

Dell™ PowerEdge™ 800 Systems

Information Update

Notes, Notices, and Cautions

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

 **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 potential for property damage, personal injury, or death.

Abbreviations and Acronyms

For a complete list of abbreviations and acronyms, see the "Glossary" in your *User's Guide*.

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This document provides updated information for your system on the following topics:

- Broadcom driver limitation with Red Hat® Linux
- Using DRAC 4/P with Red Hat Enterprise Linux 3 (RHEL 3)
- 64-bit capability
- Microprocessor replacement

Broadcom Driver Limitation With Red Hat Linux

On systems running the Red Hat Linux operating system, if you use the IPMI Pass Through (IPMI PT) for remote manageability over a LAN and you want to configure VLAN, you must use the Broadcom Advanced Server Program (BASP) and bcm5700 driver instead of the native Linux tg3 driver. If you use the native Linux tg3 driver with IPMI PT enabled, the VLAN functionality will not work correctly. The operating system utilities will let you configure the VLANS, but you will not receive any traffic over the VLAN interface.

Using DRAC 4/P With Red Hat Enterprise Linux 3

If your system has a DRAC 4/P card installed, the integrated IDE controllers and their devices will not be available on systems running RHEL 3. As a temporary solution, append the following kernel parameter to the kernel line for each stanza in the `grub.conf` file: `ide2=0x1f0`. As an alternative, go to rhn.redhat.com and upgrade your kernel to version 2.4.21.15.EL or higher.

64-Bit Capability

If the processor installed in your system has 64-bit capability, the **64-bit Technology** option on the **CPU Information** screen in the System Setup program will show **Yes (Intel® EM64T)**. If your system has a 32-bit processor installed, the **64-bit Technology** option will show **No**. This field specifies if the installed processor supports Intel 64-bit technology.

Microprocessor Replacement

You can upgrade the system processor to take advantage of future options in speed and functionality.

The processor upgrade kit contains a processor and thermal grease; you will need to re-use the processor heat sink that came with your system.

Removing the Processor



CAUTION: Many repairs may only be done by a certified service technician. You should only perform troubleshooting and simple repairs as authorized in your product documentation, or as directed by the online or telephone service and support team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. Read and follow the safety instructions that came with the product.

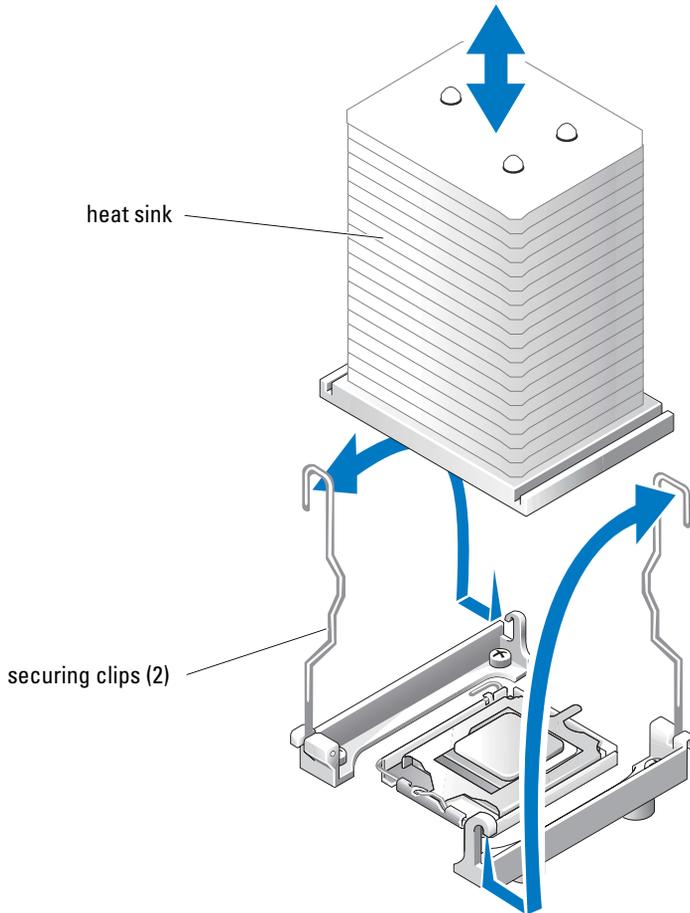
- 1 Turn off the system, including any attached peripherals, and disconnect the system from the electrical outlet.
- 2 Remove the bezel. See "Removing the Bezel" in "Troubleshooting Your System" in your *Installation and Troubleshooting Guide*.
- 3 Lay the system on its right side.
- 4 Remove the cover. See "Removing the Cover" in "Troubleshooting Your System" in your *Installation and Troubleshooting Guide*.
- 5 Remove the cooling shroud. See "Removing the Cooling Shroud" in "installing System Components" in your *Installation and Troubleshooting Guide*.



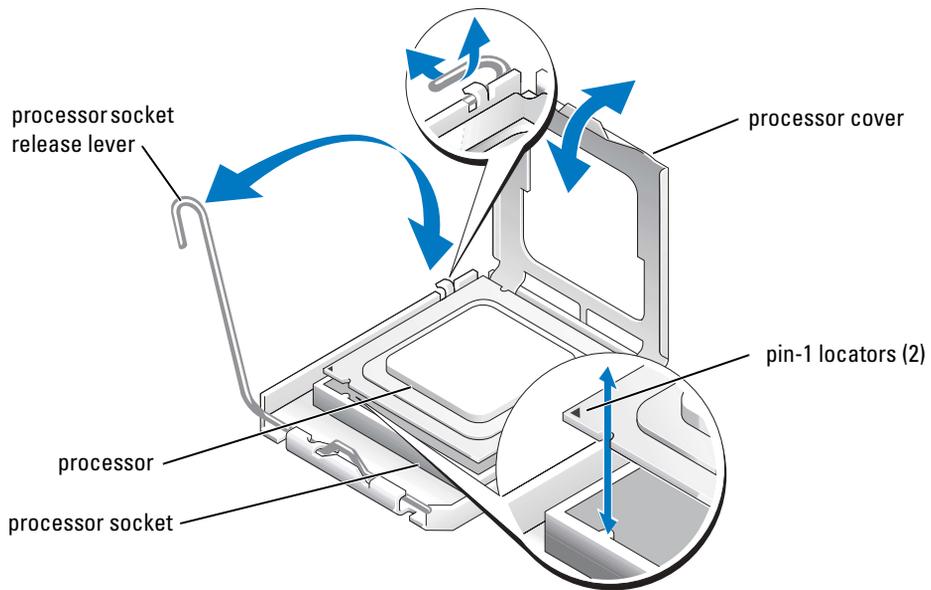
NOTICE: After removing the heat sink, place it upside down on a flat surface to prevent the thermal interface material from being damaged or contaminated.

- 6 Remove the heat sink. See Figure 1-1.
 - a Open one securing clip by pressing the end of the clip down and away from the retention until it clears the securing tab on the retention module, and then lift the clip up.
 - b Repeat step a for the remaining securing clip.
 - c Rotate the heat sink slightly and then lift the heat sink off the processor. Do not pry the heat sink off the processor.

Figure 1-1. Removing the Heat Sink



- 7** Press down on the processor socket release lever, then pull the release lever upward to the fully open position. See Figure 1-2.
- 8** Open the processor cover. See Figure 1-2.
- 9** Lift the processor vertically out of the socket. Leave the processor cover and release lever in the open position so that the socket is ready for the new processor. See Figure 1-2.

Figure 1-2. Replacing the Processor

Installing a Processor

- 1 Unpack the new processor.
- 2 Ensure that the processor socket release lever is in the fully open position.
- 3 Align the pin 1 corners of the processor and socket. See Figure 1-2.
- ➡ **NOTICE:** You must position the processor correctly in the socket to avoid damaging the processor and the system board when you turn on the system. Be careful not to touch or bend the pins on the socket.
- 4 Set the processor lightly in the socket and ensure that the processor is level in the socket. When the processor is positioned correctly, press it gently to seat it in the socket.
- 5 Close the processor cover.
- 6 Rotate the release lever back down until it snaps into place, securing the processor cover.
- ➡ **NOTICE:** Do not operate the system without the heat sink installed. The heat sink is required to maintain proper thermal conditions.
- 7 Using a clean lint-free cloth, remove the existing thermal grease from the heat sink that you removed earlier in this procedure.
- 8 Apply thermal grease evenly to the top of the processor.
- 9 Lower the heat sink onto the processor. See Figure 1-1.

- 10** Secure the heat sink to the retention module.
 - a** Gently press down on the heat sink and then press one securing clip to secure it.
 - b** Repeat step a for the remaining securing clip.
- 11** Ensure that the back fan connector is connected to the BACK_FAN connector on the system board. See Figure A-3 in your *Installation and Troubleshooting Guide*.
- 12** Install the cooling shroud. See "Installing the Cooling Shroud" in "Installing System Components" in your *Installation and Troubleshooting Guide*.
- 13** Install the cover. See "Replacing the Cover" in "Troubleshooting Your System" in your *Installation and Troubleshooting Guide*.
- 14** Stand the system upright.
- 15** Install the bezel. See "Installing the Bezel" in "Troubleshooting Your System" in your *Installation and Troubleshooting Guide*.
- 16** Reconnect the system to its electrical outlet and turn the system on, including any attached peripherals.
- 17** Enter the System Setup program, and ensure that the processor options match the new system configuration. See "Using the System Setup Program" in your *User's Guide*.

As the system boots, it detects the presence of the new processor and automatically changes the system configuration information in the System Setup program. A message similar to the following appears:

```
One 2.3 GHz Processor, Processor Bus: 533 MHz, L2 cache 256 KB
```
- 18** Confirm that the top line of the system data area in the System Setup program correctly identifies the installed processor. See "Using the System Setup Program" in your *User's Guide*.
- 19** Exit the System Setup program.
- 20** Ensure that your system is running the latest BIOS version.

You can download the latest BIOS version from the Dell Support website located at support.dell.com
- 21** Run the system diagnostics to verify that the new processor is operating correctly.

See "Running the System Diagnostics" in your *Installation and Troubleshooting Guide* for information on running the diagnostics and troubleshooting any problems that may occur.