LANTRONIX®

PCIe Gigabit Ethernet Fiber Network Interface Cards

1000Base-SX

N-GXE-SC-02

The N-GXE-xx-02 Series is a Fiber Gigabit Ethernet to PCIe bus adapter that fully complies with all IEEE 802.3z and 1000Base-SX 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, link aggregation, smart load balancing, failover, and Wake-on-LAN, the adapter provides enhanced performance, flexible configuration and secure networking for users in a standard-based environment. An LED indicator on the bracket displays link status, activity and speed.

Ordering Information

N-GXE-SC-02
1000Base-SX 850nm multimode (SC)
[62.5/125 µm fiber: 220 m/722 ft.]
[50/125 µm fiber: 550 m/1804 ft.]
Link Budget: 8.0 dB

N-GXE-LC-02
1000Base-SX 850nm multimode (LC)
[62.5/125 µm fiber: 220 m/722 ft.]
[50/125 µm fiber: 550 m/1804 ft.]
Link Budget: 8.0 dB

N-GXE-ST-02
1000Base-SX 850nm multimode (ST)
[62.5/125 µm fiber: 220 m/722 ft.]
[50/125 µm fiber: 550 m/1804 ft.]
Link Budget: 8.0 dB

N-GXE-SFP-02
100/1000Base-X open SFP fiber port
(SFP sold separately)

Optional Accessories (sold separately)
SFP Modules

Features

- Supports PCIe x1 bus
- High bandwidth 1000 Mbps network speed (100/1000 Mbps with Auto-Negotiation for SFP version)
- Supports full-duplex mode
- Supports IEEE 802.3x and IEEE 802.3z Full-Duplex Flow Control
- Compliant with PCIe Rev 2.1 Interface
- IEEE 802.1Q VLAN Support
- Link Aggregation Control Protocol (LACP)
- Link Aggregation Smart Switch
- Smart Load Balancing (SLB) and Failover
- Full Wake-on-LAN Support
- Advanced Power Management (APM) Support
- Advanced Configuration and Power Interface (ACPI) Specification v2.0c
- Magic Packet Wake-up enable
- Jumbo frames support up to 9014 bytes
- IPv4 and IPv6
- IPv4 checksum offloading TCP/UDP
- IPv6 support for IP/TCP and IP/UDP receive checksum offload
- Transmit Segmentation Offloading (TSO)
- Interrupt Handling
- Interrupt Throttling Control
- Legacy and Message Signaling Interrupt/Extension (MSI/MSI-X)
- Intelligent Interrupt Generation

Network Adapters

Specifications

Standards	IEEE 802.3, 2006 Edition IEEE 802.3z IEEE 802.3x IEEE 802.1Q IEEE 802.3ad
Bus Slot	PCIe v2.1 x1
Status LEDs	Fixed Optic Versions: L/A On = Communication link Off = Link Fail Flash = Link OK and Activity Green = Full duplex, Yellow = Half duplex SFP Version: L/A On = Communication link Off = Link Fail Flash = Link OK and Activity Green = 1 Gbps; Yellow = 100 Mbps
Software Support	Windows 7, 8, 8.1,10 Pro, Linux, Windows Server 2008, 2008 R2, FreeBSD, 2012
Boot Server Support	PXE and UEFI Boot
Dimensions	Depth: 4.097" [104.064 mm] Height: 2.175" [55.245 mm]
Power Consumption	2.0W PCI-E / ~1 watt
Power Requirement	Fixed Optic Version: 0.87 Watts (approximately), 264 mA @ 3.3 VDC SFP Version: 1.66 Watts (approximately), 503mA @ 3.3 VDC
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	0.55 lbs. [0.25 kg]
MTBF	N-GXE-xx-02 (-SC, –LC, -ST) 　　1246,176 Bellcore7 V5.0 Hours 　　658,260 Bellcore7 V5.0 Hours N-GXE-SFP-02 　　1246,176 Bellcore7 V5.0 (Hours) 　　658,260 Bellcore7 V5.0 (Hours)
Certifications	EN55022 Class B, EN55024, CE Mark, ROHS
Warranty	Lifetime

Features Continued

- Low Latency Interrupts
- PXE and UEFI Boot
- RoHS Compliance
- Standard bracket attached, low-profile bracket included
- Supports identification of NIC when multiple cards are installed