

eSATA II PCIe i/e Quick Installation Guide

Introducing the eSATA II PCIe i/e

The *eSATA II PCIe i/e* is an ultra high-speed dual channel Serial ATA Generation 2 controller for use in PCI Express enabled systems.

Features and Benefits

- Compliant with PCI Express Base Specification 1.0a
- Compliant with Serial ATA 1.0a specification with support for full complement of SATA II optional features
- PCI Express 1-lane (x1) SATA II adapter works with PCI Express slots with different lane width
- Installs in any available PCI Express slot and supports data transfer rates up to 3.0 Gbps (300 MBps)
- Spare enhanced low profile bracket is included to work in low profile chassis
- Supports Native Command Queuing (NCQ), Nonzero offsets NCQ, and Out-of-order date delivery NCO
- Independent command fetch, scatter/gather, and command execution
- Supports hard disk hot-plugging

System Requirements

- PCI Express-enabled system with an available PCI Express slot
- Windows[®] 2000 / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / Vista (32-/64-bit)

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Package Contents

- *eSATA II PCIe i/e* board and spare enhanced low profile bracket
- SATA data cable and SATA 15-pin power cable
- Driver CD and Quick Installation Guide

Board Layout

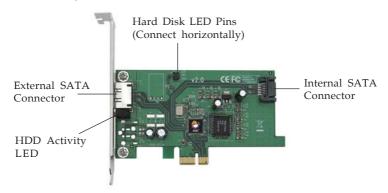


Figure 1. eSATA II PCIe i/e Board Layout

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 computer.

- 3. Remove the computer cover.
- 4. Remove the slot bracket from an available PCIe slot.
- 5. To install the card, carefully align the card's bus connector with the selected PCIe slot on the motherboard. Push the board down firmly, but gently, until it is well seated.
- 6. Replace the slot bracket holding screw to secure the card.

Device Connection

The *eSATA II PCIe i/e* supports one internal and one external Serial ATA hard disk drive.

Internal Serial ATA port

- 1. Install the hard disk drive into the chassis.
- 2. Connect the Serial ATA hard disk drive to the system power supply using the *SATA 15-pin power cable*.
- 3. Connect one end of the SATA data cable to the hard disk drive.

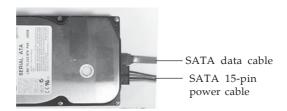


Figure 2. Hard disk drive connections

Note: For hard disk drives with both SATA power connector and legacy 5-pin connector, use either the SATA power connector or the legacy 5-pin power connector. Using both power connectors at the same time will damage the hard disk drive.

- 4. Attach the other end of the *SATA data cable* to the internal Serial ATA connector.
- 5. Replace the computer cover and reconnect the power cord.

External Serial ATA port

External Serial ATA hard disk drives should come with their own accessories. In most cases, you just need to power up the external drive and connect it to the external port. For more information, please refer to the external device's manual.

Driver Installation

This section provides information on how to install the *eSATA II PCIe i/e* drivers.

Windows 2000

New 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 **Floppy** 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 if prompted during Windows installation, otherwise, go directly to step 3.
- 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 3132... Controller for Windows 2000 and press Enter.

6. Press **Enter** to continue and follow the on-screen instructions to complete the installation.

Existing Installation

- 1. Install the board and boot up Windows.
- 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** and restart Windows to complete the driver installation.

Windows XP (32-bit) / Server 2003 (32-bit)

New 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 **Floppy** 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 if prompted by Windows installation, otherwise, go directly to step 3.
- 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 Sil 3132... Controller for Windows XP/Server 2003 and press Enter.
- 6. Press **Enter** to continue and follow on-screen instructions to complete Windows installation.

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 this time,** then click **Next**.

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

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

Windows XP (64-bit) / Server 2003 (64-bit)

New 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 if prompted during Windows installation, otherwise, go directly to step 3.
- 3. At the **Windows Setup** screen, press **F6** to continue.
- 4. Insert the driver diskette. Press **S** then press **Enter**.
- 5. Select Silicon Image SiI 3132... Controller (64-bit Extended) and press Enter.
- 6. Press **Enter** to continue and follow on-screen instructions to complete the installation.

Existing Installation

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

 \(\frac{XP(w/SP2 \ or later)/Server 2003 \ (w/SP1 \ or later)}\): select
 \(\frac{No, not this time, then click Next.\)
- 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 / 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 3132... Controller** should be displayed.

Windows Vista[™] (32-bit)

New Installation

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. At 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. Highlight the **Floppy** folder, then click **OK**.
- 6. Select **Silicon Image Sil 3132... Controller**, then click **Next**.

7. Follow on-screen instructions to complete Windows Vista installation.

Existing Installation

- 1. Install the board and boot up Windows.
- 2. At the Found New Hardware box, select Locate and install driver software (Recommended), then click Continue.
- 3. Insert the driver CD, click **Don't search online**.
- 4. Click **Next**, then **Close**.
- 5. Restart Windows to complete the installation.

Windows Vista (64-bit)

New Installation

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. At Where do you want to install Windows?, click Load Driver.
- 3. Insert the driver CD, then click **Browse**.
- 4. Double click **CD Drive... Drivers**.
- Double click 64bit folder:
 <u>For non-Itanium processors</u>: select AMD64 folder, click OK.
 For Itanium processors: select IA64 folder, click OK.
- 6. Select **Silicon Image Sil 3132... Controller**, then click **Next**.
- 7. Follow on-screen instructions to complete Windows Vista installation.

Existing Installation

1. Install the board and boot up Windows.

- 2. At the Found New Hardware box, select Locate and install driver software (Recommended), then click Continue.
- 3. When prompted, insert the driver CD.
- 4. Click **Close** to complete the installation.

To Verify Windows Vista Installation

- 1. Right click **Computer**, click **Manage**, click **Continue**.
- 2. Select **Device Manager**.
- 3. Double click **Storage controllers**, **Silicon Image SiI 3132... Controller** should be displayed.

Windows Server 2008 Installation (32-bit)

New Installation

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. At Where do you want to install Windows?, click Load Driver.
- 3. Insert the driver CD, click **OK**.
- 4. Select **Silicon Image Sil 3132... Controller**, then click **Next**.
- 5. Follow on-screen instructions to complete Server 2008 installation.

Existing Installation

- 1. Install the board and boot up Windows.
- 2. At the Found New Hardware window, select Locate and install driver software (Recommended), then click Don't search online.
- 3. Insert the driver CD.
- 4. Click **Close** to complete the driver installation.

Windows Server 2008 Installation (64-bit)

New Installation

- 1. Install the board and follow Microsoft procedures to install Windows accordingly.
- 2. At Where do you want to install Windows?, click Load Driver.
- 3. Insert the driver CD, click **Browse**.
- 4. Double click **CD Drive... Drivers**.
- 5. Double click **64bit** folder: <u>For non-Itanium processors</u>: select **AMD64** folder, click **OK**.
 - *For Itanium processors:* select **IA64** folder, click **OK**.
- 6. Select **Silicon Image SiI 3132... Controller**, then click **Next**.
- 7. Follow on-screen instructions to complete Server 2008 installation.

Existing Installation

- 1. Install the board and boot up Windows.
- 2. At the Found New Hardware window, select Locate and install driver software (Recommended), then click Don't search online.
- 3. Insert the driver CD.
- 4. Click **Close** to complete the installation.

To Verify Windows Server 2008 Installation

- 1. Right click **Computer** and click **Manage**.
- 2. Double click **Diagnostics**, select **Device Manager**.
- 3. Double click **Storage controllers**, and **Silicon Image SiI 3132... Controller** should be displayed.

eSATA II PCIe i/e BIOS

The *eSATA II PCIe i/e* BIOS will appear everytime your system starts up. If the BIOS doesn't show, please try your controller in another PCIe slot. During the **(Post)** process, the BIOS will show up on the display screen and indicate the devices attached to it.

Safely Remove External Hard Disk Drives

Before unplugging or turning off your external hard drive from a powered up system, it is recommended to first follow the steps below. Not doing so may corrupt the data stored on the external hard drive and/or cause your system to crash.

Windows 2000 / XP / Server 2003

- 1. Right click **My Computer** and click **Manage**.
- 2. Select **Device Manager**.
- 3. Double click **Disk Drives**, right click the target disk.
- 4. Click Uninstall. Click OK to confirm device removal
- 5. You can now unplug or turn off the hard disk.

Windows Vista

- 1. Right click **Computer**, click **Manage**, click **Continue**.
- 2. Select **Device Manager**.
- 3. Double click **Disk Drives**, right click the target disk.
- 4. Click **Uninstall**. Click **OK** to confirm device removal.
- 5. You can now unplug or turn off the hard disk.

Windows Server 2008

- 1. Right click **My Computer** and click **Manage**.
- 2. Double click **Diagnostics**, select **Device Manager**
- 3. Double click **Disk Drives**, right click the target disk.
- 4. Click **Uninstall**. Click **OK** to confirm device removal.
- 5. You can now unplug or turn off the hard disk.

Assigning Drive Letter to an External Hard Drive

Most external hard drives come formatted and ready to use, when connected a drive icon will show up in My Computer and you can access the drive. However, sometimes Windows will not automatically assign a drive letter to a pre-formatted drive, in this case, the drive icon will not show up in My Computer. If this happens, follow the directions below to assign the drive letter. These steps, written from Windows Server 2003, are similar in all Windows versions.

1. Right click **My Computer**, click **Manage**, click **Disk Management**, look for a **Healthy** disk without a name and drive letter assigned to it, see **Figure 3**.

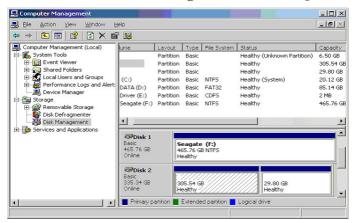


Figure 3: Disk Management

2. Right click on the **Healthy** disk, the disk without a drive letter, then click **Change Drive Letter and Paths**. See **Figure 4**.

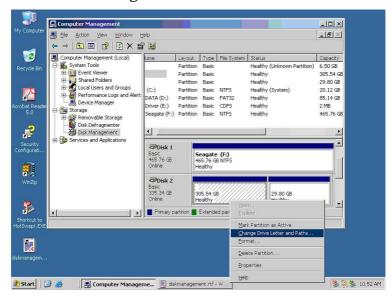


Figure 4

3. At Change Drive Letters and Paths, click **Add**.

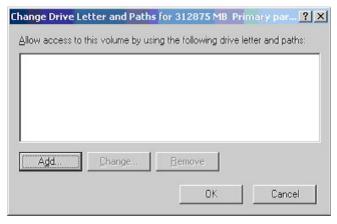


Figure 5

4. At the Add Drive Letter or Path box, select **Assign the following drive letter**, then choose an available drive letter from the drop down box. Click **OK**.

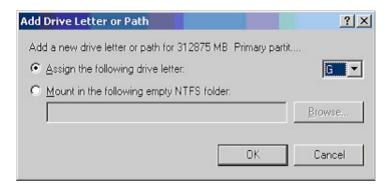


Figure 6

5. A drive letter should be assigned to the **Healthy** drive. Repeat these steps if no drive letter appears.

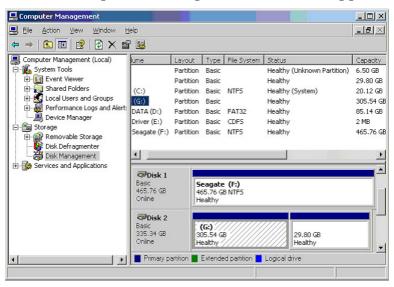


Figure 7

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.

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

eSATA II PCIe i/e

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.

6078 Stewart Avenue

Fremont, CA 94538-3152, USA

Ph: 510-657-8688

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