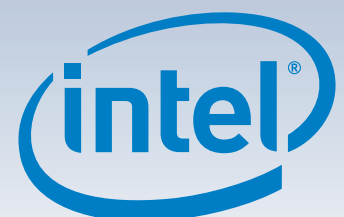
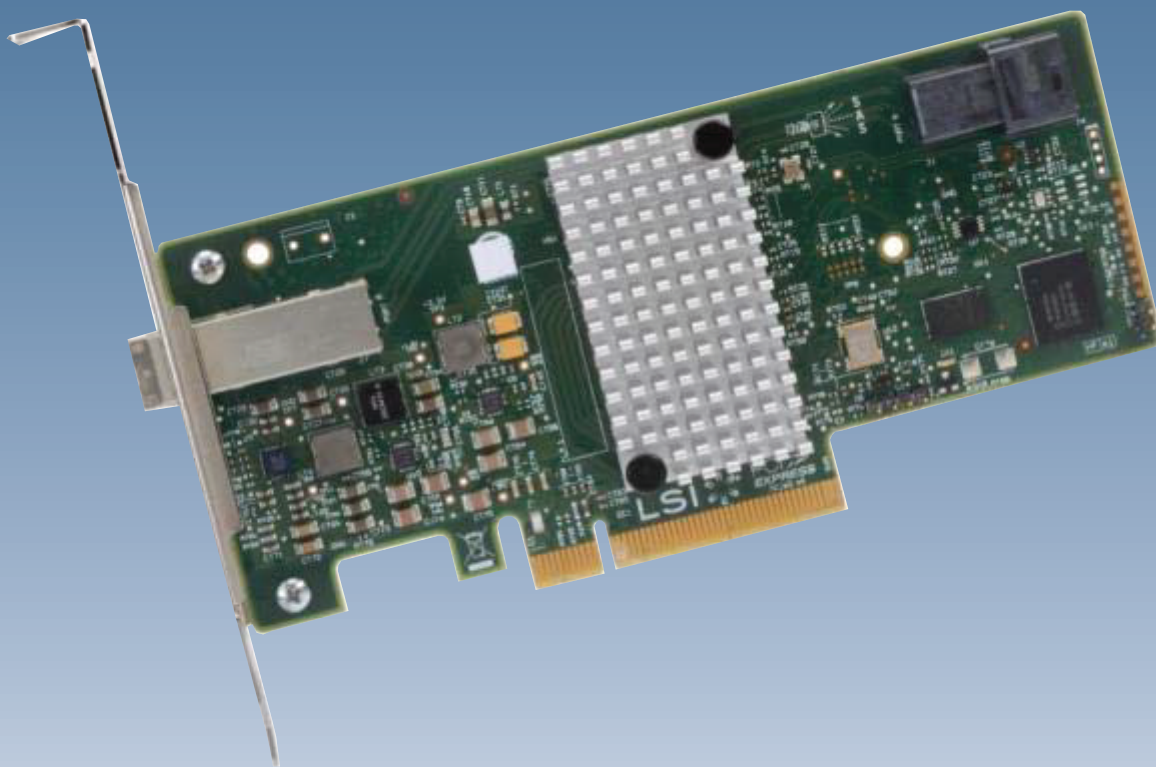


# Intel® RAID Controller RS3FC044 Quick Installation User's Guide

Thank you for buying an Intel® RAID Controller. The following information will help you assemble your Intel® RAID Controller and install components.

Perform all installation work at an electrostatic discharge (ESD)-safe workstation that meets the requirements of EIA-625, *Requirements for Handling Electrostatic Discharge Sensitive Devices*. You must perform all actions in accordance to the latest revision of the IPC-A-610 ESD-recommended practices.

This guide and other supporting documents are located on the web at:  
<http://www.intel.com/support>.



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## 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://www.intel.com/support/motherboards/server/sb/cs-010770.htm> for complete safety information.

## Warning



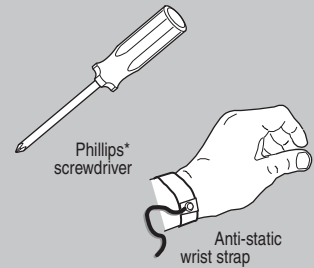
Installation and service of this product to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

## Caution



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

## Tools Required



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# General Installation Process

1

## Unpack the Controller



**CAUTION:** To avoid the risk of data loss, make a backup of your data before changing your system configuration.

Unpack the controller in a static-free environment. Remove the controller from the antistatic bag, and carefully inspect the device for damage. If you notice any damage, contact Intel or your reseller support representative.

2

## Prepare the Computer



**CAUTION:** Disconnect the computer from the power supply and from any networks to which you will install the controller, or you risk damaging the system or experiencing electrical shock.

Turn off the computer, and disconnect the power cord from the rear of the power supply.

3

## Remove the Cover

Remove the cover from the chassis.

4

## Check the Mounting Bracket

Check the mounting bracket on the controller (system-dependent). If required for your system, replace the full-height mounting bracket that ships on the controller with the low-profile bracket supplied. Complete step A through step D to attach the short bracket.

- A** Use a #1 Phillips\* screwdriver that is ESD safe to remove the two Phillips screws that connect the full-profile bracket to the board. Unscrew the two screws located at the top and bottom edges of the board. Avoid touching any other board components with the screwdriver or the bracket.



**CAUTION:** Damaging the screw can void the warranty. To prevent damage to the screw, center the screwdriver in the top of the screw.

- B** Remove the full-profile bracket from the controller. Do not damage the board.
- C** Place the controller on top of the low-profile bracket. Position the bracket so that the screw holes in the tabs align with the openings in the board.
- D** Use a #1 Phillips torque screwdriver, that is ESD safe, set to a maximum torque of  $4.8 \pm 0.5$  inch-pounds. Replace the two Phillips head screws removed in step A.



**CAUTION:** Exceeding these torque specifications can damage the board, connectors, or screws, and can void the warranty on the controller.

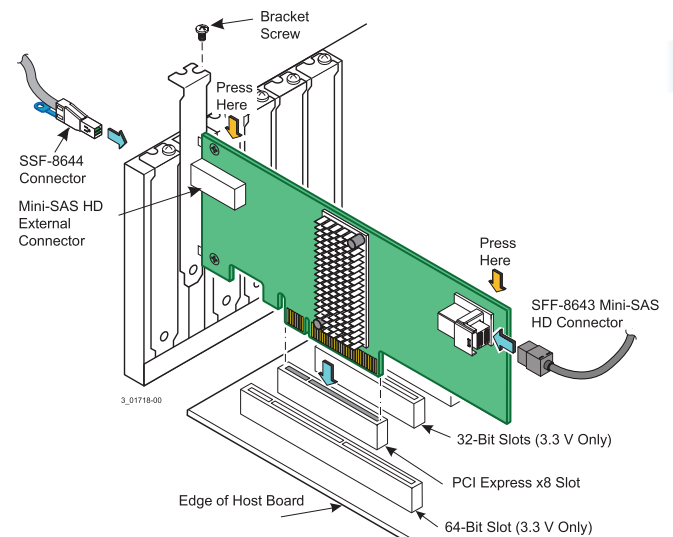
5

## Install the Controller

Insert the controller into an available PCIe slot. Locate an empty x8 PCIe slot. Remove the blank bracket panel on the rear of the computer that aligns with the empty PCIe slot. Save this bracket screw, if applicable. Align the controller to a PCIe slot. Press down gently, but firmly, to seat the controller correctly in the slot. The following figure shows how to insert the controller into a PCIe slot.



**NOTE:** The shape, size, and locations of the components on your controller and its bracket might vary from this illustration. The controller requires a x8 PCIe slot.



# General Installation Process

## 6 Secure the Controller Bracket

Secure the controller bracket to the system's chassis. Install the bracket screw, if applicable, or engage the system retention mechanism to secure the controller to the system's chassis.

## 7 Connect Internal SAS Cables

Connect internal SAS cables between the controller and the SAS backplane, any other SATA or SAS devices in the system chassis, or both. The Intel 12Gb/s SAS Controller has one SFF-8643, internal x4, mini-SAS HD connector. Use a cable with an internal mini-SAS HD connector on one end (to connect to the controller) and the appropriate connector to attach to the SAS or SATA devices on the other end.

## 8 Replace the Cover

Replace the cover of the chassis.

## 9 Connect SAS Cables

Connect SAS cables between the controller and the SAS enclosure that contains SATA or SAS devices. The Intel 12Gb/s SAS Controller has one SFF-8644, external x4 mini-SAS HD connector. Use a cable with an external mini-SAS HD connector (SFF-8644) on one end (to connect to the controller) and the appropriate connector to attach to the SAS or SATA devices on the other end.

## 10 Power up the System

Reconnect any power cords and power up the system. Reconnect any power cords and reconnect any network cables. Turn on the power.

# Windows Driver Installation

Use the INTEL\_SAS3.SYS driver for the Windows XP\* x64, Windows Server 2003\* (x86, x64, or A64), Windows Server 2008\* (x86, x64, or IA64), Windows Server 2012\*, Windows Vista\* (x86 or x64), Windows 7\*, or Windows Server 2008\* R2 operating systems (OSs). Intel does not support the Windows XP x86 server.

Refer to the Windows ReadMe.txt file on the website <http://www.intel.com/support> for driver installation directions for your particular OS version.

# Linux Driver Installation

Refer to the `Linux ReadMe.txt` file on the website <http://www.intel.com/support> for driver installation directions.

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