

Introducing the UltraATA 133 PCI

The *UltraATA 133 PCI* is an ultra high-speed dual channel Ultra ATA/133 controller board for use in Pentium-class computer.

Features and Benefits

- Compliant with UltraDMA6 ATA/133 specifications
- Compliant with PCI v2.2 Plug-n-Play
- Provides two independent Ultra ATA channels (built-in 256-byte FIFOs per channel)
- Full ACPI power management support
- Supports Ultra DMA 0-6 and Multi-word DMA 0-2
- Breaks the 137GB barrier! Supports hard drives larger than 137GB
- Coexists with on-board controller
- CRC (Cyclical Redundancy Check) error-checking provides data verification and achieves flawless data transfer
- Flash BIOS for easy upgrade
- Achieves burst data transfer rates up to 133MB/sec
- Works with various brand, capacity hard disk drives and ATAPI devices

System Requirements

- Pentium-class computer with an available PCI slot
- Windows® 98SE/ME/NT 4.0/2000/XP (32-/64-bit)
 /Server 2003 (32-/64-bit)/Vista (32-/64-bit)

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Package Contents

- UltraATA 133 PCI adapter
- Driver CD
- 40-pin/80-wire Ultra ATA cable
- Quick Installation Guide

Layout

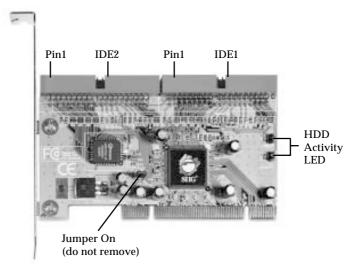


Figure 1. UltraATA 133 PCI layout

Hardware Installation

General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer's case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

- 1. Turn OFF the power to your computer and any other connected peripheral devices.
- 2. Unplug the power cord from the back of the computer.
- 3. Remove your computer's cover.
- 4. Remove the slot bracket from an available PCI slot.
- 5. To install the card, carefully align the card's bus connector with the selected PCI slot on the motherboard. Push the board down firmly, but gently, until it is well seated.
- 6. Replace the slot bracket's holding screw to secure the card.

Device Connection

The *UltraATA 133 PCI* is a dual channel Ultra ATA/133 controller that supports up to four IDE hard disk drives or ATAPI devices. If you plan to use the second IDE channel (IDE2), you will need to purchase another 40-pin/80-wire UltraATA ribbon cable.

In order to achieve high-speed data transfer, a 40-pin/80-wire Ultra ATA ribbon cable is recommended. Also, do not mix Ultra ATA/133 hard disk with slower IDE or ATAPI devices on the same channel.

- 1. Install hard disk drive(s) in chassis.
- 2. Attach one connector on the long end of the Ultra ATA ribbon cable to the board's **IDE** connector and the other connector(s) to your IDE drive(s). Make sure pin 1 on the cable (indicated by the colored stripe) matches pin 1 on the board's **IDE** connector and your IDE drive(s).

- 3. When two drives are installed on the same **IDE** channel, make sure one drive is set up as *Master* and the other as *Slave*. This rule applies to both **IDE** channels.
- 4. The Ultra ATA ribbon cable has two connectors. If you install only one drive, connect it to the end connector of the cable. On the other hand, if you install two drives, connect the *master* drive to the end connector of the cable and the *slave* drive in the middle connector.

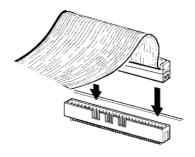


Figure 2. Connecting the cable

5. Reconnect the system power and other peripherals to your computer.

Driver Installation

This section provides information on how to install the UltraATA 133 PCI drivers for the following operating systems.

Windows 98SE

For New Windows 98SE Installation

1. Install the board and follow Microsoft procedures to install Windows 98SE accordingly.

- Once Windows has been installed, right click My Computer and click Properties. Select Device Manager tab.
- 3. Double click **PCI Mass Storage Controller** listed under **Other Devices**.
- 4. Select **Driver** tab, then click **Update Driver** button.
- 5. Insert the driver CD and click **Next**.
- 6. Select **Search for a better driver** ... and click **Next**.
- 7. Insert the driver CD, **check specify location**, uncheck the other boxes, type **D**: \32bit (change D: to match CD-ROM), then click **Next**.
- 8. Click **Next**, then **Finish**.
- 9. Remove the driver CD and restart Windows to complete the driver installation.

For Existing Windows 98SE Installation

- 1. Install the board and boot up Windows 98SE.
- 2. At the Add New Hardware Wizard, click Next.
- 3. Select **Search for the best driver for your device** and click **Next**.
- 4. Insert the driver CD, **check specify location**, uncheck the other boxes, type **D:\32bit** (change D: to match CD-ROM), then click **Next.**
- 5. Click **Next**, then **Finish**.
- 6. Remove the driver CD and restart Windows to complete the driver installation.

Windows ME

For New Windows ME Installation

1. Install the board and follow Microsoft procedures to install Windows ME accordingly.

- Once Windows has been installed, right click My Computer, then click Properties. Select Device Manager tab.
- 3. Double click **PCI Mass Storage Controller** listed under **Other Devices**.
- 4. Select **Driver** tab, then click **Update Driver** button.
- 5. Insert the driver CD, select **Automatic search for a** better driver (Recommended), then click Next.
- 6. Click **Finish**, remove the driver CD and click **Yes** to restart Windows to complete driver installation.

For Existing Windows ME Installation

- 1. Install the board and boot up Windows ME.
- 2. At the **Add New Hardware Wizard**, insert the driver CD.
- 3. Select Automatic search for a better driver (Recommended), then click Next.
- 4. Click Finish.
- 5. Remove the driver CD and restart Windows to complete the driver installation.

To Verify Windows 98SE/ME Installation

- Right-click My Computer, then click Properties.
 Select Device Manager tab.
- 2. Double click **SCSI Controllers**, an entry, **Silicon Image SiI 0680 ATA/133 Controller** should be listed.
- 3. Highlight Silicon Image SiI 0680 ATA/133 Controller and click Properties. A message *This device is working properly* is displayed in the dialog box, the driver has been correctly installed. If any error message is displayed, remove Silicon Image SiI 0680 ATA/133 Controller and restart your system.

Windows NT 4.0

For New Windows NT 4.0 Installation

A new installation of Windows NT 4.0 requires a floppy disk for the driver installation. To make this floppy disk, copy the contents of the **32bit** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

- 1. Install the board and follow Microsoft procedures to install Windows NT 4.0 accordingly.
- 2. At the **Windows NT Setup** screen, press **F6** to specify and add the driver.
- 3. Press **S**, select **Other**, then press **Enter**.
- 4. Insert the driver diskette and press **Enter.**
- 5. Select Silicon Image SiI 0680 ATA/133 Controller and press Enter.
- 6. Press **Enter** to continue and follow on-screen instructions to complete Windows NT 4.0 installation.

For Existing Windows NT 4.0 Installation

- 1. Install the board and boot up Windows NT 4.0.
- 2. Double click My Computer/Control Panel/SCSI Adapters, then click the Drivers tab.
- 3. Click Add... then Have Disk....
- 4. Insert the driver CD, type **D:\32bit** (change D: to match CD-ROM), then click **Next.**
- 5. Highlight Silicon Image SiI 0680 ATA/133 Controller and click OK. OK.
- 6. Click **Browse**, then click drop down arrow in **Look**in. Select CD-ROM drive (**Drivers**), double click
 32bit, click **Open**, then **OK**.

7. Remove the driver CD. Restart Windows to complete the driver installation.

To Verify Windows NT 4.0 Installation

- 1. Double click My Computer/Control Panel/SCSI Adapters.
- 2. Highlight Silicon Image SiI 0680 ATA/133 Controller from SCSI Adapters listing and click Properties. A message *This device is working properly* is displayed in the dialog box, the driver has been correctly installed.

Windows 2000

For New Windows 2000 Installation

A new installation of Windows 2000 requires a floppy disk for the driver installation. To make this floppy disk, copy the contents of the **32bit** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

- 1. Install the board and follow Microsoft procedures to install Windows 2000 accordingly.
- 2. Restart your system when prompted during Windows' installation.
- 3. At the **Windows 2000 Setup** screen, press **F6** to install the driver.
- 4. Insert the driver diskette. Press **S**, then press **Enter.**
- 5. Select Silicon Image SiI 0680 ATA/133 Controller and press Enter.
- 6. Press **Enter** to continue and follow on-screen instructions to complete installation.

For Existing Windows 2000 Installation

- 1. Install the board and boot up Windows 2000.
- 2. At the Found New Hardware Wizard, click Next
- 3. Select Search for a suitable driver for my device (recommended) and click Next.
- 4. Insert the driver CD, check **CD-ROM drives**, uncheck the other boxes, and click **Next**. Click **Next** again to continue.
- 5. Click **Finish**, remove the driver CD and restart Windows to complete the driver installation.

32-bit Windows XP/Server 2003

For New 32-bit Windows XP/Server 2003 Installation

A new installation of Windows XP/Server 2003 requires a floppy disk for the driver installation. To make this floppy disk, copy the contents of the **32bit** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. Restart your system when prompted during Windows' installation.
- 3. At the **Windows Setup** screen, press **F6** to install the driver.
- 4. Insert the driver diskette. Press **S** then press **Enter**.
- 5. Select Silicon Image SiI 0680 ATA/133 Controller and press Enter.
- 6. Press **Enter** to continue and follow on-screen instructions to complete the installation.

For Existing 32-bit Windows XP/Server 2003 Installation

- 1. Install the board and boot up Windows.
- 2. At the **Found New Hardware Wizard.**XP (w/SP1 or earlier)/Server 2003: continue to step #3

 XP (w/SP2 or later)/Server 2003 (w/SP1 or later): select

 No. not at this time. then click Next.
- 3. Insert the driver CD, select **Install the software automatically (Recommended)**, then click **Next**

Note: Most systems will install the driver automatically after inserting driver CD

4. Click **Finish**, remove the driver CD and restart Windows to complete the installation.

64-bit Windows XP/Server 2003

For New Windows 64-bit XP/Server 2003 Installation

A new installation of Windows XP/Server 2003 requires a floppy disk for the driver installation. To make this floppy disk, copy the contents of the **64bit** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. Restart your system when prompted during Windows' installation.
- 3. At the **Windows Setup** screen, press **F6** to install the driver.
- 4. Insert the driver diskette. Press **S** then press **Enter**.
- 5. Select Silicon Image SiI 0680 ATA/133 Controller (64-bit Extended) and press Enter.
- 6. Press **Enter** to continue and follow on-screen instructions to complete the installation.

For Existing 64-bit Windows XP/Server 2003 Installation

- 1. Install the board and boot up Windows.
- 2. At the **Found New Hardware Wizard**:

 XP (w/SP1 or earlier)/Server 2003: continue to step #3

 XP (w/SP2 or later)/Server 2003 (w/SP1 or later): select

 No. not at this time. then click Next
- 3. Insert the driver CD, select **Install the software automatically (Recommended)**, then click **Next**.

Note: Most systems will install the driver automatically after inserting driver CD

4. Click **Finish**, remove the driver CD and restart Windows to complete the installation.

To Verify Windows 2000/XP/2003 Installation

- 1. Right click **My Computer** and click **Manage**.
- 2. Select **Device Manager**.
- 3. Double click SCSI and RAID Controllers, then double click Silicon Image SiI 0680 ATA/133 Controller to display driver properties.
- 4. A message *This device is working properly* is displayed in the dialog box, the driver has been correctly installed.

32-bit Windows Vista™

For New Windows 32-bit Vista Installation

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. Restart your system when prompted during Windows' installation.
- 3. At Where do you want to install Windows?, click Load Driver.

- 4. Insert driver CD, then click **Browse**
- 5. Double click **CD Drive (D:),** (change D: to match CD-ROM)
- 6. Highlight **32bit** folder, then click **OK**
- 7. Select Silicon Image SiI 0680 ATA/133 Controller (D:\32bit\SI680.inf), then click Next
- 8. Follow on-screen instructions to complete Windows Vista installation.

For Existing 32-bit and 64-bit Vista Installation

- 1. Install the board and boot up Windows.
- 2. At the Found New Hardware Wizard, select Locate and install driver software (Recommended), then click Continue.
- 4 Insert the driver CD. The driver will install automatically.
- 3. Click **Close**, remove the driver CD and restart Windows to complete the installation.

64-bit Windows Vista

For New Windows 64-bit Vista Installation

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. Restart your system when prompted during Windows' installation.
- 3. At Where do you want to install Windows?, click Load Driver.
- 4. Insert driver CD, then click **Browse**.
- 5. Double click **CD Drive (D:),** (change D: to match CD-ROM)
- 6. Double click **64bit** folder, highlight **AMD64**, then click **OK**.

- 7. Select Silicon Image SiI 0680 ATA/133 Controller (D:\64bit\AMD64\SI680.inf), then click Next
- 8. Follow on-screen instructions to complete Windows Vista installation.

To Verify Windows Vista Installation

- 1. Right click **My Computer** and click **Manage**, then **Continue**.
- 2. Select **Device Manager**.
- 3. Double click **Storage controllers**, then double click **Silicon Image SiI 0680 ATA/133 Controller** to display driver properties.
- 4. A message *This device is working properly* is displayed in the dialog box, the driver has been correctly installed.

Bios Configuration

The *UltraATA 133 PCI* **BIOS** will appear everytime your system starts up. If the bios doesn't show, please try your controller in another PCI slot. During this (**Post**) process, the bios will show up and indicate the devices attached to it.

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Technical Support and Warranty

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our web site at *www.siig.com* and click **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analysts will promptly respond.

SIIG offers a lifetime manufacturer warranty with this product. Please see our web site for more warranty details. If you encounter any problems with this product, please follow the procedures below.

- A) If it is within the store's return policy period, please return the product to the store where you purchased from.
- B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to www.siig.com, click Support, then RMA to submit a request to <u>SIIG RMA</u>. If the product is determined to be defective, an RMA number will be issued. SIIG RMA department can also be reached at (510) 413-5333.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping. Ship the product to the following address:

SIIG, Inc.	
6078 Stewart Avenue	
Fremont, CA 94538-3152, USA	
RMA#:	

• SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

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SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High-quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

PRODUCT NAME

UltraATA 133 PCI

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE 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.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG. Inc.

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Fremont, CA 94538-3152, USA

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