

# ADAPTEC®

## Cogent™ Fast Ethernet Adapters

10/100 Mbps AutoSensing models and dedicated 100 Mbps models



### PRODUCT HIGHLIGHTS

- NWay compatible AutoSensing of maximum line speed
- Universal cable connectivity with RJ-45 and BNC connectors
- Self-configuring design for easy setup
- Drivers for all popular network operating systems
- Comprehensive diagnostics utility

### Overview

Adaptec offers Fast Ethernet products to meet every adapter environment, including 10BASE-2, 10BASE-5, 10BASE-T, 100BASE-TX, 100BASE-T4, and 100BASE-FX (fiber optic).

Adaptec's Cogent Fast Ethernet adapters, designed for PCI, EISA and ISA servers and workstations, deliver the fastest, easiest connection to Fast Ethernet networks. These flexible, high-speed adapters offer great price-performance benefits for networks migrating to or already running, Fast Ethernet.

### Key Features and Benefits

#### High Performance

The Fast Ethernet adapters provide your graphics, multimedia, and Windows® applications with the high throughput and low CPU utilization needed to power large amounts of data across the campus, or around the world.

Both TX and FX adapters for the PCI bus include Full Duplex Fast Ethernet (FD FE) capability to double the cumulative system throughput rate. FD FE capability is easily enabled via software configuration.

#### Universal Connectivity

The TX and T4 Combo adapters achieve universal cable connectivity by providing both a BNC coax and RJ-45 connector. Connect to your older coax network now and still be prepared to upgrade to Fast Ethernet in the future.

#### Flexible Configuration

The AutoSense feature in all 10/100 Mbps models allows the adapters to automatically detect the network's maximum line speed. No adapter configuration is necessary. For maximum flexibility, the AutoSense feature works with all 10 and 100 Mbps devices, including those without NWay line speed negotiation.

Whichever model you choose, installation is a snap. All PCI models provide automatic configuration through the PCI BIOS. All EISA models come with an EISA configuration file and support all EISA Configuration Utilities. And all ISA models provide Plug-and-Play support.

#### Cost-Effective Solutions

If you've already adopted Fast Ethernet, the Cogent high-performance, single speed adapters are your cost-efficient solutions. These single speed adapters are available in ISA, EISA, and PCI models for 100BASE-TX Fast Ethernet, and PCI models for 100BASE-FX Fiber Fast Ethernet.

### Additional Features

#### ISA Models

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

#### EISA Models

- SMC FEAST Fast Ethernet controller
- Integrated 128 KBytes packet buffer for increased performance
- DMA burst mode transfers
- Fully software configurable with EISA configuration file

#### PCI Models

- DECchip LAN coprocessor chip
- 132 MByte/sec burst data rate across the PCI bus for maximum performance
- Self-configuring design for Plug-and-Go operation
- Integrated 2 KBytes transmit and 4 KBytes receive FIFOs (First In, First Out memory)

## Cogent-to-Adaptec Model Number Conversion Chart

### Cogent 10/100 Fast Ethernet

New Model #	Previous Model #	Bus	Speed	Interface
ANA™-6911/TX Combo	EM110TX-PCI-C	PCI	10/100 Mbps	RJ-45, BNC
ANA-6911/TX	EM110TX-PCI	PCI	10/100 Mbps	RJ-45
ANA-6911/T4 Combo	EM110T4-PCI-C	PCI	10/100 Mbps	RJ-45, BNC
ANA-6911/T4	EM110T4-PCI	PCI	10/100 Mbps	RJ-45
ANA-6910/TX	EM100TX-PCI	PCI	100 Mbps	RJ-45
ANA-6910/FXST	EM100FX-PCI-ST	PCI	100 Mbps	ST
ANA-6910/FXSC	EM100FX-PCI-SC	PCI	100 Mbps	SC
ANA-6711/TX Combo	EM110TX-EISA-C	EISA	10/100 Mbps	RJ-45, BNC
ANA-6711/TX	EM110TX-EISA	EISA	10/100 Mbps	RJ-45
ANA-6711/T4 Combo	EM110T4-EISA-C	EISA	10/100 Mbps	RJ-45, BNC
ANA-6711/T4	EM110T4-EISA	EISA	10/100 Mbps	RJ-45
ANA-6710/TX	EM100TX-EISA	EISA	100 Mbps	RJ-45
ANA-6511/TX Combo	EM110TX-ISA-C	ISA	10/100 Mbps	RJ-45, BNC
ANA-6511/TX	EM110TX-ISA	ISA	10/100 Mbps	RJ-45
ANA-6511/T4 Combo	EM110T4-ISA-C	ISA	10/100 Mbps	RJ-45, BNC
ANA-6511/T4	EM110T4-ISA	ISA	10/100 Mbps	RJ-45
ANA-6510/TX	EM100TX-ISA	ISA	100 Mbps	RJ-45

## TECHNICAL SPECIFICATIONS

<b>Systems Supported:</b>	PCI Local Bus computers based on Intel, DEC Alpha, MIPS and PowerPC processors. ISA and EISA bus computers based on Intel processors.
<b>Bus Interface:</b>	ISA, 16-bit I/O mapped EISA, DMA burst mode transfer PCI, 32-bit bus master
<b>Ethernet Controller:</b>	DECchip LAN coprocessor chip (PCI) SMC FEAST Fast Ethernet Controller (ISA and EISA)
<b>FIFO Buffer Memory:</b>	PCI, 2 KBytes transmit, 4KBytes receive EISA, 128 KBytes (transmit and receive) ISA, 128 KBytes (transmit and receive)
<b>Hardware Interrupts:</b>	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)
<b>Base IO or Memory Address:</b>	Assigned by BIOS (PCI) Default 300h, 8 possible choices (EISA) Assigned by Plug-and-Play or manually (ISA)
<b>PCI Configuration Space:</b>	Supports DWORD, WORD, and BYTE access
<b>Reliability:</b>	Calculated MTBF>100,000 hours
<b>Power Requirements:</b>	+5 volts @ 1.5 Amp. max.
<b>Environmental Operating Range:</b>	Temperature: 0°C to 50°C
<b>Relative Humidity:</b>	5% to 85% non-condensing
<b>Altitude:</b>	3000m max.
<b>Interface Connections:</b>	See model conversion chart. All PCI models support Full Duplex at 10 Mbps. Additionally, PCI TX and FX models support Full Duplex at 100 Mbps.
<b>Dimensions:</b>	5.075" x 3.9" (conforms to PCI Short Card specifications) 7.6" x 4.2" (EISA) 7.3" x 4.2" (ISA)
<b>Standards Compliance:</b>	IEEE 802.3 10BASE-2 IEEE 802.3 10BASE-5 IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-T4/TX/FX

Bus Type	FCC	CE
PCI	B	B
EISA	A	A
ISA	A	A

## Drivers Available:

3.5" diskette - Novell NetWare 3.x, 4.x, and SFT III, DOS ODI Client, Windows for Workgroups (NDIS 3.0), Windows® 95, Windows NT™ for Intel, DEC Alpha, PowerPC, and MIPS platforms, DOS NDIS (NDIS 2.0), OS/2 Warp (NDIS 2.0), MS LAN Manager, Artisoft LANtastic, Banyan VINES DOS client, FTP PC/TCP, DEC PathWorks, Sun Solaris, NEXTSTEP, SCO Open Desktop/Open Server (not all drivers are available for every adapter)

**Diagnostic LEDs:** Link Integrity  
Network Activity

## Warranty:

Adaptec's Cogent adapters are protected by a limited lifetime warranty.



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**Literature:**  
1-800-934-2766 (USA and Canada)  
or (510) 732-3829

**Ordering Software:**  
1-800-442-7274 (USA and Canada)  
or (408) 957-7274

**World Wide Web:**  
<http://www.adaptec.com/networking>

**Internet ftp server:** [ftp.adaptec.com](ftp://ftp.adaptec.com)

**CompuServe:** GO ADAPTEC

**Microsoft® Network:** GO ADAPTEC  
**Adaptec USA Bulletin Board Service (BBS):**  
(408) 945-7727 (up to 28,800 bps,  
using 8 bits, 1 stop bit, no parity)  
**Interactive Fax:** (408) 957-7150

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