

Electrical Safety and Installation Requirements

U.S. Federal Communications Commission RADIATED ENERGY

Note: 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 instructions, may 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 separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

Industry Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community (EC) Electromagnetic Compatibility Directive

This equipment has been tested and found to comply with the protection requirements of European Emission Standards EN55022 Class B/EN61000-3-2 and the Generic European Immunity Standard EN50082-1 that calls for the following basic standards:

- IEC 801-2 Electrostatic Discharge
- IEC 801-3 RF Immunity
- IEC 801-4 Transient Burst

Power Requirement

460 mA @ 3.3V

Sources of Information

This guide gives the basic instructions for installation of a AT-2800/TX CardBus Ethernet adapter with Windows 95 or Windows 98. More information is available for specialized applications of the adapter.

- **Information files**—The CardAssistant diskette contains text files with installation and configuration information for different installation environments. Look in the directory called `INFO`. Use a text editor to view the information you need for your situation.
- **Documentation on the Web**—The Allied Telesyn Web site, <http://www.alliedtelesyn.com>, provides a searchable instruction guide in .PDF format for configuring and troubleshooting the AT-2800/TX CardBus Ethernet adapter. (Browse to the manual list in the Technical Support section of the ATI Web site.)

If you are using the AT-2800 CardBus adapter in a different environment refer to “Advanced Topics” on page 6 of this guide.

Preparing for Installation

Assuming the computer operating system is installed according to your computer manual, installing the AT-2800/TX CardBus Ethernet adapter simply involves plugging the card into a CardBus slot in your computer and installing the driver software. The adapter can be inserted and removed with power on (hot swapped).

The driver files for the AT-2800 CardBus adapter are found on the Allied Telesyn CardAssistant diskette, which you will be prompted to insert into the floppy drive.

PCMCIA CardBus to RJ45 interface cable

The AT-2800 CardBus adapter package includes a cable adapter (pigtail) to connect the PC Card connector to the UTP cable. When attaching the pigtail, take care not to force the connector latches. When removing the pigtail, press both latch retractors to relieve strain on the delicate wire and other parts.

Important Cable Considerations

The AT-2800/TX CardBus Ethernet adapter is for use with 10BaseT or 100BaseTX LAN segments, using an 8-pin (4-pair) RJ45 jack for the network cable. Be sure that all cabling used with the AT-2800 CardBus adapter in a 10BaseT segment is of category 3, 4, or 5, and that all cabling used in a 100BaseTX segment is of category 5.

Install the drivers

With the AT-2800 CardBus adapter installed, start Windows 9x. The *New Hardware Found* dialog box appears, and you are prompted for the driver.

Insert the CardAssistant diskette, and direct Windows 9x to the root directory of the diskette; type `a:\`.

Make sure *ATI AT-2800 Ethernet card* appears in the driver found dialog box. Follow the Windows 9x instructions, supplying Windows 9x files as needed.

Windows 9x prompts you to restart the computer. You are ready to access your network.

If you find that the card is not found, you may have a notebook computer that does not support the CardBus specification. Check your computer documentation.

Adapter Configuration

The adapter is set up as shown in the table below. Changing any of the settings may cause poor performance or failure. You should consult your network administrator before attempting to make any adjustments. The defaults are shown in the table so that you may restore these values in case of difficulties.

Option	Values	Unit
100 Mbps Transmit Threshold	128 (default), 256, 512, 1024	bytes
10 Mbps Transmit Threshold	72, 96 (default), 128, 160	bytes
Burst Length	1, 2, 4, 8, 16 (default), 32	doublewords
Connection Type	100/Full, 100/Half, 10/Full, 10/Half, AutoSense (default), AutoSense NoNWAY	Mb/Duplex Mode
Interrupt Mitigation	Enabled, Disabled (default)	
Map Registers	4, 8 (default), 16, 32, 64	
Memory Read Multiple	Enabled, Disabled (default)	
Receive Buffers	4, 8, 16 (default), 32, 64	
Snooze Mode	Enabled, Disabled (default)	
Store and Forward	Enabled (default), Disabled	
Underrun Max Retries	2 (default), 4, 6, 8	
Underrun Threshold	10 (default), 20, 50, 100	occurrences

Advanced Topics

Allied Telesyn supplies information files on the CardAssistant diskette and an on-line guide on our Web site.

If you are installing the card in one of the following situations, you may wish to refer to this additional information for the particular network software you are using.

Files needed for install listed	✓
Advanced cabling considerations	✓
CardBus considerations	✓

To view Information File topics

Insert the CardAssistant diskette in the diskette drive and change to the directory:

a:\INFO

The files are ASCII text files that can be read with an editor like Notepad.

To view the on-line guide

Point your browser to <http://www.alliedtelesyn.com>. The manuals are located in the Technical Support section in .PDF format.

Troubleshooting Tips

A networked computer system is a complex combination of hardware and software, all of which must function for data communication to work. Although most problems occur when the card is first being installed or when someone changes something in the network, a problem could be caused by your computer software, by cabling, or by many components elsewhere in the network. The following list offers some general guidelines for troubleshooting the AT-2800 CardBus adapter.

1. Carefully observe the behavior of the system and identify the exact symptoms. Gather information about the system and its components, such as device drivers, memory and extensions (e.g., QEMM), other peripheral cards and the use of I/O ports and IRQs. Record your interaction with the computer, noting the conditions, your actions and the responses. Analyzing this information will help you diagnose the cause of the failure. Experiment with possible solutions. As you experiment, vary only one factor at a time.
2. Substitute known good equipment and see if the problem is eliminated.
3. Don't overlook the obvious. Make sure the card is seated in the computer and that the cables and connectors are securely attached.
4. Check the LNK indicator light. If the LNK indicator does not light, make sure the cabling is intact and connected to a functioning network port, and the network port speed and duplex settings match those of the network card. If the LNK indicator lights but data transfer is slow, collision-prone, or non-existent, verify that your cable is of Category 3, 4, or 5. Category 1 and 2 voice-grade cable will not work properly. If the cable is more or less round in section, you probably have data grade cable, correctly paired, and no transmission problems. If, however, the cable appears flat in cross-section (as Silver Satin telephone-type cable) you probably have voice-grade cable and transmission problems. If it looks like telephone cable, double-check.

5. If you suspect the network adapter is not working properly, disconnect the network cable and run CardAssistant diagnostics after rebooting and with no drivers loaded. If CardAssistant software does not detect the card, it could mean a conflict between the card and another device, a card failure, or a slot failure. You may need to reconfigure the other device to avoid the conflict. Try installing the AT-2800 CardBus adapter in another slot, then, if necessary, in another computer.
6. If the card passes diagnostics, try reconnecting the computer to the network. A failure may be caused by physical medium connections or by corrupted network software. You can test the connectors and cables by swapping them for known good ones. Replace corrupted network software.

If your computer is supported by a system administrator or network administrator, this person can often provide the most help in resolving a problem. Allied Telesyn dealers also provide technical support for installation problems. You can contact the dealer where you bought your AT-2800T/TX CardBus Ethernet adapter for local assistance.

For Technical Support or Service

You can contact the dealer where you bought your AT-2800 CardBus adapter for local assistance. If local help is unable to resolve your problem, Allied Telesyn offers technical support via fax or telephone.

Where To Find Us

Location	Phone	Fax
Americas United States, Canada, Mexico, Central America, South America	1(800) 428-4835	1 (425) 481-3790
Asia Singapore, Taiwan, Thailand, Malaysia, Indonesia, Korea, Philippines, China, India	(+65) 3815-613	(+65) 3833-830
Australia Australia, New Zealand	(612) 416-0619	(612) 416-9764
France France, Belgium, Luxembourg, The Netherlands, Middle East, Africa	(+33) 1-60-92-15-32	(+33) 1-69-28-37-49
Germany Germany, Switzerland, Austria, Eastern Europe	(+49) 30-435-900126	(+49) 30-435-70650
Hong Kong	(+852) 2-529-4111	(+852) 2-529-7661
Italy Italy, Spain, Portugal, Greece, Turkey, Israel	(+39) 2-416047	(+39) 2-419282
Japan	(+81) 3-3443-5640	(+81) 3-3443-2443
United Kingdom United Kingdom, Denmark, Norway, Sweden, Finland, Iceland	(+44) 1-235-442560	(+44) 1-235-442490
Technical Bulletin Board	1-425-483-7979	
Technical Support e-mail	TS1@alliedtelesyn.com	
CompuServe	Go ALLIED	
Internet, World Wide Web and FTP site	http://www.alliedtelesyn.com	

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AT-2800T/TX
CardBus
Fast Ethernet
Network
Adapter

**QUICK
INSTALL
GUIDE**

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Allied Telesyn