

UltraATA 133/100 ProTM

User's Manual

SIIG's ONLINE SUPPORT and Product Registration

Visit SIIG's web site at *www.siig.com* and click **SUPPORT/DRIVERS** for instant technical support. Also, click **REGISTRATION FORM** to register your product



5 YEAR WARRANTY REGISTRATION CARD

Please complete and mail. This card will ensure that your warranty is properly documented in our databas

Complete Product Name: _____

Name: _____ E-Mail: _____

Address: _____

City: _____ State: _____ Zip: _____

Date of Purchase: _____ / _____ / _____ Purchase Price (before tax): \$ _____

Purchased From: _____ of (City, State): _____

1. What features encouraged you to purchase this product? (check all that apply)

- Good price Warranty Unique features
 Good value User's manual Other _____

2. Is this the first SIIG product you have ever purchased? Yes No

If not, what other SIIG products do you own? _____

3. System Configuration: Pentium III PentiumII Pentium Sub-\$1,000 PC

Manufacturer: Compaq Dell HP IBM
 Apple Other _____

Model _____

Fold Here

Place
Postage
Here

SIIG, Inc.

Attn: Warranty Registration
6078 Stewart Avenue
Fremont, CA 94538-3152

PRODUCT NAME
UltraATA 133/100 Pro

MODEL NUMBER
CN2490

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

UltraATA 133/100 Pro is a trademark of SIIG, Inc.
SIIG and SIIG logo are registered trademarks of SIIG, Inc. Power Mac is a trademark and Mac is a registered trademark of Apple Computer, Inc. All other names used in this publication are for identification only and may be trademarks of their respective companies.



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About This Manual

The purpose of this manual is to introduce you to your *UltraATA 133/100 Pro*. It will guide you on how to install the card and software for proper operation in your computer. Please save this manual for future reference in the event you wish to connect other devices to your system.

This manual is comprised of the following sections:

Chapter 1: Introduction

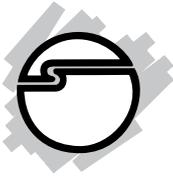
Provides unpacking instructions, and introduces features and specifications of this board.

Chapter 2: Installation

Describes how to install the board and drivers to your system.

Chapter 3: Technical Support and Product Return

Provides instructions on how to obtain technical support or return a product in the event of a problem.



Chapter 1

Introduction

Thank you for your purchase of the *UltraATA 133/100 Pro*. SIIG's goal is to provide its customers with reliable, high quality products and customer support.

The purpose of this comprehensive user's manual is to:

- introduce you to your *UltraATA 133/100 Pro* features and benefits
- guide you through the steps for an easy, trouble-free installation in your system
- provide technical support information in the event of a problem.

Before installing the board, please review this chapter for unpacking instructions and an overview of the key features. Then refer to later chapters for installation instructions.

1-1 Unpacking the *UltraATA 133/100 Pro*

Before installing the board, verify that the following items are included in the packaging carton:

- One *UltraATA 133/100 Pro* controller board
- One 40-pin/80-wire Ultra ATA cable
- One power supply "Y" split cable
- This comprehensive user's manual

Please consult your dealer if any item is damaged or missing.

1-1.1 Static Electricity Precaution

One of the routine precautions you must be aware of when working with computer components is the problem of static electricity discharge.

Note Leave the product in its static-resistant bag until you are ready to install it.

Caution Static electricity discharge may permanently damage your system. In order to avoid possible static electricity discharge during installation procedures, 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 procedures, avoid any contact with internal parts. Handle cards only by their edges.

1-1.2 Record the Serial Number

In order for SIIG's Technical Support or Customer Service Department to give you prompt service, you will need the following product information. ***The serial number label is located on the side of the box and on the back of the board.***



Please take a moment to record the serial number.

Serial Number: _____

Part Number: _____

Date purchased: _____

1-2 Introducing the *UltraATA 133/100 Pro*

The *UltraATA 133/100 Pro* is an ultra high-speed dual channel Ultra ATA/133 controller board for use with Power Macs. It achieves burst data transfer rates up to 133MB/sec and supports drive capacities greater than 137GB. And it also provides full backward support for Ultra ATA 100/66/33 hard drives. Enhanced BIOS auto-detects device types and fine tunes to the best performance for each connected hard drive.

1-2.1 Key Features and Benefits

- PCI Plug-n-play 2.2/2.1 compliant
- CRC error-checking provides data verification and achieves flawless data transfer
- Two independent IDE channels, supports up to four Ultra ATA hard drives and CD-R/RWs that support Adaptec Toast burning software (see drive compatibility list on www.siig.com)
- Breaks the 137GB barrier! Supports various types of large capacity hard disk drives
- Auto-detects drive types and fine tunes to the best performance for each Ultra ATA hard disk drives
- Full backward support for Ultra ATA 100/66/33 standards
- Supports Ultra DMA 0, 1, 2, 3, 4, 5, 6 and MultiWord DMA 0, 1, 2
- Achieves burst data transfer rates up to 133MB/sec when using Ultra ATA/133 hard drives
- Full support of ACPI for system power management
- 3.3V operating voltage with 5V tolerant I/O

1-2.2 System Requirements

- PowerMac G3, G4, and Mac computers with an available PCI slot
- OS 8.6 or later

1-2.3 Board Layout

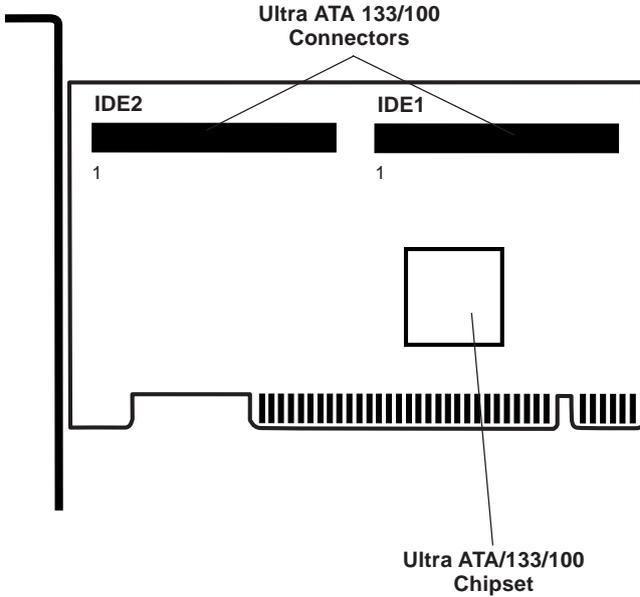
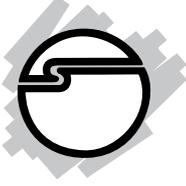


Figure 1-1. UltraATA 133/100 Pro Board Layout



Chapter 2 Installation

This chapter will guide you through the installation of the *UltraATA 133/100 Pro* into your computer.

2-1 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.

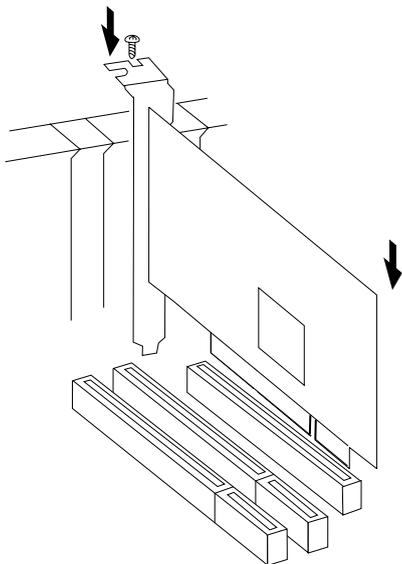


Figure 2-1: Installing the board

2-2 Device Connection

The *UltraATA 133/100 Pro* is a dual channel Ultra ATA/133 controller that supports up to four IDE hard disk drives or CD-R/RW drive. 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 CD-R/RW drive on the same IDE 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.

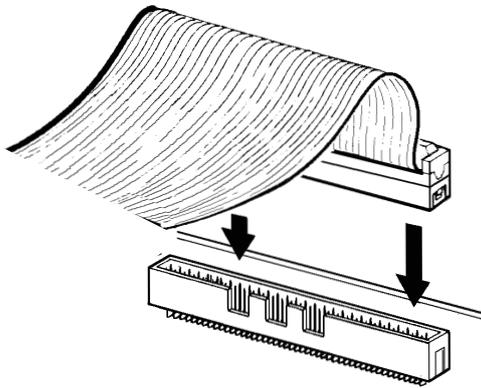


Figure 2-2: Connecting the cable

2-3 Software Installation

This section provides information on how to install the *UltraATA 133/100 Pro* driver in your Power Mac. Please refer to the Mac OS manual to familiarize yourself with Drive Setup and OS Installation routines.

2-3.1 Driver Installation for Mac OS 8.6

For a fresh OS 8.6 installation:

1. Install the *UltraATA 133/100 Pro* and attached drives.
2. Boot up your computer with the Mac OS 8.6 CD-ROM. Press and hold letter **C** on the keyboard while your system is booting to boot from CD-ROM.
3. When Mac OS finishes booting, double click **Utilities** folder.
4. Double click **Drive Setup** icon.
5. Highlight the drive connected to the *UltraATA 133/100 Pro* and click **Initialize**. Be aware that, initializing the drive will erase all information on this hard disk drive.
6. Close **Drive Setup** when finished.
7. Double click Mac OS 8.6 CD-ROM, then double click **Install Mac OS 8.6** icon. Follow on-screen instructions to complete installation.

For systems that have OS 8.6 installed:

1. Install the *UltraATA 133/100 Pro* and attached drives.
2. Boot up your system. When Mac OS finishes booting, double click **Mac OS 8.6** drive icon on the desktop.
3. Double click **Utilities** folder.
4. Double click **Drive Setup** icon.
5. Highlight the drive connected to the *UltraATA 133/100 Pro* and click **Initialize**.
6. Close the **Drive Setup** screen when finished. The new drive should appear as **Untitled** on the desktop.

2-3.2 Driver Installation for Mac OS 9.x

For a fresh OS 9.x installation:

1. Install the *UltraATA 133/100 Pro* and attached drives.
2. Boot up your computer with the Mac OS 9.x CD-ROM. Press and hold letter **C** on the keyboard while your system is booting to boot from CD-ROM.
3. When Mac OS finishes booting, double click **Utilities** folder.
4. Double click **Drive Setup** icon.
5. Highlight the drive connected to the *UltraATA 133/100 Pro* and click **Initialize**. Be aware that, initializing the drive will erase all information on this hard disk drive.
6. Close **Drive Setup** when finished.
7. Double click Mac OS 9.x CD-ROM, then double click **Mac OS Install** icon. Follow on-screen instructions to complete installation.

For systems that have OS 9.x installed:

1. Install the *UltraATA 133/100 Pro* and attached drives.
2. Boot up your system. When Mac OS finishes booting, double click **Mac OS 9.x** drive icon on the desktop.
3. Double click **Utilities** folder.
4. Double click **Drive Setup** icon.
5. Highlight the drive connected to the *UltraATA 133/100 Pro* and click **Initialize**.
6. Close the **Drive Setup** screen when finished. The new drive should appear as **Untitled** on the desktop.

2-3.3 Driver Installation for Mac OS X

For a fresh OS X installation:

1. Install the *UltraATA 133/100 Pro* and attached drives.
2. Boot up your computer with the Mac OS X CD-ROM. Press and hold letter **C** on the keyboard while your system is booting to boot from CD-ROM.
3. When Mac OS finishes booting, click **Install** in the menu bar.
4. Click **Open Disk Utility**.
5. Click **Drive Setup**.
6. Highlight the drive connected to the *UltraATA 133/100 Pro* and click **Partition**. Be aware that, partitioning the drive will erase all information on this hard disk drive.
7. Click **Partition** to initialize drive.
8. Close **Drive Setup** utility when finished and continue with Mac OS X installation.

For systems that have OS X installed:

1. Install the *UltraATA 133/100 Pro* and attached drives.
2. Boot up your system. When Mac OS finishes booting, double click **Mac OS X** drive icon on the desktop.
3. Double click **Applications** folder.
4. Double click **Utilities** folder.
5. Double click **Disk Utility** icon.
6. Click **Drive Setup** button.
7. Highlight the drive connected to the *UltraATA 133/100 Pro* and click **Partition**. Be aware that, partitioning the drive will erase all information on this hard disk drive.
8. Click **Partition** to initialize the drive.
9. Close the **Drive Setup** utility when finished. The new drive should appear as **Untitled** on the desktop.

2-4 Verifying Installation

After you successfully initialize the hard drive, new **Untitled** drive(s) icon will appear on the desktop. Please check **Apple System Profiler** for successful installation.

2-4.1 Verify Mac OS 8.6/9.x Installation

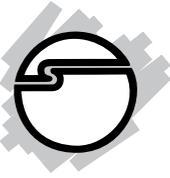
1. Click **Apple** logo located on the upper left corner of the desktop.
2. Click **Apple System Profiler** from the drop down menu.
3. Click **Devices and Volumes** tab, choose **PCI** to view the card's properties.

2-4.2 Verify Mac OS X Installation

1. Click **Finder** icon on the bottom of the desktop.
2. Click **Applications** on the top of the next screen.
3. Double click **Utilities** icon.
4. Double click **Apple System Profiler** icon.
5. Click **Devices and Volumes** tab, choose **PCI** to view the card's properties.

Troubleshooting:

If the your board doesn't show up properly in **Apple System Profiler**, shut down your system. Make sure the board is properly seated in the PCI slot or change the board to a different PCI slot.



Chapter 3

Technical Support & Product Return

3-1 Overview

This chapter will give you instructions on how to obtain product information, contact technical support and return defective product. This user's manual is written with easy-to-understand instructions on how to configure and install this product in your system. We encourage you to consult this manual as your first step for technical assistance.

There are several steps you can take should you find problems with this product. It is most helpful if you consult the following resources:

1. Installation instructions from this user's manual
2. Web Site
3. Technical Support
4. Return Merchandise Authorization (RMA)

3-2 Web Site

Visit SIIG's Web site at www.siig.com for on-line technical support, product features, drivers updates, upgrade solutions and where-to-buy information. Your opinions of SIIG products are very important to us. Through your feedback, SIIG can continue to deliver quality, innovative products to you.

3-3 Technical Support

QUESTIONS? SIIG's **Online Support** has the answers! Simply visit our web site at ***www.siig.com*** and click on the **SUPPORT** link. Our online support database is updated daily with new drivers and solutions. The answers to your problems could be just a few clicks away.

3-4 Return Merchandise Authorization (RMA)

If the product is defective, you can return it for repair or replacement.

SIIG warrants to the original buyer of the product that the hardware is free of defects in materials and workmanship for a period of 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:

1. Phone: (510)413-5333
2. Fax: (510)657-5962
3. Email: service@siig.com

In order to get a RMA number, you must have your product serial number. The serial number is located on the side of the box it came in 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 not be responsible for a product returned without a 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.

LIMITED 5 YEAR WARRANTY

The Company warrants to the original buyer of this product that the hardware is free of defects in materials and workmanship for a period of five years from the date of purchase from a reseller or dealer. Should this product fail to be in good working order during the warranty period, the Company, at its sole option, will repair or replace the defective product with an identical product or product having similar features and functionality as determined by the Company.

If the product has been modified without written approval by the Company, or the failure is a result of misuse, abuse or misapplication as determined by the Company, the warranty is void and the Company has no obligation to repair or replace the product.

The customer is responsible for properly packing the defective product for shipment and for the cost of shipping the product back to the Company. The Company will ship the repaired or replaced product via UPS Ground or US Mail at no cost to the customer.

Before returning a product for repair or replacement, you must first obtain a Return Merchandise Authorization (RMA) number from the Company's RMA Department by:

1. calling **(510) 413-5333** or
2. faxing **(510)657-5962** or
3. emailing **service@siig.com**.

The RMA number should be clearly displayed on the outside of the returned package and on the accompanying RMA form. The Company will refuse any package without a RMA number.

Under no circumstance will the Company be liable for any direct, indirect, consequential or incidental damages arising out of the use or inability to use the Company's products. Some states do not allow the exclusion or limitation of liability for consequential or incidental damages, so the above limitations may not apply. The Company reserves the right to make modifications in both hardware and software without prior notification.

Tear off and return bottom portion.

RETURN MERCHANDISE AUTHORIZATION (RMA) FORM

RMA Number: _____ Date: _____ / _____ / _____

Name: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: (_____) _____

Product Name/Model: _____ Purchase Date: _____ / _____ / _____

Serial Number: _____

Problem(s) (please be specific): _____

Please check additional items that you are returning (if applicable):

original package manual(s) software

accessories: _____

03-0311A