UltraATA 133 PCI
Quick Installation Guide

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. With full support specified in ATA/ATAPI-6, it achieves burst data transfer rates up to 133MB/sec and supports drive capacities greater that 137GB.

Features and Benefits

- Compliant with Ultra ATA/133 specifications and PCI v2.2/ 2.1 Plug-n-Play
- Provides two independent Ultra ATA channels (built-in 128-byte FIFOs per channel) for faster data transfer
- Full ACPI power management support
- Supports Ultra DMA 0, 1, 2, 3, 4, 5, 6 and Multi-word DMA 0, 1, 2
- Breaks the 137GB barrier! Supports hard drives larger than 137GB
- Coexists with on-board IDE controller
- CRC (Cyclical Redundancy Check) error-checking provides data verification and achieves flawless data tranfer
- Flash BIOS for easy upgrade
- Achieves burst data transfer rates up to 133MB/sec
- Works with various brands of Ultra ATA 133/100/66/33 hard disk drives and ATAPI devices including CD-ROM, CD-R/ RW, DVD-ROM, and zip drives

System Requirements

- Pentium-class computer with one available PCI slot
- Windows 95B or later

Package Contents

- *UltraATA 133 PCI* board
- Driver diskette
- 40-pin/80-wire Ultra ATA cable
- This quick installation guide
- One 5-year warranty card

Hardware Installation

General instructions for installing the card are provided below. If needed, please refer to your computer's reference manual for more information.

Caution: Static Electricity Discharge may permanently damage your system. To avoid possible static electricity discharge during installation, please follow the guidelines below:

- Discharge any static electricity build up in your body by touching a large grounded metal surface or the computer's case (if plugged in), for a few seconds.
- During installation, avoid any contact with internal parts. 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. Open 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.
7. Close your computer's cover and reconnect the power cord.

   Note: Hold the board by its external edges only. Try to avoid touching the components, connectors or pins.

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 Ultra ATA 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 hard disk 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 hard disk drive(s).
3. When two hard disk 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.
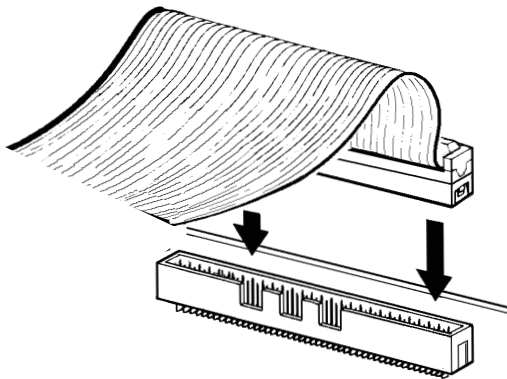

Figure 1. Connecting the cable

Software Installation

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

> New & Existing Windows 95B
> New & Existing Windows 98
> New & Existing Windows ME
> New & Existing Windows NT 4.0
> New & Existing Windows 2000
> New & Existing Windows XP

Windows 95B Driver Installation

For New Windows 95B systems

1. Follow Microsoft procedures to install Windows 95B accordingly.
2. Once Windows 95B is installed, restart Windows in **Safe Mode** by hitting the **F8** key repeatedly before Windows Logo boot-up screen.
3. Double click **My Computer/Control Panel/System**, then click **Device Manager**.
4. Remove **PCI SCSI Bus controller** listed under **Other Devices**.
5. Restart Windows. Windows will detect new hardware and prompt for Driver diskette.
6. Insert the Driver diskette, click **Next**, select **Other Locations**, type in **A:\Win9x**, click **OK,** then **Finish.** From the **Insert Disk** window, click **OK**, then type the path **A:\Win9x** and click **OK**.
7. Remove the Driver diskette and click **Yes** to restart Windows to complete driver installation.

For Existing Windows 95B Systems

1. Boot up Windows 95B.
2. At the **Update Device Driver Wizard**, click **Next**.
3. Insert the Driver diskette, click **Other Locations**, type in **A:\Win9x**, click **OK**, and then **Finish**. From the **Insert Disk** window, click **OK**. When the **Copying Files** dialog box appears, type in **A:\Win9x** and click **OK**.

4

4. Remove the Driver diskette and restart Windows to complete driver installation.

Verify Proper Installation for Windows 95B

1. Double click **My Computer/Control Panel/System**, then click **Device Manager**.
2. Double click **hdc; IDE dev**, an entry, **SIIG CN2487 UDMA133 IDE Controller**, should be listed.
3. Highlight **SIIG CN2487 UDMA133 IDE 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 **SIIG CN2487 UDMA133 IDE Controller** and restart your system.

Windows 98/98SE Driver Installation

For New Windows 98/98 SE Systems

1. Follow Microsoft procedures to install Windows accordingly.
2. Once Windows has been installed, double click **My Computer/Control Panel/System**, then click **Device Manager**.
3. Double click **Other Devices** then **PCI SCSI Bus Controller**.
4. Click **Driver** tab, then **Update Driver**.
5. Insert the Driver diskette and click **Next**.
6. Select **Search for a better driver than the one ....** and click **Next**.
7. Check **Specify a location,** uncheck the other boxes, type in **A:\Win9x** and click **Next**. Click **Next, Next,** then **Finish**.
8. Remove the Driver diskette and click **Yes** to restart Windows to complete driver installation.

For Existing Windows 98/98 SE Systems

1. Boot up Windows.
2. At the **Add New Hardware Wizard**, click **Next**.
3. Select **Search for the best driver for your device** option and then click **Next**.
4. Insert the Driver diskette, check **Specify a location,** uncheck the other boxes, type in **A:\Win9x,** and click **Next.**

5. Click **Next**, **Next**, and then **Finish** respectively.
6. Remove the Driver diskette and restart Windows to complete driver installation.

Windows ME Driver Installation

For New Windows ME Systems

1. Follow Microsoft procedures to install Windows ME accordingly.
2. Once Windows has been installed, right-click **My Computer**, then click **Properties**. Click **Device Manager** tab.
3. Double click **Other Devices** then **PCI SCSI Bus Controller**.
4. Click **Driver** tab, then **Update Driver**.
5. Insert the Driver diskette, check **Specify the location of the driver (advanced)** and click **Next**.
6. Select **Search for the better driver** option, check **Specify a location**, uncheck **Removable Media**, type in **A:\WinMe**, and click **Next**.
7. Click **Next** and **Finish**.
8. Remove the Driver diskette and click **Yes** to restart Windows to complete driver installation.

For Existing Windows ME Systems

1. Boot up Windows ME.
2. At the **Add New Hardware Wizard**, check **Specify the location of the device (advanced),** and click **Next**.
3. Insert the Driver diskette, check **Specify a location,** uncheck the other boxes, type in **A:\WinMe,** and click **Next**.
4. Click **Next** and **Finish**.
5. Remove the Driver diskette and restart Windows to complete driver installation.

Verify Proper Installation for Windows 98/98SE/ME

1. Right-click **My Computer**, then click **Properties**. Click **Device Manager** tab.
2. Double click **Hard Disk Controllers**, an entry, **SIIG CN2487 UDMA133 IDE Controller** should be listed.

3. Highlight **SIIG CN2487 UDMA133 IDE 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 **SIIG CN2487 UDMA133 IDE Controller** and restart your system.

Windows NT 4.0 Driver Installation

For New Windows NT 4.0 System

1. Follow Microsoft procedures to install Windows NT 4.0 accordingly.

2. At the **Windows Set-up** 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 **SIIG CN2487 UDMA133 IDE NT miniport Driver** 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 System

1. After installing the board, boot up Windows NT. Double click **My Computer∕Control Panel/SCSI Adapters**, then click the **Drivers** tab.

2. Click **Add…** then **Have Disk....**

3. Insert the Driver diskette into the floppy drive and type in **A:\Winnt**, then click **OK**.

4. Highlight **SIIG CN2487 UDMA133 IDE Adapter** and click **OK**.

5. Remove the Driver diskette and click **Yes** to restart Windows.

Verify Proper Installation for Windows NT 4.0

1. Double click **My Computer/Control Panel/SCSI Adapters**.

2. Highlight **SIIG CN2487 UDMA133 IDE Adapter** 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 Driver Installation

For New Windows 2000 Systems

1. Follow Microsoft procedures to install Windows 2000 accordingly.
2. At the **Windows Set-up** screen, press **F6** to specify and add the driver.
3. Insert the Driver diskette. Press **S**, then press **Enter**.
4. Select **SIIG CN2487 UDMA133 IDE Win2000 Miniport Driver** and press **Enter**.
5. Press **Enter** to continue and follow on-screen instructions to complete installation.

For Existing Windows 2000 Systems

1. 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 diskette into the floppy drive, check **Specify a location**, uncheck the other boxes, click **Next**, type in **A:\Win2000**. Click **OK** and then **Next** to continue.
5. If the **Digital Signature Not Found** message appears, click **Yes**.

   Note If prompted for Windows 2000 CD-ROM, insert the CD and click **OK**. Type in **D:\I386**, click **OK** and **Finish**. (assuming **D:** is your CD-ROM drive)
6. Click **Finish**, remove the Driver diskette and click **Yes** to restart Windows to complete driver installation.

Windows XP Driver Installation

For New Windows XP Systems

1. Follow Microsoft procedures to install Windows XP accordingly.
2. At the **Windows Set-up** screen, press **F6** in order to specify and add the driver.
3. Insert the Driver diskette. Press **S** then press **Enter**.

4. Select **SIIG CN2487 UDMA133 IDE WinXP Miniport Driver** and press **Enter**.

5. Press **Enter** to continue and follow on-screen instructions to complete Windows XP installation.

   Note: When the **Software Installation** warning pops up, click **Yes**. And when the **Hardware Installation** warning pops up, click **Yes** again.

For Existing Windows XP Systems

1. Boot up Windows XP.

2. At the **Found New Hardware Wizard**, check **Install from a list or specific location(advanced)**, then click **Next**.

3. Insert the Driver diskette. Check **Include this location in the search**, uncheck the other box, type in **A:\winXP**, and click **Next**.

4. When a warning message pops up, click **Continue Anyway**, then click **Finish**.

5. Remove the Driver diskette and click **Yes** to restart Windows.

Verify Proper Installation for Windows 2000/XP

1. Double click **My Computer/Control Panel/System**.

2. Click **Hardware** then click **Device Manager**.

3. Double click **SCSI and RAID Controllers**, then double click **SIIG CN2487 UDMA133 IDE Adapter** 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.

Empty page

Technical Support

QUESTIONS? SIIG's **Online Support** has the 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. The answers to your problems could be just a few clicks away.

Return Merchandise Authorization (RMA)

SIIG warrants to the original buyer of the product that the hardware is free of defects in materials and workmanship for a period of one, two or five years from the date of purchase. If your product fails to be in good working order during the warranty period, you may return it to SIIG for repair or replacement at SIIG's option.

To return the product, you need to follow these steps.

Step 1: Contact SIIG's RMA Department

To obtain an RMA number, SIIG's RMA Department can be reached by phone at **(510)413-5333** or fax at **(510)657-5962** or email at **service@siig.com.** In order to issue an RMA number, the product serial number is required. This number can be found on the side of the box and on the back of the product.

Step 2: Complete the RMA form

• Fill out your Return Merchandise Authorization (RMA) form, and include it in the package with the product.

• Properly pack the product for shipping. All software, cable(s) and other accessories that came with the original package **must be included**.

• Clearly write your RMA number on the top of the returned package and on the accompanying RMA form.

   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.

Step 3: Ship the Product

You are responsible for the cost of shipping back to SIIG at the following address:

> SIIG, Inc.   RMA#_____
> 6078 Stewart Ave.
> Fremont, CA 94538

SIIG will ship the repaired or replaced product via UPS Ground or US Mail at no cost to you.

PRODUCT NAME	MODEL NUMBER
UltraATA 133 PCI	CN2487

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.

FCC NOTICE:

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 and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or TV technician for help

Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment

THE PARTY RESPONSIBLE FOR
PRODUCT COMPLIANCE
SIIG, Inc.
6078 Stewart Ave.
Fremont, CA 94538-3152

November, 2001