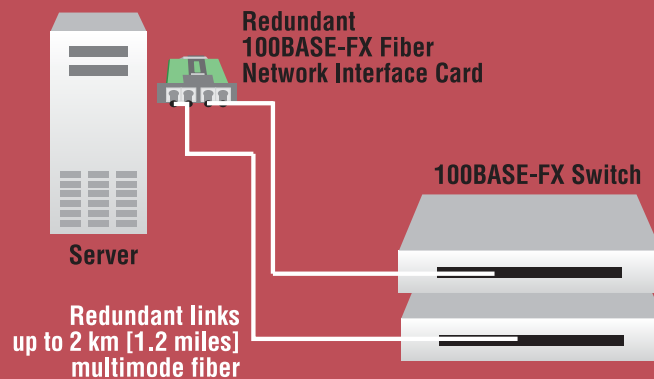


**Redundant Ethernet Network Interface Cards****ND-FX-xx-01**

Maintain network stability and reliability with a redundant NIC. Dual-port NICs provide redundancy and, if port failure is detected, the auto-failover feature automatically transfers network communications to the secondary port without disrupting the network. Whether it's a desktop solution or network server, using a redundant NIC with auto-failover guarantees consistent reliable network performance.

**Redundancy****Ordering Info**

See pages 163 – 172 for complete fiber optic connector specs.

**ND-FX-ST-01**

(2) 100BASE-FX 1300nm MM (ST)  
[2 km/1.2 mi.] Link Budget: 11.0 dB

**ND-FX-SC-01**

(2) 100BASE-FX 1300nm MM (SC)  
[2 km / 1.2 mi.] Link Budget: 11.0 dB

**ND-FX-MT-01**

(2) 100BASE-FX 1300nm mm (MT-RJ)  
[2 km/1.2 mi.] Link Budget: 14.5 dB

**Features**

- LED status indicators monitor Full/Half Duplex, Collisions, Activity, Port Select, Link Status and Magic Packet.
- Supported by the latest drivers for a wide variety of operating systems including Windows 2000, 3.X, 9X & NT; Novell; Banyan; Solaris; Linux; UNIX and supports most popular LAN protocols.
- Supported for Desktop Management Task Force (DMTF) DMI 2.0 specification and PermaNet for network servers running Novell Netware or Microsoft Windows NT.

**Fast Ethernet Dual Port**

Supports PC98/PC99 and Wired for Management baseline specifications; full OnNow support and AMD's Magic Packet technology for remote wake-up and power-on. Supports Advanced Configuration and Power Interface (ACPI) specification version 1.0.

**Specifications**

See pages 163 – 172 for complete fiber optic connector specs.

Operation	Operates as a TIA SP4360A Type I, II device
Standards	IEEE Std. 802.3™ 100BASE-FX
Controls	IRQ and DMA Controlled by PCI Bus
Status LEDs	Full/Half-Duplex Collision Activity Port Select Link Status Magic Packet
Dimensions	<b>Width:</b> 0.5" [13 mm] <b>Depth:</b> 5.5" [140 mm] <b>Height:</b> 3.8" [96 mm]
Power	+5V DC 800mA max.
Standby Power	+5V DC 500mA min.
Environment	0° – 50°C; 5% – 90% humidity non-condensing; 0 – 10,000 ft. altitude
Shipping Weight	1 lb. [0.45 kg]
Regulatory Compliance	FCC Class A Part 15, VCCI Class 1, EN55022 Class 1
Warranty	Lifetime

## Fast Ethernet Network Interface Cards

## N-FX-xx-02(x)

pci converters  
gbic modules  
small form factor pluggables

network interface cards

pcmcia adapter cards

The Fast Ethernet NIC provides a 100BASE-FX fiber port and delivers low cost, fiber optic connectivity to the desktop in fiber rich LAN environments. With both standard and low profile form factors; driver support for most popular operating systems; and PCI 2.2 plug-and-play capability; installation is a breeze in virtually any PC in your network.

## Features

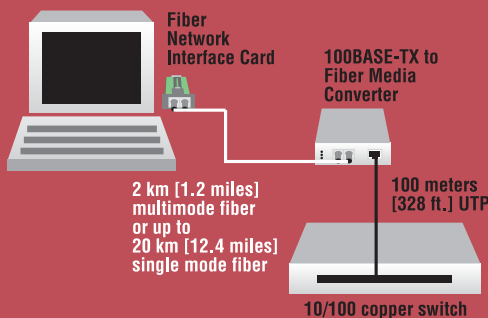
- ▶ Lifetime Warranty
- ▶ 32-bit bus master
- ▶ Supports 802.1P/Q VLAN tag
- ▶ IP multicast filter
- ▶ PCI 2.1 and 2.2 compliant
- ▶ Wake-On-LAN (WOL) power management
- ▶ Both standard and low profile form factors

## Specifications

See pages 163 – 172 for complete fiber optic connector specs.

Standards	IEEE Std. 802.3™ 2000 IEEE Std. 802.1P IEEE Std. 802.1Q
Expansion Bus Standard	PCI 2.1, 2.2
Status LEDs	<b>LINK/ACT (Link/Activity):</b> ON = communication link; FLASHING = activity on link <b>FDX (Full-duplex):</b> ON = Full-duplex link
LAN Drivers	Windows 95, 98 ME, 2000, 2003, XP, NT 4.0 NDIS 2,3,4,5 NetWare Server 3.12, 4.x, 5.x, 6.x NetWare DOS Client ODI MAC OS Linux x86, AMD64 FreeBSD 3.2, 4.x, 5.x SCO Unixware 7.1, OpenUnix 8 SCO Open Server 5.0.x Solaris 8, 9, 10
Boot Server Support	PXE RPL NetWare NCP/IPX DHCP BOOTP
PCB Dimensions	<b>Width:</b> 2.2" [56 mm] <b>Depth:</b> 4.8" [122 mm] <b>Height:</b> 0.9" [23 mm]
Power	1.0A @ +5V
Environment	0° – 50°C; 5% – 95% humidity non-condensing; 0 – 10,000 ft. altitude
Shipping Weight	1 lb. [0.45 kg]
Regulatory Compliance	FCC Class A Part 15, CE Mark
Warranty	Lifetime

## 100BASE-FX



Product Number (standard profile)	Product Number (standard profile 20-pack)	Product Number (low profile)	Product Number (low profile 20-pack)	Description
N-FX-ST-02	N-FX-ST-02-020	N-FX-ST-02(L)	N-FX-ST-02(L)-020	100BASE-FX 1300nm MM (ST) [2 km/1.2 mi.] Link Budget: 12.0 dB
N-FX-SC-02	N-FX-SC-02-020	N-FX-SC-02(L)	N-FX-SC-02(L)-020	100BASE-FX 1300nm MM (SC) [2 km/1.2 mi.] Link Budget: 12.0 dB
N-FX-MT-02	N-FX-MT-02-020	N-FX-MT-02(L)	N-FX-MT-02(L)-020	100BASE-FX 1300nm MM (MT-RJ) [2 km/1.2 mi.] Link Budget: 12.0 dB
N-FX-LC-02	N-FX-LC-02-020	N-FX-LC-02(L)	N-FX-LC-02(L)-020	100BASE-FX 1300nm MM (LC) [2 km/1.2 mi.] Link Budget: 12.0 dB
N-FX-SC5-02		N-FX-SC5-02(L)		100BASE-FX 1300nm SM (SC) [5 km/3.1 mi.] Link Budget: 12.0 dB
N-FX-SC20-02		N-FX-SC20-02(L)		100BASE-FX 1300nm SM (SC) [20 km/12.4 mi.] Link Budget: 16.0 dB
<b>Single Fiber Products</b>				
N-FX-SB201-02		N-FX-SB201-02(L)		100BASE-FX 1310nm / 1550nm single fiber SM (SC) [20 km/12.4 mi.] Link Budget: 18.0 dB
N-FX-SB202-02		N-FX-SB202-02(L)		100BASE-FX 1550nm / 1310nm single fiber SM (SC) [20 km/12.4 mi.] Link Budget: 18.0 dB
<b>Bundled Products</b>				
N-FX-ST-02F				100BASE-FX 1300nm MM (ST) [2 km/1.2 miles] Link Budget: 12.0 dB
N-FX-SC-02F				100BASE-FX 1300nm MM (SC) [2 km/1.2 miles] Link Budget: 12.0 dB
<b>Optional Accessories (sold separately)</b>				
Product Number	Description			
BTR-NFX	Boot ROM chip supporting both BBS (BIOS Boot Specification) and non-BBS compliant PCs			



**Dual Media Network Interface Cards****NDM-FTX-xx-01(x)**

The Fast Ethernet Dual Media NIC provides both a 10/100BASE-TX copper port and a 100BASE-FX fiber port to allow ultimate flexibility for installation in both new and legacy LAN environments. With both standard and low profile form factors, driver support for most popular operating systems and PCI 2.2 plug-and-play capability helps make installation a breeze in virtually any PC in your network.

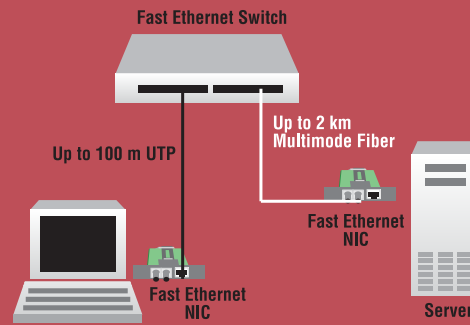
**Features**

- ▶ Lifetime Warranty
- ▶ 32-bit bus master
- ▶ Supports 802.1P/Q VLAN tag
- ▶ IP multicast filter
- ▶ PCI 2.1 and 2.2 compliant
- ▶ Wake-On-LAN (WOL) power management
- ▶ Both standard and low profile form factors

**Specifications**

See pages 163 – 172 for complete fiber optic connector specs.

Standards	IEEE Std. 802.3™ IEEE Std 802.1P IEEE Std 802.1Q
Expansion Bus Standard	PCI 2.1, 2.2
Status LEDs	<b>LINK/ACT (Link/Activity):</b> ON = communication link; FLASHING = activity on link <b>FDX (Full-duplex):</b> ON = Full-duplex link
LAN Drivers	NetWare Server 4.1x, 5.X NetWare DOS Client ODI Windows 95, 98, ME, 2000, 2003, XP, NT 4.0 Linux
Boot Server Support	Novell RPL Boot ROM PXE Boot ROM
PCB Dimensions	<b>Width:</b> 4.8" [122 mm] <b>Depth:</b> 7.1" [180 mm] <b>Height:</b> 0.9" [23 mm]
Power	1.0A @ +5V
Environment	0° – 50°C; 5% – 95% humidity non-condensing; 0 – 10,000 ft. altitude
Shipping Weight	1 lb. [0.45 kg]
Regulatory Compliance	FCC Part 15 Class A, CE Mark
Warranty	Lifetime

**Application**

Product Number (standard profile)	Product Number (standard profile 20-pack)	Product Number (low profile)	Product Number (low profile 20-pack)	Description
<b>NDM-FTX-ST-01</b>	<b>NDM-FTX-ST-01-020</b>	<b>NDM-FTX-ST-01(L)</b>	<b>NDM-FTX-ST-01(L)-020</b>	10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1300nm MM (ST) [2 km/1.2 mi.] Link Budget: 12.0 dB
<b>NDM-FTX-SC-01</b>	<b>NDM-FTX-SC-01-020</b>	<b>NDM-FTX-SC-01(L)</b>	<b>NDM-FTX-SC-01(L)-020</b>	10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1300nm MM (SC) [2 km/1.2 mi.] Link Budget: 12.0 dB
<b>NDM-FTX-MT-01</b>	<b>NDM-FTX-MT-01-020</b>	<b>NDM-FTX-MT-01(L)</b>	<b>NDM-FTX-MT-01(L)-020</b>	10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1300nm MM (MT-RJ) [2 km/1.2 mi.] Link Budget: 12.0 dB
<b>NDM-FTX-SC5-01</b>	<b>NDM-FTX-SC5-01-020</b>	<b>NDM-FTX-SC5-01(L)</b>	<b>NDM-FTX-SC5-01(L)-020</b>	10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1310nm SM (SC) [5 km/3.1 mi.] Link Budget: 12.0 dB
<b>NDM-FTX-SC20-01</b>		<b>NDM-FTX-SC20-01(L)</b>		10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1310nm SM (SC) [20 km/12.4 mi.] Link Budget: 16.0 dB
<b>Single Fiber Products</b>				
<b>NDM-FTX-SB201-01</b>		<b>NDM-FTX-SB201-01(L)</b>		10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1310nm / 1550nm single fiber SM (SC) [20 km/12.4 mi.] Link Budget: 18.0 dB
<b>NDM-FTX-SB202-01</b>		<b>NDM-FTX-SB202-01(L)</b>		10/100BASE-TX (RJ-45) [100 m/328 ft.] 100BASE-FX 1550nm / 1310nm single fiber SM (SC) [20 km/12.4 mi.] Link Budget: 18.0 dB
<b>Optional Accessories (sold separately)</b>				
Product Number	Description			
<b>BTR-NDM-PXE</b>	PXE Boot ROM			
<b>BTR-NDM-RPL</b>	RPL Boot ROM			

## Gigabit Ethernet Network Interface Cards

## N-GxX-xx-01(x)

pci converters  
gbic modules  
small form factor pluggables

network interface cards

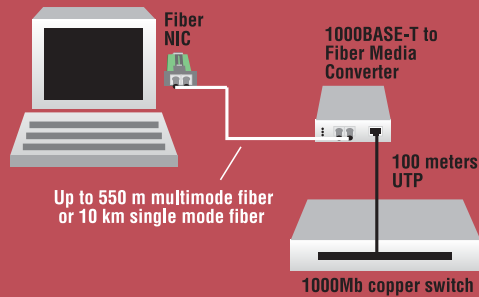
pcmcia adapter cards

The Gigabit Ethernet NIC provides a 1000BASE-SX/LX fiber port to deliver fiber optic connectivity to the desktop in fiber rich LAN environments. With both standard and low profile form factors, driver support for most popular operating systems and PCI 2.2 plug-and-play capability helps make installation a breeze in virtually any PC in your network.

## Features

- ▶ Lifetime Warranty
- ▶ Supports 32/64-bit PCI 2.2 bus
- ▶ Supports 802.1P/Q VLAN tag
- ▶ Full-duplex flow control
- ▶ Plug-and-Play auto-configuration
- ▶ Wake-On-LAN (WOL) power management
- ▶ TCP, UDP & IP checksum off-loading
- ▶ Supports jumbo frames up to 9KB
- ▶ Both standard and low profile form factors

## Application



Product Number (standard profile)	Product Number (standard profile 20-pack)	Product Number (low profile)	Product Number (low profile 20-pack)	Description
N-GSX-SC-01	N-GSX-SC-01-020	N-GSX-SC-01(L)	N-GSX-SC-01(L)-020	1000BASE-SX 850nm MM (SC) [62.5/125µm: 220 m / 722 ft.] [50/125µm: 550 m / 1804 ft.] Link Budget: 8.5 dB
N-GSX-LC-01	N-GSX-LC-01-020	N-GSX-LC-01(L)	N-GSX-LC-01(L)-020	1000BASE-SX 850nm MM (LC) [62.5/125µm: 220 m / 722 ft.] [50/125µm: 550 m / 1804 ft.] Link Budget: 8.5 dB
N-GLX-SC-01		N-GLX-SC-01(L)		1000BASE-LX 1310nm SM (SC) [10 km/6.2 mi.] Link Budget: 10.5 dB
N-GLX-LC-01		N-GLX-LC-01(L)		1000BASE-LX 1310nm SM (LC) [10 km/6.2 mi.] Link Budget: 10.5 dB

## Optional Accessories (sold separately)

Product Number	Description
BTR-NGX-PXE	PXE Boot ROM

## Specifications

See pages 163 – 172 for complete fiber optic connector specs.

Standards	IEEE Std. 802.3™ IEEE Std. 802.1P IEEE Std. 802.1Q
Expansion Bus Standard	PCI 2.2 bus 32/64-bit, 33/66MHz
Status LEDs	<b>LINK/ACT (Link/Activity):</b> ON = communication link; FLASHING = activity on link <b>FDX (Full-duplex):</b> ON = Full-duplex link
LAN Drivers	NetWare Server 4.x, 5.x, 6.x NetWare DOS Client ODI Windows 98, ME, 2000, 2003, XP, NT 4.0 Linux SCO UnixWare 7.1.x OpenUnix 8.0
Boot Server Support	PXE Boot ROM (optional)
PCB Dimensions	<b>Width:</b> 2.2" [56 mm] <b>Depth:</b> 6.5" [165 mm] <b>Height:</b> 0.9" [23 mm]
Power	2.0A @ +5V
Environment	0° – 50°C; 5% – 95% humidity non-condensing; 0 – 10,000 ft. altitude
Shipping Weight	1 lb. [0.45 kg]
Regulatory Compliance	FCC Class A Part 15, CE Mark
Warranty	Lifetime