

CVPM02 Kit

User Guide

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For a comprehensive list of changes to this document, see the [Revision History](#).

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Chapter 1: CVPM02 Kit Quick Installation Guide

Thank you for purchasing the Avago CacheVault™ Power Module 02 (CVPM02) Kit. Before you install the CVPM02 kit, please take a few minutes to read this guide. This guide describes the CacheVault Power Module Kit CVPM02, which contains a MegaRAID® CacheVault Power Module 02 (CVPM02), a clip, and cables, and it explains how to install these components.

To install the kit, attach the CVPM02 module into the clip on a BBU-BRACKET-05 remote mount board (sold separately), and then connect the CVPM02 module by cable to the RAID controller.

The following MegaRAID controllers support the CVPM02 CacheVault Kit being plugged directly into the RAID controller:

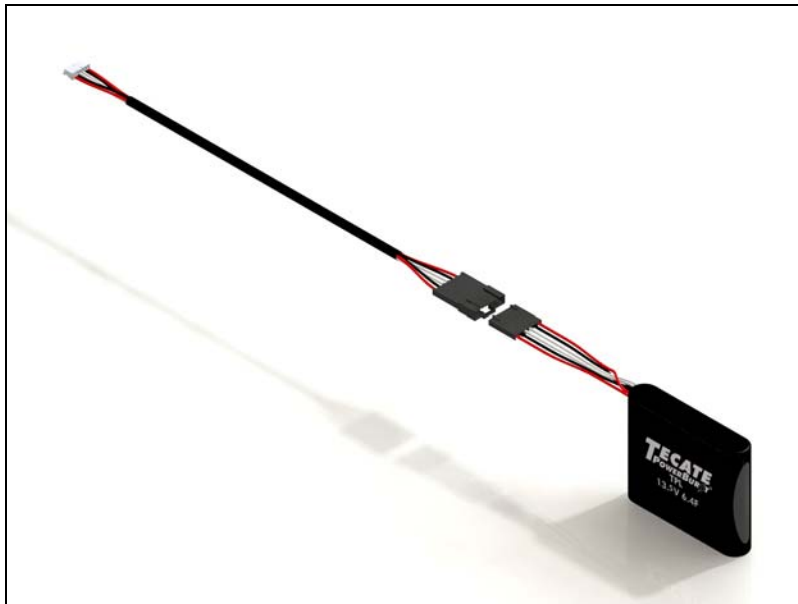
- MegaRAID SAS 9361-16i RAID controller
- MegaRAID SAS 9380-8i8e RAID controller

NOTE This guide documents installation of the CacheVault power module for controllers that have nonvolatile flash embedded on the board. For boards that have modular nonvolatile flash, please refer to the *CVPM02 Kit Quick Installation Guide*.

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

The following figure shows the CVPM02 module and the cable that connects the module to compatible RAID controllers.

Figure 1 CVPM02 Module and Cable



1.1 Technical Support

For assistance in installing, configuring, or running the CVPM02 module, contact Avago Technical Support.

Email Requests:

<http://www.avagotech.com/support/email>

NOTE

Record your controller serial number in a safe location in case you need to contact Avago.

Phone Support:

<http://www.avagotech.com/support/call-us>

- 1-800-633-4545 (North America)
- 00-800-5745-6442 (International)
- 49 (0) 8941 352 0123 (Germany)

NOTE

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

Documents and Downloads:

<http://www.avagotech.com/support/download-search>

Chapter 2: Installing the CVPM02 Kit

This section describes how to install the CVPM02 module on the remote mount board, connect the module by cable to a RAID controller, and then insert the RAID controller and the remote mount board into the PCIe slots on the motherboard.

When you remove the CacheVault Power Module from its antistatic bag, inspect it for damage. Unpack the module in a static-free environment.

NOTE Back up your data before you change your system configuration, or you could lose data.

CAUTION Electrostatic discharge (ESD) can damage the CacheVault modules and the RAID controller. Make sure that you install the CacheVault modules at an ESD-safe workstation that meets the EIA-625 standard. When you install the CacheVault modules, follow the ESD-recommended practices in the latest revision of the IPC-A-610 standard.

Perform the following tasks to install the CVPM02 module, the RAID controller, and the remote mount board.

NOTE This section shows installation of the CacheVault Power Module using the MegaRAID SAS 9361-16i RAID controller. You can install the module in the same way using the MegaRAID SAS 9380-8i8e RAID controller.

1. Remove the RAID controller from the computer. See [Removing the RAID Controller from the Computer](#) on page 6.
2. Install the clip on the remote mount board. See [Installing the Clip on the Remote Mount Board](#) on page 7.
3. Attach the CVPM02 module to the clip on the remote mount board. See [Attaching the CVPM02 Module to the Clip](#) on page 8.
4. Connect the CVPM02 module by cable to the RAID controller. See [Connecting the CVPM02 Module to the RAID Controller](#) on page 9.
5. Reinstall the RAID controller on the motherboard. See [Reinstalling the RAID Controller on the Motherboard](#) on page 10.
6. Install the remote mount board on the motherboard. See [Installing the Remote Mount Board on the Motherboard](#) on page 11.

2.1 Removing the RAID Controller from the Computer

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

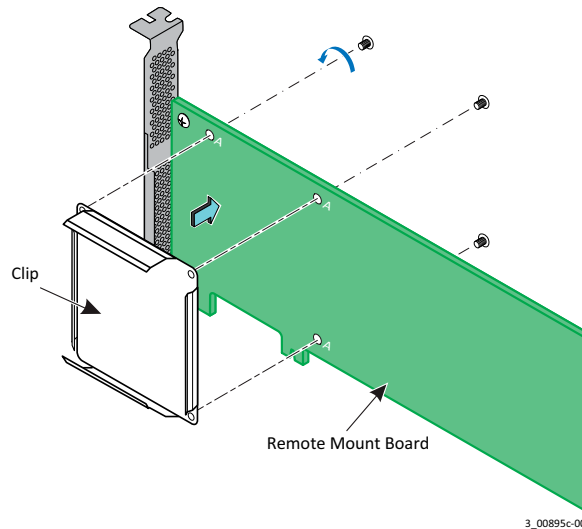
1. Turn off the power, and unplug the power cords.
2. Ground yourself, and make sure that the system is grounded.
3. Remove the cover from the computer, according to the instructions in the system user's manual, to permit access to the controller.
4. Unplug all cables from the controller, remove the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

2.2 Installing the Clip on the Remote Mount Board

Follow these steps to attach the clip to a BBU-BRACKET-05 remote mount board.

1. With the remote mount board on a flat, clean, static-free surface, ground yourself, and make sure that the system is grounded.
2. Remove the clip and the remote mount board module from the package.
3. Place the clip and the remote mount board module front-side-up on a flat, clean, static-free surface.
4. Hold the clip so the screw holes on the clip line up with the screw holes on the remote mount board, as shown in the following figure.

Figure 2 Installing the Clip on the Remote Mount Board



5. Secure the clip to the three screw holes with the screws and the nuts.
The screws thread through the back of the board into the clip.

NOTE

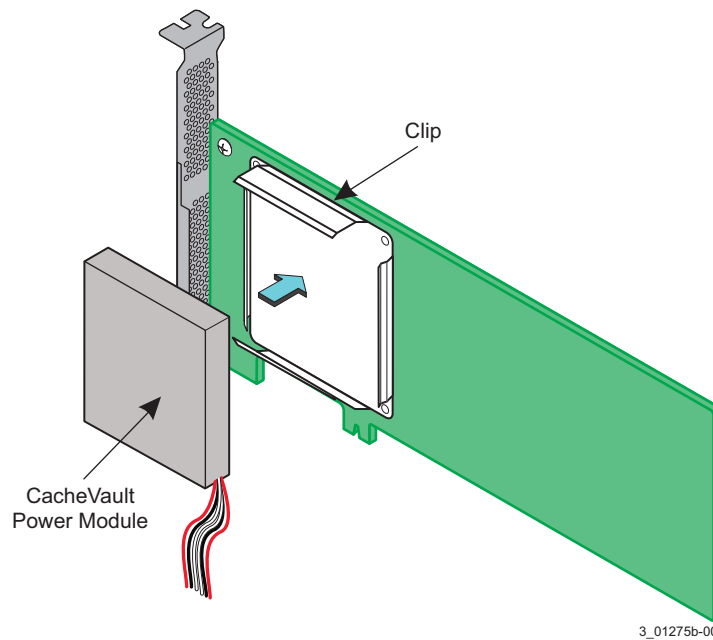
Center the screwdriver carefully to avoid stripping the screw heads.
Do not over-tighten the screws.

2.3 Attaching the CVPM02 Module to the Clip

Follow these steps to attach the CVPM02 module to the clip.

1. Ground yourself, and make sure that the system is grounded.
2. Remove the CVPM02 module from the package.
3. Place the CVPM02 module front-side-up on a flat, clean, static-free surface.
4. Press the CVPM02 module into the clip until the module clicks firmly into place, as shown in the following figure.

Figure 3 Attaching the CVPM02 Module to the Clip

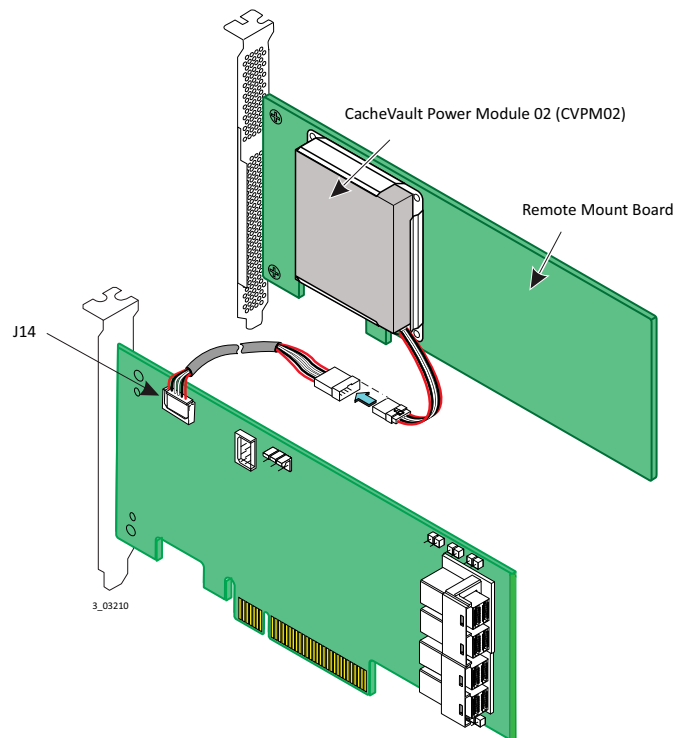


2.4 Connecting the CVPM02 Module to the RAID Controller

Follow these steps to connect the remote CVPM02 module by cable to your MegaRAID SAS RAID controller.

1. Place the controller on a flat, clean, static-free surface.
2. Ground yourself, and make sure that the system is grounded.
3. Remove the cable that is included in the CVPM02 kit box.
The cable has a 9-pin connector on one end and a 6-pin connector on the other.
4. Insert the 9-pin connector on the cable into the 9-pin J14 connector on the RAID controller, as shown in the following figure.
5. Insert the 6-pin connector into the 6-pin connector on the cable from the remote CVPM02 module.
Align the cable connectors to make sure that they are connected correctly.

Figure 4 Connecting the CVPM02 Module by Cable to the RAID Controller



2.5 Reinstalling the RAID Controller on the Motherboard

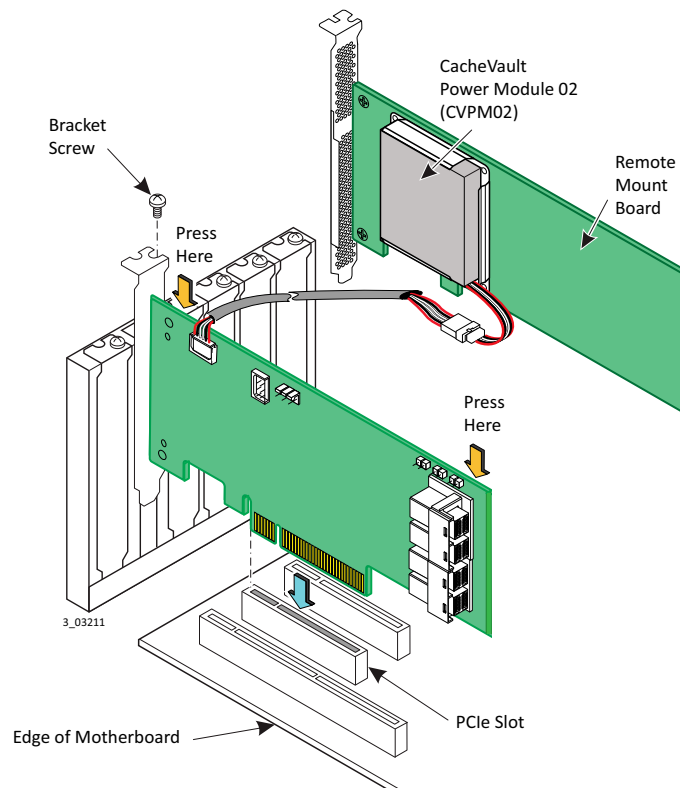
Follow these steps to reinstall your MegaRAID SAS RAID controller in a PCIe slot on the motherboard.

1. Make sure that the power to the chassis is still turned off, the power cords are unplugged, and the chassis is grounded and has no AC power.
2. Install the RAID controller in a PCIe slot on the motherboard, as shown in the following figure.

NOTE Some PCIe slots support only PCIe graphics cards; a remote mount board installed in one of these slots will not function. Refer to your computer documentation for information about the PCIe 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

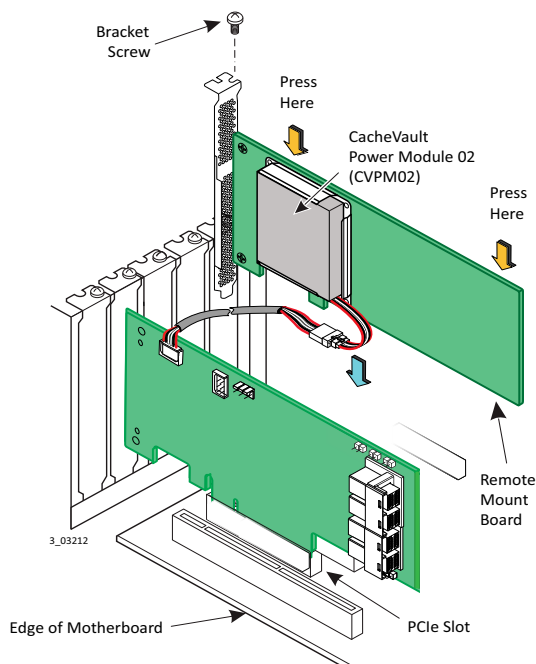


2.6 Installing the Remote Mount Board on the Motherboard

Follow these steps to install the remote mount board on the motherboard.

1. Make sure that the power to the chassis is still turned off, the power cords are unplugged, and the chassis is grounded and has no AC power.
2. Insert the remote mount board in a PCIe slot on the motherboard, as shown in the following figure.
3. Press down gently, but firmly, to seat the board correctly in the slot.
4. Use the bracket screw to secure the remote mount board to the system chassis.
5. Reinstall the computer cover, and reattach the power cords.
6. Turn on the power to the computer.

Figure 6 Installing the Remote Mount Board



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