

# MegaRAID<sup>®</sup> iBBU07 Intelligent Battery Backup Unit



## Quick Installation Guide

The LSI MegaRAID LSiBBU07 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 case of a complete AC power failure or a brief power outage.

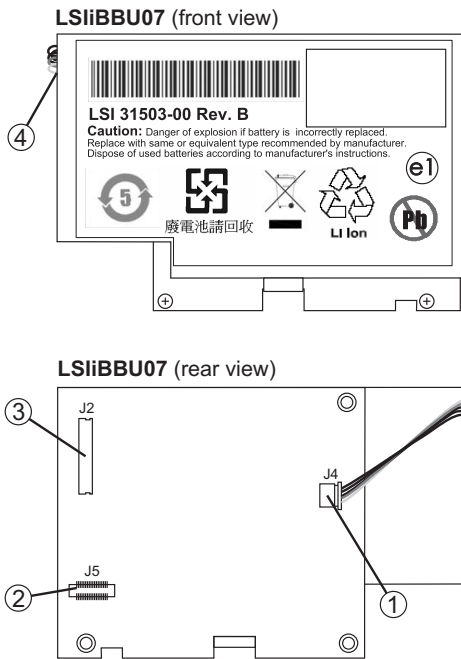
This quick installation guide explains how to install the iBBU07 directly and indirectly on your MegaRAID controller. You can install the iBBU07 on the following controllers:

- MegaRAID SAS 8880EM2
- MegaRAID SAS 9260-4i/8i and SAS 9260DE-8i
- MegaRAID SAS 9280-8i and SAS 9280DE-8i

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 iBBU07. The front view is the side that you can see after you install the iBBU07 on the RAID controller. Note that iBBU07 combines a battery pack with a daughtercard. iBBU07 uses screws and standoffs to connect to the controller.

Figure 1 Front View and Rear View of the iBBU07



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

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

**Note:** The procedures in this guide show iBBU installation on the SAS 8880EM2 RAID controller. You can connect the iBBU07 to the MegaRAID SAS 9260 and SAS 9280 RAID controllers in the same way as the SAS 8880EM2. For information about the BBU connectors on these controllers, see the *MegaRAID 6Gb/s SAS RAID Controllers User's Guide*.

### Installing the iBBU07 Directly on the MegaRAID SAS RAID Controller



Electrostatic discharge can damage the iBBU07 and the MegaRAID SAS RAID controller. Make sure that you install the iBBU07 at an ESD-safe workstation that meets the requirements of EIA-625 – "Requirements For Handling Electrostatic Discharge Sensitive Devices." When you install the iBBU07, follow the ESD-recommended practices in the latest revision of IPC-A-610.

**Note:** You can install the iBBU07 directly on the MegaRAID SAS 9260 and SAS 9280 RAID controllers in the same way as the SAS 8880EM2. For information about the BBU connectors on the controllers, see the *MegaRAID 6Gb/s SAS RAID Controllers User's Guide*.

Follow these steps to install the iBBU07 on the SAS 8880EM2 RAID controller. The battery backup unit is installed on the front side of the controller.

**Step 1** Ground yourself, and remove the iBBU07 daughtercard from the package.

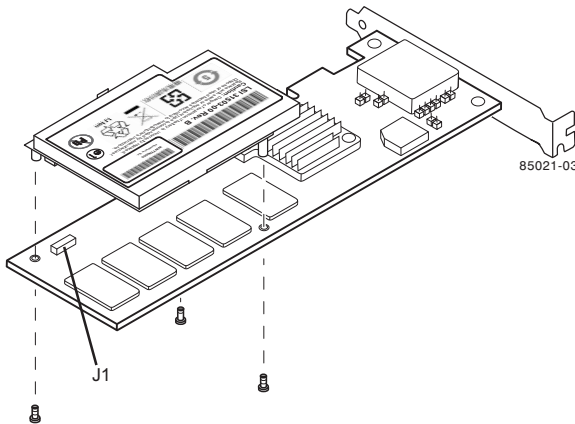


There is danger of an explosion if the battery is incorrectly replaced. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- Step 2** Insert the battery pack harness connector at the end of the colored wires into the 5-pin J4 connector on the backside of the iBBU07.
- Step 3** Place the iBBU07 front-side-up on a flat, clean, static-free surface.
- Step 4** With the front side up, place the RAID controller on a flat, clean, static-free surface.
- Step 5** Hold the iBBU07 daughtercard so that the battery side is up and the J5 connector lines up with the J1 BBU connector on the SAS 8880EM2 RAID controller, as shown in [Figure 2](#).

**Note:** See the *MegaRAID 6Gb/s SAS RAID Controllers User's Guide* for the BBU connectors to use on the other RAID controllers.

**Figure 2** Installing the iBBU07 Daughtercard on the SAS 8880EM2 RAID Controller



- Step 6** Carefully press the iBBU07 onto the RAID controller so that the two connectors are firmly joined.
- Step 7** Secure the iBBU07 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 iBBU07 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.

## Connecting the iBBU07 Remotely to the MegaRAID SAS RAID Controller

**Note:** This procedure shows installation of the iBBU07 on the MegaRAID 8880EM2 RAID controller. You can install the iBBU07 on the MegaRAID SAS 9260 and SAS 9280 RAID controllers in the same way.

You can connect the iBBU07 remotely to the SAS RAID controllers. Use the supplied 20-pin cable to connect the iBBU07 to your RAID controller.

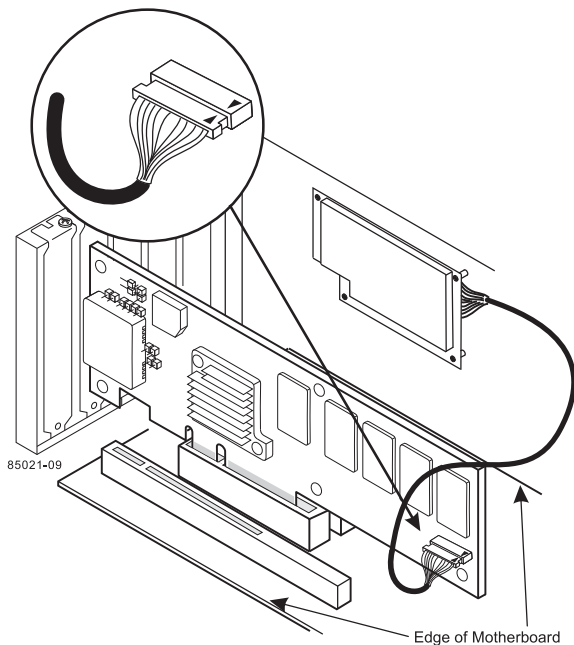
Because server chassis design and workstation chassis design vary from vendor to vendor, there is no standard mounting option that is compatible with the various system configurations.

Therefore, the iBBU07 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 iBBU07 remotely to the RAID controller.

- Step 1** Ground yourself, and remove the iBBU07 from the package.
- Step 2** Use the three Phillips-head screws that are provided to secure the iBBU07 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 iBBU07.
- Step 4** Connect one end of the 20-pin, 10-inch cable to the J2 connector on the iBBU07 and the other end to the J10 battery backup connector of the SAS 8880EM2 RAID controller, as shown in [Figure 3](#).  
There are black triangles on the connectors to help you install them properly. Insert the cable connectors so that the black triangles are aligned.

**Figure 3 Connecting the iBBU07 Remotely to the SAS 8880EM2 RAID Controller**



## Technical Support

For assistance installing, configuring, or running your LSiBBU07, contact LSI Technical Support. Click the following link to access the LSI Technical Support page for storage and board support:

[http://www.lsi.com/support/storage/tech\\_support/index.html](http://www.lsi.com/support/storage/tech_support/index.html)

From this page, you can send an email or call Technical Support, or submit a new service request and view its status.

**Note:** Record your controller serial number in a safe location in case you need to contact LSI about your RAID controller.

### E-mail:

[http://www.lsi.com/support/support\\_form.html](http://www.lsi.com/support/support_form.html)

### Phone Support:

[http://www.lsi.com/support/storage/phone\\_tech\\_support/index.html](http://www.lsi.com/support/storage/phone_tech_support/index.html)

**Note:** The international toll-free number does not require country-specific access codes.



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