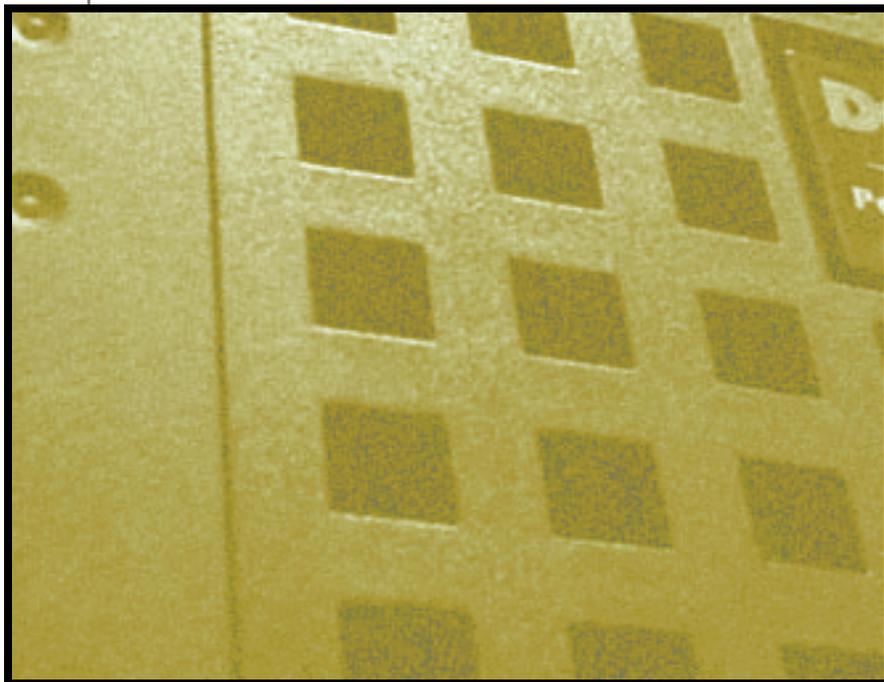




Dell™ PowerEdge™ 2450 Systems

**ACTIVATING THE  
DELL PERC 3/Si**



## **Notes, Notices, Cautions, and Warnings**

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, notices, cautions, and warnings, and they are used as follows:



*NOTE: A NOTE indicates important information that helps you make better use of your computer system.*

**NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**



**CAUTION: A CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.**



**WARNING: A WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious bodily injury.**

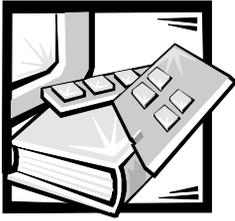
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# Dell™ PowerEdge™ 2450 Systems Activating the Dell PERC 3/Si

To activate the integrated Dell PowerEdge Expandable RAID Controller (PERC) 3/Si in your system, you must install the dual in-line memory module (DIMM) and hardware key supplied in this upgrade kit and then update your computer's System Setup settings.

**NOTICE:** You will lose existing data on hard-disk drives attached to the integrated small computer system interface (SCSI) controller after you activate the integrated PERC 3/Si controller and configure the hard-disk drives as redundant arrays of independent disks (RAID).

To avoid data loss, back up all data on your hard-disk drives before you activate the integrated PERC 3/Si controller.

## Installing the RAID Memory Module and Hardware Key

To install the RAID DIMM and hardware key in your computer, perform the following steps.

**NOTICE:** To prevent damage to your computer system, see “Protecting Against Electrostatic Discharge” in your system's *User's Guide*.



**CAUTION:** To prevent bodily injury, before you activate the integrated PERC 3/Si controller you must turn off the computer and disconnect it from its AC power source. For more information, see “Safety First—For You and Your Computer” in your system's *User's Guide*.

1. Turn off and unplug your computer and peripherals.

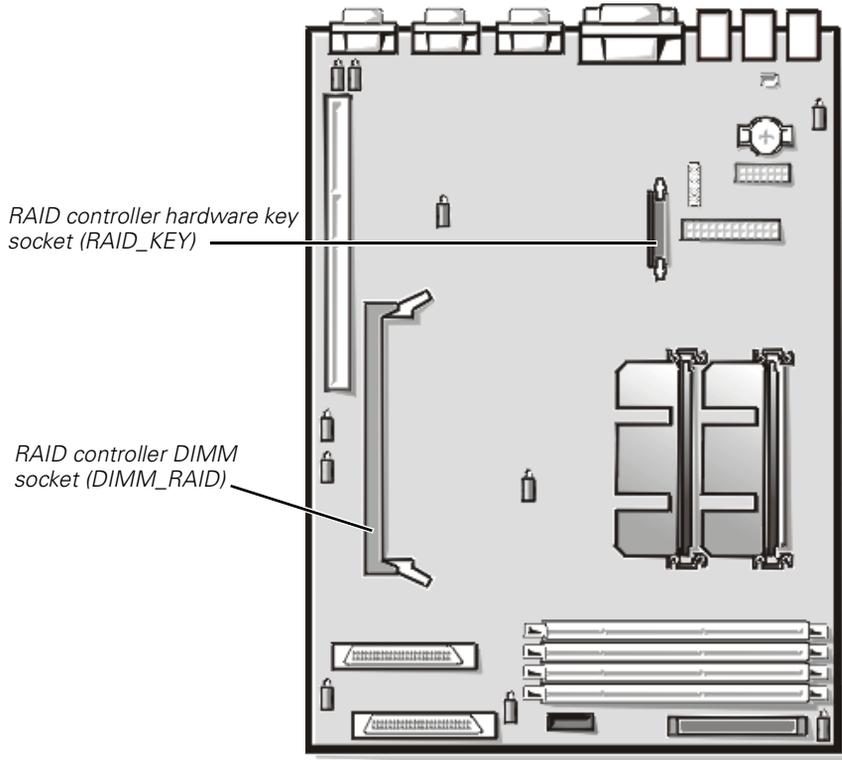
2. Open the computer doors.

See “Checking Inside the Computer” in your system’s *Installation and Troubleshooting Guide* for more information.

3. Remove all expansion cards from the system.

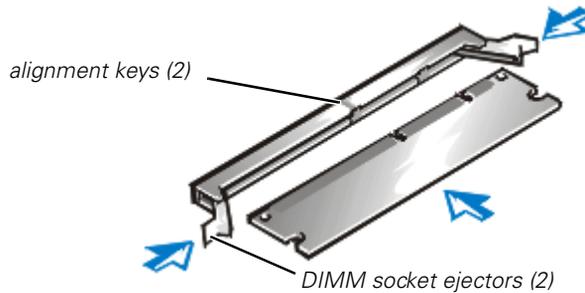
See “Installing System Board Options” in your system’s *Installation and Troubleshooting Guide* for information on removing expansion cards.

4. Locate the RAID controller DIMM socket on the system board (see Figure 1).



**Figure 1. System Board Features**

5. Open the ejectors on the RAID controller DIMM socket (see Figure 2) to allow the DIMM to be inserted into the socket.



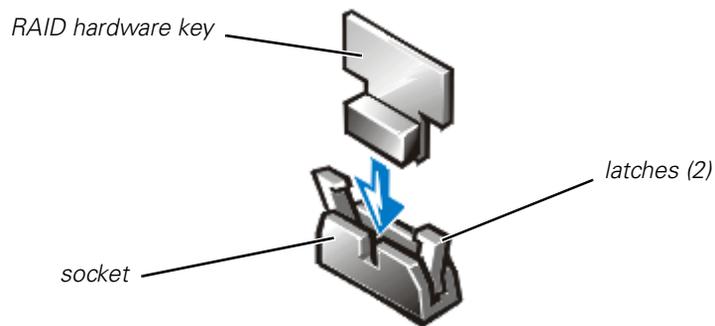
**Figure 2. Installing the RAID Controller DIMM**

6. Align the DIMM's edge connector with the two alignment keys in the DIMM socket, and insert the DIMM in the socket (see Figure 2).



*NOTE: The RAID controller DIMM must be an unbuffered DIMM, rated to run at 100 MHz. Do not substitute registered DIMMs such as those used for system memory. System memory DIMMs are labeled "PC133."*

7. Press on the DIMM with your thumbs while pulling on the ejectors with your index fingers to lock the DIMM into the socket (see Figure 2).
8. Locate the RAID hardware key socket on the system board (see Figure 1).
9. Insert the key into the socket and secure the key with the latches on each end of the socket (see Figure 3). The RAID hardware key should be labeled "PE2450."



**Figure 3. Installing the RAID Hardware Key**

10. Replace any expansion cards that you removed in step 3.
11. Close the computer doors, and then reconnect the computer and peripherals to their AC power sources.

# Changing the System Setup Settings

To complete the installation procedure, you must select the RAID controller option in the System Setup program. (For more information on the System Setup program, see “Using the System Setup Program” in your system’s *User’s Guide*.)

To update the System Setup program settings, perform the following steps:

1. Turn on your system.
2. Press <F2> immediately after you see the following message:

Press <F2> for System Setup

If you wait too long and your operating system begins to load into memory, let the system complete the load operation. Then shut down the system and try again.



*NOTE: To ensure an orderly system shutdown, consult the documentation that accompanied your operating system.*

3. Press <Alt><p> to switch to Page 2 of the System Setup screen.
  - If the system detects the new RAID controller DIMM and RAID hardware key, the **RAID** option is displayed in the **Integrated Devices** section of the screen.
  - If the **SCSI** option is displayed, the integrated RAID controller was not detected. Ensure that the RAID hardware key and RAID DIMM are the correct type and repeat all hardware installation steps found earlier in this document.

**NOTICE: You will lose existing data on hard-disk drives attached to the integrated SCSI controller after you activate the integrated PERC 3/Si and configure the hard-disk drives as RAID.**

4. Press the left- or right-arrow key to change the **RAID** option to **RAID Enabled**.

**Channel A** displays **RAID** and **Channel B** displays **SCSI**. (When the **RAID** option is set to **SCSI**, **Channel A** and **Channel B** display **SCSI**.)

5. Press <Alt><b> to save the settings, and then reboot the system.

**NOTICE: Whenever you make changes to the System Setup program or change settings for integrated devices, you must run the Resource Configuration Utility, make any necessary changes, and save the system configuration information. Failure to do so may cause resource conflicts among Peripheral Component Interconnect (PCI) devices (such as PCI expansion cards, the integrated video controller, or the integrated SCSI host adapter). See your system’s User’s Guide for more information.**

6. Configure the RAID subsystem and install the RAID driver and management software.

For more information, see the PERC 3/Si controller documentation.

