

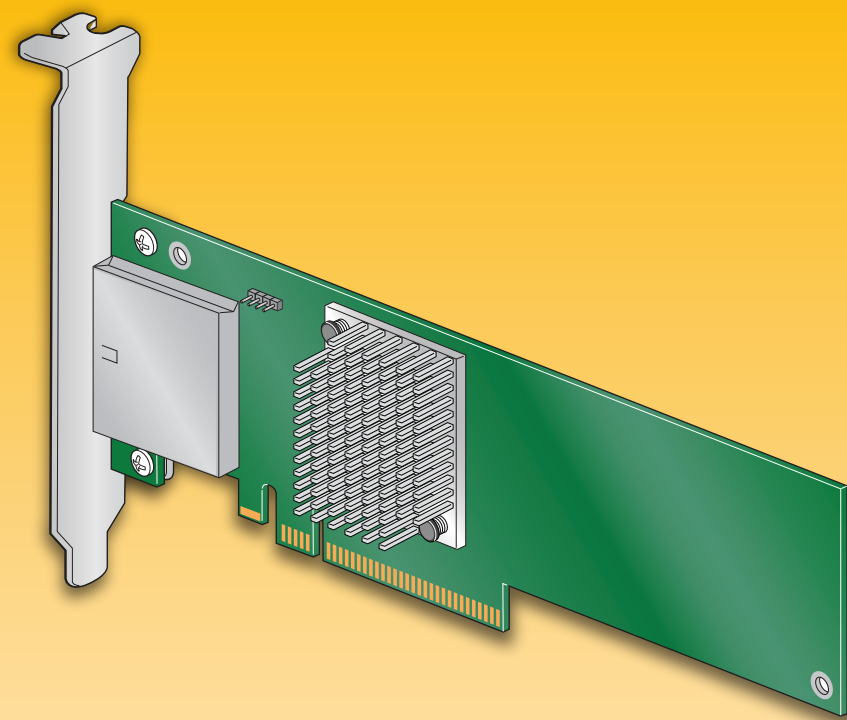
Intel® SAS Controller RS25GB008 Quick Start User's Guide

This guide contains step-by-step instructions for installing the Intel® SAS Controller RS25GB008.

These guides and other supporting documents (including a list of supported server boards) are also located on the web at: http://www.intel.com/p/en_US/support/server.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, see your Hardware Guide for complete ESD procedures. For more details on Intel® SAS controllers, see: www.intel.com/go/serverbuilder.

Read all cautions and warnings first before starting your SAS Controller integration.



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Install the Operating System Drivers

Note: Below section lists the general driver loading process for frequently used operating systems. For more details, and for other supported operating systems, refer to the corresponding driver release notes to get latest information.

Microsoft Windows 2003*

OR Microsoft Windows 2008*

OR Red Hat* Enterprise Linux

OR SuSE* Linux Enterprise Server

- 1 Create installation media (floppy disk required for Microsoft Windows 2003*; removable media, such as a floppy disk, USB device, or CD/DVD-ROM, required for Microsoft Windows 2008*). See the instructions below.
- 2 Boot the server and start the OS installation.
- 3 Press the <F6> key as soon as the first screen appears.
- 4 When prompted to specify a mass storage controller:
 - a. Press <S> to specify additional storage devices.
 - b. Insert the installation driver disk that you created in step 1 above.
 - c. Press the <Enter> key to select the "Installation Driver" and continue with the Windows installation.
- 5 Follow the on-screen instructions to complete the Windows installation.

When you see: "Where do you want to install windows?", select **Load Driver**, and then click Next.

When prompted by the Load Driver dialog:

- a. Insert the removable installation media that you created in step 1 above.
- b. Press the <Enter> key to select the "Installation Driver" and continue with the Windows installation.

- 1 Create installation media (removable media, such as a floppy disk, USB device, or CD/DVD-ROM, required). See the instructions below.
- 2 Boot the system with Red Hat* Enterprise Linux CD-ROM.

Boot the system with SuSE* Linux Enterprise Server (SLES) CD-ROM.
- 3 At the boot prompt, insert the Linux installation disk that you created in step 1.

When the first screen displays, insert the Linux installation disk that you created step 1.
- 4 Type **Linux dd**, and press the <Enter> key.

Press the <F5> key for SLES 10 or the <F6> key for SLES 9 to load the driver, and then select an installation menu option.
- 5 Follow the on-screen instructions to complete the installation. The SAS controller driver is automatically detected and installed.

Create Installation Media

- 1 Obtain the drivers either from the enclosed resource CD or the Intel web site.
- 2 If using the enclosed Resource CD, insert the resource CD. Browse to \Drivers and then the matching OS folder.

OR

Go to <http://downloadcenter.intel.com> and locate your product under Server Products in the left menu.

Microsoft Windows*

Extract the files from the zip file to your hard drive. Copy the appropriate files to a floppy disk (for Microsoft Windows 2003*) or removable media (for Microsoft Windows 2008*).

Copy the matching .sys, .cat, .oem, and .inf driver files to a floppy disk or removable media

Linux*

Create install disk (for most drivers)

Extract the driver update disk (DUD) image (file extension .img) from the zip file to your hard drive. If you have a system with Microsoft Windows*, you will need a third-party utility such as 'rawrite' to extract the DUD image to a floppy disk. For a system under Linux or Sun Solaris*, use the 'dd' command as follows:

```
dd if=<image_file_name> of=<path-to-media>
```

*'path-to-media' is usually /dev/fd0, but may differ if you are using a USB floppy drive.

Create install CD (for some drivers)

Extract the image (file extension .iso) from the zip file to your hard drive. You will need a third-party cd burner application to create an install CD.

Warning

Read all caution and safety statements in this document before performing any of the instructions. Also see the *Intel® Server Board and Server Chassis Safety Information* document at: <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm> for complete safety information.

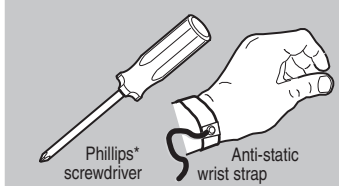
Warning

Installation and service of this product should only be performed by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

Caution

Observe normal ESD (Electrostatic Discharge) procedures during system integration to avoid possible damage to server board and/or other components.

Tools Required



What you will need to begin

- SAS 2.0 or SATA II hard disk drives (backward compatible to support SAS 1.0 hard disk drives)
- Intel® SAS Controller RS25GB008
- Server board with an x8 PCI Express* Generation 2 slot (backward compatible to support an x8 or x16 PCI Express* Generation 1 slot)
- Intel® SAS Controller RS25GB008 Resource CD
- Operating system installation media: Microsoft Windows Server 2003*, Microsoft Windows Server 2008*, Microsoft Windows Vista*, Red Hat* Enterprise Linux, or SUSE* Linux Enterprise Server

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1 Check the Bracket Height

- A Determine whether the full-height bracket will fit in the server's PCI back plate.
- B Your SAS controller ships with the full-height bracket. If the low-profile bracket is required, unscrew the two fasteners holding the green board to the silver bracket.
- C Remove the bracket.
- D Line up the low-profile bracket with the board, making sure the two holes align.
- E Replace and tighten the two screws.

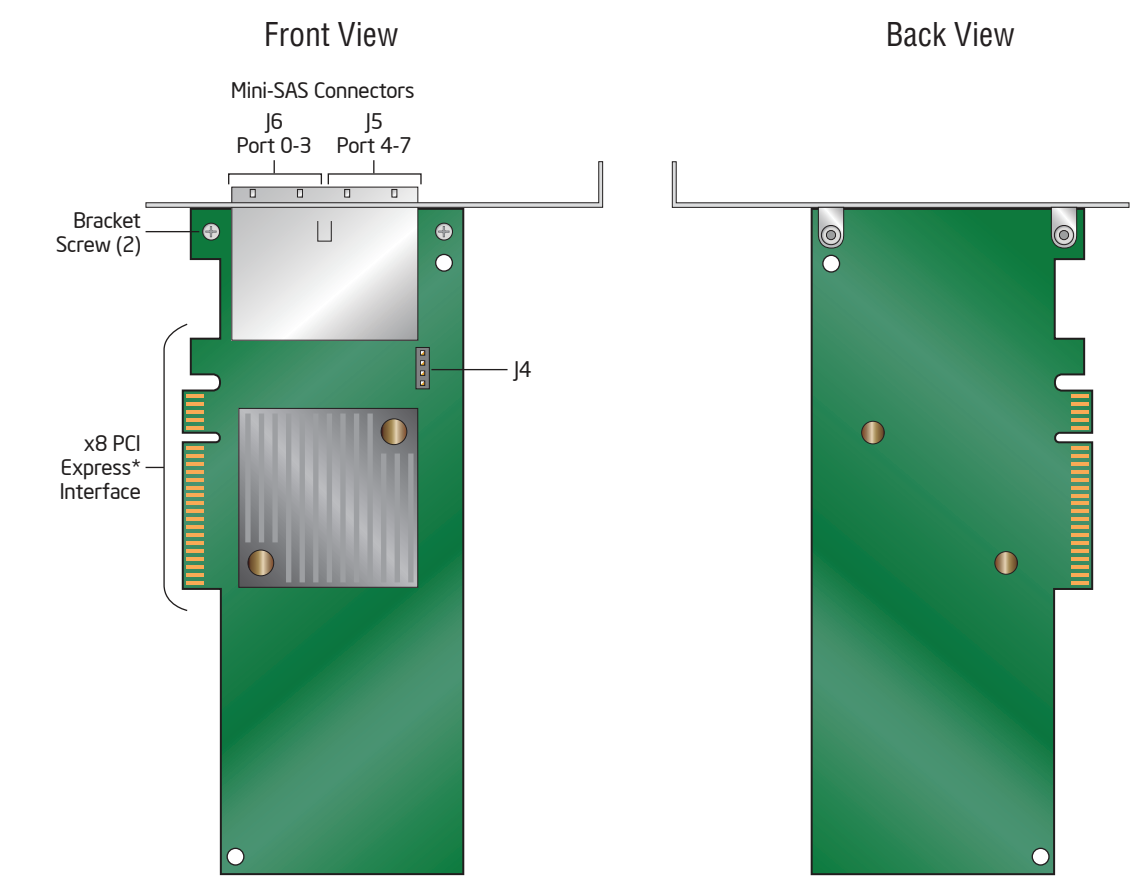
2 Install the SAS Controller

- A Power down the system and disconnect the power cord.
- B Remove the system cover and any other pieces to access the PCI Express* slot.
- C Firmly press the SAS Controller into an available x8 or x16 PCI Express* Slot.
- D Secure the SAS Controller bracket to the system back panel.

3 Connect the SAS Controller

- A Configure and install the external SAS Devices, SATA II Devices, or both. Refer to the target device documentation for any preinstallation configuration requirements.
- B Connect the SAS Controller to the external SAS Devices, SATA II Devices, or both. Refer to the target device documentation for devices to select the correct SAS cable for the SAS Devices, SATA II Devices, or both.
- C Push the cable into the external connector until it makes a slight click. The SAS Cable is not shipped together with the controller.

Intel® SAS Controller RS25GB008 Reference Diagram



For more information on the jumpers referenced in this diagram, refer to user guide located on the web at: http://www.intel.com/p/en_US/support/server.

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