

MegaRAID® LSIiBBU07 Intelligent Battery Backup Unit

Quick Installation Guide

October 2011

34231-01, Rev. A

Revision History

Version and Date	Description of Changes		
34231-01, Rev. A, October 2011	Converted to the new template. Added a section for connecting an LSIiBBU07 unit on a remote mount board by a cable to a board-to-board adapter card on a RAID controller.		
34231-00, Rev. D, September 2010	Listed the RAID controllers that use the LSIiBBU07 unit, and updated the installation procedures.		
34231-00, Rev. C, August 2009	Added a section about remote connection using a daughter card, and updated the technical support information.		
34231-00, Rev. B, December 2008	Added the procedure for connecting the LSIiBBU07 unit remotely.		
34231-00, Rev. A, August 2007	Initial release.		

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MegaRAID LSIiBBU07 Intelligent Battery Backup Unit Quick Installation Guide

Thank you for purchasing the LSI® MegaRAID® LSIBBU07 product. Before you install your RAID controller, take a few minutes to read this quick installation guide. This guide explains how to install the LSIBBU07 unit directly on your RAID controller or connect the LSIBBU07 unit remotely to the RAID controller.

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 with a UPS.

If you need more information about any topic covered in this guide, refer to the related documents on your MegaRAID Universal Software Suite CD.

Product Overview

The LSIiBBU07 unit is a lithium ion (LiON), intelligent battery backup unit that protects the integrity of the cached data on a MegaRAID controller for up to 72 hours (depending on the derated retention time selected) in the event of a complete AC power failure or a brief power outage. The LSIiBBU07 unit is based on Lithium ion (LiON) battery cell technology.

You can connect the LSIiBBU07 unit in the following ways:

- Mode 1: Attach the LSIiBBU07 unit directly on the following MegaRAID SAS RAID controllers:
 - MegaRAID SAS 8880EM2
 - MegaRAID SAS 9260-4i
 - MegaRAID SAS 9260-8i
 - MegaRAID SAS 9260DE-8i
 - MegaRAID SAS 9261-8i
 - MegaRAID SAS 9280-4i4e
 - MegaRAID SAS 9280-8e
 - MegaRAID SAS 9280DE-8e
- **Mode 2:** Connect a 12-in. cable (sold separately in a Remote Battery Kit) between a remote LSIiBBU07 unit and the remote BBU connector on your RAID controller. Reinstall the RAID controller, and mount the LSIiBBU07 unit on the system chassis or motherboard. Use this mode with the following MegaRAID SAS RAID controllers:
 - MegaRAID SAS 9260-16i
 - MegaRAID SAS 9261-8i
 - MegaRAID SAS 9280-4i4e
 - MegaRAID SAS 9280-8e
 - MegaRAID SAS 9280DE-8e
 - MegaRAID SAS 9280-16i4e
 - MegaRAID SAS 9280-24i4e
- Mode 3: Connect a 12-in. cable between a remote LSIiBBU07 unit and a board-to-board cable adapter card on the RAID controller. Reinstall the RAID controller, and mount the LSIiBBU07 unit on the system chassis or motherboard. Use this mode with the following MegaRAID SAS RAID controllers:
 - MegaRAID SAS 8880EM2
 - MegaRAID SAS 9261-8i
 - MegaRAID SAS 9280-4i4e

- MegaRAID SAS 9280-8e
- MegaRAID SAS 9280DE-8e
- **Mode 4:** Connect a 12-in. cable between a LSIiBBU07 unit on a remote mount board and a board-to-board cable adapter card on the RAID controller. Reinstall the RAID controller, and then install the remote mount board. Use this mode with the following MegaRAID SAS RAID controllers:
 - MegaRAID SAS 8880EM2
 - MegaRAID SAS 9260-4i
 - MegaRAID SAS 9260-8i
 - MegaRAID SAS 9261-8i
 - MegaRAID SAS 9280-4i4e
 - MegaRAID SAS 9280-8e

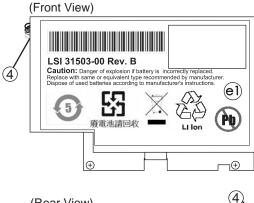


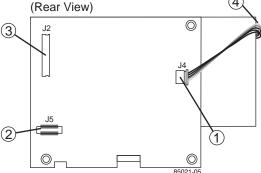
WARNING The battery used in this device might present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100 °C, or incinerate. Dispose of used battery properly. Keep away from children.

Front View and Rear View of the LSIiBBU07 Unit

The following figure shows the front view and the rear view of the LSIiBBU07 unit. The front view is the side that you can see after you install the LSIiBBU07 unit on the RAID controller. Note that the LSIiBBU07 unit combines a battery pack with a daughter card. The unit uses screws and standoffs to connect to the RAID controller.

Figure 1 Front View and Rear View of the LSIiBBU07 Unit





- 1. J4 Battery Pack harness Connector
- 2. J5 Board-to-Board Connector

- 3. J2 Remote Connector
- 4. Battery Pack Harness



NOTE For technical specifications for this battery backup unit, refer to the *Cache Backup Products for SAS+SATA RAID Controllers User Guide*.

Installing a LSIiBBU07 Unit Directly on a MegaRAID SAS RAID Controller

This section describes how to install the LSIiBBU07 unit directly on the SAS 8880EM2 RAID controller. The procedure in this section shows the SAS 8880EM2 RAID controller; you can connect the LSIiBBU07 unit in the same way to the other MegaRAID SAS RAID controllers that use this unit. For information about the BBU connectors on these controllers, refer to the MegaRAID 6Gb/s SAS RAID Controllers User Guide on the MegaRAID Universal Software Suite CD

Perform the following tasks:

- 1. Remove the RAID controller from the computer. For this procedure, see Removing the RAID Controller from the Computer.
- 2. Install the LSIiBBU07 Unit on the RAID controller. For this procedure, see Installing the LSIiBBU07 Unit on the RAID Controller on page 6.
- 3. Reinstall the RAID controller. For this procedure, see Reinstalling the RAID Controller on page 7.



CAUTION Electrostatic discharge (ESD) can damage the LSIiBBU07 unit and the MegaRAID SAS RAID controller. Make sure that you install the LSIiBBU07 unit at an ESD-safe workstation that meets the requirements of the Electronic Industries Alliance (EIA) EIA-625 (Requirements for Handling Electrostatic Discharge Sensitive Devices). When you install the LSIiBBU07 unit, follow the ESD-recommended practices in the latest revision of the Inter-Process Communication (IPC®) IPC-A-610 (Acceptability of Electronic Assemblies).



WARNING Ground yourself, and disconnect the power cords from the system before you remove the cover. Also, make sure that the system is grounded.

Removing the RAID Controller from the Computer

Follow these steps to remove the RAID controller from the computer.

- 1. Turn off the power to the computer, and unplug the power cords.
- 2. Remove the cover from the computer, using the instructions in the system user manual, to allow access to the controller.
- 3. Ground yourself before you touch the controller.
- 4. Unplug all cables from the controller, remove the screw attaching the bracket to the computer chassis, and carefully remove the controller from the slot.
- 5. Place the controller on a flat, clean, static-free surface, and continue with the next procedure.

Installing the LSIiBBU07 Unit on the RAID Controller

Follow these steps to install the LSIiBBU07 unit on the front of the SAS 8880EM2 RAID controller.



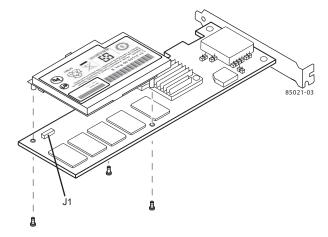
WARNING An explosion could occur if the battery is replaced incorrectly. Replace the battery with the same type of battery or an equivalent type of battery, as recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- 1. Ground yourself, and make sure that the system is grounded.
- 2. Remove the LSIiBBU07 daughter card from the package.
- 3. Insert the battery pack harness connector at the end of the wires into the 5-pin J4 connector on the back side of the LSIiBBU07 unit, as shown in the rear view in Figure 1.
- 4. Place the LSIiBBU07 unit with its front side facing upward on a flat, clean, static-free surface.
- 5. Place the RAID controller with the front side facing upward on a flat, clean, static-free surface.
- 6. Hold the LSIiBBU07 daughter card so that the battery side is facing up and the J5 connector lines up with the J1 BBU connector on the SAS 8880EM2 RAID controller, as shown in the following figure.



NOTE Refer to the *MegaRAID 6Gb/s SAS RAID Controllers User Guide* for the BBU connectors to use on the other RAID controllers that use the LSIiBBU07 unit directly.

Figure 2 Installing the LSIiBBU07 Daughter Card on the SAS 8880EM2 RAID Controller



- 7. Carefully press the LSIiBBU07 daughter card onto the RAID controller so that the two connectors are joined firmly.
- 8. Secure the LSIiBBU07 daughter card to the RAID controller with the screws and the standoffs in the three screw holes, and continue with the following procedure.

The standoffs are threaded at both ends, and a screw fits into each end. The screw threads from the back of the controller board into the board-to-board standoff on the bottom of the LSIiBBU07 daughter card.



NOTE Center the screwdriver carefully to avoid stripping the screw heads. Do not overtighten the screws.

Reinstalling the RAID Controller

Follow these steps to reinstall the RAID controller on the motherboard.

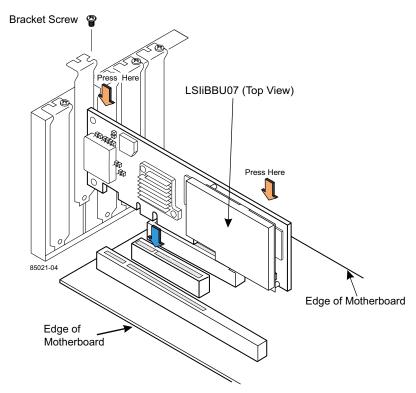
- 1. With the power to the chassis still turned off and the power cords unplugged, make sure that the chassis is grounded and has no AC power.
- 2. Insert the RAID controller in a PCI Express® slot on the motherboard, as shown in the following figure.



NOTE Some PCI Express slots support only PCI Express graphics cards; if a RAID controller is installed in one of these slots, it will not function. Refer to your computer documentation for information about the PCI Express slot.

- 3. Press down gently, but firmly, to seat the card correctly in the slot.
- 4. Secure the controller to the computer chassis with the bracket screw.

Figure 3 Reinstalling the RAID Controller



- 5. Attach the cables from the external port connectors to the drives.
- 6. Replace the computer cover, and reattach the power cords.
- 7. Turn on the power to the computer.

Connecting a Remote LSIiBBU07 Unit to a MegaRAID SAS RAID Controller

The following sections describe the three methods you can use to connect a LSIiBBU07 unit remotely to your MegaRAID SAS RAID controller using the 12-in., 20-pin cable (sold separately in a Remote Battery Kit). The methods are as follows:

- 1. Connect a 12-in. cable between a remote LSIiBBU07 unit and the remote BBU connector on your RAID controller. Reinstall the RAID controller, and mount the LSIiBBU07 unit on the system chassis or motherboard. See Connecting a Remote LSIiBBU07 Unit to the BBU Connector on the RAID Controller.
- 2. Connect a 12-in. cable between a remote LSIiBBU07 unit and a board-to-board cable adapter card on the RAID controller. Reinstall the RAID controller, and mount the LSIiBBU07 unit on the system chassis or motherboard. See Connecting a Remote LSIiBBU07 Unit on the System Chassis to a Board-to-Board Cable Adapter Card on a RAID Controller on page 11.
- 3. Connect a 12-in. cable between an LSIiBBU07 unit that is on a remote mount board and a board-to-board cable adapter card on the RAID controller. Reinstall the RAID controller, and then install the remote mount board. See Connecting an LSIiBBU07 Unit from a Remote Mount Board to a Board-to-Board Adapter Card on a RAID Controller on page 15.

The procedures in each section show how to connect the LSIiBBU07 unit remotely to a MegaRAID SAS RAID controller. You can connect the LSIiBBU07 unit in the same way to the other MegaRAID controllers that support each method of connection. See Product Overview on page 3 for information about which RAID controllers support each method of remote connection.

For information about the BBU connectors on the RAID controllers, refer to the MegaRAID 6Gb/s SAS RAID Controllers User Guide on the MegaRAID Universal Software Suite CD.

Connecting a Remote LSIiBBU07 Unit to the BBU Connector on the RAID Controller

This section describes how to connect a remote LSIiBBU07 unit to the remote BBU connector on the SAS 9280-4i4e RAID controller. You can connect the LSIiBBU07 unit in the same way to the other MegaRAID controllers that support this method of connection.

Perform the following tasks.



NOTE Ground yourself, and disconnect the power cords from the system before you remove the cover. Also, make sure that the system is grounded.

- 1. Remove the controller from the computer. For this procedure, see Removing the RAID Controller from the Computer on page 9.
- 2. Mount the LSIiBBU07 unit to the chassis.
- 3. Connect the controller to the remote LSliBBU07 unit using the 12-in., 20-pin cable and the BBU connector on the RAID controller (the LSliBBU07 unit must be mounted inside the chassis within 10 in. of the controller). For this procedure, see Connecting the Remote LSliBBU07 Unit on page 9.
- 4. Reinstall the controller. For this procedure, see Reinstalling the RAID Controller on the Motherboard on page 10.



NOTE Because server and workstation chassis vary from vendor to vendor, no standard mounting option is compatible with the various system configurations. Therefore, the LSIiBBU07 battery kit contains only the battery, daughter card, and standoff, which enables authorized resellers and chassis manufacturers to customize the location of the remote battery to provide the most flexibility within various environments.

Removing the RAID Controller from the Computer

Follow these steps to remove the RAID controller from the computer.

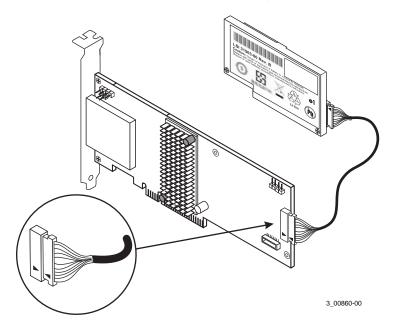
- 1. Turn off the power to the computer, and unplug the power cords.
- 2. Remove the cover from the computer, using the instructions in the system user manual, to allow access to the controller.
- 3. Ground yourself before you touch the controller.
- 4. Unplug all cables from the controller, remove the screw attaching the bracket to the computer chassis, and carefully remove the controller from the slot.
- 5. Place the controller on a flat, clean, static-free surface, and continue with the next procedure.

Connecting the Remote LSIiBBU07 Unit

Follow these steps to connect the remote LSIiBBU07 unit to the BBU connector on the RAID controller.

- 1. Ground yourself, and remove the LSIiBBU07 unit from the package.
- 2. Use the three Phillips screws that are provided to secure the LSIiBBU07 unit to the motherboard or the server chassis.
- 3. Insert the battery pack harness connector into the J4 connector on the back side of the LSIiBBU07, as shown in Figure 1.
- 4. Connect one end of the 12-in., 20-pin cable to the J2 connector on the LSIiBBU07 daughter card and the other end of the cable to the J6B2 battery backup connector of the SAS 9280-8e RAID controller, as shown in the following figure.
 - Black triangles on the connectors help you install the connectors correctly. Align the black triangles on the cable connectors to make sure that they are connected correctly.

Figure 4 Connecting the LSIiBBU07 Unit Remotely to the MegaRAID SAS 9280-8e RAID Controller



Reinstalling the RAID Controller on the Motherboard

Follow these steps to reinstall the RAID controller on a motherboard.

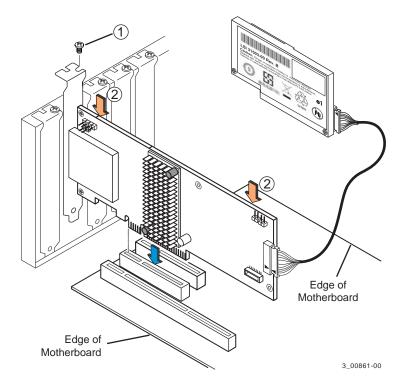
- 1. With the power to the chassis still turned off and the power cords unplugged, make sure that the chassis is grounded and has no AC power.
- 2. Insert the RAID controller in a PCI Express slot on the motherboard, as shown in the following figure.



NOTE Some PCI Express slots support only PCI Express graphics cards; if a RAID controller is installed in one of these slots, it will not function. Refer to your computer documentation for information about the PCI Express slot.

- 3. Press down gently, but firmly, to seat the card correctly in the slot.
- 4. Secure the controller to the computer chassis with the bracket screw.

Figure 5 Reinstalling the RAID Controller



- 5. Replace the computer cover, and reattach the power cords.
- 6. Turn on the power to the computer.

Adapter Card on a RAID Controller

Connecting a Remote LSIiBBU07 Unit on the System Chassis to a Board-to-Board Cable Adapter Card on a RAID Controller

This section describes how to connect the remote LSIiBBU07 unit mounted on the system chassis to a board-to-board cable adapter card on the SAS 8880EM2 RAID controller. The remote LSIiBBU07 unit connects by a cable to the adapter card. You can connect the LSIiBBU07 unit in the same way to the other MegaRAID controllers that support this method of connection.



WARNING Ground yourself, and disconnect the power cords from the system before you remove the cover. Also, make sure that the system is grounded.

Perform the following tasks:

- 1. Remove the RAID controller from the computer. For this procedure, see Removing the RAID Controller from the Computer.
- 2. Install the board-to-board adapter card on the RAID controller. For this procedure, see Installing the Board-to-Board Cable Adapter Card on the RAID Controller on page 12.
- 3. Mount the LSIiBBU07 unit to the chassis.
- 4. Connect the cable between the board-to-board adapter card on the RAID controller and the LSIiBBU07 unit on the system chassis. For this procedure, see Connecting the Cable between the Board-to-Board Cable Adapter Card on the RAID Controller and the Remote LSIiBBU07 Unit on the System Chassis on page 13.
- 5. Reinstall the RAID controller. For this procedure, see Reinstalling the RAID Controller on page 14.



NOTE Because server and workstation chassis vary from vendor to vendor, no standard mounting option is compatible with the various system configurations. Therefore, the LSIiBBU07 battery kit contains only the battery backup unit, the daughter card, and the standoff, which enables authorized resellers and chassis manufacturers to customize the location of the remote battery to provide the most flexibility within various environments.



WARNING Ground yourself, and disconnect the power cords from the system before you remove the cover. Also, make sure that the system is grounded.

Removing the RAID Controller from the Computer

Follow these steps to remove the RAID controller from the computer.

- 1. Turn off the power to the computer, and unplug the power cords.
- 2. Remove the cover from the computer, using the instructions in the system user manual, to allow access to the controller.
- 3. Ground yourself before you touch the controller.
- 4. Unplug all cables from the controller, remove the screw attaching the bracket to the computer chassis, and carefully remove the controller from the slot.
- 5. Place the controller on a flat, clean, static-free surface, and continue with the next procedure.

Installing the Board-to-Board Cable Adapter Card on the RAID Controller

Follow these steps to install the board-to-board cable adapter card on the controller, as shown in the following figure.

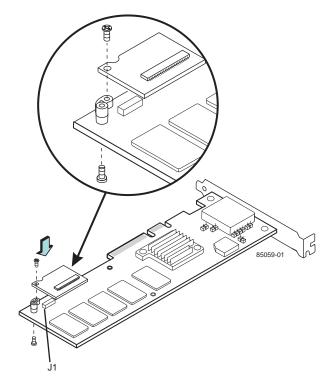
- 1. With the controller on a flat, clean, static-free surface, ground yourself.
- 2. Remove the board-to-board cable adapter card, standoff, and screws from the package.
- 3. Place the standoff on the controller so that the bottom side is positioned over the screw hole next to the J1 connector on the controller.
- 4. Use one of the screws to secure the standoff to the controller.



NOTE Center the screwdriver carefully to avoid stripping the screw head. Do not overtighten the screws.

- 5. Hold the adapter card so that the J1 board-to-board connector on the adapter card lines up with the J1 board-to-board connector on the RAID controller.
- 6. Carefully press the J2 connector on the adapter card into the J1 connector on the controller so that the two connectors are joined firmly.
 - The connectors fit only when they are in the correct alignment.
- 7. Use the other screw to secure the adapter card to the controller, and continue with the next procedure.

Figure 6 Connecting the Board-to-Board Cable Adapter Card to the RAID Controller



Connecting the Cable between the Board-to-Board Cable Adapter Card on the RAID Controller and the Remote LSIiBBU07 Unit on the System Chassis

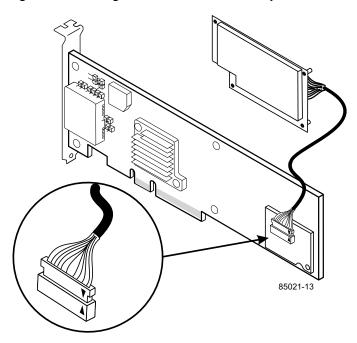
Follow these steps to connect the cable between the adapter card on the RAID controller and the LSIiBBU07 unit.

- 1. Mount the LSIiBBU07 unit to the chassis of your computer based on the location and the type of mounting option.
- 2. With the controller on a flat, clean, static-free surface, ground yourself, and make sure that the system is grounded.
- 3. Remove the cable included in the Remote Battery Kit (sold separately).
- 4. Insert one end of the cable into the 20-pin J2 connector on the LSliBBU07 unit and the other end of the cable into the 20-pin J1 connector on the board-to-board cable adapter card, as shown in the following figure.
 - Black triangles on the connectors help you install the connectors correctly. Align the black triangles on the cable connectors to make sure that they are connected correctly.



CAUTION Damage to the battery backup unit will occur when power is applied to the system if the cable assembly connectors are installed backwards in either the JT1 board-to-board connector or the J2 battery connector. The cable connectors are polarized, and the keying features of the connector are designed to allow the connectors to be attached in only one orientation. The cable end inserts into the connector with only minimal resistance. Even with the keying features, if excessive force is used, it is possible to install these connectors incorrectly. To assist in correct alignment, the small triangles that designate pin 1 on each connector have been marked in black. Make sure that these triangles line up as shown in the illustrations. Also, the wire that connects to pin 1 of each end of the cable assembly is yellow on most LSI cables.

Figure 7 Connecting the LSIiBBU07 Unit Remotely to the RAID Controller



Reinstalling the RAID Controller

Follow these steps to install the RAID controller in the computer.

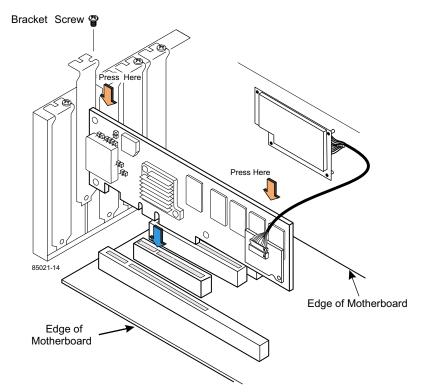
- 1. With the power to the chassis still turned off and the power cords unplugged, make sure that the chassis is grounded and has no AC power.
- 2. Insert the RAID controller in a PCI Express slot on the motherboard, as shown in the following figure.



NOTE Some PCI Express slots support only PCI Express graphics cards; if a RAID controller is installed in one of these slots, it will not function. Refer to your computer documentation for information about the PCI Express slot.

3. Press down gently, but firmly, to seat the card correctly in the slot.

Figure 8 Reinstalling the RAID Controller



- 4. Secure the controller to the computer chassis with the bracket screw.
- 5. Attach the cables from the external port connectors to the drives.
- 6. Replace the computer cover, and reattach the power cords.
- 7. Turn on the power to the computer.



NOTE Refer to the *MegaRAID SAS Software User Guide* for information about running the RAID configuration utility and installing software drivers.

Connecting an LSIiBBU07 Unit from a Remote Mount Board to a Board-to-Board Adapter Card on a RAID Controller

This section describes how to connect an LSIiBBU07 unit on a remote mount board by cable to a board-to-board adapter card on your RAID controller. This procedure shows the SAS 8880EM2 RAID controller; you can connect the LSIiBBU07 unit in the same way to the other MegaRAID controllers that support this method of connection



NOTE The remote mount board can hold up to two LSIiBBU07 units. The procedure in this section shows the remote mount board with one LSIiBBU07 unit.

Perform the following tasks:

- Remove the RAID controller from the computer. For this procedure, see Removing the RAID Controller from the Computer.
- 2. Install the board-to-board adapter card on the RAID controller. For this procedure, see Installing the Board-to-Board Cable Adapter Card on the RAID Controller on page 16.
- 3. Connect the cable between the board-to-board adapter card on the RAID controller and the LSIiBBU07 unit on the system chassis. For this procedure, see Connecting the LSIiBBU07 Unit on the Remote Mount Board to the Board-to Board Cable Adapter Card on the RAID Controller on page 17.
- 4. Reinstall the RAID controller. For this procedure, see Reinstalling the RAID Controller on page 18.
- 5. Install the remote mount board. For this procedure, see Installing the Remote Mount Board on page 19.



WARNING Ground yourself, and disconnect the power cords from the system before you remove the cover. Also, make sure that the system is grounded.

Removing the RAID Controller from the Computer

Follow these steps to remove the RAID controller from the computer.

- 1. Turn off the power, and unplug the power cords.
- 2. Ground yourself, and make sure that the system is grounded.
- 3. Remove the cover from the computer, using the instructions in the system user's manual, to allow access to the controller.
- 4. Unplug all cables from the controller, remove the screw that attaches the bracket to the computer chassis, and carefully remove the controller from the slot.
- 5. Place the controller on a flat, clean, static-free surface, and continue with the next procedure.

Installing the Board-to-Board Cable Adapter Card on the RAID Controller

Follow these steps to install the board-to-board cable adapter card on the controller, as shown in the following figure.

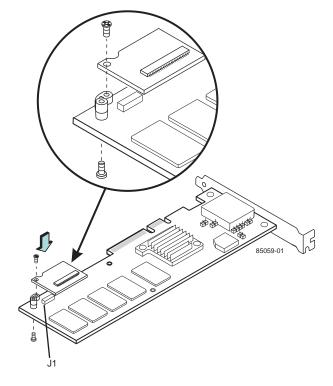
- 1. With the controller on a flat, clean, static-free surface, ground yourself, and remove the adapter card, standoff, and screws from the package.
- 2. Place the standoff on the controller so that the bottom side is positioned over the screw hole next to the J1 connector on the controller.
- 3. Use one of the screws to secure the standoff to the controller.



NOTE Center the screwdriver carefully to avoid stripping the screw head. Do not overtighten the screws.

- 4. Hold the adapter card so that the J2 board-to-board connector on the adapter card lines up with the J10 board-to-board connector on the RAID controller.
- 5. Carefully press the J2 connector on the adapter card into the J10 connector on the controller so that the two connectors are joined firmly.
 - The connectors fit only when they are in the correct alignment.
- 6. Use the other screw to secure the adapter card to the controller, and continue with the next procedure.

Figure 9 Connecting the Board-to-Board Cable Adapter Card to the RAID Controller



Connecting the LSIiBBU07 Unit on the Remote Mount Board to the Board-to Board Cable Adapter Card on the RAID Controller

Follow these steps to connect the cable between the LSIiBBU07 unit on the remote mount board and the board-to-board adapter card on the RAID controller.

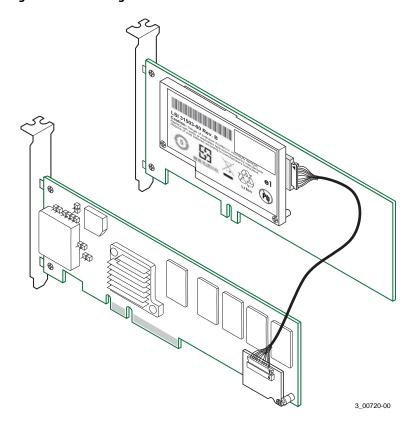
- 1. With the controller on a flat, clean, static-free surface, ground yourself, and make sure that the system is grounded.
- 2. Insert the 20-pin cable connector at one end of the 12-in. cable into the 20-pin J2 cable connector on the LSliBBU07 unit on the remote mount board and the 20-pin cable connector at the other end into the 20-pin J1 connector on the board-to-board adapter card on the RAID controller.

Black triangles on the connectors help you install the connectors correctly. Insert the cable connectors into the controller connector and the iBBU connector so that the black triangles are aligned, as shown in the following figure.



CAUTION Damage to the battery backup unit will occur when power is applied to the system if the cable assembly connectors are installed backwards in either the JT1 board-to-board connector or the J2 battery connector. The cable connectors are polarized, and the keying features of the connector are designed to allow the connectors to be attached in only one orientation. The cable end inserts into the connector with only minimal resistance. Even with the keying features, if excessive force is used, it is possible to install these connectors incorrectly. To assist in correct alignment, the small triangles that designate pin 1 on each connector have been marked in black. Make sure that these triangles line up as shown in the illustrations. Also, the wire that connects to pin 1 of each end of the cable assembly is yellow on most LSI cables.

Figure 10 Connecting the LSIiBBU07 Unit on the Remote Mount Board to the Adapter Card on the RAID Controller



Reinstalling the RAID Controller

Follow these steps to reinstall the RAID controller in the computer.

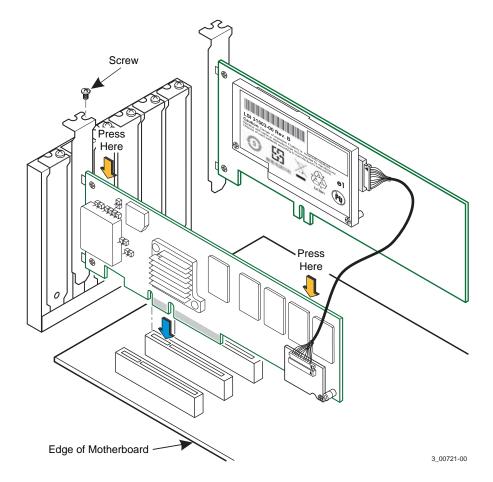
- 1. With the power to the chassis still turned off and the power cords unplugged, make sure that the chassis is grounded and has no AC power.
- 2. Insert the RAID controller into a PCI Express slot on the motherboard, as shown in the following figure.



NOTE Some PCI Express slots support only PCI Express graphics cards; if a RAID controller is installed in one of these slots, the controller does not function. Refer to your computer documentation for information about the PCI Express slot.

- 3. Press down gently, but firmly, to seat the controller correctly in the slot.
- 4. Secure the controller to the computer chassis with the bracket screw.

Figure 11 Reinstalling the RAID Controller



Card on a RAID Controller

Installing the Remote Mount Board

Follow these steps to install the remote mount board in the computer.

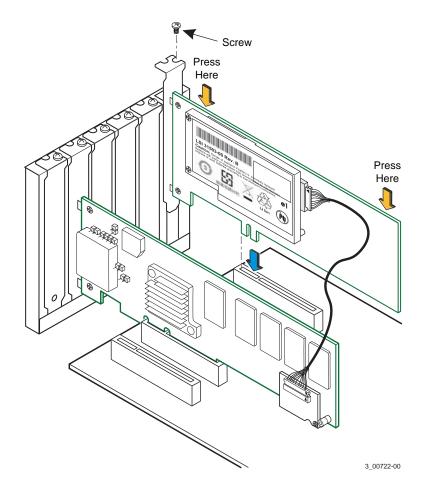
- 1. With the power to the chassis still turned off and the power cords unplugged, make sure that the chassis is grounded and has no AC power.
- 2. Insert the remote mount board in a PCI Express slot on the motherboard, as shown in the following figure.



NOTE Some PCI Express slots support only PCI Express graphics cards; if a RAID controller is installed in one of these slots, the controller does not function. Refer to your computer documentation for information about the PCI Express slot.

3. Press down gently, but firmly, to seat the board correctly in the slot.

Figure 12 Installing the Remote Mount Board



- 4. Secure the remote mount board to the computer chassis with the bracket screw.
- 5. Attach the cables from the external port connectors to the drives.
- 6. Reinstall the computer cover, and reattach the power cords.
- 7. Turn on the power to the computer.

Refer to the MegaRAID SAS Software User Guide for information about running the RAID configuration utility and installing the software drivers.

Technical Support

For assistance installing your LSIiBBU07 unit, contact an LSI Technical Support representative.



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

Click the following link to access the LSI technical support web page for storage and board support:

http://www.lsi.com/about/contact/pages/support.aspx

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

E-mail:

http://www.lsi.com/support/email/Pages/default.aspx

Phone Support:

http://www.lsi.com/support/Pages/call-us.aspx

1-800-633-4545 (North America)

00-800-5745-6442 (International)



NOTE The international toll-free number does not require country-specific access codes.

Documents and Downloads:

http://www.lsi.com/support



