



## **GNC-0111**

1000FX Multi-mode SC Fiber Optic PCI Express Card

## **User Manual**

Ver. 1.00-0801

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## **Caution**

Circuit devices are sensitive to static electricity, which can damage their delicate electronics. Dry weather conditions or walking across a carpeted floor may cause you to acquire a static electrical charge.

To protect your device, always:

- Touch the metal chassis of your computer to ground the static electrical charge before you pick up the circuit device.
- Pick up the device by holding it on the left and right edges only.

## **Electronic Emission Notices**

### **Federal Communications Commission (FCC) Statement**

This equipment has been tested and found to comply with the limits for a class B computing device pursuant to Subpart J of part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

### **European Community (CE) Electromagnetic Compatibility Directive**

This equipment has been tested and found to comply with the protection requirements of European Emission Standard EN55022/EN60555-2 and the Generic European Immunity Standard EN50082-1.

EMC:	EN55022(1988)/CISPR-22(1985)	class B
	EN60555-2(1995)	class B
	EN60555-3	
	IEC1000-4-2(1995)	4K V CD, 8KV, AD
	IEC1000-4-3(1995)	3V/m
	IEC1000-4-4(1995)	1KV – (power line), 0.5KV – (signal line)

## 1. Overview

Gigabit Ethernet PCI-e 1000SX/LX Fiber Adapter is a Gigabit Ethernet Board that fully complies with all IEEE 802.3z and 1000Base-SX/LX standards. Two LED indicators (LINK/ACT and FDX) on the bracket will help to oversee the board link, activities and full-duplex status.

Gigabit Ethernet PCI-e 1000SX/LX Fiber adapters support Preboot Execution Environment (PXE), Remote Program Load (RPL), and Bootstrap Protocol (BOOTP). Multi-Boot Agent (MBA) is a software module that allows your networked system to boot with the images provided by remote systems across the network.

## 2. Checklist

Before you start installing the Gigabit Ethernet PCI-e 1000SX/LX Fiber Adapter, verify that the package contains the following items:

- Gigabit Ethernet PCI-e 1000SX/LX Fiber Adapter
- LAN Driver and User's Guide CD-ROM

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

## 3. Model Description

PCI-e 1000SX/LX Board Models	
Fiber Transceiver	Wavelength
SC multi-mode	850nm

## 4. Network Remote Boot Configuration

### 4.1 Select Remote Boot Type

For entering "MBA Configuration Menu" to select Remote Boot Type (PXE, RPL), please press Shift-Tab within 3 seconds after power on your PC, otherwise, the system would go to Windows O.S.

### 4.2 Set Network Remote Boot

For setting network remote boot, please enter PC BIOS first, then select "Boot" tab, after that, choose "MBA" as the priority first boot device.

### 4.3 Cancel Network Remote Boot

To cancel network remote boot, please change the "Boot" setting in PC BIOS from "MBA" to "Hard Drive" or other devices.

## 5. LED Description

LED	Color	Function
LINK/ACT	Green	Lit when cable connection is good and speed is at 1000Mbps. Blinks when any traffic is present.
FDX	Green	Lit when full-duplex mode is active.

## 6. Network Parameter

IEEE 802.3z Gigabit Ethernet 1000SX 850nm	<i>Multi-mode Fiber Cable and Modal Bandwidth</i>			
	Multi-mode 62.5/125 $\mu$ m		Multi-mode 50/125 $\mu$ m	
	Modal Bandwidth	Distance	Modal Bandwidth	Distance
	160MHz-Km	220m	400MHz-Km	500m
200MHz-Km	275m	500MHz-Km	550m	

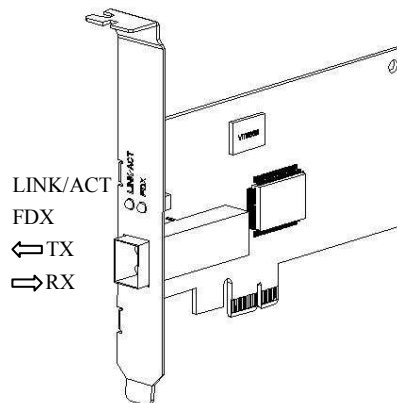


Fig. 1 Diagnostic LEDs and Bracket

## 7. Technical Specifications

**Standards** : IEEE 802.3z  
 Gigabit Ethernet 1000Base-SX/LX  
 IEEE 802.3x Full-Duplex Flow Control  
 IEEE 802.3ad Link Aggregation  
 IEEE 802.1Q VLANs  
 IEEE 802.1p Quality of Service

**Connector** : 850nm SC multi-mode

### Fiber Optic Cable:

— 62.5/125, 50/125 $\mu$ m multi-mode

### Data Transfer Mode/Speed:

— Full duplex with flow control  
 — 1000Mbps speed

**Diagnostics LED on Bracket:**

- LINK/ACT
- FDX

**Bus Slot** : PCI-e 1.1 Compliant  
**Power Requirement** : Max. 5W, +3.3VDC@1.5A  
**Ambient Temperature** : 0° to 50°C  
**Humidity** : 5% to 90%  
**Emission** : Complies with EMI Standard  
FCC Class B  
CE Mark