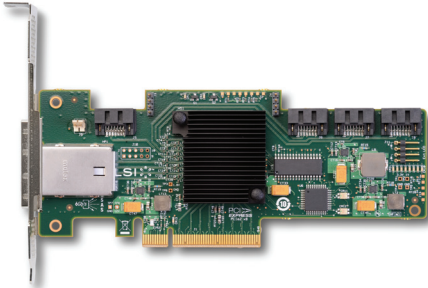


Quick Installation Guide

LSI® SAS 9212-4i4e PCI Express® to 6Gb/s SAS Host Bus Adapter



Thank you for purchasing the LSI SAS 9212-4i4e Host Bus Adapter (HBA). Please take a few minutes to read this quick installation guide before you install the HBA.

For more information about any topic covered in this guide, refer to the documents listed with your product at the following link:

<http://go.lsi.com/hbas>

After navigating to your product, select **Software Downloads** to locate necessary device drivers.

ATTENTION: 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.

To install the LSI® SAS 9212-4i4e HBA, follow these steps:

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

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

2. Prepare the computer. Turn off the computer, and remove the power cord from the rear of the power supply.

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

3. Remove the cover from the chassis.

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

- a. Using a #1 Phillips screwdriver that is ESD safe, 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 bracket.

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

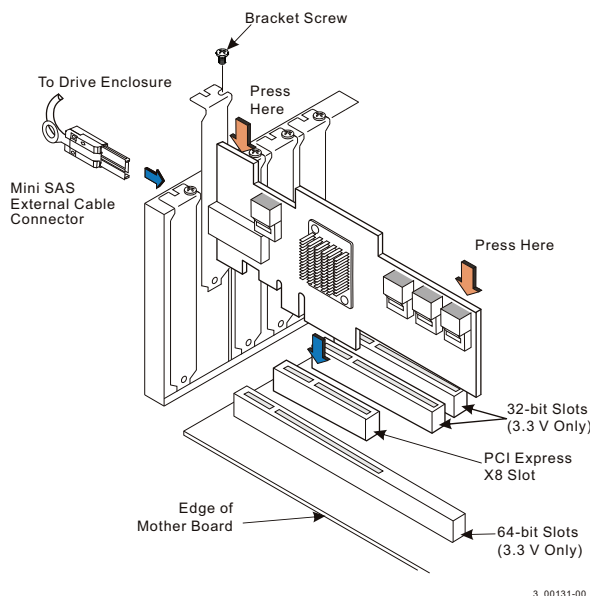
- b. Remove the full-profile bracket from the HBA. Do not damage the board.
- c. Place the HBA on top of the low-profile bracket. Position the bracket so that the screw holes in the tabs align with the openings in the board.
- d. Using a #1 Phillips torque screwdriver that is ESD safe, set to a maximum torque of 4.8 ± 0.5 inch-pounds. Replace the two Phillips screws removed in step a.

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

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



42615-01A



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

- 6. Secure the HBA bracket to the system's chassis.** Install the bracket screw, if applicable, or engage the system retention mechanism to secure the HBA to the system's chassis.
- 7. Connect internal SAS cables between the HBA and the SAS backplane, any other SATA or SAS devices in the system chassis, or both.** The LSI SAS9212-4i4e has four internal 7-pin SATA connectors. Use a cable with a 7-pin SATA connector on one end (to connect to the HBA) and the appropriate connector to attach to the SAS or SATA device on the other end.
- 8. Replace the cover of the chassis.**
- 9. Connect external SAS cables between the HBA and the SAS enclosure that contains SATA or SAS devices.** The LSI SAS9212-4i4e has one external x4 mini-SAS connector. Use a cable with an external mini-SAS connector (SFF-8088) on one end (to connect to the HBA) and the appropriate connector to attach to the SAS or SATA devices on the other end.
- 10. Reconnect any power cords, and power up the system.** Reconnect any power cords and reconnect any network cables. Turn on the power.

The hardware installation of your LSI 6Gb/s SAS HBA is complete.

DRIVER INSTALLATION

All driver installation instructions are available at <http://go.lsi.com/hbas>. Select **6Gb/s SAS HBAs > Product Name > Software Downloads**.

TECHNICAL SUPPORT

For assistance installing, configuring, or running the LSI SAS 9212-4i4e HBA, contact LSI Technical Support:

E-mail: globalsupport.pld@avagotech.com

Web Site: www.lsi.com/support/

WARRANTY NOTICE

- 1.** The warranty does not cover the return of parts damaged by changing the bracket.
- 2.** The warranty does not cover ESD damage to the HBA. HBAs returned without a bracket mounted on the board will be returned without return merchandise authorization (RMA) processing.

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