

# Gigabit Ethernet Adapter

10/100/1000Mbps PCI

**Gigabit Ethernet Adapter** 

EN-9230TX-64/32

User's Manual



### FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits of a Class B computing devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

If you suspect this product is causing interference, turn your computer on and off while your radio or TV is showing interference. If the interference disappears then when you turn the computer off and reappears then you turn the computer on, something in the computer is causing interference.

You can try to correct the interference by one or more of the following measures:

- 1. Reorient/Relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit difference from that to which the receiver is connected
- 4. Ensure that all expansion slots (on the back or side of the computer) are covered. Also ensure that all metal retaining brackets are tightly attached to the computer.

# 1 Introduction

Thanks you for purchasing our Gigabit Ethernet Adapter. This guide is to provide the installation and usage of this adapter for network installers and users. The Gigabit network adapter complies to 64-/32-bit (EN-9230TX-32 supports 32-bit only) PCI specification and supports half-full-duplex feature which can double network speed.

This adapter supports 1000Mbps(Gigabit), 100Mbps and 10Mbps network speed, 1000BaseT operates on all four pairs of category 5 UTP cable, 100BaseTX operates on two pairs of category 5 UTP cable and 10BaseT operates on Category 3, 4 or 5 UTP cable.

With the Auto-Negotiation technology, network speed is auto detected. When you connect the adapter to Gigabit Switch or another Gigabit NIC, the speed will be doubled to 2000Mbps (1000Mbps Transmit and 1000Mbps Receive). If you connect the adapter to 100BaseTX hub, the network speed is 100Mbps. Similarly, if the hub is a switching hub which supports full duplex function, then the speed will be doubled to 200Mbps.

This adapter supplies many drivers including NDIS 4, 5 driver for Microsoft Windows 98SE, Me, NT, 2000, XP, Netware Server 5.x, Netware ODI for DOS, Linux and Unix. Whatever your requirements are ease of installation, superior performance or responsive support backed up by unlimited technical support, this adapter is the superior choice.

# **2** Features & Specifications

### (1) Features & Benefits

- Supports 64-/32-bit (EN-9230TX-32 supports 32-bit only), 66/33MHz PCI Local Bus Master Version 2.2/2.1.
- Complies with the IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x.
- Supports IEEE 802.3x full duplex flow control.
- Supports IEEE 802.1Q VLAN tagging.
- Supports PCI 2.1 Wake On LAN function.
- Plug and Play installation, auto-setup IRQ and I/O address.
- Auto-Negotiation, full-/half- duplex.
- Supports Web-based Management.
- Provide three LEDs to indicate network link/activity and 10/100/1000Mbps connections.

### (2) Technical Specification

Topology : StarConnector : RJ-45

• Standard : IEEE 802.3 10BaseT

IEEE 802.3u 100BaseTX IEEE 802.3ab 1000BaseT

• Transmission Rate : 10Mbps/20Mbps

100Mbps/200Mbps 1000Mbps/2000Mbps

• Hardware Required : IBM compatible PC with

available PCI slot

(PCI 2.2/2.1), 64-/32-bit,

66/33MHz

• IRQ Line : Assigned by system

• I/O Address : Assigned by system

• Drivers : Windows 98SE/Me/NT/2000/XP,

Netware Server 5.x, Netware ODI for DOS,

Netware ODI for DOS

• LEDs : 10Mbps Link/Activity

100Mbps Link/Activity 1000Mbps Link/Activity

• Temperature : 32-131°F (0-55°C)

• Humidity : 10% to 95% (Non-condensing)

• Certification : FCC Class B, CE Mark, C-tick

• Dimension : 163 x 64 mm (EN-9230TX-64)

144 x 63 mm (EN-9230TX-32)

•Weight : 81g (EN-9230TX-64)

76g (EN-9230TX-32)

# 3 Installation

### (1) Hardware Installation

To insert the network adapter into your PC, follow the steps as below:

- 1. Turn off the computer and remove its cover.
- 2. Insert the adapter into a PCI slot.
- 3. Secure this adapter to the rear of the computer chassis and put back the computer cover.
- 4. Connect the adapter to the network using twistedpair cable.

### (2) Driver Installation

Use the drivers supplied by the diskette included in this product. For detail description, please execute the readme.exe in the root directory of the diskette provided by this product.

### (3) Hardware Installation for Wake On LAN

**This card supports PCI 2.1 Wake On LAN function**. Please refer to following instructions for installation of

### A. Hardware Requirement for Wake On LAN

- If your motherboard supports the PCI 2.1 only, then the motherboard must provide a 3-pin WOL connector. (Some computers may require you to change a setting in your computer's BIOS or setup program to enable the WOL feature.)
- •ATX 2.01 power supply.

Wake On LAN.

Note: Please installs only one active WOL adapter per computer. You can install additional non-WOL adapters.

### (3) Hardware Installation for Wake On LAN

Please follow the next procedure to install the WOL adapter to PCI 2.1 motherboard.

- 1. Unpack the 3-pin auxiliary power cable.
- 2. Insert the 3-pin auxiliary power cable into the connector on the adapter.
- 3. Attach the 3-pin auxiliary power cable to the connector on the PC motherboard.

# 4 Trouble-shooting

If you experience any problems with the adapter, please make sure the appropriate driver is loaded, the proper cable is connected to the adapter port and the hub/switch complies with the adapter specification, such as 10Mbps 10BaseT, 100Mbps 100BaseTX and 1000Mbps 1000BaseT, then check the LED.

The adapter provides three LEDs to indicate network status.

### ■ 10Mbps Link/Activity

The LED indicates if the 10Mbps UTP has been LINK ok or not. When the light is OFF, it indicates that the 10Mbps UTP port has not been connected or LINK not ok. When the light is ON, it indicates that the 10Mbps UTP port LINK ok. When the light is BLINKING, it indicates that there is traffic flow on the network which the adapter is connected to.

### ■ 100Mbps Link/Activity

The LED indicates if the 100Mbps UTP has been LINK ok or not. When the light is OFF, it indicates that the 100Mbps UTP port has not been connected or LINK not ok. When the light is ON, it indicates that the 100Mbps UTP port LINK ok. When the light is BLINKING, it indicates that there is traffic flow on the network which the adapter is connected to.

### ■ 1000Mbps Link/Activity

The LED indicates if the 1000Mbps (Gigabit) UTP has been LINK ok or not. When the light is OFF, it indicates that the 1000Mbps UTP port has not been connected or LINK not ok. When the light is ON, it indicates that the 1000Mbps UTP port LINK ok. When the light is BLINKING, it indicates that there is traffic flow on the network which the adapter is connected to.

### (Wake On LAN)

### ■ The PC can not boot up after installing the adapter.

- 1. Remove the 3-pin cable from the PC connector.
- Boot up the PC, run setup program to enable ACPI or Wake On LAN.
- 3. Turn off the PC and reconnect the 3-pin cable to the PC.
- 4. Boot up the PC again.

# ■ The PC does not boot up when a Magic Packet or Wake Up Frame is sent.

- 1. Check the specification of this PC meets the hardware requirement in Chapter 3.
- Verify the BIOS setting of Wake On LAN is configured properly. (Please check your computer owner's manual or contact your dealer for more information.)
- 3. Remove the PC cover and check the 3-pin cable connection.
- 4. If the adapter still does not wake up, install a known good working Wake On LAN adapter and 3-pin auxiliary power cable in the PC and recheck the PC.

### [!] Contact your dealer if problem persist.

### **TRADEMARKS**

Copyright 2002/2003 by the manufacturer of this product. No part of this manual may be reproduced, transcribed, stored in a retrieval system, translated into any language or computer language without the prior written consent of the manufacturer.

All brand and product names are trademarks and/or registered trademarks of their respective companies.

(