sec. IEEE 802.3u 100BASE-TX standard

- Low-cost, single-speed design targeted at Fast Ethernet-only Networks

- Predictive Pipelining™ for greater throughput with lower CPU utilization

- All popular networks supported

- Comprehensive setup and diagnostics utility

- Self-configuring design for easy setup

- Limited lifetime warranty

Additional features for *ISA* models

- *SMC 91C100 FEAST Fast Ethernet controller*
- *Integrated 128 KByte packet buffer for increased performance*
- *Optional support for "Plug and Play"*
- *Optional universal boot PROM (RPL)*
- *I/O mapped architecture to prevent RAM consumption*

Additional features for *EISA* models

- *SMC 91C100 FEAST Fast Ethernet controller*
- *Integrated 128 KByte packet buffer for increased performance*
- *DMA burst mode transfers*
- *Fully software configurable, includes EISA configuration file*

Additional Features for *PCI* models

- *DECchip® 21140 LAN coprocessor chip*
- *Full Duplex capability for up to 200 Mbits/sec. performance*
- *132 MBytes/sec. burst data rate across the PCI bus for maximum performance*
- *Self-configuring design for "plug and go" operation*
- *Integrated 2 KByte transmit and 4 KByte receive FIFOs (First In, First Out memory)*

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DATA TECHNOLOGIES, INC.

TX

EM110 TX 10/100 Fast Ethernet Adapters

EM110 TX Fast Ethernet adapters, designed for PCI, EISA and ISA servers and workstations, are the fastest way to connect to 10 Mbits/sec. and 100 Mbits/sec. Fast Ethernet networks. These high speed adapters combine flexibility, and performance to provide easy migration from 10BASE-T and 10BASE-2 to 100BASE-TX Fast Ethernet.

The Combo Option - Universal Connectivity and Upgrade Path

The EM110 TX Combo achieves universal cable connectivity by providing a BNC coax connector. You can connect to your old coax network now, and still be prepared for the eventual upgrade to Fast Ethernet.

AutoSense configuration provides flexibility

The AutoSense feature of EM110 TX allows the adapter to detect the maximum line speed of your network automatically. Simply connect the EM110 TX to any existing 10BASE-T or 100BASE-TX network device; 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.

High bandwidth networking

Ten times faster than traditional 10 Mbits/sec. Ethernet adapters, EM110 TX Fast Ethernet is ideal for resource-intensive graphics, multimedia, Microsoft Windows, and mission-critical applications which need high throughput and low CPU utilization to power large amounts of data across the network.

For maximum performance, EM110 TX (PCI only) includes both 10 Mbits/sec. FDE and 100 Mbits/sec. FDFE Full Duplex capability which doubles the cumulative system throughput rate. Full Duplex capability is easily enabled via software configuration.

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

Product Specifications

Systems Supported
PCI Local Bus computers, based on Intel, DEC Alpha, MIPS, and PowerPC processors.
ISA and EISA bus computers based on Intel processors

Bus Interface
ISA, 16-bit I/O mapped
EISA, DMA burst mode transfer
PCI, 32-bit bus master

Ethernet Controller
DECchip® 21140 LAN coprocessor chip (PCI)
SMC 91C100 FEAST Fast Ethernet Controller (ISA and EISA)

Hardware Interrupts
PCI interrupt A, supports shared interrupts (PCI)
5, 9, 11 & 15, supports shared interrupts (EISA)
"Plug and Play," or interrupts 5, 9, 11 & 15 (ISA)

Base I/O or Memory Address
Assigned by BIOS (PCI)
Automatically Configured (EISA)
Assigned by "Plug and Play," or manually (ISA)

PCI Configuration Space
Supports DWORD, WORD, and BYTE access

Reliability
Calculated MTBF >100,000 hours

Power Requirements
+5 volts @ 1.5 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
supports CAT 5 UTP and Type 1 STP for 100BASE-TX. supports Cat 3, 4 and 5 UTP for 10BASE-T
BNC connector
supports RG-58 coax for 10BASE-2

Dimensions
5.075" x 3.9" (conforms to PCI Short Card specification)
7.6"x 4.2" (EISA)
7.3"x 4.2" (ISA)

Standards Compliance
IEEE 802.3 10BASE-2
IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TX
FCC A, CE A (ISA/EISA)
FCC B, CE B (PCI)

Full Duplex Support
PCI Models:
10BASE-T
100BASE-TX

Drivers Available
3.5" diskette
NetWare 3.x, 4.x, NetWare Lite, Personal NetWare, LAN Manager, VINES, OS/2 Warp, IBM LAN Server, Artisoft LANtastic, Windows for Workgroups, DEC PATHWORKS for DOS, FTP PC/TCP, LAN Workplace for DOS Windows NT for Intel, DEC Alpha, MIPS, PowerPC, Windows 95, Windows for Workgroups 3.11

Diagnostic LEDs
Link Integrity (one each for 10 Mbits/sec. & 100Mbits/sec.)
Network Activity (one each for 10 Mbits/sec. & 100 Mbits/sec.)

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

Ordering Information
Order Number	Connectors
EM110TX-PCI	RJ-45
EM110TX-PCI-C	RJ-45, BNC
EM110TX-EISA	RJ-45

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