

Accton

Making Partnership Work

Cheetah PCI Adapter Quick Installation Guide



Introduction

Accton's Cheetah PCI Adapter is a dual-speed Fast Ethernet card for PCI local bus compliant computers. A true plug-and-play device, this card is auto-configurable upon power up and also supports auto-negotiation to automatically select the optimum speed and communication mode of an attached device. Additionally, the Cheetah PCI Adapter complies with ACPI, Wired for Management 2.0, and PC99, and includes support for Remote Wake-Up by Magic Packet™.

Package Checklist

Accton's Cheetah PCI Adapter includes:

- 1 Cheetah PCI Adapter (EN1207D-TX)
- 1 driver diskette
- 1 registration card (please return)
- This Quick Installation Guide

Immediately inform your dealer in the event of any incorrect, missing or damaged parts. If possible, please retain the carton and original packing materials in case there is a need to return the product.

Note that new or updated driver information is available via Accton's Web site.

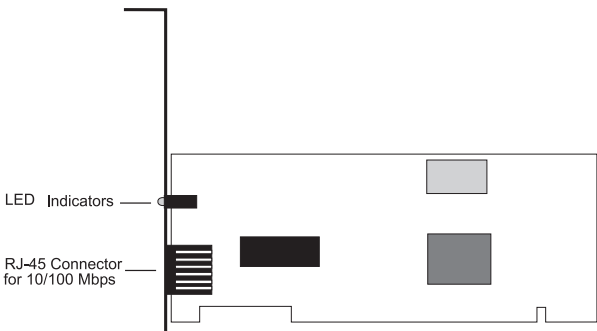
Please fill out and return the registration card to Accton. The Cheetah PCI Adapter is covered by a limited lifetime warranty.

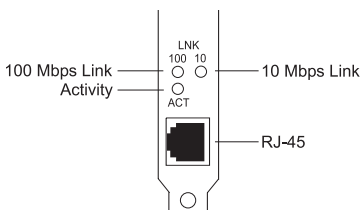
Hardware Description

The Cheetah PCI Adapter is equipped with :

- 1 10BASE-T/100BASE-TX RJ-45 port
- 3 LED indicators

The components of the Cheetah PCI Adapter are shown in the figure below:





LED Indicators

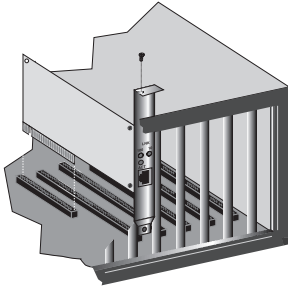
The following table describes the operation of the Cheetah PCI Adapter status LEDs:

LED	Status	Description	
LNK	10 Mbps	Green	Valid 10BASE-T link
		Off	Power is off: 10BASE-T connection is invalid
	100 Mbps	Green	Valid 100BASE-TX link
		Off	Power is off: 100BASE-TX connection is invalid
ACT	Green	Heavy network activity	
	Blinking	Intermittent or light network activity (the blinking rate is proportional to the amount of network traffic)	

Installation

Warnings:

- Network cards are sensitive to static electricity. To protect the card, avoid touching its electrical components and always touch the metal chassis of your computer before handling the card.
 - Backup your driver diskette and use the copy as the working diskette to protect the original from accidental damage.
1. Switch off the computer, unplug the power cord, and remove the computer's cover.
 2. Select an unused PCI bus-master slot and remove its protective bracket.
 3. Carefully insert the card and press until all the edge connectors are firmly seated inside the slot. Then, screw the card's bracket securely into the PC's chassis.

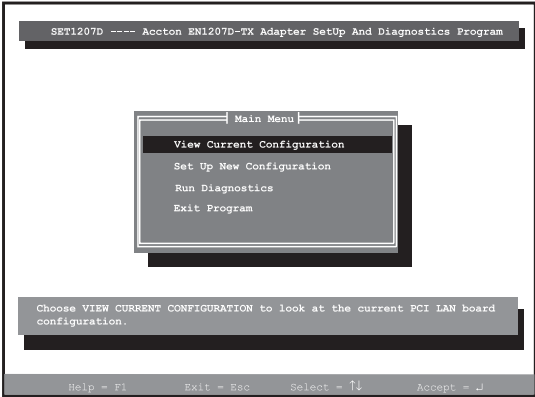


4. Connect the Cheetah PCI Adapter directly to a 10BASE-T or 100BASE-TX hub or switch using UTP cable (Category 3, 4 or 5 for 10BASE-T; Category 5 for 100BASE-TX). The maximum allowable length of UTP cable connections is 100 meters (328 ft.). When inserting an RJ-45 plug, be sure the tab on the plug clicks into position to ensure that it is properly seated.
5. Replace the computer's cover and power it on. The Cheetah PCI Adapter should be automatically configured by the host computer's BIOS. However, if you have an older computer, you may have to manually configure the computer's BIOS settings. See "Troubleshooting."
6. Install the appropriate network driver for your operating system. The Accton driver diskette that accompanies the Cheetah PCI Adapter contains all the network operating system drivers supported by this card. For convenience, the Windows 95/98 and Windows NT drivers are placed in the diskette's root directory. Please read the "RELEASE.TXT" file on the diskette for a list of all drivers. A text file is included with each driver to detail the proper installation procedure. Any new or updated drivers can be downloaded from Accton's Web site at <http://www.accton.com>.

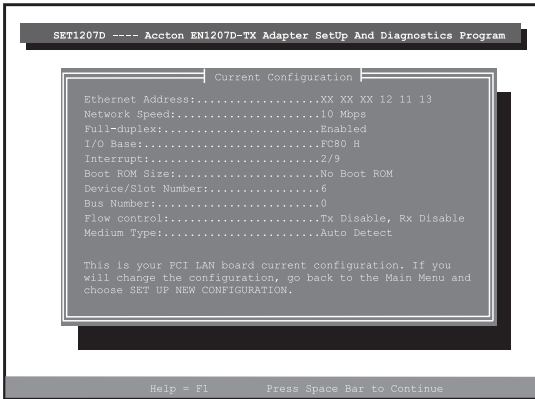
Setup Program

If the Cheetah PCI Adapter is not automatically configured by the host PC, or there is a problem with the card, run the DOS-based Setup Program to help configure the PC's BIOS settings and test the card.

1. Boot the computer to a full DOS environment (not a DOS window) and run the Setup Program, SET1207D.EXE, on the Accton driver diskette. The screen will display the Main Menu (see below).



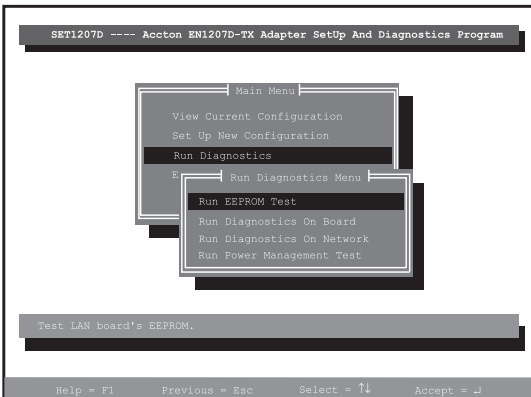
2. Select the “View Current Configuration” option from the Main Menu to access the screen shown below. If you wish to modify the current configuration, return to the Main Menu and select “Setup New Configuration.”



3. The host computer’s BIOS automatically allocates the necessary resources, such as the Interrupt and I/O Base, to the Cheetah PCI Adapter. Although the Setup Program will not allow you to change those resources, you can change the settings displayed on the “Setup New Configuration” screen (see below).



4. In the event of a problem with the Cheetah PCI Adapter, use the Setup Program to run the card's built-in diagnostics (see the "SET1207D.TXT" file for specific instructions). Should any of the diagnostic tests fail, reboot your computer and run the diagnostics again to see if the problem persists. If it does, record the failure indicated and contact Accton's Technical Support for assistance.



Troubleshooting

Check the following troubleshooting items before contacting Accton Technical Support.

PCI Compatibility

Some PCI computers are not self-configuring and require you to perform some or all of the following functions by motherboard jumper changes and/or BIOS Setup program configuration:

- Make sure your BIOS correctly supports the PCI Local Bus Specification v2.0 or later and upgrade your computer BIOS to the latest version.
- Verify that the PCI slot is an enabled bus-master slot and not a slave PCI slot. In some computers the PCI slot must be configured to enable bus mastering. Refer to your PC's manual and check the PCI BIOS Setup program to be sure the PCI slot is an enabled bus-master slot.
- In some computers, you may be required to disable Plug 'n Play (PnP) in the BIOS Setup program if resources are not properly assigned between installed cards.
- Some computers may require you to reserve interrupts and memory addresses for installed ISA cards to prevent PCI cards from using the same settings. Refer to your PC's manual and check the PCI BIOS Setup program configuration options for ISA cards.
- Make sure the PCI slot is configured to support INTA.
- Be sure that INTA for the slot is assigned to a free interrupt (IRQ) number.
- Check the BIOS Setup program's PCI parameters for the slot where the Cheetah PCI Adapter is installed. Be sure the slot is configured for level-triggered interrupts instead of edge-triggered interrupts. An example of typical PCI parameters follows:

PCI Slot #:	(slot number where the network card is installed)
Master:	Enabled
Slave:	Enabled
Latency Timer:	40 (range is 20 to 255)
Interrupt Type:	Level-Triggered
Interrupt Number:	(choose any number the BIOS Setup supplies that does not conflict with another installed card)

Note: The wording of these parameters varies with different computers, and not all parameters may be configurable.

Always consult your computer manual for information on changing motherboard jumper settings and BIOS Setup program parameters for use with PCI network cards. If you set a motherboard jumper and modify the computer's BIOS Setup, make sure the jumper and BIOS settings match.

Adapter Installation Problems

If your computer can't find the Cheetah PCI Adapter or the network driver doesn't install correctly, check the following:

- Make sure the adapter is securely seated in the PCI slot. Check for any hardware problems, such as physical damage to the card's edge connector.
- Try the card in another PCI bus-master slot. If all fails, test with another Cheetah PCI Adapter that is known to operate correctly.
- Check for resource conflict in the PCI configuration. See "PCI Compatibility."
- Make sure your computer is using the latest BIOS available.
- If there are other network adapters in the computer, they may be causing conflict. Remove all other adapters from the computer and test the Accton adapter separately.
- Check for a defective computer or PCI bus by trying the adapter in another computer that is known to operate correctly.

Network Connection Problems

If the Link LED on the adapter's bracket does not light, or if you can't access any network resources from the computer. Check the following:

- Be sure you are using Category 5 cable for 100Mbps connections, and that the length of any cable does not exceed 100m (328ft.).
- Inspect all network cables and connections. Make sure the cable is securely attached to the adapter's connector.
- Make sure the correct software driver is installed for your operating system. If necessary, try reinstalling the driver.
- Make sure the computer and other network devices are receiving power.
- If the adapter's speed or duplex mode has been configured manually, check that it matches that of the attached network device port. Note that it is recommended to set the adapter to auto-negotiation when installing the network driver.
- The port on the network device that the adapter is attached to may be defective. Try using another port on the device.
- If you cannot access a Windows or NetWare service on the network, check that you have enabled and configured the service correctly. If you cannot connect to a particular server, be sure that you have access rights and a valid ID and password.
- If you cannot access the Internet, be sure you have configured your system for TCP/IP.

Compliances

FCC Class B Certification

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning! This equipment has been tested and found to comply with the limits 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 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from the one which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Attach shielded or unshielded Category 3, 4 or 5 twisted-pair cable to the RJ-45 port.

Note: In order to maintain compliance with the limits of a Class B digital device, Accton requires that you use a quality interface cable when connecting to this device. Changes or modifications not expressly approved by Accton could void the user's authority to operate this equipment. Suggested cable type is 100Ω shielded or unshielded Category 3, 4, or 5 twisted-pair cable for the RJ-45 port.

CSA Statement (Canada)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radio-électriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par l'Industrie.

VCCI Class B Compliance (Japan)

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取扱説明書に従って正しい取り扱いをして下さい。

CE Mark Declaration of Conformance

This is to certify that this product complies with ISO/IEC Guide 22 and EN45014. It conforms to the following specifications:

EMC: EN55022(1988)/CISPR-22(1985)	class B
IEC 1000-4-2(1995)	4kV CD, 8kV AD
IEC 1000-4-3(1995)	3V/m
IEC 1000-4-4(1995)	1kV - (power line)
IEC 1000-4-6(1995)	3Vrms

This product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, and carries the CE Mark accordingly.

Specifications

General Specifications

Network Interface	10BASE-T RJ-45 (UTP Cable: Categories 3, 4, 5) 100BASE-TX RJ-45 (UTP Cable: Category 5)
Data Interface	32-bit bus-mastering PCI
I/O Address	Automatically determined by configuration space
Interrupt	INT A, mapping to BIOS IRQ setup
LED Indicators	10 Mbps Link, 100 Mbps Link, Activity
Temperature	0 to 55 °C (32 to 131 °F) operating -10 to 65 °C (14 to 149 °F) storage
Humidity	10% to 90% (non-condensing)
Power Consumption	+5 VDC @ 210 mA (maximum)
Size (without bracket)	119.92 x 56.03 mm (4.72 x 2.21 in)
Weight	56 g (1.98 oz)
Standards Supported	IEEE 802.3, 802.3u PCI bus V2.2 PCI Power Management Specification 1.1 ACPI 1.0b (no D3-Cold support) WfM 2.0 Microsoft On/Now PC99 Magic Packet
EMC/Safety Compliances	
CE Mark	EN50081-1, EN55022, IEC1000-4-2/3/4/6
Emmissions	FCC Class B, VCCI Class B, Industry Canada Class B, EN55022 (CISPR 22) Class B

Software Drivers

Microsoft drivers	Windows 95/98 Windows NT 3.51, 4.0 Windows 2000 Windows for Workgroups 3.11 LAN Manager v1.x, 2.x
Novell NetWare	NetWare 3.1x, 4.x, 5.0 32-bit ODI Driver 16-bit DOS ODI Driver Client32 for Windows 95
Unix	SCO Unix 5,0x SCO Unixware 7.x Linux FreeBSD
Other	NDIS2 DOS Mode Driver Packet Driver

Warranty

Accton warrants to the original owner that the product delivered in this package will be free from defects in material and workmanship for the lifetime of the product. For the warranty to apply, you must register your purchase by returning the registration card indicating the date of purchase and including proof of purchase. There will be a minimal charge to replace consumable components, such as fuses, power transformers, and mechanical cooling devices. The warranty does not cover the product if it is damaged in the process of being installed. Accton recommends that you have the company from whom you purchased this product install it.

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Accton

International Headquarters

No. 1 Creation Road III,
Science-based Industrial Park
Hsinchu 300, Taiwan, R.O.C.
Phone: 886-3-5770-270
FAX: 886-3-5770-267
Internet: support@accton.com.tw

USA Headquarters

6 Hughes
Irvine, CA 92618
Phone Numbers -
Sales: 800-926-9288,
Support: 888-398-4101, 949-707-4847
RMA: 800-762-4968
FAX: 949-707-2460

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