LSI™

SAS3801E PCI Express to 3.0-Gb/s SAS Host Bus Adapter

Thank you for purchasing the SAS3801E PCI Express to 3.0-Gb/s Serial Attached SCSI (SAS) Host Bus Adapter. Please take a few minutes to read this quick installation guide before you install the SAS3801E.

If you need more information about any topic covered in this guide, please refer to the other documents on the accompanying LSI Serial Attached SCSI Device Drivers and Utilities CD.

Contents of the LSI Device Drivers and Utilities CD

The LSI host bus adapter (HBA) CD contains utility programs, device drivers for various operating systems, and the following LSI documentation:

- *Serial Attached SCSI (SAS) to PCI Express Host Adapters User's Guide*
- *Fusion-MPT™ Device Management User's Guide*
- Host bus adapter technical product briefs
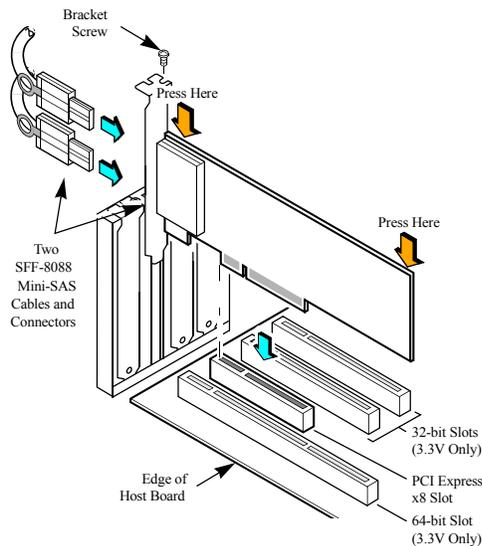
QUICK HBA INSTALLATION

To install the SAS3801E HBA, follow these steps:

1. **Unpack the HBA in a static-free environment.** Remove the HBA from the antistatic bag and inspect it for damage. If it appears to be damaged, contact LSI or your reseller support representative.

⚠️ **CAUTION**   **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 back of the power supply. Remove the cover from the chassis. *Be certain to disconnect the computer from the power supply and from any networks before installing the controller card.*

3. **Insert the SAS3801E in an available PCI Express slot.** Locate an empty PCI Express slot. Remove the blank bracket panel on the back of the computer that is aligned with the PCI Express slot you have selected. Save the bracket screw when present. Align the HBA with a PCI Express slot. Press down gently but firmly to properly seat the HBA in the slot. The following figure illustrates how to insert the HBA in a PCI Express slot.

NOTE:

The HBA shape, size, and locations of components may vary from this illustration.

4. **Secure the bracket to the system chassis.** Install the bracket screw, when present, or engage the system's retention mechanism to secure the HBA to the system's chassis.

5. **Connect the SAS hard disk drives (HDD) to the SAS connectors on the HBA.** The SAS3801E has two external SAS signal connectors, each connecting to four 3-Gb/s SAS PHYs. The HBA needs to be connected to external SAS storage devices using the appropriate cable. Two SAS external cables with the standard SAS external plug connector (SFF-8088) are required to connect to external devices.

6. **Replace the cover and the power cords, and power up the system.** Reconnect the power cord(s) and any network cables. Turn on power to the system.

The SAS3801E HBA hardware installation is complete, and you are ready to install the operating system drivers.

WINDOWS DRIVER INSTALLATION

To load the `SYMMPI.SYS` miniport driver during a new Microsoft Windows 2000 or Windows XP system installation or to load the `LSI_SAS.SYS` driver during a new Windows 2003 installation, you can boot directly from the Microsoft installation CD-ROM. The Windows drivers are not interchangeable; however, the instructions are similar.

To install a new Windows operating system and its appropriate device driver, follow these steps:

1. Using another computer, copy the appropriate driver files supplied on the LSI Serial Attached SCSI Device Drivers and Utilities CD onto a diskette. This will be needed in step 6.

   To create the driver diskette, open the driver folder on the CD, then open the folder for the version of the Windows operating system to be installed on the new system. Next, select all folders and files within the directory and copy to the root directory of a blank floppy diskette.

2. Boot the computer from the Windows CD-ROM.

3. Shortly after the Windows Setup begins, press F6 when the words `Setup is inspecting your computer's hardware configuration` appear, or when prompted to press F6 if you need to install a third-party SCSI or RAID driver.

NOTE: You must press F6 for the new driver to be recognized. Otherwise, the system does not recognize the devices controlled by the driver during the Windows setup.

4. Follow the instructions until a screen displaying the words `Setup could not determine the type of one or more mass storage device...` appears.

5. Choose S to specify additional devices.

6. Follow the prompts and insert the windows driver diskette when you are prompted to insert the hardware support disk. Select the driver version appropriate for your system.

7. Follow the Windows installation procedure to complete the installation. Microsoft provides documentation with its installation CD-ROM.

NOTE: Refer to the *Fusion-MPT Device Management User's Guide* for detailed configuration and installation instructions for all firmware and drivers.

LINUX DRIVER INSTALLATION

Consult the Linux `ReadMe.txt` file on the LSI Device Drivers & Utilities CD. LSI provides Open Source Drivers that may be implemented in the following ways:

- Adding precompiled binaries to an existing installation using driver update disks or RPMs for selected distributions.
- Adding or updating the Fusion-MPT source in the Linux kernel for any distribution.

TECHNICAL SUPPORT

For assistance installing, configuring, or running the SAS3801E, contact an LSI Technical Support representative:

E-mail: support@lsi.com

Phone: 1-800-633-4545 (North America)

+44.1344.413.115 (Europe)

Web Site: http://www.lsi.com/support/