MegaRAID® iBBU06 Intelligent Battery Backup Unit

Quick Installation Guide

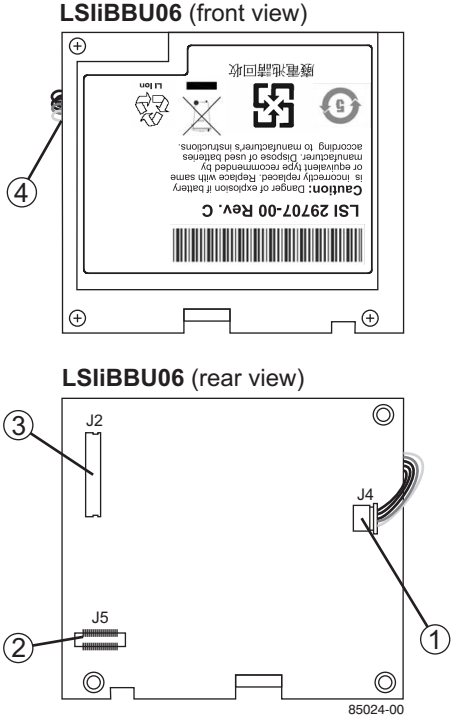
The LSI MegaRAID LSIiBBU06 is an intelligent battery backup unit (iBBU) that protects the integrity of the cached data on a MegaRAID controller for up to 72 hours in the event of a complete AC power failure or a brief power outage.

This quick installation guide explains how to install the iBBU06 on the MegaRAID SAS 8708EM2 RAID controller. It also explains how to connect the iBBU06 remotely.

LSI provides a family of MegaRAID iBBUs for use with its high-performance MegaRAID RAID controllers. The LSI MegaRAID iBBUs provide an inexpensive alternative to using an uninterruptible power supply (UPS) and a second level of fault tolerance when used with a UPS.

Figure 1 shows the front view and the rear view of the iBBU06. The front view is the side that you can see after you install the iBBU06 on the RAID controller. Note that iBBU06 combines a battery pack with a daughtercard. iBBU06 uses screws and standoffs to connect to the controller.

Figure 1 Front View and Rear View of the iBBU06



1. J4 battery pack harness connector
2. J5 board-to-board connector
3. J2 connector
4. Battery pack harness connector

Note: For more information about this battery, see the *Intelligent Battery Backup Units for 1078-based MegaRAID Products User's Guide*.

Installing the iBBU06 on the SAS 8708EM2 RAID Controller

CAUTION Electrostatic discharge can damage the iBBU06 and the MegaRAID SAS RAID controller. Make sure that you install the iBBU06 at an ESD-safe workstation that meets the requirements of EIA-625 – "Requirements For Handling Electrostatic Discharge Sensitive Devices." When you install the iBBU06, follow the ESD-recommended practices in the latest revision of IPC-A-610.

Follow these steps to install the iBBU06 on the SAS 8708EM2 RAID controller. The battery backup unit is installed on the front side of the controller.

Step 1 Ground yourself, and remove the iBBU06 daughter card from the package.

WARNING There is danger of an explosion if the battery is incorrectly replaced. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

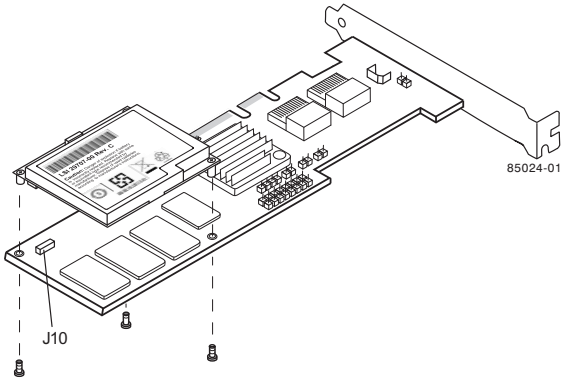
Step 2 Insert the battery pack harness connector at the end of the colored wires into the 5-pin J4 connector on the rear side of the iBBU06.

Step 3 Place the iBBU06 front-side-up on a flat, clean, static-free surface.

Step 4 Place the RAID controller front-side up on a flat, clean, static-free surface.

Step 5 Hold the iBBU06 daughtercard so that the battery side is up and the J5 connector lines up with the J10 BBU connector on the RAID controller, as shown in Figure 2.

Figure 2 Installing the iBBU06 Daughtercard on the SAS 8708EM2 RAID Controller



Step 6 Carefully press the iBBU06 onto the RAID controller so that the two connectors are firmly joined.

Step 7 Secure the iBBU06 to the RAID controller with the screws and the standoffs in the three screwholes.

The standoffs are threaded at both ends, and a screw goes into each end.

Step 8 Use the Phillips-head screws that are provided to secure the iBBU06 to the RAID controller.

CAUTION Center the screwdriver carefully to avoid stripping the screw heads. Do not over-tighten the screws.

Step 9 Install the RAID controller in a PCI Express slot in the computer.

Connecting the iBBU06 Remotely to the 8708EM2 RAID Controller

You can connect the iBB06 remotely to the 8708EM2 RAID controller. Use the supplied 20-pin cable to connect the iBBU06 to a RAID controller.

Because server chassis design and workstation chassis design vary from vendor to vendor, there is no standard mounting option that is compatible with the various system configurations.

Therefore, the iBBU06 battery kit contains only the battery and the cable, allowing value-added reseller's (VAR) and chassis manufacturers to customize the location of the remote battery to provide the most flexibility within various environments.

Follow these steps to install the iBBU06 remotely to the RAID controller.

Step 1 Ground yourself, and remove the iBBU06 from the package.

Step 2 Use the three Phillips-head screws that are provided to secure the iBBU06 to the motherboard or the server chassis.

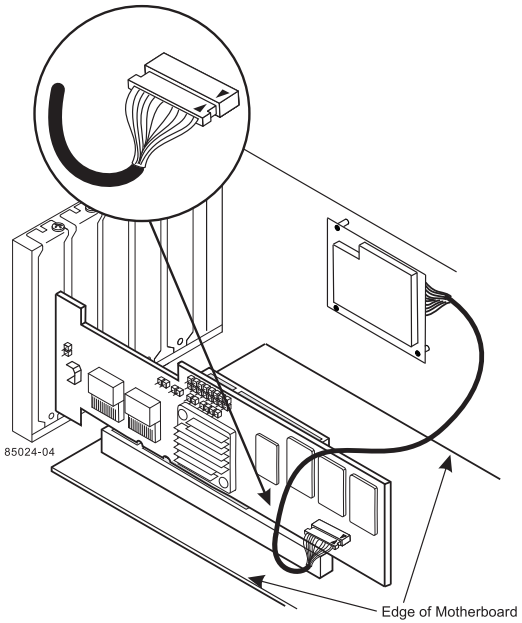
Step 3 Insert the battery pack harness connector at the end of the colored wires into the J4 connector on the rear side of the iBBU06.

Step 4 Connect the J2 connector on the iBBU06 to the J10 battery backup connector of the RAID controller, as shown in Figure 3.

The iBBU06 does not connect directly to the MegaRAID controllers. Instead, it uses the supplied 20-pin, 10-inch cable to connect the iBBU06 to the RAID controller.

There are black triangles on the connectors to help you install them properly. Insert the cable connectors into the controller connector and the iBBU connector so that the black triangles are aligned, as shown in Figure 3.

Figure 3 Connecting the iBBU06 to the 8708EM2 RAID Controller



Technical Support

For assistance in installing, configuring, or running your iBBU06, contact LSI Customer and Technical Support representative:

Phone Support:

1-800-633-4545 (North America)

Web Site:

http://www.lsi.com/support

Part Number: 34229-00 Rev. B, December 2008

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

http://www.lsi.com