

Chapter 5

ULTRA100 DRIVER

5.1 Introduction

The Ultra100 controller provides two IDE hard drive connectors that support Ultra ATA/100 protocols, perfect for such demanding applications as real-time video, multimedia, and high-performance operating systems.

Ultra100's two IDE connectors each support a master/slave combination of any IDE devices, including IDE, EIDE, Fast-ATA, and Ultra-ATA standards. Devices of different standards can be connected to Ultra100 without performance degradation, due to the independent programmable timing registers in the controller's design.

5.2 Software Installation

This section details the Ultra100 driver installation procedure when used with various operating systems as follows:

- Windows 2000
- Microsoft Millenium
- Windows 98
- Windows NT 4.x

You can install from CDROM drive or **copy it to disk from CDROM**.

5.2-1 Windows 2000

5.2-1-1 Installing Driver during New Windows 2000 Installation

- 1a. Floppy Install: Boot the computer with the Windows 2000 installation diskettes.
- 1b. Floppyless Install: Boot from floppy and type "WINNT". After files have been copied, the system will reboot. On the reboot, press <F6> after the message "Setup is inspecting your computer's hardware configuration..." appears.
- 1c. CD-ROM Install: Boot from the CD-ROM. Press <F6> after the message "Press F6 if you need to install third party SCSI or RAID driver" appears.
2. When the "Windows 2000 Setup" window is generated, press "S" to Specify an Additional Device(s)
3. Press "O" to select "Other" and press the "Enter" key.
4. Insert the Promise Technology driver diskette into drive A: and press "Enter" key.
5. Choose "Win2000 Promise Ultra100 Controller" from the list that appears on screen, then press the "Enter" key.
6. The Windows 2000 Setup screen will appear again saying "Setup

will load support for the following mass storage devices:" The list will include "Win2000 Promise Ultra100 controller"..

***NOTE:** If you need to specify any additional devices to be installed, do so at this time. Once all devices are specified, continue to step 7.*

From the Windows 2000 Setup screen, press the Enter key. Setup will now load all device files and then continue the Windows 2000 installation.

5.2-1-2 Installing Driver in Existing Windows 2000 System

***WARNING:** If you will be moving the boot drive containing the existing Windows 2000 operating system to the Ultra100 card, the Ultra100 driver **MUST** be loaded on to this hard drive while it is still attached to your existing hard drive controller. Do not attach this drive or any other hard drive to the Ultra100 controller card before completing this step.*

After installing the Ultra100 card and rebooting your system, Windows 2000 setup will show a "New Hardware Found" dialog box.

1. In the dialog box, choose "Driver from disk provided by hardware manufacturer" button.
2. In the A: drive, insert the Ultra100 driver diskette.
3. Type "A:\WIN2000" in the text box. Press "Enter".
4. Choose "Win2000 Promise Ultra100 IDE Controller" from the list that appears on screen, then press the "Enter" key.
5. The Windows 2000 Setup screen will appear again saying "Setup will load support for the following mass storage devices – Win2000 Promise Ultra100 IDE controller". The Ultra100 driver will now be copied on to the system and entered into the Windows 2000 driver database.
6. When the "System Settings Change" dialog box appears, remove the floppy diskette and click on "Yes" to restart the system. Windows 2000 will then restart for the driver installation to take effect.

7. Power off your system, then attach your hard drive to the Ultra100 controller card.

Confirming Windows 2000 Installation

1. From Windows 2000, open the Control Panel from “My Computer” followed by the System icon.
2. Choose the “Hardware” tab, then click the “Device Manager” tab.
3. Click the “+” in front of “SCSI controllers.” “Promise Technology, Inc. ULTRA100 IDE controller” should appear.

5.2-2 Microsoft Millennium

5.2-2-1 Installing Drivers During Millennium Installation

The following details the installation of the Ultra100 drivers while installing Microsoft's Millennium (with the Ultra100 controller card already in place). If you're installing the Ultra100 drivers on a system with Millennium already installed, see "Installing Drivers with Existing Millennium System."

1. Install Microsoft Millennium fully.
2. After installation, go the "Start" menu and choose "Settings."
3. From the "Settings" menu, choose "Control Panel."
4. In the "Control Panel" window, double-click on the "System" icon.
5. In the "System" window, choose the "Device Manager" tab.
6. In the hierarchical display under "Other Devices" is a listing for "PCI Mass Storage Controller." Choose it and then press the "Properties" button.
7. Choose the "Driver" tab in the "Properties" window, choose "Update Driver," and then press "Next."
8. Choose "Search for a better driver than the one your device is using now (recommended)," then press "Next."
9. Choose "Specify Location," then type "A:\WINMILL" in the text box.
10. Insert the "Ultra100 Driver" diskette into the A: drive.
11. Press the "Next" button. A message informing you that Millennium has found "Windows Millennium Promise ULTRA100 (tm) IDE Controller" should appear.
12. Press "Next," then "Finish," then "Yes" when asked if you want to restart your computer. Be sure to remove the diskette from drive A:.

5.2-2-2 Installing Drivers with Existing Millenium System

The following section details the installation of Ultra100 drivers on a system that has Millenium already installed and running. If you're installing the Ultra100 drivers on a system during an installation of Millenium, see "Installing Drivers During Millenium Installation."

1. After installing the Ultra100 controller card and configuring the hard drives, power up the system and boot.
2. The "Add New Hardware Wizard" will appear, informing you that it has found a "PCI Mass Storage Controller."
3. Click on "Next," and from the generated list box, choose "Search for a better driver than the one your device is using now."
4. Click on "Next," and from the generated choices, choose "Specify a location."
5. Insert the "Ultra100 Driver" diskette in drive A:.
6. Type "A:\WINMILL" in the text box that appears.
7. Click on "Next." A message informing you that Millennium has found "Windows Millennium Promise ULTRA100 (tm) IDE Controller" should appear.
8. Click on "Next," and then on "Finish."
9. Choose "Yes" when asked if you want to restart your computer. Be sure to eject the diskette from drive A:.

Confirming Driver Installation in Millennium

To confirm that the driver has been properly loaded in Millennium, perform the following steps:

1. Choose "Settings" from the "Start" menu.
2. Choose "Control Panel," and then double-click on the "System" icon.

Choose the "Device Manager" tab, and then click the "+" in front of "SCSI controllers." "Windows Millennium Promise ULTRA100 (tm) IDE controller" should appear.

5.2-3 Windows 98

5.2-3-1 Installing Drivers During Windows 98 Installation

The following details the installation of the Ultra100 drivers while installing Windows 98 (with the Ultra100 controller card already in place). If you're installing the Ultra100 drivers on a system with Windows 98 already installed, see "Installing Drivers with Existing Windows 98."

1. After installing the Ultra100 controller card and configuring the hard drive(s), partition and format your hard drive(s), if necessary.
2. Install Windows 98 normally.
3. After installation, go the "Start" menu and choose "Settings."
4. From the "Settings" menu, choose "Control Panel."
5. In the "Control Panel" window, double-click on the "System" icon.
6. In the "System" window, choose the "Device Manager" tab.
7. In the hierarchical display under "Other Devices" is a listing for "PCI Mass Storage Controller." Choose it and then press the "Properties" button.
8. Choose the "Driver" tab in the "Properties" window, choose "Update Driver," and then press "Next."
9. Choose "Search for a better driver than the one your device is using now (recommended)," then press "Next."
10. Choose "Specify Location," and then type "A:\WIN95-98" in the text box.
11. Insert the "Ultra100 Driver" diskette into the A: drive.
12. Press the "Next" button. A message informing you that Windows has found "Win95-98 Promise ULTRA100 (tm) IDE Controller" should appear.
13. Press "Next," then "Finish," then "Yes" when asked if you want to restart your computer. Be sure to remove the diskette from drive A:.

5.2-3-2 Installing Drivers with Existing Windows 98

The following section details the installation of Ultra100 drivers on a system that has Windows 98 already installed. If you're installing the Ultra100 drivers on a system during a Windows 98 installation, see "Installing Drivers During Windows 98 Installation."

1. After installing the Ultra100 controller card and configuring the hard drives, power up the system and boot Windows.
2. The "Add New Hardware Wizard" will appear, informing you that it has found a "PCI Mass Storage Controller."
3. Click on "Next," and from the generated list box, choose "Search for a better driver than the one your device is using now."
4. Click on "Next," and from the generated choices, choose "Specify a location."
5. Type "A:\WIN95-98" in the text box that appears.
6. Insert the "Ultra100 Driver" diskette in drive A:.
7. Click on "Next." A message informing you that Windows has found "Win95-98 Promise ULTRA100 (tm) IDE Controller" should appear.
8. Click on "Next," and then on "Finish."
9. Choose "Yes" when asked if you want to restart your computer. Be sure to eject the diskette from drive A:.

Confirming Driver Installation in Windows 98

To confirm that the driver has been properly loaded in Windows 98, perform the following steps:

1. Choose "Settings" from the "Start" menu.
2. Choose "Control Panel," and then double-click on the "System" icon.
3. Choose the "Device Manager" tab, and then click the "+" in front of "SCSI controllers." "Win95-98 Promise ULTRA100 (tm) IDE controller" should appear.

5.2-4 Windows NT 4.x

5.2-4-1 Installing Drivers During New Windows NT 4.0 Installation

1. Start the system installation by booting from the Windows NT disk:
 - a) Floppy install: boot the system with the Windows NT installation diskettes.
 - b) Floppyless install: boot from floppy and type "WINNT /B". After files have been copied, the system will reboot. On the reboot, press the "F6" key when the message "Setup is inspecting your computer's hardware configuration..." appears.
 - c) CD-ROM disk install: boot from the CD-ROM disk and press the "F6" key when the message "Setup is inspecting your computer's hardware configuration..." appears.
 2. When the "Windows NT Setup" window is generated, press "S" to Specify an Additional Device(s).
 3. Press "O" to select "Other" and press the "Enter" key.
 4. Insert the Promise Technology driver diskette into drive A: and press the "Enter" key.
 5. Choose "Win NT Promise Ultra100 (tm) Controller" from the list that appears on screen, then press the "Enter" key.
 6. The Windows NT Setup screen will appear again saying "Setup will load support for the following mass storage devices:" The list will include "Win2000 Promise Ultra100 (tm) controller".

***NOTE:** If you need to specify any additional devices to be installed, do so at this time. Once all devices are specified, continue to step 6.*
 7. From the Windows NT Setup screen, press the Enter key. Setup will now load all device files and then continue the Windows NT installation.
 8. After a successful installation, the "SCSI Adapter Setup" box will show that the "Win NT Promise ULTRA100 (tm) Controller" driver has been installed.
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5.2-4-2 Installing Drivers with Existing Windows NT 4.0

WARNING: If you wish to use your current bootable drive with the Windows NT4 operating system on the Ultra100, perform the steps below while the boot drive is still attached to your existing onboard IDE controller. Do not attach any drives to your Ultra100 until the steps below are complete.

1. Choose “Settings” from the “Start” menu.
2. Choose “Control Panel” from the “Settings” menu.
3. Double-click on the “SCSI Adapters” icon, which generates the “SCSI Adapters” dialog box.
4. Choose “Drivers,” and then press “Add.”
5. In the “Install Drivers” dialog box, press “Have Disk...”
6. When the “Install From Disk” appears, insert the “Ultra100 Driver” diskette in drive A:.
7. Type “A:\NT4” in the text box, then choose “OK.”
8. When the “Install Driver” dialog box appears, select “Win NT Promise ULTRA100 (tm) Controller” and then press “OK.”
9. When the “Select SCSI Adapter Option” dialog box appears, press “Install.”
10. After a successful installation, the “SCSI Adapter Setup” box will show that the “Win NT Promise ULTRA100 (tm) Controller” driver has been installed.
11. Power off your system, and then attach your hard drive(s) (see page 7 for more details) to the Ultra100 controller card.