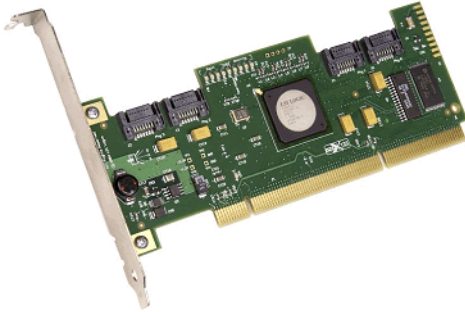


LSI Logic SAS3041X-R Host Adapter Quick Installation Guide



Thank you for purchasing the LSI Logic SAS3041X-R Serial Attached SCSI (SAS) to PCI-X Host Bus Adapter (HBA). Please take a few minutes to read this *Quick Installation Guide* before you install the SAS3041X-R.

If you need more information about any topic covered in this guide, refer to the other documents on the accompanying LSI Logic Device Drivers & Utilities CD.

CONTENTS OF THE LSI LOGIC DEVICE DRIVERS & UTILITIES CD

The LSI Logic HBA CD contains utility programs, device drivers for various operating systems, and the following LSI Logic documentation:

- *LSISAS (Serial Attached SCSI) PCI/PCI-X Host Adapters User's Guide*
- *Fusion-MPT™ Device Management User's Guide*
- LSI Logic HBA technical product briefs

QUICK HBA INSTALLATION

To install the SAS3041X-R, follow these steps:

Step 1 Unpack the HBA and inspect it for damage.

Unpack the HBA in a static-free environment. Remove the HBA from the anti-static bag and inspect it for damage. If it appears to be damaged, or if any component is missing, contact LSI Logic or your reseller support representative.



Make a backup of your data before changing your system configuration.

Step 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.*

Step 3 Insert the SAS3041X-R in an available PCI/PCI-X slot.

Locate an empty PCI/PCI-X slot. Remove the blank bracket panel on the back of the computer that is aligned with the PCI/PCI-X slot you have selected. Save the bracket screw when present.

Align the HBA to a PCI/PCI-X 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/PCI-X slot.

Note: The SAS3041X-R is keyed for a 3.3 V slot. The keying of edge connector J1 prevents the card from being installed in a 5 V slot.

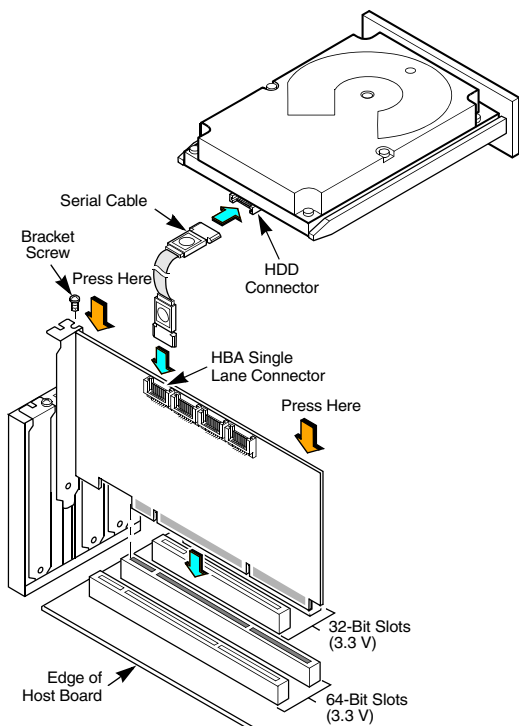
Step 4 Secure the bracket to the system's chassis.

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

Step 5 Connect the serial cable(s) between the HBA and the serial hard disk drive(s) (HDD).

The SAS3041X-R has four internal SATA 7-pin signal connectors, each connecting to a 3 Gbit/s SAS port. Use an appropriate cable to connect the SAS3041X-R to SAS/SATA storage devices. To connect directly to SAS hard disk drives, it is necessary to use a cable that has a SAS device connector on one end (HDD side) and a standard SATA 7-pin connector on the other end (HBA end). This cable may also be used for direct connection to SATA drives. For connection to internal SATA hard disk drives, a standard internal SATA cable may also be used (note that using a standard SATA cable requires availability of a 15-POS power cable from the main power supply). The preceding figure illustrates the connector locations on the SAS3041X-R HBA and the use of a standard SATA cable for connection to a SATA hard disk drive.

When connecting the SAS3041X-R to a backplane, there are two possible cable configurations. The first configuration is use of a standard SATA cable when the backplane uses standard SATA 7-pin connectors to route the signals to the hard disk drives. A second configuration is necessary when the backplane uses a SAS internal wide port connector (SFF8484). In this case, a backplane-based fan-out cable is required. This cable has an SAS wide port connector on one end (backplane side) and four SAS 7-pin signal connectors on the other end (HBA side).



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

Step 6 Replace the cover, the power cord(s) and power-up the system.

Replace the system's cover, reconnect the power cord(s) and any network cables. Turn power on.

The SAS3041X-R HBA hardware installation is complete and you are ready to install the operating system drivers.

WINDOWS DRIVER INSTALLATION

To load the `SYMPTI.SYS` miniport driver during a new Windows 2000 or Windows XP system installation or to load the `LSI_SAS.SYS` driver during a new Windows 2003 system 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:

Step 1 Using another computer, copy the appropriate driver files supplied on the LSI Logic DeviceDrivers & Utilities CD onto a diskette. This

is needed in Step 6. To create the driver diskette, open the driver folder on the CD, then open the folder for the version of Windows to be installed on the new system. Next, select all folders and files within the directory and copy to the root directory of a clean floppy diskette.

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

Step 3 Press F6 when the words `Setup` is inspecting your computer's hardware configuration appear, or when the Windows operating system prompts you for nonsupported drivers.

Important. 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.

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

Step 5 Choose S to Specify Additional Devices.

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

Step 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 Logic Device Drivers & Utilities CD. LSI Logic provides Open Source Drivers that may be implemented in the following ways:

Step 1 Adding Pre-Compiled Binaries to an Existing Installation using driver update disks or RPMs for selected distributions.

Step 2 Adding or Updating the Fusion-MPT™ Source in the Linux Kernel for any distribution.

TECHNICAL SUPPORT

For assistance installing, configuring, or running the SAS3041X-R, contact LSI Logic Technical Support:

Phone Support:

1-800-633-4545 (North America)

+44 1344 413 441 (Europe)

Web Site: <http://www.lsillogic.com/support/>



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Find a list of LSI Logic Corporation's U.S. distributors, international distributors, sales offices, and design resource centers on the LSI Logic web site at:

<http://www.lsillogic.com/contacts/index.html>

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