3Com Megahertz 10/100 LAN CardBus PC Card User Guide

3Com®

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CONTENTS

1

INSTALLING THE PC CARD

The 3Com Megahertz 10/100 LAN CardBus PC Cards (models 3CCFE575BT and 3CXFE575BT) connect your notebook to an Ethernet or Fast Ethernet network. The only difference between the two models is the connector.

3CCFE575BT
CardBus PC Card

3CXFE575BT
CardBus PC Card

Figure 1-1   3Com Megahertz 10/100 CardBus LAN PC Cards

These CardBus PC Cards automatically operate at 10 Mbps when connected to a 10BASE-T Ethernet hub and at 100 Mbps when connected to a hub supporting 100BASE-TX Fast Ethernet.

This chapter describes how to install the CardBus PC Cards in your notebook and connect them to the network.

Before You Begin

Make sure that you have a CardBus notebook and these items:

- 3Com Megahertz 10/100 LAN CardBus PC Card
- PC Card cable (6 inches) and network cable (six feet)
- *3Com Megahertz 10/100 LAN CardBus PC Card User Guide*
- *LAN Installation Disk*

If any of these items are missing from the CardBus PC Card package, contact your PC Card supplier.

Setting CardBus Mode

Before you install the CardBus PC Card, you must set CardBus mode for Toshiba®, IBM® ThinkPad series 760, and some NEC notebooks. For NEC notebooks see your NEC notebook documentation. If you have questions about setting CardBus mode, refer to your notebook documentation.

Before you install the PC Card in these notebooks, follow these steps to set the notebook to CardBus mode.

Toshiba Notebooks

1 **Hold down the Esc key (the button the upper left hand corner of your notebook keyboard) and turn the notebook on.**

2 **Press F1 when the error message appears.**

3 **On the Controller Mode line (this may be on the second page) choose CardBus mode.**

4 **Press end to save changes.**

5 **Type Y to reboot into Windows 95.**

6   **Using the Start menu, select shutdown the computer and then click Yes to confirm.**

7   **Turn the notebook back on.**

The notebook is now set up to run in CardBus mode.

IBM ThinkPad Series 760 Notebooks

1   **Using the Start Menu, select *Programs >Thinkpad >Thinkpad Configurations.***

If this menu does not appear, contact your notebook manufacturer to get the latest BIOS and instructions for setting CardBus mode.

2   **Click the *PC Card Slots* picture.**

The PC Card Slots window appears.

3   **Enable *CardBus mode.***

The IRQ Conflict warning appears asking if you want to disable the device in conflict.

4   **Click *OK.***

5   **Restart the notebook.**

If New Hardware Detected appears, restart again. The notebook is now set up to run in CardBus mode.

Connecting the 3CCFE575BT CardBus PC Card

1 Remove all PC Cards from your notebook.

2 Connect the PC Card cable to the CardBus PC Card ①, and to the network cable ②.
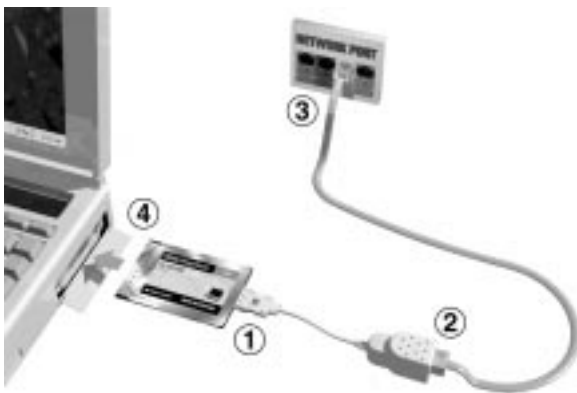
Figure 1-2 Connecting the CardBus PC Card

3 Connect the RJ-45 connector to the network port ③.

4 Turn the notebook on.

5 When Windows is ready, insert the PC Card ④ into the CardBus PC Card slot. Slide it all the way in.

CAUTION: Do not force the CardBus PC Card into the slot or you may bend the pins inside the slot.

If the CardBus PC Card doesn't fit into the slot, make sure that your notebook has a CardBus slot. Refer to your notebook documentation or contact your notebook manufacturer.

You may see Windows 95 prompts for driver installation.

The final installation step is to install the network driver that allows you to login to the network. For instructions on how to install the network driver, go to Chapter 2.

Connecting the 3CXE589ET CardBus PC Card with XJACK Connector

1 **Remove all PC Cards from your notebook and turn it on.**

2 **Connect the network cable ① to the CardBus PC Card XJACK connector.**

Figure 1-3   Connecting the CardBus PC Card

3 **Insert the RJ-45 connector into the network port ②.**

4 **Insert the PC Card into the CardBus PC Card slot ③. Slide it all the way in.**

⚠ *CAUTION: Do not force the CardBus PC Card into the slot or you may bend the pins inside the slot. If the CardBus PC Card doesn't fit into the slot, make sure that your notebook has a CardBus slot. Refer to your notebook documentation and contact your notebook manufacturer for more information.*

You may see Windows 95 prompts for driver installation.

The final installation step is to install the network driver that allows you to login to the network. For instructions on how to install the network driver, go to Chapter 2.

2

INSTALLING THE NETWORK DRIVER

This chapter describes how to install the 3Com network driver that completes your notebook connection to the network.

Instructions are provided for Windows 95, Windows NT, Windows for Workgroups, and AutoLink NetWare network driver installation.

For information about Banyan Vines, Microsoft LAN Manager, IBM LAN Server, Artisoft LANtastic, and DEC PATHWORKS, see Table 2-1.

The latest network drivers are available on 3Com's World Wide Web site. To download the latest drivers:

1 Go to the 3Com web site. Type the 3Com URL into your browser:

   `http://www.3com.com/`

2 Scroll down to *Software and Drivers* and double-click.

3 Scroll down to *Network Interface Cards* and click.

4 Select the 3Com Megahertz 10/100 LAN CardBus PC Card.

Before You Install the Network Driver

Now that the CardBus PC Card is inserted in your notebook and the network cable is connected to the network port, the final installation step is to install the network driver. This section describes the requirements for a successful driver installation.

Which Driver Installation Instructions Should You Use?

Ask your MIS department which network driver instructions you should use. Instructions are provided in this chapter for each of the following environments:

- Windows 95 version 4.00.950 or 4.00.950a
- Windows 95 version 4.00.950b (OSR 2)
- Windows NT version 4.0
- Windows NT version 3.51
- Windows for Workgroups

For information about Banyan Vines, Microsoft LAN Manager, IBM LAN Server, Artisoft LANtastic, and DEC PATHWORKS, see Table 2-1.

Proceed to the driver installation section in this user guide that your MIS department recommends.

Which Windows 95 Version Are You Running?

You must determine if you are running Windows 95 OEM Service Release 2 (OSR 2) or the standard Windows 95 before you install the network driver.

Since standard Windows 95 does not support CardBus automatically, the driver installation instructions are different.

If you already know which version of Windows 95 you are running, go to the appropriate Windows 95 section to install the CardBus PC Card network driver on your notebook.

1 **Double-click *My Computer* and then Control Panel.**

2 **In the Windows 95 Control Panel, double-click *System* to display the System Properties dialog box.**

3 **Click the *General tab* to display the Windows 95 version information.**

If your Windows 95 version is 4.00.950 or 4.00.950A, go to the appropriate section to install the network driver.

If your Windows 95 version is 4.00.950B (OSR 2), go to the following section to install the network driver.

Windows 95 Version 4.00.950B (OSR 2)

Install the NDIS network driver when your notebook is running Windows 95 4.00.950B (also known as OSR 2). The 3Com software automatically detects which OS your notebook is running and installs the correct NDIS driver.

1 Make sure the CardBus PC Card is installed and connected to the network, as described in Chapter 1.

The Update Device Driver Wizard window appears.

Figure 2-1   Update Device Driver Wizard Window

2 In the Update Device Driver Wizard window, click *Next*.

If this window does not appear, click *System*, click *Device Manager*, and then click *Refresh*.

3 Click *Other Locations*.

4 Insert the *LAN Installation Disk*.

5 Type a: and click *OK*.

6 **In the Update Device Driver Wizard, click *Finish*.**

7 **In the Insert Disk window, click *OK*.**

8 **In the copying files window, type a: and click *OK*.**

9 **If prompted, insert the Windows 95 CD-ROM or type the directory path to the Windows 95 CAB files on your notebook and click *OK*.**

10 **Remove the *LAN Installation Disk* and restart the notebook.**

   The network driver installation is complete. To confirm installation, see the section "Confirming Installation." If you have problems, go to Chapter 3.

Windows 95 (Versions 4.00.950 and 4.00.950A)

You install the NDIS network driver when your notebook is running Windows 95. This driver can be used in Microsoft and NetWare environments.

1 **Make sure the CardBus PC Card is inserted and connected to the network, as described in Chapter 1.**

2 **Double-click *My Computer, Control Panel,* and then double-click *Add New Hardware*.**

3 **In the Add New Hardware Wizard window, click *Next*.**

4 **Respond to the "Do you want Windows to search for your new hardware" prompt by clicking "*No"* and then click *Next*.**

5 **Double-click on *Network Adapters* in the list that appears.**

6 **In the Select Device window, click the *Have Disk* button.**

7 **Insert the *LAN Installation Disk* in the floppy drive and click *OK*.**

8 **Select *3Com Megahertz 10/100 LAN CardBus PC Card Manual Load* and click *OK* to copy the CardBus PC Card files to your notebook.**

9 **In the New Hardware Wizard Window, click *Next*.**

10 Click *Finish* to complete the driver installation and remove the *LAN Installation Disk*.

   a If the software prompts for Computer Name and Work Group Name, type the names as supplied by your MIS department and click *OK*.

   ■ The computer name is the name of your notebook. Give your notebook a unique name (up to 15 characters, no blank spaces).

   ■ A workgroup is composed of the computers that you usually communicate with (like your department) and contains shared resources (like printers).

   ■ If you use peer group networking, the workgroup name is your peer group. Peers can see each other when they look in the Network Neighborhood.

   ■ Your computer description is visible to other members of your workgroup when they see your notebook in the Network Neighborhood.

11 If you are prompted for Windows 95 files, enter the directory path for Windows 95 CAB files or insert the Windows 95 CD-ROM.

When installation is complete, Windows 95 prompts for restart.

12 Remove the *LAN Installation Disk* and click *Yes* to restart the notebook to complete driver installation.

Confirming Installation

1 Double-click the *My Computer* icon.

2 Double-click the *Control Panel* icon.

3 Double-click the *System* icon.

The System Properties box appears, detailing your notebook setup.

4 Click the *Device Manager* tab.

A list of devices appears, arranged by type.

5 Double-click the *Network Adapters* icon.

The name of the installed CardBus PC Card appears:

```
3Com Megahertz 10/100 LAN CardBus PC Card
Manual Load
```

6 Double-click *3Com Megahertz 10/100 LAN CardBus PC Card* to display a description of the CardBus PC Card and its current status.

If the CardBus PC Card is not operational, go to Chapter 3 for troubleshooting information.

Windows NT Version 4.0

This section describes how to install the NDIS network driver for a notebook running Windows NT 4.0, with Windows NT networking installed and without Windows NT networking installed.

Before you begin, obtain the *LAN Installation Disk* and Windows NT installation files (on hard disk, floppy diskettes, or CD-ROM).

Windows NT 4.0 with Networking Installed

1 Make sure the CardBus PC Card is installed and connected to the network, as described in Chapter 1.

2 Using the Control Panel, double-click *Network*.

3 Select the Adapters tab and click *Add.*

4 The Select Network Adapter screen appears.
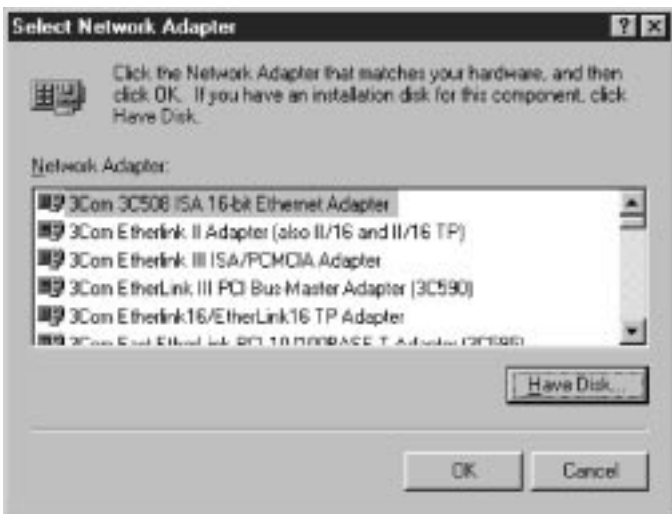
Figure 2-2 Select Network Adapter Window

5   Click *Have Disk.*

6   **In the Insert Disk dialog box, type: a:**

7   **Insert the *LAN Installation Disk* into the floppy drive and click *OK.***

8   **On the Select OEM Option screen, highlight *3Com Megahertz 10/100 LAN CardBus PC Card* and click *OK*.**
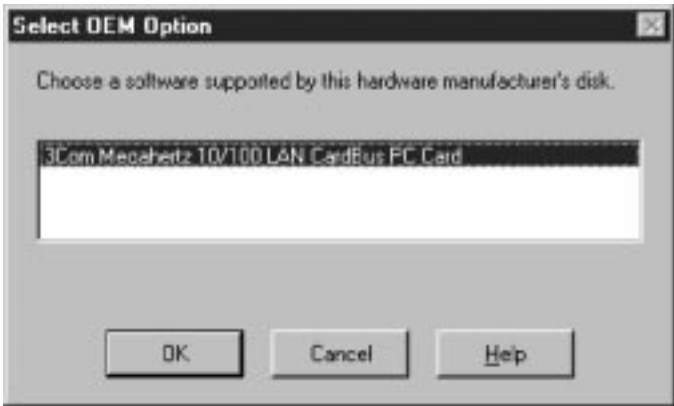
Figure 2-3   Select OEM Option Window

9   **Wait for the CardBus PC Card files to be copied.**

The PC Card Setup Network Settings screen appears.

10   **Click *OK* to accept resource allocations or enter new values.**

3Com Megahertz 10/100 LAN CardBus PC Card appears in the Network window.

11   **Click *Close.* If prompted, enter your IP address and click *OK*.**

12   **Remove the *LAN Installation Disk* and click *Yes* to reboot your notebook.**

Installation is complete.

Confirming Installation

To confirm successful installation, double-click the Network icon in the Control Panel. Click the Adapters tab. The 3Com Megahertz 10/100 LAN CardBus PC Card should appear on the list. If it doesn't appear, see Chapter 3 for troubleshooting information.

Windows NT 4.0 without Networking Installed

If Windows NT networking is not installed, obtain the following information from your MIS department.

- Are you on a local area network or are you using a modem?
- Transport and network layer protocol used in the Microsoft Windows Network
- Name of the NT Server domain or workgroup you belong to
- IP address if you are not using DHCP

1 **Make sure the CardBus PC Card is installed and connected to the network, as described in Chapter 1.**

   If the CardBus PC Card is automatically detected by Windows NT, you may have Card Services installed. Refer to your Card Services documentation to see if it supports the CardBus PC Card. If it does not support it, consult your Card Services documentation to remove Card Services.

2 **Using the Control Panel, double-click *Network*.**

   When Windows NT networking is not installed, you are asked if you want to install Windows NT networking.

3 **Click *Yes*.**

4 **Select *Wired to the Network* and click *Next*.**

5 **Click *Select from list.***

6 **Click *Have Disk*.**

7 **Insert the LAN Installation Disk.**

8 **Type a: and click *OK*.**

   3Com Megahertz 10/100 LAN CardBus PC Card appears in the Select OEM Option window.

9   Click *OK*.

The Network Setup Wizard window appears.

10   Click *Next.*

The Network Protocols configuration box appears.

11   Select the appropriate network protocol.

If you choose TCP/IP, you will be prompted to set TCP/IP later in this installation.

12   Click *Next.*

The Network Services configuration box appears.

13   Select the appropriate network services.

14   Click *Next.*

The message " Windows NT is ready to install networking components..." appears.

15   Click *Next.*

The Windows NT Setup window asks for the location of the Windows NT installation files.
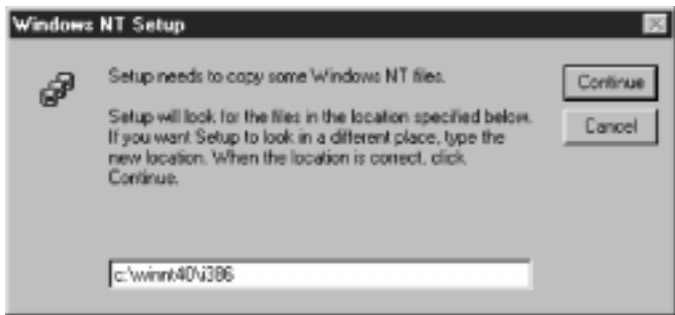
Figure 2-4   Windows NT Setup Window

16   Type in the directory path to the location of your Windows NT installation files.

The directory path shown on this screen is only a sample.

17   Click *Continue.*

18 **When Figure 2-4 appears again and asks for the location of the files, type a:**

19 **Click *Continue*.**

20 **After Windows NT copies files, select new Network Settings if required.**

Ask your system administrator if you are not sure what to select.

21 **Click *Continue* to accept the resources.**

22 **If you are prompted for TCP/IP setup information, enter it.**

Ask your system administrator if you need help.

23 **After the final files are copied, click *Next, Next*, and then enter the computer name, workgroup, or domain.**

- The computer name is the name of your notebook. Give your notebook a unique name (up to 15 characters, no blank spaces).

- A workgroup is composed of the computers that you usually communicate with (like your department) and contains shared resources (like printers).

- If you use peer group networking, the workgroup name is your peer group. Peers can see each other when they look in the Network Neighborhood.

- Your computer description is visible to other members of your workgroup when they see your notebook in the Network Neighborhood.

24 **Click *Next*.**

25 **Click *Finished*.**

26 **Remove the *LAN Installation Disk* and click *Yes* to reboot your notebook.**

Installation is complete.

Windows NT Version 3.51

Before you begin, obtain the *LAN Installation Disk*.
If Windows NT networking is not installed, obtain the
following information from your MIS department:

- Are you on a local area network or are you using
  a modem?
- Transport and network layer protocol used in the
  Microsoft Windows Network
- Name of the NT Server domain or workgroup you
  belong to
- IP address if you are not using DHCP

To install the 3Com network driver on a notebook running
Windows NT version 3.51, follow these steps:

1 **Make sure the CardBus PC Card is installed and
  connected to the network, as described in Chapter 1.**

2 **After you reboot, in the *Main* group, select Control
  Panel.**

3 **On the *Control* panel, double-click *Network*.**

4 **If you have networking already installed, click *Add
  Adapter*. If you do not have networking installed,
  follow the prompts to install Windows NT networking.**

   The Add Network Adapter window appears.

5 **On the Add Network Adapter window, choose
  <Other> Requires disk from manufacturer from
  the list.**

6 **Click the *Continue* button.**

7 **Insert the *LAN Installation Disk* into in the floppy
  drive.**

8 **Type: a: and click *OK*.**

9 **In the Select OEM Option window, click *OK.***

10 **Choose the *3Com Megahertz 10/100 LAN CardBus PC
   Card* from the list and click *OK*.**

   The CardBus PC Card network driver and software are
   copied to your notebook. The 3Com CardBus PC Card
   dialog box appears.

11 Click *OK* to accept the default settings for the
CardBus PC Card or enter new settings if requested by
your MIS department.

The Network Settings Window appears.

12 Click *OK to bring up the* TCP/IP configuration window.

13 Enter the IP address.

14 Click *OK*.

If networking has not been installed, follow the prompts to
complete networking installation.

15 Remove the *LAN Installation Disk* and click *Restart
Now to complete installation*.

The network driver installation is complete. To confirm
successful installation use the File Manager to browse
the network.

Windows for Workgroups (WFW)

Before you begin installing the network driver, obtain the
LAN Installation Disk and Windows for Workgroups v3.11
installation files (on hard disk, floppy diskettes, or CD-ROM).
The *LAN Installation Disk* contains a subdirectory structure
and files that make it an OEM import disk for WFW.

Ask your MIS department for the following information:

■ Which NDIS driver should you install - the NDIS 3 DOS
enhanced-mode driver or the NDIS 2.0 16-bit DOS
real-mode driver?

■ Transport and Network protocol layer used in the
Microsoft Windows Network

■ WFW 3.11 workgroup name

*If you installed any other network adapter or network
driver in the notebook, consult your system administrator
for further instructions.*

Installing the DOS Enhanced-Mode Driver for WFW

To install the NDIS 3 DOS enhanced-mode driver for WFW, follow these steps:

1 Using the *Windows* menu, select *Network*.

2 Double-click *Network Setup*.

3 In the Network Setup dialog box, select the *Networks...* button.

4 Select *Install Microsoft Windows Network* and then click *OK*.

5 Select the *Drivers...* button.

6 In the Network Drivers dialog box, click *Add Adapter*.

    A dialog box appears, listing the supported network adapters on the diskette.

7 From the list of network adapters, select *Unlisted Or Updated Network Adapter*, and click *OK*.

8 Insert the *LAN Installation Disk* in floppy drive A, enter a:\, and click *OK* in the Install Driver dialog box.

9 Select *3Com Megahertz 10/100 LAN CardBus PC Card* and click *OK* in the Unlisted or Updated Network Adapter dialog box.

    a When prompted for ELPC575.DOS, type a:\ndis2

    b When prompted for ELPC575.386, type: a:\WFW311

10 In the Network Drivers dialog box, click *Close to accept the displayed values.*

11 In the Network Setup dialog box, click *OK*.

12 If prompted, supply the information you gathered before you began the installation. After you enter the information, click *OK*.

    A message appears, prompting you to restart your notebook.

13 Click *Restart*.

    The network driver installation is complete. You have network access when the notebook restarts.

    To install the NDIS 2 driver, display the WFWNDIS.TXT file in the Help directory on the *LAN Installation Disk*.

AutoLink for Windows 3.x, Windows for Workgroups, and DOS

This section describes how to install the network driver for a notebook running Windows 3.x, Windows for Workgroups, and DOS using the 3Com AutoLink™ program. The AutoLink program automatically installs the NetWare ODI client software (including the driver), and modifies the CONFIG.SYS and AUTOEXEC.BAT files.

To use the AutoLink program, the notebook must use the Novell NetWare 3.12, 4.10, or 4.11 network operating system, and be a NetWare DOS ODI client.

1 **Make sure the CardBus PC Card is installed and connected to the network, as described in Chapter 1.**

2 **Boot the notebook under DOS.**

3 **Insert the *LAN Installation Disk* in the floppy drive, and type the following at the DOS prompt:**

   `a:\install [Enter]`

4 **Choose Auto Install and Config for NetWare (AutoLink).**

   An OS selection screen appears.

5 **Select AutoLink for DOS, Windows 3.x, or WFW 3.11.**

   Several messages appear while the AutoLink program is running. A final message indicates successful installation.

6 **When prompted, remove the LAN Installation Disk and reboot the notebook.**

7 **When prompted, type your user name and password to complete installation.**

Supported Network Drivers

Table 2-1 provides the text file names and driver names for supported network drivers. These text files are located in the HELP directory on the *LAN Installation Disk*.

Table 2-1   Network Driver Text File Names

Network Operating System	Text File Name	Network Driver Name
Windows 95A and OSR 2	W95NDIS.TXT	EL575ND3.SYS/EL575ND4.SYS
Windows NT (v 4.0/3.51)	WINNT.TXT	EL575ND3.SYS/EL575ND4.SYS
Windows for Workgroups (NetWare)	WFWNETWR.TXT	ELPC575.COM
Windows for Workgroups	WFWNDIS.TXT	ELPC575.386 with ELPC575.DOS
Windows for Workgroups (NDIS 2 real mode driver)	WFWNDIS.TXT	ELPC575.DOS
NetWare and Windows 3.11	NWDOSODI.TXT	ELPC575.COM
NetWare and DOS, Windows 3.11, and Windows for Workgroups	AUTOLINK.TXT- this file is in the AUTOLINK directory.	ELPC575.COM
Banyan VINES	BANYAN.TXT	ELPC575.DOS
Microsoft LAN Manager	LANMAN.TXT	ELPC575.DOS
IBM LAN Server (DOS)	LANSRV.TXT	ELPC575.DOS
Artisoft LANtastic	LANTASTK.TXT	ELPC575.DOS
DEC PATHWORKS	PATHWORK.TXT	ELPC575.DOS

The NDIS 3 driver can be used by both Windows 95 version A and Windows 95 OSR 2 (version B). The NDIS 4 driver can only be used by Windows 95 OSR 2. The 3Com software automatically selects the correct driver after determining which OS is running.

The NDIS 3 driver can be used by both Windows NT versions 4 and 3.51. The NDIS 4 driver can only be used by Windows NT version 4. The 3Com software automatically selects the correct driver after determining which OS is running.

3 TROUBLESHOOTING

This chapter provides the following troubleshooting information:

- Checking the CardBus PC Card LEDs
- Running the 3Com PC Card Diagnostics program
- Accessing the 3Com CardBus PC Card help system
- Support services
- Generating a problem report
- DOS Diagnostics program
- Removing the CardBus PC Card software
- Resolving hardware resource conflicts
- Disabling and Re-enabling PC Card Support
- Frequently Asked Questions
- Troubleshooting tips

The 3Com World Wide Web site (http://www.3com.com/) offers the latest drivers, troubleshooting information, and software updates in the Support area.

LEDs

Before the LEDs (Figures 3-1 and 3-2, Table 3-1) can be used for troubleshooting, the CardBus PC Card must be connected to the network (see Chapter 1) and the network drivers must be installed (see Chapter 2).
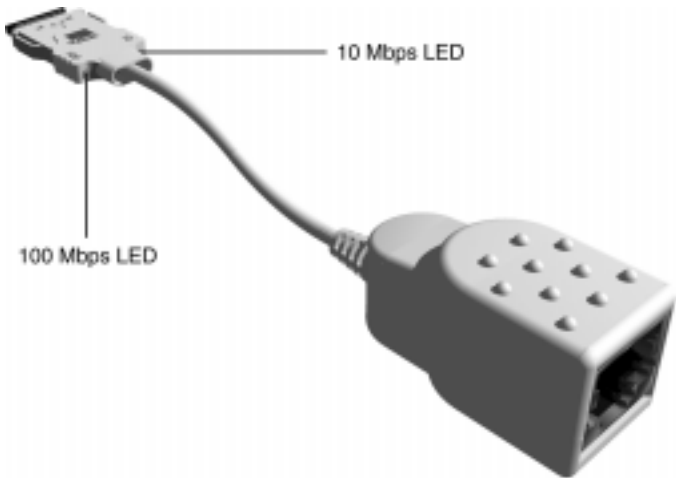
Figure 3-1   3CCFE575BT CardBus PC Card Cable LEDs
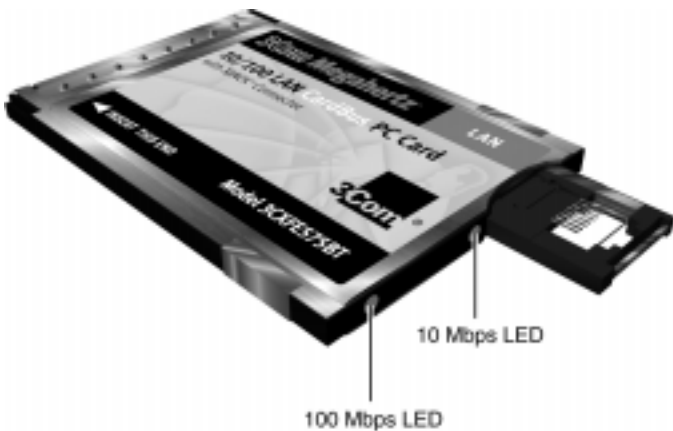
Figure 3-2   3CXFE575BT CardBus PC Card LEDs

Table 3-1   LED Descriptions

LED	Description	Steady	Off
10 Mbps	Green: Link integrity	Good 10BASE-T connection between PC Card and hub	No connection between PC Card and hub
100 Mbps	Green: Link integrity	Good 100BASE-TX connection between PC Card and hub	No connection between PC Card and hub

3Com PC Card Diagnostics Program

The 3Com PC Card Diagnostics program, which is automatically installed with the Windows 95 and Windows NT drivers, tests the CardBus PC Card. To change configuration information, see Chapter 4.

Accessing the CardBus PC Card Help System

The CardBus PC Card help system is a Windows Help application that was installed with your Windows 95 and Windows NT network driver.

The help system includes PC Card release notes, frequently asked questions, and the PC Card KnowledgeBase.

To display the 3Com help system, follow these steps:

1 **Install the CardBus PC Card and connect it to the network as described in Chapter 1.**

2 **Click the *Windows Start* menu.**

3 **Select *Programs*.**

4 **Select *3Com PC Card Utilities*.**

5 **Click *OK* to "Warning! Running diagnostics will disconnect your computer from the network".**

The 3Com PC Card Diagnostics General Screen appears.

6 **Click the *Help* button.**

i *To display the entire help system, click the Help button on each PC Card Diagnostics screen. To display information about any item on each screen, click the ? and drag it to the item and click. The pop-up box displays information about the selected item.*

7 **Click the links and tabs to display information about each of the *3Com PC Card Diagnostics* screens.**

Displaying Release Notes, Frequently Asked Questions, and KnowledgeBase

1 **Click the *Support tab*.**

2 **Click the *Release Notes* button on the Support Screen.**

   The Release Notes help screen appears.

   ■ Click the *Release Notes* button to display tips about installing and using the CardBus PC Card.

   ■ Click the *Frequently Asked Questions* button to display responses from 3Com support experts to common customer questions.

   ■ Click the *KnowledgeBase* button to display CardBus PC Card compatibility topics.

Running the CardBus PC Card Self-Test

   Run the CardBus PC Card self-test to check the physical components, connectors, and circuitry on the CardBus PC Card.

1 **Install the CardBus PC Card and connect it to the network as described in Chapter 1.**

2 **To start the PC Card Diagnostics program, follow these steps:**

   a Click the *Windows Start* menu.

   b Select *Programs*.

   c Select 3*Com PC Card Utilities*.

   d Click *3Com PC Card Diagnostics*.

For Windows NT v3.51, select *File>Run*, and type
tnicdiag.exe

When you install the network driver (Chapter 2) the
3Com logo appears in the Windows 95 and Windows NT
4.0 tray at the bottom of your screen after you reboot.
You can double-click the logo to run the 3Com PC Card
Diagnostics program.

ⓘ *Close down the PC Card Diagnostics program before you
reboot or remove the CardBus PC Card.*

The PC Card Diagnostics general screen appears as shown
in Figure 3-3.

Figure 3-3   PC Card Diagnostics General Screen

If you have disabled the 3Com icon, you can re-enable
the 3Com logo on your Windows 95 and Windows NT
task bar by clicking the box next to Enable Tray Control.

ⓘ *To display the CardBus PC Card help system, click the
Help button on the PC Card Diagnostics General screen.*

3 **Click the *Diagnostics* tab to display the diagnostics screen shown in Figure 3-4.**
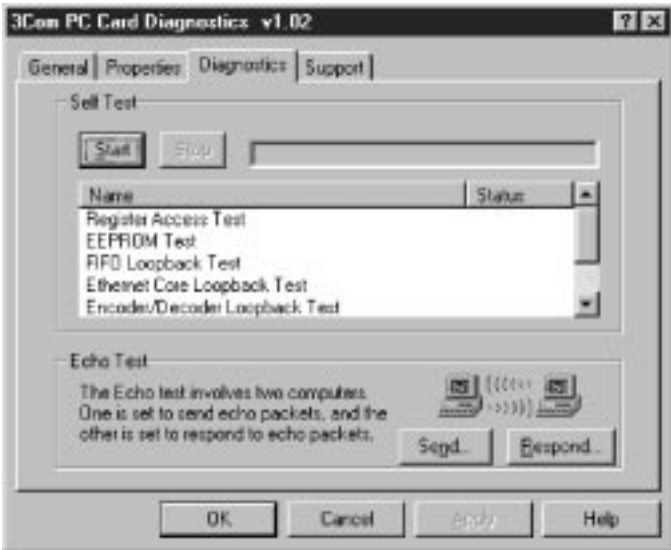
Figure 3-4 Diagnostics Screen

4 **Click *Start* in the Self Test section to run the self test.**

The following tests run in sequence:

- Register Access
- EEPROM
- FIFO
- Ethernet Core Loopback
- Encoder/Decoder Loopback
- Interrupt

Click *Stop* to stop the tests. Otherwise, the tests run continuously to completion.

Click the Help button to display help for this screen. Click the ? at the top of the screen and drag it to a test and click. The pop-up box displays information about the selected test and what to do if the test fails.

Running the Echo Test

The echo test tests the CardBus PC Card's ability to transmit and receive data while on the network.

⚠ *CAUTION: Running the echo test while connected to an active network can cause intermittent failures. To avoid this, connect to a test network on which only the notebook being tested and the echo server PC are operating.*

You need two computers, each with a 3Com network adapter installed, to run an echo test: one computer to send data and another to receive data.

This second computer is called the echo server or sending computer. Make sure it has the same operating system as the first computer.

Table 3-2 lists the diagnostics programs for the supported echo server adapters.

Table 3-2   Diagnostics Program and Adapter Names

Diagnostics Program Name	Echo Server Network Adapter
TC515CFG	Fast EtherLink ISA
TC5X9CFG	EtherLink III family
TC59XCFG	Fast EtherLink or EtherLink III PCI/EISA
TC90XCFG	Fast EtherLink XL or EtherLink XL PCI
TNICDIAG	Fast EtherLink XL family

To run the echo test, follow these steps:

1 **Install the CardBus PC Card, connect it to the network, and install the network driver.**

2 **Install a CardBus PC Card in another computer, connect it to the network, and install the network driver.**

3 On both computers:

   a Click the *Windows Start* menu.

   b Click *Programs.*

   c Select *3Com PC Card Utilities.*

   d *Select 3Com PC Card Diagnostics.*

   For Windows NT v3.51, select *File>Run*, and type
   tnicdiag.exe

   The PC Card Diagnostics general screen appears on both
   computers, as shown in Figure 3-2.

**4 On the Diagnostics screen (Figure 3-3) of the
   responding computer, click *Respond* and *Start*
   on the Echo Test screen.**

**5 On the Diagnostics screen (Figure 3-4) of the sending
   computer, click *Send* and *Start*.**

   The Echo Test Responder screen (Figure 3-5) appears on
   the responding computer.

Figure 3-5   Echo Test Responder Screen

> **i** *Click the Help button to display help for this screen. Click the ? at the top of the screen and drag it to a statistic and click. The pop-up box displays information about the selected statistic.*

6 Click *Start*.

The statistics for the test appear in the statistics window, as shown in Figure 3-5.

Click *Help* for statistics definitions. You can also click the right mouse and the ? at the top right of the screen and drag the ? to a statistics name and click.

Troubleshooting Support Services

The support screen (Figure 3-6), provides buttons for the following 3Com support services:

- 3Com PC Card Diagnostics program
- CardBus PC Card Release Notes, including:
    - Release Notes
    - Frequently Asked Questions
    - CardBus PC Card KnowledgeBase
- 3Com BBS telephone numbers and modem speeds
- 3Com World Wide Web information
- 3Com Problem Report Generator

1 To access the 3Com support screen (Figure 3-6), click the *Support* tab on the 3Com PC Card Diagnostics general screen, shown in Figure 3-3.
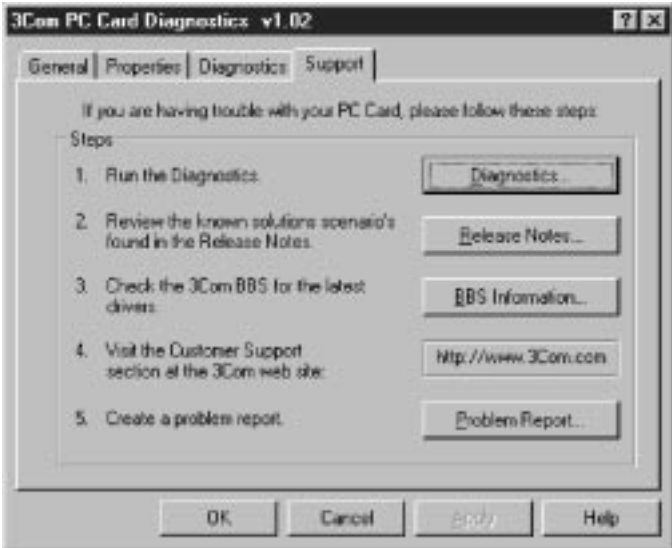
Figure 3-6   Support Screen

- Click *Diagnostics* to run the 3Com PC Card Diagnostics program. Refer to the beginning of this chapter for information on how to use the 3Com PC Card Diagnostics program.

- Click *Release Notes* to display the CardBus PC Card Release Notes, Frequently Asked Questions, or KnowledgeBase.

- Click *BBS Information* to display the BBS telephone numbers and modem speeds.

- *http...* displays the 3Com World Wide Web address.

- Click *Problem Report* to generate a 3Com problem report that you can use to report a problem to 3Com.

Generating a Problem Report

The problem report generator prompts you for the information that will help 3Com Customer Support solve your CardBus PC Card installation and configuration problems.

You can email the completed report to 3Com Customer Support and receive an email answer within two business days.

To generate a problem report, follow these steps:

1 Click *Problem Report* on the support screen shown in Figure 3-5 to access the first problem report screen (Figure 3-7).
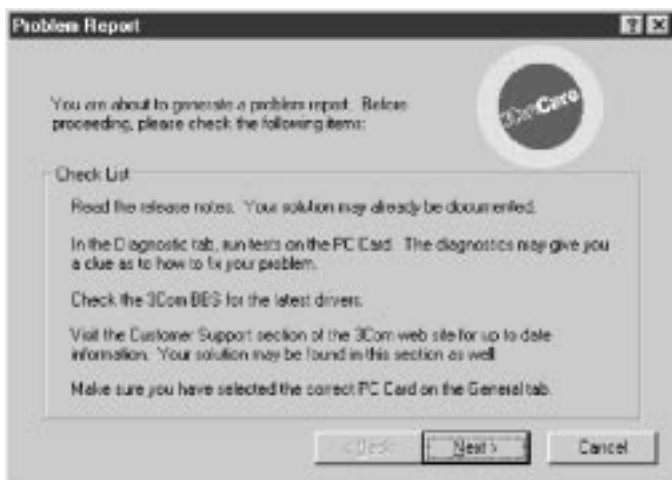
Figure 3-7 Problem Report Main Screen

2 Review the screen text and click *Next* to begin the problem report.

The Customer Information screen appears.

3 Enter your company name, address, contact name(s), phone, and email address.

4 Click *Next* to display the Computer information screen, shown in Figure 3-8.
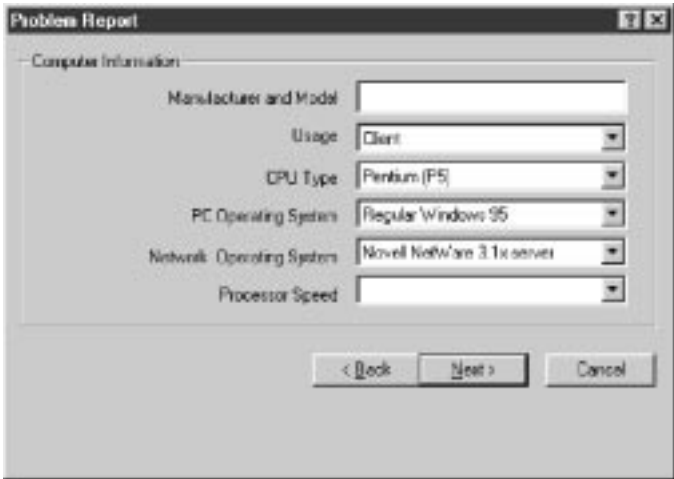
Figure 3-8 Computer Information Screen

a Enter your notebook manufacturer and model.

b Identify your notebook as a client, server, or both, using the pull-down menu.

c Select your CPU type using the pull-down menu.

d Select your notebook operating system using the pull-down menu.

e Select your network operating system using the pull-down menu.

f Select your notebook processor speed using the pull-down menu.

5 Click *Next* to display the Problem Description screen.

6 Enter your problem description, the 3Com case number if you have one, and select if you can reproduce the problem or not.

7 Click *Next* to display the Save screen.

8 Click *Finish* to save the report to the c:\3report.txt file.

The Send Report screen appears. The problem report is completed. To view the report, click *View Report*.

Use your mail application to mail the report to one of the addresses on the Send Report screen. If required, contact your local reseller first.

9　Click *OK* to bring up the PC Card Diagnostics general screen.

10　To exit the program, click *Cancel*.

DOS Diagnostics Program

To run the DOS diagnostics tests, see the INSTRUCT.TXT file in the HELP directory on the *LAN Installation Disk.*

Removing the PC Card Diagnostics using Windows 95 and Windows NT

1　In the Control Panel, select *Add/Remove Programs.*

2　Select *3Com PC Card Diagnostic Utilities.*

3　Click the *Add/Remove* button.

The PC Card Diagnostics Program is removed from your notebook.

Resolving Hardware Resource Conflicts

Use this procedure to resolve hardware resource conflicts (I/O Base Address and Interrupt values) using Windows 95.

1　Using the Start Menu, select *Help*.

2　In the Help window, select the *Contents* tab.

3　Select T*roubleshooting.*

4　Double-click *"if you have a hardware conflict"*

5　Click *Start the Conflict Troubleshooter* and follow the instructions.

Use this procedure to resolve hardware resource conflicts (I/O Base Address and Interrupt values) using Windows NT.

1　Using the Control Panel, double-click *Network.*

2　Click the *Adapter tab.*

3 Select *3Com Megahertz 10/100 LAN CardBus PC Card* and click *Properties*.

4 Change I/O or IRQ value and click *Confirm*.

Changing the I/O, IRQ, or Memory Range

If you discover resource conflicts, you can change the I/O Base Address, Interrupt Request (IRQ), or Memory Range using Windows 95.

1 Double-click the *System* icon in the Control Panel.

2 In the System Properties window, click *Network Adapters*.

3 Double-click *3Com Megahertz 10/100 LAN CardBus PC Card Manual Load*.

4 Select the *Resources* tab.

5 Select *Input/Output Range*, *Interrupt Request*, or *Memory Range*.

In Windows 95 OSR2, the memory range value should be the same as the CardBus socket.

6 Click the *Change Settings* button.

7 Change the value and click *OK*.

8 Restart the notebook to change the values.

Disabling PC Card (PCMCIA) Support for Windows 95

If you have a problem using two PC Cards at the same time, follow these instructions to disable PC Card support. You cannot use another PC Card while PCMCIA Support is disabled.

1 Double-click the *System* icon in the Control Panel.

The System Properties window appears.

2 Click the *Device Manager* tab.

3 Click *Property* and place a check mark next to Disable the Device.

If PCMCIA socket is not listed, PC Card support is already disabled.

4   Click *OK*.

5   **Reboot the notebook to disable PC Card Support.**

If prompted, select *Do Not Install a Driver.* Some notebooks may re-install the PCMCIA sockets (PC Card Support) without prompting you. Refer to Windows 95 help on disabling devices to disable PCMCIA sockets.

*You must re-enable PC Card Support to use another PC Card. See "*Re-enabling PC Card Support for Windows 95*" in this chapter for instructions.*

Re-enabling PC Card Support for Windows 95

If you disabled PC Card Support to use the CardBus PC Card, you must re-enable it to use another PC Card.

1   **In the Control Panel, double-click *System*.**

2   **Double-click *Add New Hardware*.**

3   **Click *No* to detect automatically.**

4   **On the Hardware Types list, select *PCMCIA Socket* and click *Next*.**

5   **On the manufacturer's list, select the PC Card Support that you disabled in Chapter 2.**

6   **Click *Next*.**

7   **Click *Finish*.**

8   **Reboot the notebook.**

9   **In the Control Panel, double-click *System*.**

10 **In the System Properties window, click *Device Manager* and then double-click *PCMCIA Socket*.**

11 **Click *PCIC* or *compatible PCMCIA controller*.**

12 **Place a check mark in the check box to enable the device.**

13 **Click *Change Driver*.**

14 **Follow the Enable PCMICA Support Wizard.**

15 **Restart the notebook to re-enable PC Card Support.**

Disabling PC Card (PCMCIA) Support for Windows NT

1 In the Windows NT Control Panel, double-click
   Devices.

2 Click *PCMCIA* on the list that appears.

   If no controller is listed, PC Card support is already disabled.

   If you select a different PCMCIA controller, write down
   the name; you will need it to re-enable PC Card support
   to use a different PC Card.

3 Click *HW Profiles*.

4 Click *Disable* and then click *OK*.

5 Reboot the notebook.

> *You must re-enable PC Card Support to use another PC
> Card. See "Re-enabling Windows 95 PC Card Support for
> Windows NT" for instructions.*

Re-enabling PC Card (PCMCIA) Support for Windows NT

> *If you disabled PC Card Support to use the CardBus PC
> Card, you must re-enable it to use another PC Card.*

   Follow these instructions to re-enable PC Card support for
   Windows NT.

1 In the Windows NT Control Panel, double-click
   Devices.

2 Select *PCMCIA* and click the *Startup* button.

3 Change the button selection from *Disabled* to *Boot*.

4 Click *Close*.

5 Reboot the notebook to re-enable PC Card Support.

Frequently Asked Questions

Table 3-3. Frequently Asked Questions

Question	Answer
What is CardBus?	CardBus is the new high-speed peripherals interface for notebooks that includes:
	■ 33 MHz, 32-bit performance based on PCI bus architecture
	■ 3.3 volt operation
	■ Bus mastering for improved CPU efficiency
	■ Built-in multifunction capabilities
	■ Zoomed video to handle multimedia applications
	■ 20 times the throughput of 16-bit PC Cards
Who supports CardBus?	Major notebook manufacturers, Microsoft, and leading device vendors such as 3Com.
Is the CardBus PC Card FCC B, CISPR B EMI, C-tick EMI, and VCCI 2 EMI certified?	Yes, the CardBus PC Card has passed these certification tests.
Which CardBus slot is best for my CardBus PC Card?	The CardBus PC Card is designed to work in any CardBus PC Card slot, but in some notebooks the CardBus PC Card seems to work best in the top CardBus PC Card slot.
What interrupts should I use?	Typically, your network operating system assigns interrupts successfully during the network driver installation. Some notebooks require specific interrupts. A list of suggested interrupts is included in the on-line help system. To access the help system:
	1 Click the 3Com icon in your system tray.
	2 Click the Support tab.
	3 Click the Help button.
	4 Click the Frequently Asked Questions link.
	5 Click Which Interrupts Should I Use?
	The interrupts table is displayed. If your notebook is not listed, try the listed available interrupts.

(continued)

Table 3-3. Frequently Asked Questions **(continued)**

Question	Answer
Are my network drivers Microsoft certified?	Yes.
Are my network drivers Novell certified?	Yes.
How do I remove the 3Com icon from my system tray?	**1** Double-click the *3Com* icon to start the 3Com PC Card Diagnostics program.
	2 In the right bottom corner of the main window, click the Enable Tray Control check box to remove the check mark.
	3 Exit the program and the icon will not appear anymore.
How can I remove the PC Card Diagnostics Program?	**1** In the Windows 95 Control Panel, select *Add/Remove Programs*.
	2 Select *3Com PC Card Diagnostic Utilities*.
	3 Click *Add/Remove*.
	4 The PC Card Diagnostics program is removed from your notebook.
Does the CardBus PC Card support full duplex?	Yes, the CardBus PC Card supports full duplex at 10 Mbps and 100 Mbps operation.
What should I do if the CardBus PC Card installs as a "Generic PCI Ethernet Controller" under Other Devices in the Device Manager?	If the CardBus PC Card installs as a generic PCI Ethernet controller, follow these steps:
	1 In the Device Manager, double-click *Other Devices*.
	2 Click the PCI Ethernet Controller.
	3 Click *Remove*.
	4 Restart your notebook.
What should I do if a yellow exclamation point appears next to the 3Com Megahertz 10/100 LAN CardBus PC Card name?	**1** In the Device Manager, double-click *Other Devices*.
	2 Click the PCI Ethernet Controller or the duplicate 3Com Megahertz 10/100 LAN CardBus PC Card entry.
	3 Click *Remove*.
	4 Restart your notebook.

(continued)

Table 3-3. **Frequently Asked Questions (continued)**

Question	Answer
What is Dynamic*Access*® software?	Dynamic*Access* software brings intelligence to the end systems to provide improved network performance and control. You can download the latest Dynamic*Access* software from the 3Com Web site: www.3com.com.
What is Fast IP?	Fast IP is software that improves performance on switched networks. Fast IP allows end systems (notebooks and servers) to discover switched communication paths. By creating switched short cuts, Fast IP allows end stations to bypass the router and transfer data across wire-speed switched paths. Fast IP is part of 3Com's Dynamic*Access* software.
What are the notebook and network requirements to run Fast IP?	Client requirements:
	Notebook running Windows 95, Windows NT (versions 4 or 3.51), 3Com Megahertz 10/100 LAN CardBus PC Card, and the TCP/IP stack.
	Network requirements:
	Switched path between stations and single broadcast domain.
What are the network configuration requirements for Fast IP?	Fast IP is designed to bypass the router, particularly where the router is a bottleneck, as well as to leverage the switched infrastructure. For Fast IP to create short cuts around routers, there must be a switched path between source and destination.
What is the performance gain when using Fast IP?	Fast IP bypasses the router to provide increased performance in switched networks even if there are just a small number of network nodes using Fast IP. The performance gain obtained when deploying Fast IP is directly related to traffic load on the backbone router. The more traffic is pumped to it, the bigger the latency and response time and the higher the performance gain. Internal tests show performance increases in the order of 600% when routers are loaded at 70 to 75%.

Troubleshooting Tips

- Check the CardBus PC Card installation in Chapter 1.

- Inspect all cables and connections.

- Make sure you have the latest BIOS for your notebook.

- Try the notebook at a known working location.

- Try the CardBus PC Card in a known working notebook.

- If you removed the CardBus PC Card while the PC Card Diagnostics Program was running or shut down your notebook without closing the PC Card Diagnostics Program, you must remove the PC Card Diagnostics and driver and reinstall the 3Com network driver.

- If you think you have resource conflicts (I/O base address or interrupts) run the Windows 95 conflict troubleshooter as described in the previous section. It is normal for the PC Card to conflict with the CardBus controller.

- Replace the failed CardBus PC Card with a working CardBus PC Card and run the diagnostic tests again, using the same option settings as those used on the failed CardBus PC Card. If the working CardBus PC Card passes all tests, the original CardBus PC Card is probably defective. For information on product repair, see Appendix B.

- If you are running a 16-bit modem PC Card and the CardBus PC Card in the same notebook, and you experience lockups on boot, try changing the modem IRQ to the same value as the PCMCIA socket IRQ. Otherwise, insert the modem PC Card after you reboot.

- If trouble persists, contact your MIS department or network manager.

For additional troubleshooting information, see the 3Com Web site at www.3com.com.

4

CHANGING CONFIGURATION

This chapter describes how to display and change configuration settings for the CardBus PC Card.

Before you change these settings, contact your MIS department.

Configuration Settings

Table 4-1 lists each configuration option, the default setting, and the available settings.

Table 4-1 Option Settings

Option	Default Setting	Available Settings
Duplex	Auto Select	Auto Select, full duplex
Media Type	Auto Select	Auto Select
CIS Memory Address	0090h - 00FFh	256 Bytes
I/O Base Address	3000h	3000h, 3040h, 3080h, 30C0h 3100h, 3140h, 3180h, 31C0h 3200h, 3240h, 3280h, 32C0h 3300h, 3340h, 3380h, 33C0h 3400h, 3440h, 3480h, 34C0h 3500h, 3540h, 3580h, 35C0h
Interrupt Request Level	9	5, 7, 9, 10, 11, 12

Configuration Setting Descriptions

Duplex
Full duplex allows the CardBus PC Card to send and receive data between the CardBus PC Card and the switch connection at the same time. If the switch supports the NWay feature and full duplex, the CardBus PC Card automatically runs in full duplex (Auto Select).

Media Type
The Media Type is Auto Select.

CIS Memory Address

The CIS Memory requires a 256 B segment of memory.

I/O Base Address

The I/O address space is used by the CardBus PC Card for communication between the CardBus PC Card and the notebook. The CardBus PC Card uses 64 bytes of I/O space, starting at the I/O Base Address.

Make sure that no other device is using the same value. (the default is 3000h). For more information about resolving Resource conflicts, see Chapter 3.

Interrupt Request Level

To change the IRQ is used by the CardBus PC Card for communication between the CardBus PC Card and the notebook.

The CardBus PC Card can operate on one of six interrupt levels: 5, 7, 9, 10, 11, or 12.

The preferred interrupt level is 9, but the CardBus PC Card can operate on the other interrupt levels if necessary. If a conflict continues, you might have to change the setting of other adapters or options that are in the notebook.

For Toshiba notebooks, set the interrupt to 11.

For more information about resolving resource conflicts, see Chapter 3.

Displaying Configuration

If you are running Windows 95 or Windows NT, use the 3Com PC Card Diagnostics program to display configuration information.

Otherwise, use the 3Com DOS Configuration program described in the INSTRUCT.TXT file in the Help directory on the *LAN Installation Disk*.

To display the current configuration of the CardBus PC Card using the 3Com PC Card Diagnostics program, follow these steps:

1 **Install the CardBus PC Card and connect it to the network as described in Chapter 1 and install the driver as described in Chapter 2.**

2 **To start the 3Com PC Card Diagnostics program, follow these steps:**

   a Click the *Windows Start* menu.

   b Click *Programs.*

   c Select *3Com PC Card Utilities.*

   d *Select 3Com PC Card Diagnostics.*

   For Windows NT v3.51, select *File>Run*, and type
   tnicdiag.exe

   The 3Com PC Card Diagnostics program General screen appears as shown in Figure 4-1.

Figure 4-1 PC Card Diagnostics Program General Screen

To display the 3Com logo icon on your Windows 95 and Windows NT task bar for easy access to the 3Com PC Card Diagnostics program, click the box next to Enable Tray Control.

> **i** *You can display the CardBus PC Card help system by clicking the Help button on the PC Card Diagnostics General screen.*

3 **Click *PC Card Details* to display the PC Card Details screen shown in Figure 4-2.**
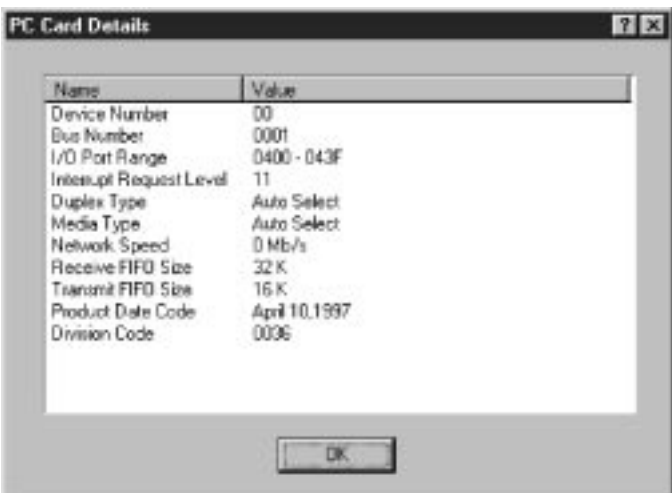

Figure 4-2 PC Card Details Screen

Each configuration setting is displayed with the current status.

> **i** *Click the ? at the top of the screen, drag it to a value and click, to display information about the selected value.*

Changing Configuration Settings

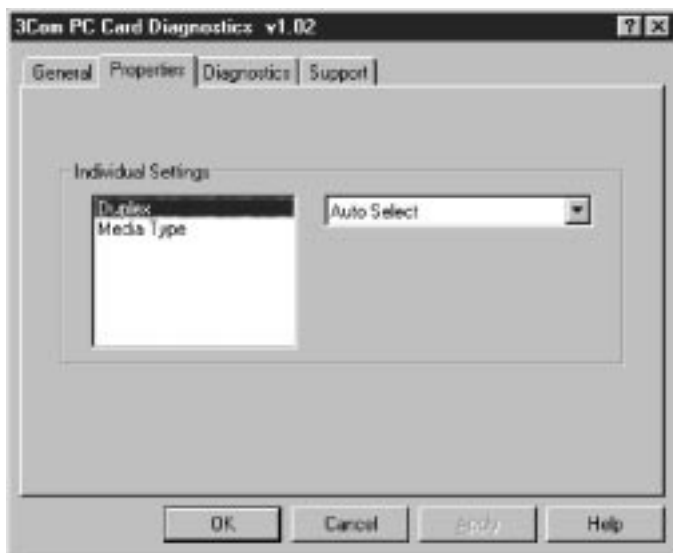**1** **Click the *Properties* tab on the 3Com PC Card Diagnostics General screen, shown in Figure 4-1.**

Figure 4-3   Properties Screen

2 **To display the options for a setting, highlight the setting and use the right pulldown menu.**

3 **To select a new value, highlight the value and release the mouse button.**

4 **Click *OK*.**

The new value is selected.

5 **Click *OK* or *Cancel* to exit the screen.**

Repeat the process to change any configuration setting on the Properties screen. For more information about resolving resource conflicts, see Chapter 3.

DOS Configuration Program

To change the configuration on a DOS notebook, see the INSTRUCT.TXT file in the HELP directory on the *LAN Installation Disk.*
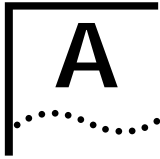
A SPECIFICATIONS

Table A-1   CardBus PC Card Specifications

Network Interface

10 Mbps Ethernet 10BASE-T	Ethernet IEEE 802.3 industry standard for a 10 Mbps baseband CSMA/CD local area network
100 Mbps Ethernet and 100BASE-TX	Ethernet IEEE 802.3u industry standard for a 100 Mbps baseband CSMA/CD local area network

Physical Dimensions

Length	3.370 in (85.6 mm)
Width	2.126 in (54 mm)
Height	Type II, 0.197 in (5.0 mm)
Weight	0.86 oz. (24.4 g)

Environmental Operating Range

Operating temperature	(0˚ to 70˚C) 32˚ to 131˚F
Relative humidity	5% to 90% noncondensing

Card Information Structure (CIS) and Memory Size

Drivers	4 KB
Diagnostics	8 KB
CIS	256 K
FIFO	8 KB

Network Cable Specifications

UTP Cable Requirements:

Category 3 LAN and high-speed data cable (10 Mbps) that meets the requirements of EIA/TIA-568 and EIA/TIA TSB-36

Category 4 extended distance LAN cable that meets the requirements of EIA/TIA-568 and EIA/TIA TSB-36

Category 5 voice and data transmission LAN cable (100 Mbps) that meets the requirements of EIA/TIA-568 and EIA/TIA TSB-36
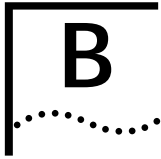
Power Requirements

Operating voltage	+3.3 V ± .3V @ 150 mA

Mean Time Between Failures (hours calculated)

70 ˚C (158 ˚F) mobile environment	128, 694.33 hours
25 ˚C (77 ˚F) mobile environment	342, 367.70 hours

FCC Certification	Part 15, Class B

B

TECHNICAL SUPPORT

3Com provides easy access to technical support information through a variety of services. This appendix describes these services.

Information contained in this appendix is correct at time of publication. For the very latest, we recommend that you access 3Com Corporation's World Wide Web site.

Online Technical Services

3Com offers worldwide product support 24 hours a day, 7 days a week, through the following online systems:

- World Wide Web site
- 3Com Bulletin Board Service (3ComBBS)
- 3ComFacts℠ automated fax service
- 3ComForum on CompuServe online service

World Wide Web Site

Access the latest networking information on 3Com Corporation's World Wide Web site by entering our URL into your Internet browser:

http://www.3com.com/

This service features the latest information about 3Com solutions and technologies, customer service and support, news about the company, *Net Age®* Magazine, technical documentation, and more.

3Com Bulletin Board Service

3ComBBS contains patches, software, and drivers for all 3Com products, as well as technical articles. This service is available through analog modem or digital modem (ISDN) 24 hours a day, 7 days a week.

Access by Analog Modem

To reach the service by modem, set your modem to 8 data bits, no parity, and 1 stop bit. Call the telephone number nearest you:

Country	Data Rate	Telephone Number
Australia	up to 14400 bps	61 2 9955 2073
Brazil	up to 14400 bps	55 11 5181 9666
France	up to 14400 bps	33 1 6986 6954
Germany	up to 28800 bps	4989 62732 188
Hong Kong	up to 14400 bps	852 2537 5601
Italy	up to 14400 bps	39 2 27300680
Japan	up to 14400 bps	81 3 3345 7266
Mexico	up to 28800 bps	52 5 520 7835
P.R. of China	up to 14400 bps	86 10 684 92351
Taiwan, R.O.C.	up to 14400 bps	886 2 377 5840
U.K.	up to 28800 bps	44 1442 438278
U.S.A.	up to 28800 bps	1 847 982 5092

Access by Digital Modem

ISDN users can dial in to 3ComBBS using a digital modem for fast access up to 56 Kbps. To access 3ComBBS using ISDN, use the following number:

1 408 654 2703

3ComFacts Automated Fax Service

3Com Corporation's interactive fax service, 3ComFacts, provides data sheets, technical articles, diagrams, and troubleshooting instructions on 3Com products 24 hours a day, 7 days a week.

Call 3ComFacts using your Touch-Tone telephone using one of these international access numbers:

Country	Telephone Number
U.K.	44 1442 438279
U.S.A.	1 408 727 7021

Local access numbers are available within the following countries:

Country	Telephone Number	Country	Telephone Number
Australia	1800 123 853	Netherlands	0800 0228049
Belgium	0800 71279	Norway	800 11062
Denmark	800 17319	Portugal	0505 442 607
Finland	98 001 4444	Russia (Moscow only)	956 0815
France	0800 908158	Spain	900 964 445
Germany	0130 81 80 63	Sweden	020 792954
Italy	1678 99085	U.K.	0800 626403

3ComForum on CompuServe Online Service

3ComForum contains patches, software, drivers, and technical articles about all 3Com products, as well as a messaging section for peer support. To use 3ComForum, you need a CompuServe account.

To use 3ComForum:

1 **Log on to your CompuServe account.**

2 **Type `go threecom`**

3 **Press [Return] to see the 3ComForum main menu.**

Support from Your Network Supplier

If additional assistance is required, contact your network supplier. Many suppliers are authorized 3Com service partners who are qualified to provide a variety of services, including network planning, installation, hardware maintenance, application training, and support services.

When you contact your network supplier for assistance, have the following information ready:

■ A list of system hardware and software, including revision levels

■ Diagnostic error messages

■ Details about recent configuration changes, if applicable

Returning Products for Repair

Before you send a product directly to 3Com for repair, you must first obtain a Return Materials Authorization (RMA) number. Products sent to 3Com without RMA numbers will be returned to the sender unopened, at the sender's expense.

To obtain an RMA number, call or fax:

Country	Telephone Number	Fax Number
U.S.A. and Canada	1 800 876 3266, option 2	408 764 7120
Latin America	1 408 326 2927	408 764 7120
Europe, South Africa, and Middle East	44 1442 435860	44 1442 435822
Elsewhere	1 408 326 2926	1 408 764 7120

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3Com Corporation LIMITED WARRANTY

HARDWARE

3Com warrants its hardware products to be free from defects in workmanship and materials, under normal use and service, for the following lengths of time from the date of purchase from 3Com or its Authorized Reseller:

Network interface cards	Lifetime
Other hardware products (unless otherwise specified in the warranty statement above)	1 year
Spare parts and spares kits	90 days
Notebook PC Compatability	1 year from date of purchase

If a product does not operate as warranted above during the applicable warranty period, 3Com shall, at its option and expense, repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of 3Com. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

3Com shall not be responsible for any software, firmware, information, or memory data of Customer contained in, stored on, or integrated with any products returned to 3Com for repair, whether under warranty or not.

SOFTWARE

3Com warrants that the software programs licensed from it will perform in substantial conformance to the program specifications therefor for a period of ninety (90) days from the date of purchase from 3Com or its Authorized Reseller. 3Com warrants the media containing software against failure during the warranty period. No updates are provided. The sole obligation of 3Com with respect to this express warranty shall be (at the discretion of 3Com) to refund the purchase price paid by Customer for any defective software products, or to replace any defective media with software which substantially conforms to applicable 3Com published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. 3Com makes no warranty or representation that its software products will work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third-party products listed in the 3Com software product documentation or specifications as being compatible, 3Com will make reasonable efforts to provide compatibility, except where the noncompatibility is caused by a "bug" or defect in the third party's product.

STANDARD WARRANTY SERVICE

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FCC CLASS B STATEMENT

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

The user may find the following booklet prepared by the Federal Communications Commission helpful:

The Interference Handbook

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-00345-4.

Tested to comply with the FCC Standards for home and office use.

NOTE: In order to maintain compliance with the limits of a Class B digital device, 3Com requires that you use quality interface cables when connecting to this device. Changes or modifications not expressly approved by 3Com could void the user's authority to operate this equipment. Refer to the manual for specifications on cabling types.

FCC DECLARATION OF CONFORMITY

We declare under our sole responsibility that the

Model:	Description:
3CCFE575BT, 3CXFE575BT	3Com Megahertz 10/100 LAN CardBus PC Card

to which this declaration relates, is in conformity with the following standards or other normative documents:

- ANSI C63.4-1992 Methods of Measurement

- Federal Communications Commission 47 CFR Part 15, subpart B
  15.107 (e) Class B Conducted Limits
  15.109 (g) Class B Radiated Emissions Limits

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INDUSTRY CANADA CLASS B EMMISSION COMPLIANCE STATEMENT

This Class B digital apparatus complies with Canadian ICES-003.

AVIS DE CONFORMITÉ À LA RÉGLEMENTATION D'INDUSTRIE CANADA

Cet appareil numérique de la classe B est conform à la norme NMB-003 du Canada.

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