FNC-0108TX
10/100Mbps
Fast Ethernet Adapter

User's Manual
Version:1.0

FCC Warning

This equipment has been tested and found to comply with the regulations for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Trademarks

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P/N: 6012-2114301

Table of Contents

INTRODUCTION

Thank you for choosing the FNC-0108TX 10/100Mbps Fast Ethernet Adapter, the value leader among Fast Ethernet adapters for PCI–Bus personal computers.This Introduction chapter will be useful if you are new to Fast Ethernet and other new technology featured by the FNC-0108TX 10/100Mbps Fast Ethernet Adapter. Otherwise, skip ahead to the Installation chapter.

About Fast Ethernet

Fast Ethernet is a network technology specified by IEEE Standard 802.3u. It extends the traditional 10Mbps Ethernet technology to achieve 100Mbps transmission and reception, while retaining the same CSMA/CD Ethernet protocol. Thus while Fast Ethernet provides a tenfold increase in network capacity, it is wholly compatible with traditional 10Mbps Ethernet network facilities.

About Auto-negotiation

Auto-negotiation is an IEEE 802.3 procedure of negotiating the highest data flow capability between the device (in this case, our Adapter) and their links partner (some other device). The data flow information, to be negotiated, consists of the data speed (10Mbps or 100Mbps) and data transfer (half-duplex or full-duplex communication). The physical process of auto-negotiation requires only a few milliseconds to choose the fastest communications capability between the two devices.

About WOL (for ACPI/WOL model only)

WOL (Wake-On-LAN) is an ACPI function allowing a powered OFF computer to be powered ON from a remote station. ACPI (Advanced Configuration Power Interface) is a new technology and an open industry specification to provide power management support systems through hardware and operating system cooperation. To use the WOL feature, the NIC must be WOL capable and the motherboard of the PC (for which the card is installed) must be of ACPI architecture.

While the powered OFF computer sleeps, the WOL NIC monitors LAN traffic for valid Wake-up frames. The NIC will determine whether a received Wake-up frame is addressed to the PC. If so, the NIC will send a signal to the motherboard to power ON the computer.

What is the utility in the WOL card?

- "I forgot a document and I'm out of town?" Send a Wake-up signal to your computer and transfer the needed file to your location.

- Initiate long routines and reports before you get to work.

- Transfer files when the network traffic is low (during late hours).

- Power ON your PC before you arrive to work.

WOL has great utility in power management of PCs, workstations, and kiosks.

Product Featues

Designed for versatility and performance, the FNC-0108TX10/100Mbps Fast Ethernet Adapter provides the following features:

- 10/100Mbps NWay Interface
- 32-bit PCI Bus Master operation
- Single shielded RJ-45 connector
- UTP and STP supported
- Remote Boot Rom socket supported
- Wake-On-LAN (WOL) provides great utility for power management of PC.
- 100Mbps Fast Ethernet or 10Mbps Ethernet data transfer, selected via auto-negotiation.
- Full-duplex or half-duplex operation, selected by auto-negotiation.
- Drivers for all leading Network Operating Systems.
- Four LED indicators: Link, Activity, 100Mbps, Collision/Full-duplex.
  - LINK Indicator
    A steady *green* LED indicates good linkage between the FNC-0108TX 10/100Mbps Fast Ethernet Adapter and its supporting hub.
  - ACTIVITY Indicator
    A flashing *green* LED indicates that the adapter is sending or receiving data.
  - 100M Indicator
    This LED indicator lights *green* when this adapter connected to 100Mbps Fast Ethernet Networks. If this adapter connected to 10Mbps Ethernet Network, the LED indicator lights off.
  - Collision/Full-duplex Indicator
    This LED indicator lights *green* when a respective port is in full duplex (FDX) mode. Otherwise, it is OFF for half duplex (HDX) operations. It blinking *green* when collisions are occurring on the respective port.

INSTALLATION

Installation of a FNC-0108TX 10/100Mbps Fast Ethernet Adapter requires Hardware installation first, then BIOS and Software installation.

Hardware Installation

1. Trun OFF the computer, unplug is power cord and open the computer case.
2. Insert the contact edge of the FNC-0108TX 10/100Mbps Fast Ethernet Adapter into the connector of any available PCI Bus Master expansion slot. Press the card firmly into the connector and ascertain that the card contacts are fully seated in the connector.
3. For WOL model, connect the WOL cable to the NIC WOL connector. Both ends of the WOL cable are identical, so either and may be used.
4. Install the bracket screw, which secures the card to the cinouter chassis.
5. Replace the computer's case and connect the network cable to newly installed network card. Reconnect the computer's power cord and plug it into the power outlet.

BIOS Configuration

Due to a fault in some Plug-n-Play BIOS programs, it happens occasionally that a newly installed adapter is assigned an Interrupt Number which is already assigned to another device. In such a case, the conflict of Interrupt Number will cause faults in the behavior of both devices. Then it is necessary to run the CMOS Setup

utility, and manually assign a non-conflicting Interrupt Number.

Driver Installation

Before you connect the FCN-0108TX 10/100Mbps Fast Ethernet Adapter to the network, you have to install the network driver first. The driver for each networking operating system is under a separate directory. A HELPME.EXE file under root directory lists the information and detailed installation procedure of all the available drivers.

Boot ROM Installation

The optional Boot ROM device allows you to connect a diskless workstation to the network. Perform the following steps to install your Boot ROM device:

1. Insert the Boot ROM into the socket on the Card.

2. Refer to the installation procedure provided by networking operating system.

SPECIFICATIONS

Standards:	IEEE 802.3 10BASE-T
	IEEE802.3u 100BASE-TX
	PCI Local Bus specification Rev.2.1
Host interface:	PCI 2.1 Bus (Bus Master)
Data Bus Width:	32-bit PCI bus mastering
Jumperless Hardware	
Auto-negotiation functionality	
Wake-On-Lan: (for WOL model only)	AMD's Magic Packet
LED indicators:	Link, Activity, 100M, COL/FDX
Media Interface:	RJ-45
EMI Compatiblity:	FCC Class B
	CE Certification, Class B
	VCCI-II
	Canada C-Tick
Dimensions:	130mm x 65mm
Storage Temperture:	-25°C ~ 70°C
Operating Temp.:	0°C ~ 50°C
Storage Humidity:	10% ~ 90% non-condensing
Operating Humidity:	10% ~70% non-condensing
Power Consumption:	1.25 Watts (maximum)
PCB Layer:	2 layers