



Software Installation Guide for the QLA1080

Parallel SCSI Host Adapter Board
for the PCI Bus

PC8153301-00 B
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| Drivers for the Following Operating Systems are Affected |
| DOS Windows 95/98 |

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Section 1

Introduction

1.1 Before You Begin

After successfully installing your QLA1080 board, you are ready to install the software drivers you need for the QLA1080 board to communicate between your host machine and the desired peripherals.

1.2 Before You Install

Before you install the software driver, you'll need to:

- Locate the QLogic software drivers diskette. Make a backup copy of the diskette.
- Read through this guide to determine which drivers you want to install.

If you have QLogic drivers already installed on your system, you can check the driver versions by performing the following procedure:

1. Place the QLogic software drivers diskette in an appropriate drive.
2. Copy the QLVER.EXE file from the diskette into the directory with the QLogic drivers. For example:

```
COPY A:QLVER.EXE C:\QLC\QLVER.EXE
```

3. Change directories to the subdirectory containing the QLogic drivers. For example:

```
CD \QLC
```

4. At the prompt type:

```
QLVER *.*
```

A QLogic banner is displayed, followed by the drivers and their corresponding version numbers. For more information about QLVER.EXE, use the /h (help) parameter. For example:

```
QLVER /h
```

NOTE: The latest versions of the software drivers and documentation may be obtained from the QLogic web site, <http://www.qlc.com>.

1.3**General Description**

Software drivers for the following operating systems are provided with your QLA1080 board:

- MS-DOS version 6.X with advanced SCSI programming interface (ASPI) support
- Windows NT version 4.0
- Windows 95/98

Section 2

DOS Drivers Installation

2.1

Introduction

This section provides instructions for installing the drivers for MS-DOS version 6.X under the following operating system conditions:

- Initial installation of MS-DOS, a new SCSI hard drive, and the MS-DOS drivers

If you are installing a new system that has an uninitialized SCSI hard drive and no other hard drives attached, install MS-DOS version 6.X according to the Microsoft DOS user manual before installing the DOS drivers.

- Initial installation of a SCSI hard disk and the MS-DOS drivers on an existing system

If you have an existing system and you are attaching a new SCSI hard drive to the QLA1080 board, run the DOS FDISK and FORMAT utilities to prepare the drive for use.

2.2

DOS Driver Files

The following files on the QLogic software drivers diskette are provided for installation of the DOS drivers:

- \DOS\SETUP.BAT – batch file for installing DOS drivers
- \DOS\INSTALL.EXE – SCSI Install program
- \DOS\QL18ASPI.SYS – RAM BIOS and ASPI manager driver
- \DOS\QL00DISK.SYS – disk driver
- \DOS\QL00CDRM.SYS – CD-ROM driver
- README.TXT – helpful hints about the DOS drivers

Be sure to review the README.TXT file for both new and changed information.

CAUTION! Do not use the old versions of QLogic drivers QL10DOS.SYS and QL00ASPI.SYS with the new driver QL18ASPI.SYS. Using both versions may cause system problems. Remove any existing QLogic drivers before installing the new drivers.

2.3 Installing Your Drivers with SCSI Install

SCSI Install is a menu-based utility for installing and configuring the DOS drivers. SCSI Install can automatically update your CONFIG.SYS and AUTOEXEC.BAT files and create backup copies of the original files, identifying them with .QLC extensions. SCSI Install runs under MS-DOS version 6.X.

If you use SCSI Install, you do not need to perform the manual installation procedures in section 2.4.

Perform the following steps to install your drivers using SCSI Install.

1. Insert the QLogic software drivers diskette in an appropriate drive.
2. At a DOS prompt, type <drive>:SETUP and press <ENTER>. For example:

```
A : SETUP
```
3. Press the <ENTER> key again to select *Continue with Installation* or press <Esc> to abort the installation.
4. If you want to install the drivers on a drive or in a directory other than the default of C:\QLC, use the up and down arrow keys and the <ENTER> key to select the location you want.
5. You are prompted to *Read the README file* or *Continue with the Installation*. Use the up and down arrow keys and the <ENTER> key to make your selection. If you choose to view the README file, press the <Esc> key when you are finished and proceed to step 6.
6. Use the up and down arrow keys and the <ENTER> key to choose *YES* if you want to connect a CD-ROM or *NO* if you don't. Follow the instructions on the screen.
7. After completing the installation, exit SCSI Install and remove the diskette from the drive.
8. Reboot your system.

The following is an example of what is added to your CONFIG.SYS file in a standard CD-ROM installation:

```
DEVICEHIGH=C:\QLC\QL18ASPI.SYS /D
REM DEVICEHIGH=C:\QLC\QL00DISK.SYS
DEVICEHIGH=C:\QLC\QL00CDRM.SYS /D:QLC0000
```

The following is an example of what is added to your AUTOEXEC.BAT file in a standard CD-ROM installation:

```
C:\DOS\MSCDEX.EXE /D:QLC0000
```

NOTE:

If you do not have a hard drive attached to the QLA1080 board or you have disabled the QLogic BIOS PROM, then the line in your CONFIG.SYS file that loads the QL18ASPI.SYS driver must precede any line that loads a memory manager.

If the QLogic BIOS PROM is disabled, remove the REM statement from the line containing the QL00DISK.SYS driver. Removing the statement loads the driver and allows DOS to configure the disk drives.

2.4

Installing Your Drivers Manually

The following sections contain detailed information for manually installing the DOS drivers.

When installing the software drivers, copy only the files you need to your system.

Before you install the DOS drivers, make backup copies of the CONFIG.SYS and AUTOEXEC.BAT files on your system.

NOTE: If you are running HIMEM.SYS and a memory manager such as EMM386.SYS, you can save low memory space by substituting DEVICEHIGH for DEVICE in your CONFIG.SYS file when installing the drivers.

2.4.1

DOS RAM BIOS and ASPI Manager Driver and Switch Options

The QLA1080 board has an onboard BIOS PROM that boots the system from a SCSI disk. In addition, a RAM BIOS that includes an ASPI manager is provided. Using the RAM BIOS and ASPI manager driver gives your system enhanced performance and the additional functionality of the CD-ROM and DOS disk drivers.

NOTE: Using the RAM BIOS and ASPI manager driver is mandatory when you install the CD-ROM or disk drives.

The DOS ASPI manager provides the standard ASPI interface to the QLA1080 board. Many SCSI application programs require this interface for disk backup and restore operations to SCSI tape devices, scanners, removable devices, etc.

The option switches in table 2-1 can be appended to your RAM BIOS and ASPI manager driver DEVICE= line in your CONFIG.SYS file.

Table 2-1. DOS RAM BIOS and ASPI Manager Driver Switch Options

| Parameter | Description |
|----------------|---|
| /PARITY | This switch enables SCSI bus parity checking. By default, parity checking is disabled. |
| /NORESET | This switch disables SCSI reset during initialization. This switch is useful for peripherals that take longer than 3 seconds to recover from SCSI resets. |
| /ASYNC | This switch disables synchronous data transfers. |
| /NODISCONNECT | This switch disables SCSI disconnects. By default, disconnects are enabled. |
| /NOSEEK | Some SCSI devices do not implement SCSI seek commands. This switch disables the SCSI seek commands. By default, SCSI seek commands are enabled. |
| /DISPLAY or /D | When enabled, this switch displays the SCSI configuration when the driver is loaded. By default, the SCSI configuration is not displayed. |
| /E | This switch disables the ASPI portion of the RAM BIOS and ASPI manager driver. By default, ASPI is enabled. |
| /R | This switch is enabled when you have a removable drive attached to the QLA1080 board. |

2.4.1.1

Installing the RAM BIOS and ASPI Manager Driver

Perform the following steps to install the RAM BIOS and ASPI manager driver.

NOTE: If you are installing NetWare, the RAM BIOS and ASPI manager driver is not required and should not be loaded.

1. Place the QLogic software drivers diskette in an appropriate drive.
2. Create a directory on the boot drive of the computer to store the driver. For example:

```
MKDIR C:\QLC
```

3. Copy the RAM BIOS and ASPI manager driver file from the diskette to the directory created in step 2. For example:

```
COPY A:\DOS\QL18ASPI.SYS C:\QLC\*.*
```

4. Add a RAM BIOS and ASPI manager driver DEVICE= line to your CONFIG.SYS file. When you reboot your computer, this line loads the driver into your system. For example:

```
DEVICE=C:\QLC\QL18ASPI.SYS
```

If you do not have a hard drive attached to the QLA1080 board or you have disabled the QLogic BIOS PROM, then the QL18ASPI.SYS line must precede any memory manager line in your CONFIG.SYS. For example:

```
DEVICE=C:\QLC\QL18ASPI.SYS  
DEVICE=C:\DOS\HIMEM.SYS  
DEVICE=C:\DOS\EMM386.SYS
```

5. If you want to use any of the option switches, append them to the RAM BIOS and ASPI manager driver DEVICE= line in your CONFIG.SYS file. For example:

```
DEVICE=C:\QLC\QL18ASPI.SYS /DISPLAY /E
```

6. Save your edited CONFIG.SYS file.
7. If you are installing more drivers, proceed to the next appropriate section; otherwise, reboot your system to load the drivers.

2.4.2

DOS Disk Driver

The DOS disk driver (QL00DISK.SYS) is used only in the following cases:

- You have hard drives attached to the QLA1080 board and you have disabled the QLogic BIOS PROM. When the BIOS PROM is disabled, the DOS disk driver configures the disk devices into DOS and assigns drive letters.
- You have attached a removable disk drive to the QLA1080 board and are not using the driver provided by the vendor.

2.4.2.1

Installing the DOS Disk Driver

Before you can install the DOS disk driver, you must first install the RAM BIOS and ASPI manager driver (see section 2.4.1.1).

Perform the following steps to install the DOS disk driver.

1. Place the QLogic software drivers diskette in an appropriate drive.
2. Copy the DOS disk driver file from the diskette to the computer's boot drive. For example:

```
COPY A:\DOS\QL00DISK.SYS C:\QLC\*.*
```

3. Add a disk driver DEVICE= line to your CONFIG.SYS file after the line that loads the RAM BIOS and ASPI manager driver. For example:

```
DEVICE=C:\QLC\QL18ASPI.SYS  
DEVICE=C:\QLC\QL00DISK.SYS
```

4. Save your edited CONFIG.SYS file.
5. If you are installing more drivers, proceed to the next appropriate section; otherwise, reboot your system to load the drivers.

2.4.3

DOS CD-ROM Driver and Command Line Parameter

The DOS CD-ROM driver provides the interface between the MSCDEX.EXE program and the CD-ROM device attached to the QLA1080 board. The CD-ROM driver, RAM BIOS and ASPI manager driver, and MSCDEX.EXE program are required for accessing the CD-ROM attached to the QLA1080 board.

The DOS CD-ROM driver and the MSCDEX.EXE program require the following parameter:

/D:your driver name This name associates the MSCDEX.EXE program and the CD-ROM driver. The name can be any legal DOS name.

NOTE: The /D: in the parameter does not refer to the drive letter of the CD-ROM. See section 2.4.3.1 for examples.

Make sure the driver name you supply to the MSCDEX.EXE program is **identical** to the one you supply to the DOS CD-ROM driver parameter (see section 2.4.3.1).

NOTE: The MSCDEX.EXE program is provided by Microsoft with MS-DOS version 6.X. If you are running an older version of MS-DOS, contact Microsoft to obtain the program.

2.4.3.1

Installing the DOS CD-ROM Driver

Before you can install the DOS CD-ROM driver, you must first install the RAM BIOS and ASPI manager driver (see section 2.4.1.1).

Perform the following steps to install the DOS CD-ROM driver.

1. Place the QLogic software drivers diskette in an appropriate drive.
2. Copy the DOS CD-ROM driver file from the diskette to the computer's boot drive. For example:

```
COPY A:\DOS\QL00CDRM.SYS C:\QLC\*.*
```

3. Add a CD-ROM driver DEVICE= line to your CONFIG.SYS file after the line that loads the RAM BIOS and ASPI manager driver. When you reboot your computer, this line loads the driver into your system. For example:

```
DEVICE=C:\QLC\QL18ASPI.SYS  
DEVICE=C:\QLC\QL00CDRM.SYS /D:QLC0000
```

If you are installing NetWare from a CD-ROM, you must copy and use the QLNWCDRM.SYS CD-ROM driver (located in the \NETWARE directory of the QLogic driver disk). For example:

```
DEVICE=C:\QLC\QLNWCDRM.SYS /D:QLC0000
```

4. Save your edited CONFIG.SYS file.
5. Add a line in your AUTOEXEC.BAT file for the MSCDEX.EXE program (supplied by Microsoft). For example:

```
C:\DOS\MSCDEX.EXE /D:QLC0000
```

6. Save your edited AUTOEXEC.BAT file.
7. Reboot your system to load the driver.

Section 3

Windows NT Driver Installation

3.1

Introduction

This section provides instructions for installing the Windows NT driver under the following operating system conditions:

- Initial installation of the Windows NT 4.0 operating system and the Windows NT driver
- Installation of the Windows NT driver in an already installed Windows NT 4.0 operating system

3.2

Windows NT Driver Files

The following files on the QLogic software drivers diskette are provided for installation of the Windows NT driver:

- TXTSETUP.OEM – driver installation script for initial Windows NT text setup
- QLOGIC – identification file for Windows NT setup program
- \NT\OEMSETUP.INF – driver installation script for Windows NT setup program
- \NT\QL1080.SYS – Windows NT driver
- \NT\README.TXT – helpful hints about the Windows NT driver

Be sure to review the README.TXT file for both new and changed information.

3.3

Driver Installation for Windows NT

If Windows NT 4.0 is not installed on your system, perform the installation procedures in section 3.3.1. If Windows NT is already installed on your system, perform the installation procedures in section 3.3.2. If the Windows NT driver is already installed and you want to install an updated version of the driver, perform the installation procedures in section 3.3.3.

3.3.1

Installing Windows NT and the Windows NT Driver

Perform the following steps to install Windows NT on the SCSI disk drive attached to the QLA1080 board. You may use these same steps to install Windows NT from a CD-ROM attached to the QLA1080 board.

1. Start the NT installation procedure using the NT setup diskettes.
2. After the standard devices have been detected and configured, use the *S* option to *Specify Additional Device*.
3. Select *Other*, then press the <ENTER> key.
4. Insert the QLogic software drivers diskette, then press the <ENTER> key.
5. Select *QLogic QLA1080 64 bit PCI LVD SCSI HBA*, then press the <ENTER> key.
6. Continue with the standard installation procedure.

3.3.2

Installing the Windows NT Driver

Perform the following steps to add the Windows NT driver to a previously installed Windows NT 4.0 system.

1. Select *My Computer* from the desktop.
2. Select *Control Panel*.
3. Select *SCSI Adapters*.
4. Select the *Drivers* tab and click *Add*.
5. Insert the QLogic software drivers diskette in an appropriate drive and click *Have Disk*.
6. Enter A:\NT for the path to the driver. Click *OK*.
7. Select the appropriate adapter/driver from the list of supported adapters. Click *OK*.

3.3.3

Updating the Windows NT Driver

Perform the following steps if the Windows NT driver is already installed and you want to install an updated version of the driver.

1. Open a DOS command prompt window.
2. Change the current directory to the Windows NT driver directory. For example:

```
CD \WINNT\SYSTEM32\DRIVERS
```

3. Make a backup copy of the old driver. You can copy the file into the same directory with a .SAV extension indicating that it is the saved file. For example:

```
COPY QL1080.SYS QL1080.SAV
```

4. Insert the QLogic software drivers diskette with the updated driver in an appropriate drive.
 5. Copy the new driver over the old driver. For example:
- ```
COPY A:\NT\QL1080.SYS
```
6. Reboot your system to load the driver.



## *Section 4*

# Windows 9X Driver Installation

### 4.1

#### **Introduction**

This section provides instructions for installing the Windows 9X driver under the following operating system conditions:

- Initial installation of the Windows 95 operating system and the Windows 9X driver
- Installation of the Windows 9X driver in a previously installed Windows 95 operating system
- Initial installation of the Windows 98 operating system and the Windows 9X driver
- Installation of the Windows 9X driver in a previously installed Windows 98 operating system

### 4.2

#### **Windows 9X Driver Files**

The following files on the QLogic software drivers diskette are provided for installation of the Windows 9X driver:

- \WIN9X\QL1080.INF – driver installation script for the Windows 95 setup program
- \WIN9X\QL1080.MPD – Windows 9X driver
- \WIN9X\QL1080.CAT – digital signature catalog file needed for Windows 9X driver installation
- \WIN9X\README.TXT – helpful hints about the Windows 9X driver

Be sure to review the README.TXT file for both new and changed information.

### 4.3

#### **Driver Installation for Windows 95**

If Windows 95 is not installed on your system, perform the installation procedure in section 4.3.1 (retail version) or section 4.3.2 (OEM version); if Windows 95 (retail or OEM) is already installed on your system, perform the installation procedure in section 4.3.3.

#### 4.3.1

### Installing Windows 95 (Retail Version) and the Windows 9X Driver

Perform the following steps to install the retail version of Windows 95 and the Windows 9X driver.

1. Make sure that MS-DOS 6.X is installed on the system boot disk.
2. Install the QLA1080 board and the peripheral devices.
3. Run the Windows 95 SETUP program by following the instructions provided with Windows 95.
4. After Windows 95 is installed and operational, click the *My Computer* icon, then the *Control Panel* icon.
5. In the *Control Panel* window, click the *System* icon and select the *Device Manager* tab.
6. Select *PCI SCSI Bus Controller* listed under *Other Devices*, then click *Properties*.
7. Select the *Driver* tab. Click *Change Driver*.
8. Select *SCSI Controllers*. Click *OK*.
9. Insert the QLogic software drivers diskette. Click *Have Disk*.
10. Enter <drive>:\WIN9X for the path to the driver. Click *OK*.
11. Select the *QLogic QLA1080 PCI SCSI Adapter*. Click *OK*.
12. Click *OK* once more to continue.
13. If the *Windows cannot determine if it can remove this device safely* dialog box appears, click *Cancel*. Do **not** click *Test*.  
**CAUTION!** Clicking *Test* may lock the system. Rebooting the system results in normal operation.
14. Edit your CONFIG.SYS file to remove any QLogic drivers that may have been added for DOS support. These are not required for Windows 95.
15. Remove the QLogic software drivers diskette from the drive and reboot your system.

### 4.3.2

## Installing Windows 95 (OEM Version) and the Windows 9X Driver

Perform the following steps to install the OEM service release of Windows 95 and the Windows 9X driver.

1. Make sure that MS-DOS 6.X is installed on the system boot disk.
2. Install the QLA1080 board and the peripheral devices.
3. Run the Windows 95 SETUP program by following the instructions provided with Windows 95.
4. When Windows restarts, a dialog box displays that says *Do you want to see more about your computer not being configured for optimal performance*. Click *No*.
5. After Windows 95 is installed and operational, click the *My Computer* icon, then the *Control Panel* icon.
6. In the *Control Panel* window, click the *System* icon and select the *Device Manager* tab.
7. Select *PCI SCSI Bus Controller* listed under *Other Devices*, then click *Properties*.
8. Select the *Driver* tab. Click *Update Driver*.
9. Insert the QLogic software drivers diskette and click *Yes* in the *Update Device Driver Wizard* dialog box.
10. Click *Other Locations* when the *Update Device Driver Wizard* dialog box returns.
11. Enter <drive>:\WIN9X for the path to the driver. Click *OK*.
12. Click *Finish* when the wizard finds the updated driver for the *QLogic QLA1080 PCI SCSI Adapter*.
13. Click *OK* when prompted to insert the *QLogic Software Drivers*.
14. Enter <drive>:\WIN9X for the path to the QLogic driver. Click *OK*.
15. If the *Windows cannot determine if it can remove this device safely* dialog box appears, click *Cancel*. Do **not** click *Test*.

**CAUTION!** Clicking *Test* may lock the system. Rebooting the system results in normal operation.

16. Edit your CONFIG.SYS file to remove any QLogic drivers that may have been added for DOS support. These are not required for Windows 95.
17. Remove the QLogic software drivers diskette from the drive and reboot your system.

### 4.3.3

#### Installing the Windows 9X Driver

Perform the following steps to install the Windows 9X driver on a system with the **Windows 95 retail** package already installed.

1. Shut down Windows 95 and install your QLA1080 board and peripheral devices.
2. Reboot your system. The *New Hardware Found* window pops up after detecting the *PCI SCSI Bus Controller*.
3. Insert the QLogic software drivers diskette and select the option to *Load driver from disk provided by the hardware manufacturer*. Click *OK*.
4. Enter <drive>:\WIN9X for the path to the driver. Click *OK*.

Perform the following steps to install the Windows 9X driver on a system with the **Windows 95 OEM** service release already installed.

1. Shut down Windows 95 and install your QLA1080 board and peripheral devices.
2. Reboot your system. The *New Hardware Found* window pops up after detecting the *PCI SCSI Bus Controller*.
3. Insert the QLogic software drivers diskette. Click *Next*.
4. Click *Other Locations* in the *Update Device Driver Wizard* dialog box.
5. Enter <drive>:\WIN9X for the path to the driver. Click *OK*.
6. Click *Finish* when the wizard finds the updated driver for the *QLogic QLA1080 PCI SCSI Adapter*.
7. Click *OK* when prompted to insert the *QLogic Software Drivers*.
8. Enter <drive>:\WIN9X for the path to the driver. Click *OK*.
9. Remove the QLogic software drivers diskette from the drive and reboot your system.

#### 4.4

### Driver Installation for Windows 98

If Windows 98 is not on your system, perform the installation procedure in section 4.4.1 (SCSI CD-ROM) or section 4.4.2 (IDE CD-ROM). If Windows 98 is already installed on your system, perform the installation procedure in section 4.4.3.

#### 4.4.1

### Installing Windows 98 and the Windows 9X Driver from a SCSI CD-ROM

Perform the following steps to install Windows 98 and the Windows 9X driver from a SCSI CD-ROM.

1. Install the QLA1080 board and peripheral devices.
2. Create a bootable partition on your hard drive and format it.

**NOTE:** The Windows 98 bootable distribution diskette from Microsoft does not contain the necessary file (Format.com) that creates a bootable partition. The Windows 98 procedure removes this file from the CD-ROM during the installation process. To successfully install Windows 98 from a SCSI CD-ROM attached to the QLogic QLA1080 board, you must create a bootable partition on your hard drive from a DOS or Windows 95 boot disk.

3. Boot to the root directory. For example:  
C:\
4. Insert the QLogic software drivers diskette and run `SETUP.BAT`.
5. When you are prompted for the `MSCDEX.EXE`, insert the Windows 98 boot disk.
6. Reboot your system and run the Windows 98 `SETUP` program from the CD.
7. After Windows 98 is installed and operational, double-click the *My Computer* icon, then the *Control Panel* icon.
8. In the *Control Panel* window, double-click the *System* icon and select the *Device Manager* tab.
9. Select *PCI SCSI Bus Controller* listed under *Other devices*, then click *Properties*.
10. Click *Driver*, then click *Update Driver*.
11. Insert the QLogic software drivers diskette. Click *Next* in the *Update Device Driver Wizard* dialog box.

12. Click *Display a list of all the drivers in a specific location, so you can select the driver you want*. Click *Next*.
13. If you are prompted to select the device type, click *SCSI Controllers*. Click *Next*.
14. Click *Have Disk* and type <drive>:\WIN9X for the path to the QLogic driver. Click *OK*.
15. Click *QLogic QLA1080 PCI SCSI Adaptor*. Click *Next*.
16. Windows 98 displays your QLogic adapter choice and path to the QLogic driver. Click *Next*.
17. Click *Finish* when the wizard finds the updated driver for the *QLogic QLA1080 PCI SCSI Adapter*.
18. Remove the QLogic software drivers diskette from the drive and reboot your system.

#### 4.4.2

### **Installing Windows 98 and the Windows 9X Driver from an IDE CD-ROM**

Perform the following steps to install Windows 98 and the Windows 9X driver from an IDE CD-ROM.

1. Install the QLA1080 board and peripheral devices.
2. Connect the IDE CD-ROM to the IDE controller.
3. Insert the Windows 98 boot disk.
4. Reboot your system.
5. The Microsoft Windows 98 Startup Menu opens and prompts you to select a startup option.

Microsoft Windows 98 Startup Menu

1. Start Windows 98 Setup from CD-ROM.
2. Start computer with CD-ROM support.
3. Start computer without CD-ROM support.

Enter a choice: 1

6. Press the <ENTER> key to accept the default.
7. Install Windows 98 according to the manufacturer's instructions.
8. After Windows 98 is installed and operational, double-click the *My Computer* icon, then the *Control Panel* icon.

9. In the *Control Panel* window, double-click the *System* icon and select the *Device Manager* tab.
10. Select *PCI SCSI Bus Controller* listed under *Other devices*, then click *Properties*.
11. Click *Driver*, then click *Update Driver*.
12. Insert the QLogic software drivers diskette. Click *Next* in the *Update Device Driver Wizard* dialog box.
13. Click *Display a list of all the drivers in a specific location, so you can select the driver you want*. Click *Next*.
14. If you are prompted to select the device type, click *SCSI Controllers*. Click *Next*.
15. Click *Have Disk* and type <drive>:\WIN9X for the path to the QLogic driver. Click *OK*.
16. Click *QLogic QLA1080 PCI SCSI Adaptor*. Click *Next*.
17. Windows 98 displays your QLogic adapter choice and path to the QLogic driver. Click *Next*.
18. Click *Finish* when the wizard finds the updated driver for the *QLogic QLA1080 PCI SCSI Adapter*.
19. Remove the QLogic software drivers diskette from the drive and reboot your system.

#### 4.4.3

### Installing the Windows 9X Driver

Perform the following steps to install the Windows 9X driver on a system with the Windows 98 operating system already installed.

1. Install the QLA1080 board and peripheral devices. The *New Hardware Found* window pops up after detecting the *PCI SCSI Bus Controller*.
2. Insert the QLogic software drivers diskette. Click *Next*.
3. Click *Display a list of all the drivers in a specific location so you can select the driver you want*. Click *Next*.
4. If you are prompted to select the device type, click *SCSI Controllers*. Click *Next*.
5. Click *Have Disk* and type <drive>:\WIN9X for the path to the QLogic driver. Click *OK*.
6. Click *QLogic QLA1080 PCI SCSI Adaptor*. Click *Next*.

7. Windows 98 displays your QLogic adapter choice and path to the QLogic driver. Click *Next*.
8. Click *Finish* when the wizard finds the updated driver for the *QLogic QLA1080 PCI SCSI Adapter*.
9. Remove the QLogic software drivers diskette from the drive and reboot your system.