

Network Interface Cards

**Cost Effective Fiber to the Desktop
Solutions for Evolving Networks**

High Performance Fiber Optic Network Interface Cards

Transition Networks offers a vast portfolio of high-quality and cost-effective fiber based Network Interface Cards (NICs) that are designed to meet today's requirements for secure, high-speed network connectivity to workstations and servers.

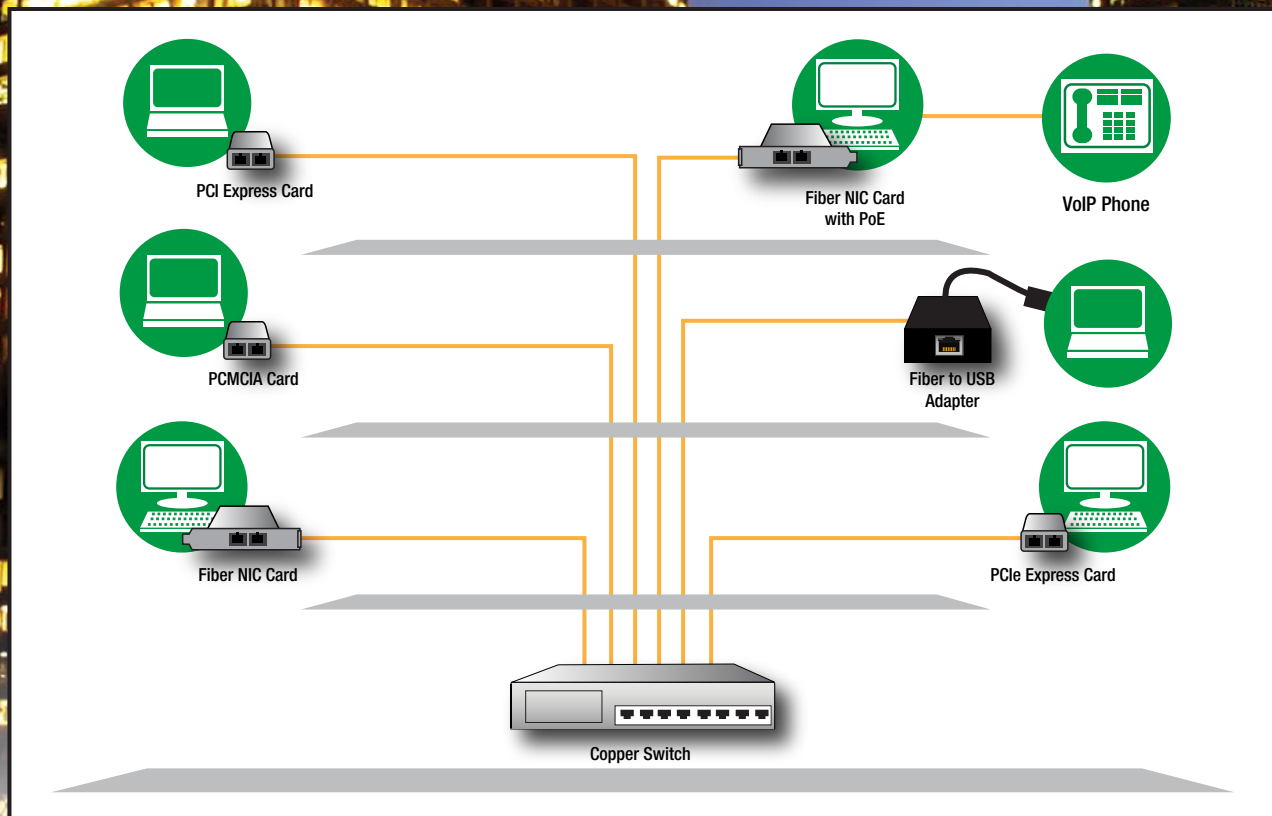
With the ever increasing level of attention being paid to the security of the data in today's networks, all organizations can benefit from a fiber infrastructure. Long ago, government and military agencies, developed a strong interest in fiber because of its ability to provide greater transmission distances, support increased bandwidth, and reduce the risks of security breaches of classified data in their networks. Fiber is able to protect the data traveling through a network due to its properties. It is virtually impossible to tap into fiber cabling and go undetected by network managers.



Fiber NIC cards from Transition Networks allow for a simple integration path wherever fiber is available at the workstation. The NICs include software drivers for today's most popular operating systems and support both Fast Ethernet and Gigabit Ethernet environments. Users can choose from a variety of interface bus technologies. PCI Express (PCIe) offers the ability to maximize bandwidth and bus efficiency while lowering power consumption on desktops. PCI and PCI-X based NICs are also available. For laptop users, NICs supporting PCMCIA and ExpressCard bus technology are also available for secure fiber connectivity for the mobile user.

Fiber Network Solutions that Offer the Advantages of Bandwidth & Security to the Desktop

- Government & Military Operations
- Financial Institutions
- Healthcare & Medical Organizations
- Colleges & Higher Education



Product Features:

- Lifetime warranty
- Supports high bandwidth network speeds
- Full-duplex flow control
- Wake-On-Lan (WOL) power management
- Both standard and low profile form factors
- Supports Jumbo Frame
- Driver Support for a wide variety of operating systems



N-FX-xx-03

PCI Fast Ethernet Fiber Network Interface Cards

100BASE-FX



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 operating systems and PCI 2.2 plug-and-play capabilities, installation is a breeze in virtually any PC in your network.

Features

- PCI 32-bit bus master
- Supports 802.1P/Q VLAN tags
- IP multicast filter
- PCI 2.1 and 2.2 compliant
- Wake-On-LAN (WOL) power management
- Supported via the PCI BUS or through the supplied WOL cable
- Low-profile brackets included
- PXE Remote boot support
- Supports ACPI

Specifications

Standards	IEEE Std. 802.3 u IEEE Std. 802.1P IEEE Std. 802.1Q
Bus Slot	PCI 2.1, 2.2
Status LEDs	LINK/ACT (Link/Activity): ON = communication link; FLASHING = activity on link FDX (Full-duplex): ON = Full-duplex link
Software Support	Windows 95, 98 ME, 2000, 2003, XP, NT 4.0, VISTA, 7 NDIS 2,3,4,5 NetWare Server 3.12, 4.x, 5.x, 6.x NetWare DOS Client ODI MAC OS Linux 2.2.x - 2.4.x Kernel Linux 2.6.x Kernel FreeBSD - 4.13 SCO Unixware 7.1, OpenUnix 8 SCO Open Server 5.0.x Sun Solaris
Boot Server Support	PXE RPL
PCB Dimensions	Width: 2.2" [56 mm] Depth: 4.8" [122 mm] Height: 0.9" [23 mm]
Power	1.9 Watts
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 - 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	FCC Class B Part 15, CE Mark
Warranty	Lifetime



Ordering Information

N-FX-ST-03

100BASE-FX 1300nm multimode (ST)
[2 km/1.2 mi.] Link Budget: 12.0 dB

N-FX-SC-03

100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

N-FX-LC-03

100BASE-FX 1300nm multimode (LC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

N-FX-MT-03

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

N-FX-SC20-03

100BASE-FX 1310nm single mode (SC)
[20 km/12.4 mi.] Link Budget: 16.0 dB

N-FXE-xx-02

PCIe Fast Ethernet Fiber Network Interface Cards

100Base-FX



N-FXE-xx-02 is a Fiber Fast Ethernet to PCI-Express (PCIe) bus adapter that fully complies with all IEEE 802.3u and 100Base-FX standards. It provides up to 200Mbps full-duplex bandwidth capacity to support high-end systems. In addition, with advanced functions like VLAN filtering packet processing, the adapter provides added performance, flexible configuration and secure networking to users in a standards-based environment.

The PCI-Express (PCIe) design gives you the maximum possible bandwidth and bus efficiency, along with low power consumption.

For users equipped with PCI-Express systems, N-FXE-xx-02 provides the ability to easily build or connect to the Fast Ethernet fiber networks.



Ordering Information

N-FXE-ST-02

100BASE-FX 1300nm multimode (ST)
[2 km/1.2 mi.] Link Budget: 12.0 dB

N-FXE-SC-02

100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

N-FXE-LC-02

100BASE-FX 1300nm multimode (LC)
[2 km/1.2 mi.] Link Budget: 13.0 dB

N-FXE-MT-02

100BASE-FX 1300nm multimode (MT-RJ)
[2 km/1.2 mi.] Link Budget: 12.0 dB

Features

- PCI-Express x1 Interface
- IEEE 802.3x Full-Duplex Flow Control
- Supports Multicast Frame Filtering
- Supports Asymmetric/Symmetric Flow control
- Supports 802.1q VLAN tagging
- Wake-On-LAN (WOL) power management
- Microsoft certified drivers
- PXE remote boot support
- RoHS Compliance
- Available with SC, LC multimode and SC single mode fiber connection
- Low-Profile Bracket Included
- Compliant with PCIe Rev 1.1 interface
- Supports Jumbo Frame
- Supports ASF 2.0
- ACPI Supported

Specifications

Standards	IEEE 802.3u IEEE 802.3x IEEE 802.1Q
Bus Slot	PCIe 1.1
Status LEDs	LINK/ACT (Link/Activity): ON = communication link; FLASHING = activity on link FDX (Full-duplex): ON = Full-duplex link
Software Support	Windows 2003, XP, 4.0, Windows 2008 Server, Vista, Novell Netware 5.x, 6.x, Linux, PXE Boot ROM
PCB Dimensions	Length: 4.25" [108 mm] Height: 2.70" [68.5 mm]
Power Requirement	1.2 Watts max, +3.3 VDC @ 0.7A
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lbs. [.45 kg]
Compliance	EMI Standard, FCC Class B, CE Mark
Warranty	Lifetime



NEC-FXE-xx-02

ExpressCard PCIe Fast Ethernet Fiber Network Interface Cards

100Base-FX



Fast Ethernet ExpressCards provide a 100Base-FX fiber port for delivering fiber optic connectivity to laptop computers in high security, fiber rich, LAN environments. This small sized fiber card is specifically designed to plug into laptop computers equipped with an ExpressCard compliant slot. The card includes a single LED located on top of its plastic cover indicating link and activity status. Extensive Network Operating System drivers are provided, easing installation and configuration. Preboot Execution Environment (PXE) and Bootstrap Protocol (BOOTP) are also supported.



Ordering Information

NEC-FXE-ST-02

100BASE-FX 1300nm multimode (ST)
[2 km/1.2 mi.] Link Budget: 12.0 dB

NEC-FXE-SC-02

100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

NEC-FXE-LC-02

100BASE-FX 1300nm multimode (LC)
[2 km/1.2 mi.] Link Budget: 13.0 dB

NEC-FXE-SC20-02

100BASE-FX 1310nm single mode (SC)
[20 km/12.4 mi.] Link Budget: 30.0 dB

Features

- Complies with ExpressCard/34 standard
- Complies with the IEEE 802.3 CSMA/CD 100Base-FX standards
- Full-duplex design
- Options for SC or LC fiber connectors
- Options for multimode or single mode fiber
- Driver support for wide variety of operating systems
- Integrated support for PXE remote boot

Specifications

Standards	IEEE 802.3u IEEE 802.3x ExpressCard Compliant
Card Slot	ExpressCard/34 26-pin connector
Data Transfer Rate	100 Mbps
Status LEDs	L/A - On = communication link Flashing = Activity on link
Software Support	Windows 98, NT, 2000, XP, Vista, 2003 Server, 7, 2008 Server, 8, Netware, Linux
Dimensions	Length: 5.04 inches [128 mm] Width: 1.34 inches [34 mm]
Weight	1.0 lbs [0.45 kg]
Power consumption	3 Watts
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Compliance	FCC Part 15 Class B, CE Mark
Warranty	Lifetime



PCM32-FX-SC-01

PCMCIA Fast Ethernet Fiber Network InterfaceCards

100BASE-FX



Fast Ethernet PCMCIA cards provide a 100BASE-FX fiber port to deliver fiber optic connectivity to the laptop in high-security, fiber rich LAN environments. Offered in a high-performance 32-bit CardBus version to match virtually any laptop PC and help save money by eliminating the need for a docking station and a fixed, fiber NIC.



Ordering Information

PCM32-FX-SC-01

100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

PCM32-FX-LC-01

100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

PCM32-FX-ST-01

100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 12.0 dB

Features

- Complies with PCMCIA standard
- Complies with the IEEE 802.3u CSMA/CD 100Base-FX standards
- Fiber connectivity to a legacy laptop supporting the PCMCIA standard
- Single LED to provide link and activity status
- Provides connectivity to a multimode fiber network via NSC connector
- Meet Class I Laser safety requirements
- Driver support for wide variety of operating system

Specifications

Standards	IEEE Std. 802.3 PCMCIA Type II Car dBus PCMCIA Release 2.x JEIDA 4.x
Card Slot	PC Card 68-pin connector to PC
Status LEDs	LINK/ACT: ON = communication link; Flashing = activity on link FDX/COL: ON = full duplex link; Flashing = collisions occurring
Software Support	Windows 95, 98, ME, 2000, XP, NT 3.51, NT 4.0 Windows for Workgroup 3.1/3.11, 7, 8, Linux, NetWare 3.x, 4.0, NetWare DOS Client ODI
Dimensions	Width: 2.1" [54 mm] Depth: 4.7" [120 mm] Height: 0.6" [16 mm]
Power	0.7A @ +5V max.
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	FCC Class A Part 15, CE Mark
Warranty	Lifetime

TN-USB-FX-01

USB 2.0 to Fast Ethernet Fiber Adapter

100Base-FX



Features

- USB to Ethernet adapter over fiber 100Base-FX Full Duplex Bus powered device, no external power supply needed
- Advanced power saving mode to preserve PC battery life
- Multimode SC, LC, or industry standard
- SFP fiber port
- LEDs to indicate USB Speed / Activity and fiber Link / Activity
- Plastic ABS enclosure with a 6 inch pigtail to USB type-A connector
- WHQL-certified drivers for Windows 7, 8, and 8.1 (both 32-bit and 64-bit), as well as numerous other operating systems

Application



Use the Scorpion-USB™ to create an EMI-secure data connection over fiber between a USB port on a PC or laptop and a 100Mbps Ethernet port on a switch. Used in applications where wireless transmission is not the preferred technology, this device allows the PC to connect to a fiber-based Ethernet network through its USB 2.0 interface, facilitating the sharing of files over the network, quickly, reliably and securely.

Designed specifically for laptop, notebook, and tablet PCs, running today's most popular operating systems, and deployed in fiber-rich networking environments. Just plug the adapter into the USB port, install the driver, and the connection is ready.

Specifications

Standards	IEEE 802.3-2008, USB 2.0
Data Rates	USB 2.0: 480Mbps (USB type-A connector) Fiber: 100Mbps
Fiber Port	100Base-FX SC, LC, or SFP
Max. Frame Size	1635 bytes
Status LEDs	USB: Link / Activity Yellow: ON – High Speed, OFF – Low Speed, BLINK – Activity Fiber: Link / Activity Green: ON – Link, BLINK – Activity
Dimensions	SC & LC Versions Length 9.2" [233mm] Width 2.2" [56mm] Height 0.8" [20mm] SFP Versions Length 10" [254mm] Width 1.2" [30mm] Height 1.0" [25mm]
Software Support	Windows 7, 8, and 8.1 (both 32-bit and 64-bit) and many others
Power Source	USB Bus
Power Consumption	SC: Typical 1.12 Watts LC: Typical 0.9 Watts
Environment	Operating: 0°C to 50°C Storage: -20°C to +80°C Humidity: 5% to 95% (non-condensing) Altitude: 0 to 10,000 feet (with de-rating)
Weight	1lb. [0.45 kg]
Compliance	EN55022 Class B EN55022 FCC Class B, CE Mark
Warranty	Lifetime

Ordering Information

TN-USB-FX-01(SC)

USB 2.0 to Ethernet 100Base-FX MM SC 2km
Link Budget: 11.0dB

TN-USB-FX-01(LC)

USB 2.0 to Ethernet 100Base-FX MM LC 2km Link
Budget: 11.0dB

TN-USB-FX-01(SFP)

USB 2.0 to Ethernet 100Base-FX Open SFP Slot

Optional Accessories (sold separately)

TN-SFP-OC3M

100Mbps SFP MM LC 1310nm 2km

TN-SFP-OC3S

100Mbps SFP SM LC 1310nm 20km

TN-SFP-OC3S3

100Mbps SFP SM LC 1310nm 30km

TN-SFP-OC3S8

100Mbps SFP SM LC 1550nm 80km

TN-SFP-OC3S10

100Mbps SFP SM LC 1550nm 100km

TN-SFP-OC3S12

100Mbps SFP SM LC 1550nm 120km

TN-SFP-OC3S20

100Mbps SFP SM LC 1550nm 200km

N-GxX-xC-03

PCI Gigabit Ethernet Fiber Network Interface Cards

1000BASE-SX/LX



The Gigabit Ethernet NIC provides a 1000BASE-SX/LX fiber port, delivering fiber optic connectivity to the desktop for 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.



Ordering Information

N-GSX-SC-03

1000BASE-SX 850 nm MM (SC)
[62.5/125 μ m: 220 m/ 722 ft.]
[50/125 μ m: 550 m/ 1804 ft.]
Link Budget: 7.5 dB

N-GSX-LC-03

1000BASE-SX 850 nm MM (LC)
[62.5/125 μ m: 220 m/ 722 ft.]
[50/125 μ m: 550 m/ 1804 ft.]
Link Budget: 7.5 dB

N-GLX-SC-03

1000BASE-LX 1310 nm SM (SC)
[10 km/6.2 mi.] Link Budget: 10.5 dB

N-GLX-LC-03

1000BASE-LX 1310 nm SM (LC)
[10 km/6.2 mi.] Link Budget: 11.5 dB

Features

- Supports 32/64-bit PCI 2.2 bus
- Supports 802.1P/Q VLAN filtering function
- Full-duplex flow control
- Plug-and-Play auto-configuration
- TCP, UDP & IP checksum off-loading
- Supports Jumbo Frames up to 9014 bytes
- Low-profile bracket included
- Supports 802.3ad Link Aggregation (LACP)
- Integrated Remote Boot types supported: PXE, RPL and BOOTP

Specifications

Standards	IEEE Std. 802.3Z IEEE Std. 802.1P IEEE Std. 802.1Q IEEE Std. 802.3x IEEE Std. 802.3ad
Bus Slot	PCI 2.2 bus 32/64-bit
Status LEDs	LINK/ACT (Link/Activity): ON = communication link; FLASHING = activity on link FDX (Full-duplex): ON = Full-duplex link
Software Support	NetWare Server 4.x, 5.x, 6.x NetWare DOS Client ODI Windows 98, ME, 2000, 2003, XP, NT 4.0, VISTA Linux SCO UnixWare 7.1.x SCO Open Server Solaris
Boot Server Support	PXE, RPL, BOOTP
PCB Dimensions	Width: 2.2" [56 mm] Depth: 6.5" [165 mm] Height: 0.9" [23 mm]
Power	2.0A @ +5V
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	FCC Class A, CE Mark
Warranty	Lifetime

N-GXE-xx-01

PCIe Gigabit Ethernet Fiber Network Interface Cards

1000BASE-SX



N-GXE-xx-01 is a Fiber Gigabit Ethernet to PCIe bus adapter that fully complies with all IEEE 802.3z and 1000Base-SX/LX standards. It provides up to 2000 Mbps full-duplex bandwidth capacity to support high-end servers. In addition, with advanced functions like VLAN filtering packet processing, the adapter provides enhanced performance, flexible configuration and secure networking for users in a standard-based environment. Two LED indicators (LINK/ACT and FDX) on the bracket will help to oversee the board link, activities and full-duplex status.

Ordering Information

N-GXE-SC-01

1000BASE-SX 850nm multimode (SC)
[50/125 μ m fiber: 550 m/1804 ft.]
[62.5/125 μ m fiber: 220 m/722 ft.]
Link Budget: 7.5 dB

N-GXE-LC-01

1000BASE-SX 850nm multimode (LC)
[50/125 μ m fiber: 550 m/1804 ft.]
[62.5/125 μ m fiber: 220 m/722 ft.]
Link Budget: 7.5 dB

Features

- High bandwidth 1000 Mbps network speed
- Supports full-duplex mode
- Supports IEEE 802.3x Full-Duplex Flow Control
- Supports PCIe x1 bus
- Compliant with PCIe Rev.1.1 Interface
- Supports Jumbo Frame
- Supports High Level VLAN Filtering Function
- Supports IP headers and TCP/UDP checksums offload
- RoHS Compliance
- Supports on-board screening of VLAN tagged Ethernet frames
- Low-Profile Bracket Included

Specifications

Standards	IEEE 802.3z IEEE 802.3x IEEE 802.1Q
Bus Slot	PCI-e 1.1
Status LEDs	LINK/ACT (Link/Activity): ON = communication link FLASHING = activity on link FDX (Full-duplex): ON = Full-duplex link
Software Support	Windows 98/ME, 2000, 2003, XP, NT 4.0, Vista Novell Netware 4.x, 5.x, 6.x, Linux, PXE & RPL Boot ROM
PCB Dimensions	Depth: 4.25" [108 mm] Height: 2.70" 68.5 mm]
Power Requirement	5 Watts, + 3.3VDC@ 1.5A max.
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	EMI Standard, FCC Class B, CE Mark
Warranty	Lifetime

N-GXE-PoE-xx-01

PCIe Gigabit Ethernet Fiber Network Interface Card with POE+

1000Base-X and 10/100/1000Base-T POE+



The N-GXE-PoE-xx-01 Network Interface Card (NIC) provides connectivity to a secure fiber network while also delivering power to a PoE Powered Device (PD), such as a VoIP phone with a copper UTP interface. It fully complies with all IEEE 802.3z and 1000Base-X standards, providing up to 2000 Mbps full-duplex bandwidth capacity.

Developed to support high-end users, this two-port NIC has one 1000Base-X fiber network interface port and one switched 10/100/1000Base-T port supporting IEEE 802.3at PoE+ power. It is designed to allow a PC to power a VoIP phone, or any other traditional copper Powered Device, over a secure fiber network. Additionally, the NIC also has the ability to provide traffic switching functions between the copper and fiber ports, even when the PC is in a sleep mode.

Combining the functions of PC connectivity and VoIP phone connectivity into one device saves installation time, expense, and the space of having two devices at the desktop. When the VoIP traffic is filtered and prioritized by third-party devices like an Ethernet switch and the IP phone, this PoE NIC will pass all tagged traffic ensuring users experience a high level of quality of service. Or VLANs and Prioritization can be configured at the NIC via Transition's PoE NIC utility software.

Features

- High bandwidth 1000Mbps
- Supports Full-duplex Mode
- Supports IEEE 802.3x Full-Duplex Flow Control
- Supports PCIe x1 bus
- Compliant with PCIe Rev 2.1 Interface
- Supports Jumbo Frames
- Supports High Level VLAN Filtering Function
- Supports IP headers and TCP/UDP checksum offload
- Wake-on-LAN (WOL) power management
- PXE 2.1 Boot ROM Supported
- ACPI 2.0 Link Status LED for each port
- Low-profile bracket included
- Driver Support
 - Windows 7
 - Windows 8.1
 - Windows Server 2003
 - Windows Server 2008
- Available with a fixed LC port or an open SFP port

Specifications

Standards	IEEE 802.3-2000 IEEE 802.3z IEEE 802.3x IEEE 802.1Q IEEE 802.1p IEEE 802.3ab IEEE 802.3af IEEE 802.3at	
Jumper Switches	Legacy PoE Energy Efficient Ethernet (EEE) enable/disable Primary LPT Select	
LEDs	L/A POE RJ-45 Upper Lf RJ-45 Upper Rt	Fiber Link/Activity Power over Ethernet TP Link/Activity/Speed TP Duplex
Max Packet Size	Jumbo Frames, 10k bytes	
Mac Addresses	8k MAC address table	
Dimensions	Length: 6.5" [165.1 mm] Width: 4.8" [121.9 mm] Height: 0.9" [22.86 mm]	
Power input	PCIe 3.3V, 3.3VDC 12V Peripheral connection	
Power Consumption	3.2W PCIe, 30W PoE	
Power over Ethernet	Mode A Power	
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.	
Weight	2 lbs [0.90 kg]	
Compliance	Emission: EN55022 Class B, CE Immunity: EN55024	
Warranty	Lifetime	



Ordering Information

N-GXE-PoE-LC-01

1000Base-SX 850nm Multimode LC
[50/125um fiber: 550 m/1804 ft.]
[62.5/125 um fiber: 220 m/722 ft.]
Link Budget: 8.0 dB
Plus 10/100/1000Base-T PoE+

N-GXE-PoE-SFP-01

Gigabit Ethernet PCIe NIC with a 1000Base-X
Open SFP fiber port, plus a
10/100/1000Base-T PoE+ port

SFP+ Modules Sold Separately

Optional Accessories

N-PoE-CBLKIT

3 piece cable kit for 12V power input
connectivity options

27246

Cable assembly, 4 pin Molex to ATX Power
Cable Adapter

28582

Cable assembly, 4 pin Molex to SATA 15 pin
Female Power Adapter

28583

6 inch SATA Power Y Splitter Cable Adapter-M/F

NEC-GXE-xx-01

ExpressCard PCIe Gigabit Ethernet Fiber Network Interface Card

100Base-SX



Gigabit ExpressCards provide a 1000Base-X fiber port for delivering fiber optic connectivity to laptop computers in high security, fiber rich LAN environments. This small sized fiber card is specifically designed to plug into laptop computers equipped with an ExpressCard compliant slot. The card includes a single LED located on top of its plastic cover indicating link and activity status. Extensive Network Operating System drivers are provided, easing installation and configuration. Preboot Execution Environment (PXE) and Bootstrap Protocol (BOOTP) are also supported.

Features

- Complies with ExpressCard/34 standard
- IEEE 802.3az Gigabit Ethernet
- Full-duplex design
- Options for SC or LC fiber connectors
- Options for multimode or single mode fiber
- Driver support for wide variety of operating systems, Windows 7, XP, Vista, 2008
- Integrated support for PXE remote boot
- Supports Jumbo Frames up to 9K bytes
- Supports Wake-on-LAN (WoL) with optional power adapter

Specifications

Standards	IEEE 802.1Q IEEE 802.1P IEEE 802.3u IEEE 802.3x ExpressCard Compliant
Card Slot	ExpressCard/34 26-pin connector
Data Transfer Rate	1000 Mbps, 1,488,000 pps
Status LEDs	L/A - ON = communication link Flashing = Activity on link
Software Support	Windows 7, XP, Vista, 2008 Server
Dimensions	Length: 5.04" [128 mm] Width: 1.34" [34 mm] Height: 0.19" [5 mm]
Weight	1.0 lb. [0.45 kg]
Power consumption	3.3 Watts
Environment	Operating: 0°C to 50°C Storage: -15°C to 65°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Compliance	FCC Part 15 Class B, CE Mark
Warranty	Lifetime



Ordering Information

NEC-GXE-SC-01

1000BASE-SX/LX ExpressCard
850nm multimode (SC)
[62.5/125 μ m fiber: 220 m/722 ft.]
Link Budget: 7.5 dB
[50/125 μ m fiber: 550 m/1804 ft.]
Link Budget: 7.5 dB

NEC-GXE-LC-01

1000BASE-SX/LX ExpressCard
850nm multimode (LC)
[62.5/125 μ m fiber: 220 m/722 ft.]
Link Budget: 7.5 dB
[50/125 μ m fiber: 550 m/1804 ft.]
Link Budget: 7.5 dB

NEC-GXE-WOL

Wake-on-LAN (WoL) accessory kit

N-TGE-SFP-01

10 Gigabit Ethernet Fiber Network Interface Card

10G Base-SR/LR SFP+



Ordering Information

N-TGE-SFP-01

PCIe bus 2-port 10GBase-SR/LR

SFP+ Modules Sold Separately



The N-TGE-SFP-01 is a PCIe bus 2-port 10GBase-SR/LR SFP+ fiber NIC that fully complies with IEEE 802.3ae standards. It provides up to 20 Gbps full duplex bandwidth capacity to support high-end servers. It is suitable for Data Center, SMB and Cloud computing applications. Two LED indicators (LINK and ACT) on the bracket will help to oversee the board link and activities status.

Features

- High bandwidth 10Gbps network speed
- Supports IEEE 802.3x Full-Duplex flow control
- Compliant with PCIe 2.0 interface
- Supports Jumbo Frame up to 10Kbytes
- Supported transmission distance based on the SFP+ modules and fiber type used
- Supports IEEE 802.3ad Link Aggregation (LACP)
- Supports on-board screening of VLAN tagged Ethernet frames
- RoHS compliance
- Supports gPXE

Specifications

Standards	IEEE 802.3ae IEEE 802.3x IEEE 802.3 ad IEEE 802.1Q IEEE 802.1p
Bus Slot	PCIe 2.0
Data Rate	10 Gbps: 14,880,000 pps
Connector	SFP+: 10Gbps
Status LEDs	LINK/ACT (Link/Activity): ON = Communication link; Flashing=activity on link
Cable	Fiber (MM):50/125,62.5/125µm Fiber (SM): 9/125µm
Software Support	Windows 2003, 2003 R2, 2008 Windows 7 REHL v5.0 XenServer 5.6.0 VMware ESXi 4.0
Dimensions	Width: 2.2" [56mm] Depth: 6.5" [165mm] Height: 0.9" [23mm]
Power Requirement	Max. 7.5 Watts
Environment	Operating: 0°C – 40°C Humidity: 5% to 90% (non condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	FCC Part 15 Class B; CE Mark,
Waranty	Lifetime

N-GxX32-xC-03

Gigabit Ethernet Network Interface Card

Gigabit Ethernet 1000BASE-SX/LX



The Gigabit Ethernet NIC provides a 1000BASE-SX/LX fiber port, delivering fiber optic connectivity to the desktop for 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.

Ordering Information

N-GSX32-SC-03

1000BASE-SX 850 nm MM (SC)
[62.5/125 μ m: 220 m/ 722 ft.]
[50/125 μ m: 550 m/ 1804 ft.]
Link Budget: 7.5 dB

N-GSX32-LC-03

1000BASE-SX 850 nm MM (LC)
[62.5/125 μ m: 220 m/ 722 ft.]
[50/125 μ m: 550 m/ 1804 ft.]
Link Budget: 7.5 dB

Features

- Lifetime Warranty
- Supports 32-bit PCI 2.2 bus
- Supports 802.1P/Q VLAN filtering function
- Full-duplex flow control
- Plug-and-Play auto-configuration
- TCP, UDP & IP checksum off-loading
- Ships with Standard Profile Bracket attached,
- Low Profile Bracket included
- Integrated Remote Boot types supported:
- PXE, RPL and BOOTP

Specifications

Standards	IEEE Std. 802.3Z IEEE Std. 802.1P IEEE Std. 802.1Q IEEE Std. 802.3x
Expansion Bus Standard	PCI 2.2 bus 32-bit
Status LEDs	LINK/ACT (Link/Activity): ON = communication link; FLASHING = activity on link FDX (Full-duplex): 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, VISTA Linux SCO UnixWare 7.0.x SCO Open Server Solaris Free BSD
Boot Server Support	PXE, RPL, BOOTP
PCB Dimensions	Length: 5.05" [128.5 mm] Height: 2.26" [57.5 mm]
Power	2.0A @ +5V
Environment	0° – 50°C; 5% – 90% humidity non-condensing;
Shipping Weight	1 lb. [0.45 kg]
Regulatory Compliance	FCC Class B, CE Mark, RoHS
Warranty	Lifetime



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