

# T4

## EM110 T4

### 10/100

## Fast Ethernet Adapters

# 10/100 Fast Ethernet

### EM110 T4 ISA, EISA and PCI Adapters

- Support for 10 Mbits/sec. IEEE 802.3 10BASE-T & 10BASE-2 standards
- Support for 100 Mbits/sec. IEEE 802.3u 100BASE-T4 standard
- NWAY compatible AutoSensing of maximum line speed
- Easy migration from 10BASE-T and 10BASE-2 to 100BASE-T4 Fast Ethernet
- Runs on Category 3, 4 or 5 UTP cable for maximum compatibility
- Combo (RJ-45 plus BNC) models offer universal cable connectivity
- Predictive Pipelining™ for greater throughput with lower CPU utilization
- All popular networks supported
- Comprehensive setup and diagnostics utility
- Limited lifetime warranty

#### **Additional features for ISA models**

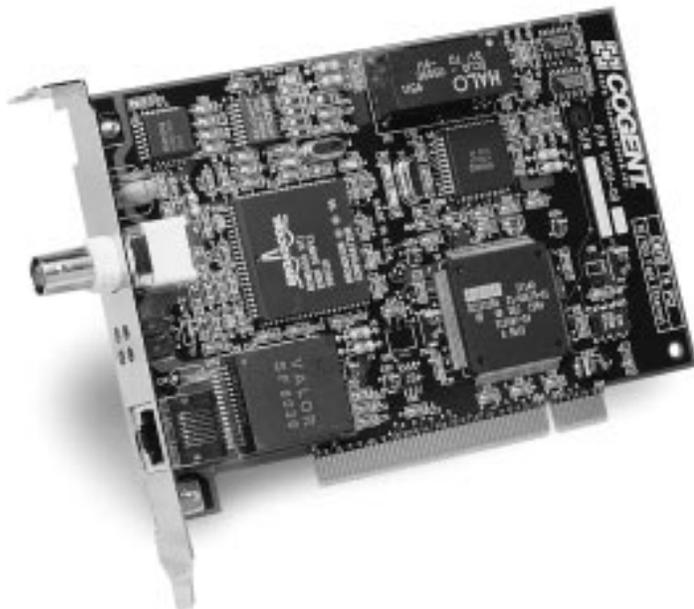
- SMC 91C100 FEAST Fast Ethernet controller
- Integrated 128 KByte packet buffer for increased performance
- Optional support for "Plug and Play"
- Optional universal boot PROM (RPL)
- I/O mapped architecture to prevent RAM consumption

#### **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 20 Mbits/sec. support for 10BASE-T networks
- 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)



**COGENT**  
DATA TECHNOLOGIES, INC.

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## EM110 T4 10/100 Fast Ethernet Adapters

EM110 T4 Fast Ethernet adapters, designed for PCI, EISA and ISA servers and workstations, are the fastest way to connect to 10 Mbps/sec. and 100 Mbps/sec. Fast Ethernet networks. These high speed adapters combine flexibility, performance, and cabling compatibility to provide the easiest migration possible from 10BASE-T and 10BASE-2 to 100BASE-T4 Fast Ethernet.

### The Combo Option - Universal Connectivity and Upgrade Path

The EM110 T4 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 T4 allows the adapter to detect the maximum line speed of your network automatically. Simply connect the EM110 T4 to 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 Mbps/sec. devices, including those without NWAY line speed negotiation.

### Category 3 UTP support provides low-cost upgrade

T4 support means that you don't have to upgrade your cabling plant. EM110 T4 will run on any UTP cable you are currently using for 10BASE-T. Run the EM110 T4 now at 10 Mbps/sec., and in the future run at 100 Mbps/sec. using the same adapter and the same cable.

### High bandwidth networking

Ten times faster than traditional 10 Mbps/sec. Ethernet adapters, EM110 T4 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.

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

#### Cogent Sales

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

#### Cogent Corporate

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#### Cogent Europe

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80331 Munich Germany  
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E-mail europe.sales@coagentdata.com

#### 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 3, 4, and 5 UTP cabling  
BNC connector  
supports RG-58 coax for 10Mbps/sec. (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-T4  
FCC A, CE A (ISA/EISA)  
FCC B, CE B (PCI)

#### Full Duplex Support

PCI Models:  
10BASE-T

#### 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 Mbps/sec. & 100Mbps/sec.)  
Network Activity (one each for 10 Mbps/sec. & 100 Mbps/sec.)

#### Warranty

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

#### Ordering Information

Order Number	Connectors
EM110T4-PCI	RJ-45
EM110T4-PCI-C	RJ-45, BNC
EM110T4-EISA	RJ-45
EM110T4-EISA-C	RJ-45, BNC
EM110T4-ISA	RJ-45
EM110T4-ISA-C	RJ-45, BNC

Made in U.S.A.

