



Serial ATA 4-Channel PCI

Quick Installation Guide

Introducing the *Serial ATA 4-Channel PCI*

The *Serial ATA 4-Channel PCI* is an ultra high-speed four channel Serial ATA controller for use in Pentium-class computers. It achieves burst data transfer rates up to 150MB/s (1.5Gb/s) and supports various brands of hard disk drives with capacities greater than 137GB.

Features and Benefits

- Compliant with Serial ATA Specification, rev 1.0
- Compliant with PCI Specification, revision 2.2
- Provides four independent channels to support up to four Serial ATA drives
- Features independent 256-byte FIFOs per channel for host reads and writes
- Co-exists with on-board HDD controllers
- Features Watch Dog timer for fault resiliency
- Supports 32-bit wide PCI bus at 66MHz
- Lower pin count and voltage requirements, plus better cabling over traditional Parallel ATA (IDE) make Serial ATA the controller of the future

System Requirements

- Pentium® class computer with one available PCI slot
- Windows® 98SE / ME / NT4.0 / 2000 / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / Vista (32-/64-bit)
- CD-ROM

Package Contents

- *Serial ATA 4-Channel PCI* board
- Serial ATA cable (x2)
- Dual connector Serial ATA power cable
- Driver CD
- This quick installation guide

Board Layout

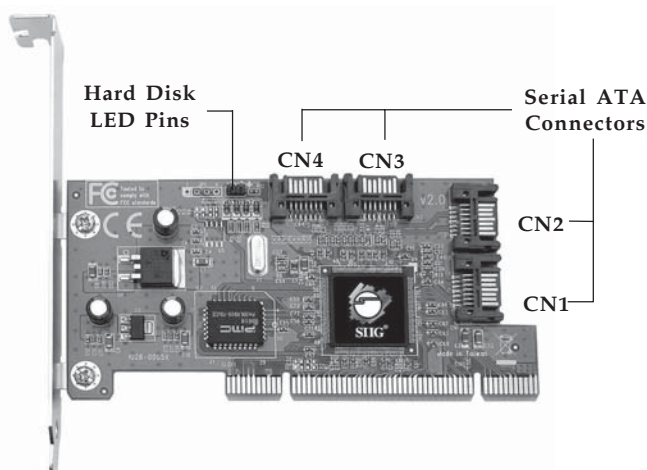


Figure 1. *Serial ATA 4-Channel PCI* Layout

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 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.
2. Unplug the power cord and remove your computer cover.
3. Remove the slot bracket from an available PCI slot.
4. Carefully align the card to the selected PCI slot push the board down firmly, but gently, until it is well seated.
5. Replace the slot bracket holding screw to secure the card.

Device Connection

If you plan to use more than two Serial ATA channels, you will need to purchase additional Serial ATA data and power cables.

1. Install hard disk drive(s) into chassis.
2. Connect the Serial ATA hard disk drive to the system power supply using the *Serial ATA power cable*.
3. Connect one end of the *Serial ATA cable* to the HDD.

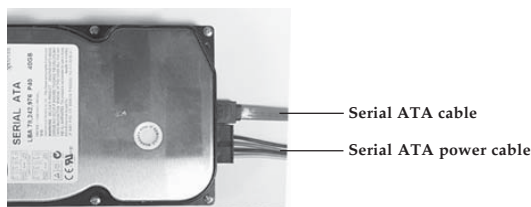


Figure 2. Hard disk drive connections

4. Attach the other end of the *Serial ATA cable* to the Serial ATA connector on the board.
5. Follow the same instructions when connecting additional hard drives. Device connection is now complete.

Note: If you like to monitor disk activity of the Serial ATA hard drives, you may at this time connect the hard disk LED of the system case to the **Hard Disk LED Pins** on the Serial ATA controller, see **Figure 1**, on page 2 for the location of the pins. For most systems connect the **red** wire to the pin located farthest from the mounting bracket.

6. Replace the computer cover and reconnect the power cord. Go to **Driver Installation** to install the *Serial ATA 4-Channel PCI* device driver.

Driver Installation

This section provides information on how to install the *Serial ATA 4-Channel PCI* drivers.

Windows 2000

A new installation of Windows 2000 requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **NT4** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

For New Installation

1. Install the board and follow Microsoft procedures to install Windows 2000 accordingly.
2. At the **Windows 2000 Setup** screen, press **F6** to install the driver.
3. Insert the floppy disk that you made above. Press **S**, then press **Enter**.
4. Select **Silicon Image SiL... Controller for Windows NT4.0 and 2000**, press **Enter**.
5. Press **Enter** again to continue and follow on-screen instructions to complete the installation.

For Existing 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.

Windows XP / Server 2003 (32-bit)

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.

For New Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. At the **Windows Setup** screen, press **F6** to install the driver.
3. Insert the floppy disk that you made above. Press **S** then press **Enter**.
4. Select **Silicon Image SiL... for Windows XP/Server 2003**, then press **Enter**.
5. Press **Enter** to continue and follow on-screen instructions to complete Windows installation.

For Existing 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)**, and click **Next**.
4. Click **Finish** and restart Windows to complete the installation.

Windows XP / Server 2003 (64-bit)

For New Installation

A new installation 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. At the **Windows Setup** screen, press **F6** to install the driver.
3. Insert the floppy disk that you made above. Press **S** then press **Enter**.
4. Select **Silicon Image SiL...** that matches your system processor, then press **Enter**.
5. Press **Enter** to continue and follow the on-screen instructions to complete the installation.

Note: If prompted, press Continue Anyway several times to install the driver.
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For Existing Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, select **No, not at this time**, then click **Next**.

3. Insert the driver CD, select **Install the software automatically (Recommended)**, and click **Next**.
4. Click **Finish** and restart Windows to complete the installation.

To Verify Windows 2000/XP/Server 2003 Installation

1. Right click **My Computer** and click **Manage**.
2. Select **Device Manager**.
3. Double click **SCSI and RAID controllers, Silicon Image SiI 3114... Controller** should be listed.

Windows Vista™ (32-bit)

For New Installation

1. Install the board and follow Microsoft procedures to install Windows Vista accordingly.
2. At the **Where do you want to install Windows?**, click **Load Driver**.
3. Insert the driver CD, then click **Browse**.
4. Double click **CD Drive... Drivers**.
5. Select **32bit**, click **OK**.
6. Select **Silicon Image SiI... SATALink Controller**, then click **Next**.
7. Follow the on-screen instructions to complete the Windows Vista installation.

For Existing Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, click **Locate and install driver software (recommended)**.
3. Click **Continue**, insert the driver CD, click **Next**.
4. Click **Close** to complete the installation.

Windows Vista (64-bit)

For New Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. At **Where do you want to install Windows?** screen, click **Load Drivers**.
3. Insert the driver CD, click **Browse**.
4. Double click **CD Drive... Drivers**.
5. Double click **64bit**:
For non-Itanium processors: select **AMD64**, then click **OK**.
For Itanium processors: select **IA64**, then click **OK**.
6. Select **Silicon Image SiI... SATALink Controller**, then click **Next**.
7. Follow the on-screen instructions to complete the installation.

For Existing Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, click **Locate and install driver software (recommended)**.
3. Click **Continue**, insert the driver CD, click **Next**.
4. Click **Close** to complete the installation.

To Verify Windows Vista Installation

1. Right click **My Computer** and click **Manage**.
2. Click **Continue**, select **Device Manager**.
3. Double click **Storage Controllers, Silicon Image SiI 3114... Controller** should be listed.

Windows Server 2008 (32-bit)

For New Installation

1. Install the board and follow Microsoft procedures to install Windows Vista accordingly.
2. At the **Where do you want to install Windows?**, click **Load Driver**.
3. Insert the driver CD, then click **Browse**.
4. Double click **CD Drive... Drivers**.
5. Select **32bit**, click **OK**.
6. Select **Silicon Image SiI... SATALink Controller**, then click **Next**.
7. Follow the on-screen instructions to complete the installation.

For Existing Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, click **Locate and install driver software (recommended)**.
3. Click **Continue**, insert the driver CD, click **Next**.
4. Click **Close** to complete the installation.

Windows Server 2008 (64-bit)

For New Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. At the **Where do you want to install Windows?**, click **Load Driver**.
3. Insert the driver CD, click **Browse**.
4. Double click **CD Drive... Drivers**, double click **64bit**:
For non-Itanium processors: select **AMD64**, then click **OK**.
For Itanium processors: select **IA64**, then click **OK**.

5. Select **Silicon Image SiL... SATALink Controller**, then click **Next**.
6. Follow the on-screen instructions to complete the installation.

For Existing Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, click **Locate and install driver software (recommended)**.
3. Click **Continue**, insert the driver CD, click **Next**.
4. Click **Close** to complete the installation.

To Verify Windows Server 2008 Installation

1. Right click **My Computer** and click **Manage**.
2. Double click **Diagnostics**, select **Device Manager**.
3. Double click **Storage Controllers**, **Silicon Image SiI 3114... Controller** should be listed.

Windows 98SE

For New Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. Once Windows has been installed, right click **My Computer**, click **Properties**, select **Device Manager**.
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...**, then click **Next**.
7. Check **Specify a location**, uncheck the other boxes, type **D:\9x-Me**, then click **Next**. (Change **D:** to match your CD-ROM drive letter)

8. Click **Yes**, then click **Finish** to complete.

For Existing Installation

1. Install the board and boot up Windows.
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 a location**, uncheck the other boxes, type **D:\9x-Me**, then click **Next**. (Change **D:** to match your CD-ROM drive letter)
5. Click **Next**, then **Finish**.
6. Remove the driver CD and restart Windows to complete the driver installation.

Windows ME

For New Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. 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 **Specify the location of the driver (Advanced)**, then click **Next**.
6. Check **Specify a location**, uncheck the other box, type **D:\9X-Me**, click **Next**. (Change **D:** to match your CD-ROM drive letter)
7. Click **Next**, then click **Finish**.
8. Remove the driver CD, restart Windows to complete.

For Existing Installation

1. Install the board and boot up Windows.
2. At the **Add New Hardware Wizard**, insert the driver CD.
3. Select **Specify the location of the driver (Advanced)**, then click **Next**.
4. Check **Specify a location**, uncheck the other box, type **D:\9x-Me**, click **Next**. (Change **D:** to match your CD-ROM drive letter)
5. Click **Next**, then click **Finish**.
6. Remove the driver CD and restart Windows to complete the installation.

To Verify Windows 98SE / ME Installation

1. Right-click **My Computer**, then click **Properties**. Select **Device Manager** tab.
2. Double click **SCSI controllers** and **Silicon Image SiI 3114 ... Controller** should be listed.

Windows NT4.0

A new installation of Windows NT requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **NT4** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

For New Installation

1. Install the board and follow Microsoft procedures to install Windows 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 floppy disk that you made above and press **Enter**.

5. Select **Silicon Image... Controller for Windows NT 4.0 and 2000**, and press **Enter**.
6. Press **Enter** to continue and follow on-screen instructions to complete Windows NT4.0 installation.

For Existing Installation

1. Install the board and boot up Windows.
2. Double click **My Computer/Control Panel/SCSI Adapters**, then click the **Drivers** tab.
3. Click **Add...**, then click **Have Disk...**
4. Insert the driver CD, type in **D:\NT4**, then click **OK**. (Change **D:** to match your CD-ROM drive letter)
5. Highlight **Silicon Image SiL... Controller** and click **OK**.
6. Type in **D:\NT4**, then click **OK**. (Change **D:** to match your CD-ROM drive letter)
7. Click **OK**, remove the driver CD and restart Windows to complete the installation.

To Verify Windows NT4.0 Installation

1. Double click **My Computer/Control Panel/SCSI Adapters**.
2. Highlight **Silicon Image... 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.

Note: If an error message is displayed in the dialog box, install the *Serial ATA 4-Channel PCI* into a different PCI slot and reinstall the driver.

Bios Configuration

The *Serial ATA 4-Channel 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.

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 SIIG RMA. If the product is determined to be defective, an RMA number will be issued.

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.

Founded in 1985, SIIG, Inc. is a leading computer upgrade manufacturer of I/O connectivity products, including PCIe, PCI & ISA serial and parallel ports, USB, Serial ATA & UltraATA controllers, FireWire (1394a/b), networking, sound cards, and other accessories. SIIG is the premier one-stop source of upgrades.

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

Serial ATA 4-Channel 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

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