MegaRAID[®] iBBU05 Battery Backup Unit



Quick Installation Guide

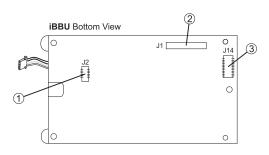
Thank you for purchasing the LSI MegaRAID NiMH intelligent Battery Backup Unit 05 (iBBU05). The iBBU05 is designed for use on MegaRAID SAS RAID controllers. It protects the integrity of the cached data on a MegaRAID controller for up to 72 hours in the event of a complete AC power failure or a brief power outage.

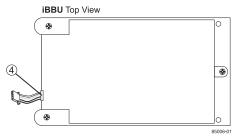
This quick installation guide explains how to install the iBBU05 on the MegaRAID SAS 8704ELP, SAS 8708ELP, and SAS 8888ELP controllers.

LSI provides a family of MegaRAID intelligent battery backup units (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 in conjunction with a UPS.

Figure 1 shows the top view and the bottom view of the iBBU05, the M2.50-0.45 x 5mm screws, and the 6mm standoffs. (The "top" side is the side that you can see after you install the LSIiBBU05 on the RAID controller.) Note that this unit combines a battery pack with a daughtercard.

Figure 1 LSIiBBU05 and Components





- 1 J2 Battery Pack Harness Connector
- 2 J1 Connector
- 3 J14 Board-to-board Connector
- 4 Battery Pack Harness

Important: For detailed information about this battery, see the Intelligent Battery Backup Unit for 1078-based MegaRAID Products Guide.

Installing the iBBU05 on the SAS 8704ELP or SAS 8708ELP RAID Controller



Electrostatic discharge can damage the iBBU05 and the MegaRAID SAS RAID controller. Make sure that you install the iBBU05 at an ESD-safe workstation that meets the requirements of EIA-625 – "Requirements For Handling Electrostatic Discharge Sensitive Devices." When you install the iBBU05, follow the ESD-recommended practices in the latest revision of IPC-A-610.

Follow these steps to install the iBBU05 on the SAS 8704ELP RAID controller or on the SAS 8708ELP RAID controller. The battery is installed on the top of the controller.

Step 1 Ground yourself, and remove the iBBU05 daughter card from the package.

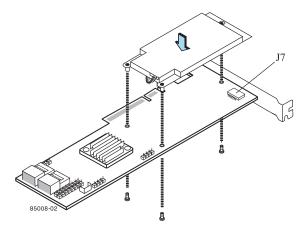


There is danger of an explosion if the battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- Step 2 Insert the battery pack harness connector at the end of the colored wires into the 5-pin J2 connector on the backside of the iBBU05.
- Step 3 Place the iBBU05 front-side-up on a flat, clean, static-free surface.
- Step 4 With the front side up, place the MegaRAID SAS RAID controller on a flat, clean, static-free surface.
- Step 5 Hold the iBBU05 daughtercard so that the battery side is up and the J14 connector lines up with the J7 BBU connector on the SAS 8704ELP RAID

controller or on the SAS 8708ELP RAID controller, as shown in Figure 2.

Figure 2 Installing the iBBU05 Daughtercard on the SAS 8708ELP RAID Controller



Step 6 Carefully press the iBBU05 onto the RAID controller so that the two connectors are firmly joined.

Step 7 Secure the iBBU05 to the RAID controller with the M2.50-0.45 x 5mm screws and the 6mm standoffs in the three screwholes.

The standoffs are threaded at both ends, and a M2.50-0.45 x 5mm screw goes into each end.

Step 8 Use the Phillips-head screws that are provided to secure the iBBU05 to the RAID controller.



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.

Installing the iBBU05 on the MegaRAID SAS 8888ELP RAID Controller

The iBBU05 does not mount directly to the SAS 8888ELP RAID controller. Instead, use the supplied 12-inch cable to connect the iBBU05 to a RAID controller. The battery backup unit must be mounted inside the chassis within 12 inches of the RAID controller.

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

Therefore, the iBBU05 battery kit contains only the battery and the cable, allowing VAR's and chassis manufacturers to

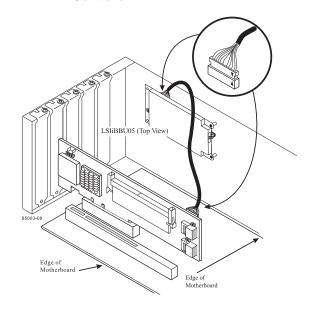
customize the location of the remote battery to provide the most flexibility within various environments.

Follow these steps to install the iBBU05 remotely to the SAS 8888ELP RAID controller.

- Step 1 Ground yourself, and remove the iBBU05 from the package.
- Step 2 Use the three Phillips-head screws that are provided to secure the iBBU05 to the motherboard or the server chassis
- Step 3 Insert the battery pack harness connector at the end of the colored wires into the J2 connector on the bottom side of the iBBU05.
- Step 4 Connect the J1 connector on the iBBU05 to the J10 battery backup connector on the backside of the SAS 8888ELP RAID controller, as shown in Figure 3.

The iBBU05 does not connect directly to the MegaRAID controllers. Instead, it uses the supplied 20-pin, 10-inch cable to connect to a 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 the example in Figure 3.

Figure 3 Connecting the iBBU05 on the MegaRAID SAS 8888ELP RAID Controller



TECHNICAL SUPPORT

For assistance in installing, configuring, or running your SAS RAID controller, contact LSI Customer and Technical Support.

Phone Support:

1-800-633-4545 (North America)

Web Site:

http://www.lsi.com/support



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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

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