Dell™ 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.

September 2002 P/N 9W758 Rev. A00

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

- Installing the SCSI cable strain-relief bracket
- System board connectors for memory modules
- Installing Red Hat Linux 7.2 ROMB drivers
- Installing the SCSI backplane daughter card
- Using the USB keyboard
- Broadcom NetXtreme Gigabit Ethernet Server Adapter
- Microprocessor features
- Console redirection special key functions
- System memory features

Installing the SCSI Cable Strain-Relief Bracket

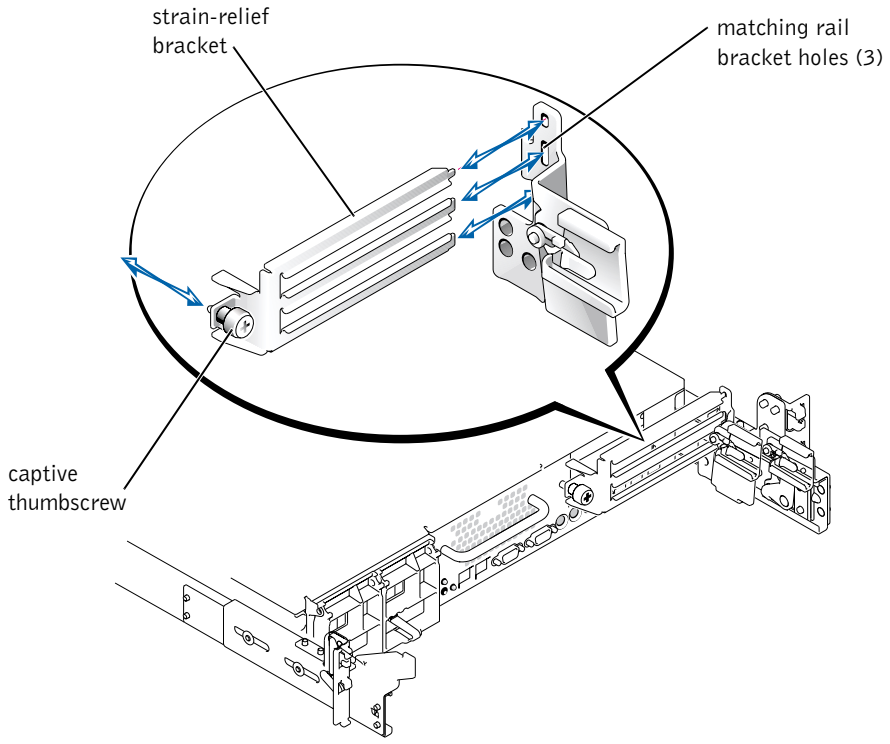
1. Turn off the system, including any attached peripherals, and disconnect the system from the electrical outlet.
2. Ensure that the system is pushed back as far as possible in the rack.
3. Connect any SCSI cables to the system before connecting the I/O cables.

   NOTE: To use the strain-relief bracket, only two SCSI cables can be connected to each I/O slot at a time. The cables cannot be stacked, one above the other; they must be either side-by-side or placed diagonally to each other.

4. Install the strain-relief bracket to the back of the system.
   a. Insert the ends of the three long portions of the strain-relief bracket into the three matching holes in the rail bracket (see Figure 1-1).
   b. Secure the captive thumbscrew to the back of the system (see Figure 1-1).
5. Connect the I/O cables to the back of the system.

   For information on routing system cables, see your *Rack Installation Guide*.

Figure 1-1. Installing the Strain-Relief Bracket

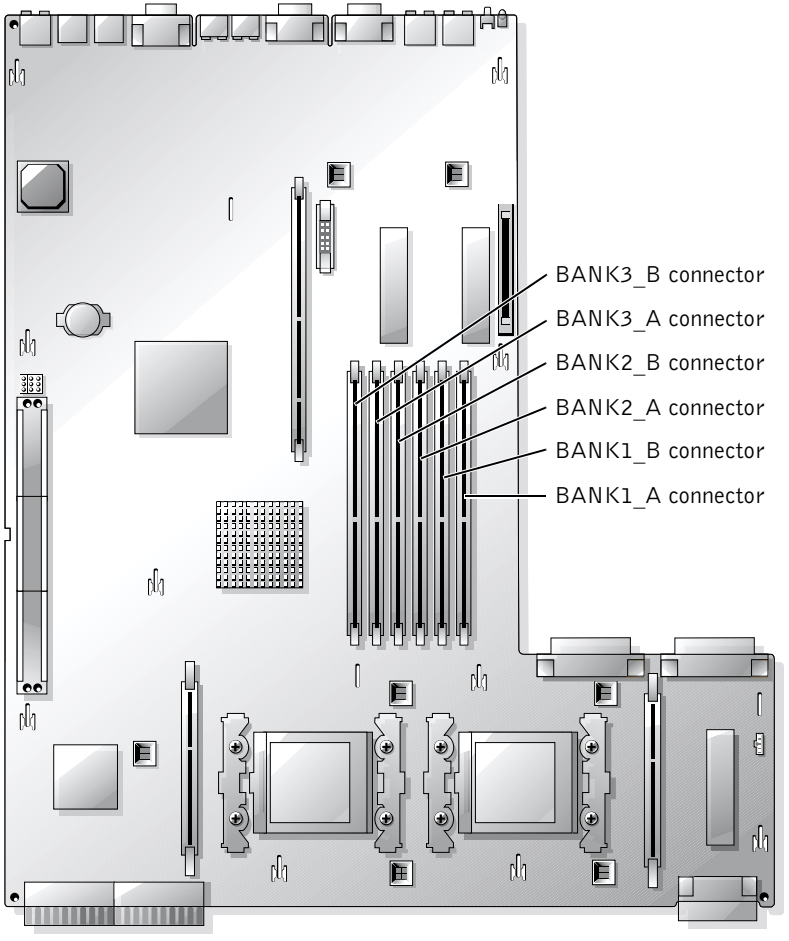


System Board Connectors for Memory Modules

See Figure 1-2 for the location and the updated description of the memory module connectors on the system board.

For more information on system board connectors, see your *Installation and Troubleshooting Guide*.

Figure 1-2. System Board Connectors for Memory Modules



Installing Red Hat Linux Version 7.2 ROMB Drivers

Your system may include a RAID controller that is embedded in the system board for ROMB functionality. When you install the Red Hat Linux 7.2 operating system using the Red Hat Linux 7.2 installation CD, the operating system is unable to recognize the ROMB device, preventing the installation of ROMB as a RAID controller device. This situation occurs because the device drivers on the Red Hat Linux installation CD do not contain the correct device ID for the ROMB hardware in your system.

Dell recommends using the *Dell OpenManage Server Assistant* CD to install the operating system. This CD contains updated drivers for your system's ROMB hardware. If you do not have the *Server Assistant* CD, perform the following steps to install the operating system and the device ID for your ROMB hardware using the Red Hat Linux 7.2 installation CD.

1. Insert the Red Hat Linux 7.2 installation CD into your CD drive.
2. Boot your system from the CD.
3. At the command prompt, type:

   ```
   expert noprobe
   ```

   NOTE: You must enter a command within 10 seconds after the command prompt appears. Otherwise, the operating system will automatically continue the installation process and fail to detect the ROMB card in the system.

   This command prevents the operating system from automatically discovering your system hardware, allowing you to include the ROMB device ID during the installation procedure.

4. Press <Enter>.

   The **Device** window appears with the following message:

   ```
   Do you have a driver disk?
   ```

5. Using the arrow keys on your keyboard, select **No**, and then press the spacebar.
6. In the **Language** window, press <Tab> to select the desired language, and then press the spacebar.
7. In the **Keyboard Type** window, press <Tab> to select the desired keyboard type, and then press the spacebar.

8 In the **Installation Method** window, ensure that **Local CD ROM** is selected, and then press the spacebar.

Press <Tab> to change the selection if necessary.

9 In the **Devices** window, press <Tab> to select **Add Device**, and then press the spacebar.

10 In the **Devices** window, perform the following steps:

a Using the up- and down-arrow keys, select **Adaptec AACRAID (aacraid)**.

b Press <Tab> to select **Specify module parameter**, and then press the spacebar.

The **Specify module parameter** check box is highlighted.

c Press <Tab> to select **OK**, and then press the spacebar.

The **Module Parameters** window appears.

11 In the **Miscellaneous** field, type:

```
aacraid_pciid=0x1028,0x0A,0x1028,0x0121
```

This text provides the device ID for the ROMB card.

12 Press <Tab> to select **OK**, and then press the spacebar.

The driver is loaded onto your system, and the **Devices** window appears.

13 Press <Tab> to select **Done**, and then press the spacebar.

14 Follow the instructions on your screen to complete the installation.

See your Red Hat Linux 7.2 documentation for more information on completing the installation procedures.

Installing the SCSI Backplane Daughter Card

NOTICE: Before installing a SCSI backplane daughter card, back up your data to prevent data loss.

To operate the SCSI backplane in a 2/3 split configuration, you must install a daughter card. For more information on installing the SCSI backplane daughter card, see your *Installation and Troubleshooting Guide*.

Using the USB Keyboard

If your system fails to boot with a USB keyboard connected to your system and the USB option is enabled in **System Setup**, disconnect any PS/2 mouse from the USB keyboard and connect a PS/2 mouse to the front- or back-panel PS/2 mouse connector on your system.

NOTE: If a PS/2 mouse is connected the front panel PS/2 connector, you must use a keyboard/mouse cable adapter.

Broadcom NetXtreme Gigabit Ethernet Server Adapter

When a Broadcom NetXtreme Gigabit Ethernet Server Adapter is installed and wake on LAN (WOL) is enabled in the System Setup program, your system's connection speed is 10/100 Mbps.

The Broadcom NetXtreme Gigabit Server Adapter only supports 10/100 Mbps links when WOL is enabled and the system is in Microsoft® Windows® 2000 Server and Advanced Server hibernation.

When the operating system loads and the correct drivers are installed, your supported connection speed is 10/100/1000 Mbps. It is recommended that when WOL support is required, the Broadcom NetXtreme Gigabit Server Adapter is connected to a 10/100/1000 link partner in auto negotiation mode.

Microprocessor Features

The Intel® Xeon™ microprocessors in your system provide NetBurst microarchitecture and Hyper-Threading Technology to significantly increase microprocessor performance. Hyper-Threading allows one physical microprocessor to appear as two logical processors to the operating system and application programs. Hyper-Threading also allows each microprocessor to simultaneously execute multiple tasks using shared hardware resources.

These new technology features in the microprocessor provide the following for multithreaded tasks:

- Enhanced system performance
- Improved reaction and response time for the system
- Increased number of users that a system can support
- Increased number of transactions that can be executed simultaneously by the system

The **CPU Information** option in the System Setup program's main screen displays information about the different processors in the system (speed, cache size, etc.). After the microprocessor information is displayed, you can enable or disable Hyper-Threading by changing the setting of the **Logical Processor** option. (The default is **Enabled**.)

You can find more information about Hyper-Threading Technology at **developer.intel.com**.

Console Redirection Special Key Functions

Table 1-1 lists additional ANSI escape sequences that represent a special key or function. For additional information on console redirection and configuring special key functions, see "Console Redirection" in your *User's Guide*.

NOTE: ANSI escape-sequence key combinations listed in Table 1-1 are case-sensitive. For example, to generate the character <Insert> you must press <Esc> and then press <Shift><+>.

Table 1-1. Additional ANSI Escape Sequences

Key(s)	Supported Sequence	Terminal Emulation
<Home>	<Esc><h>	ANSI
<End>	<Esc><k>	ANSI
<Insert>	<Esc><Shift><+>	ANSI
<Delete>	<Esc><->	ANSI
<Page Up>	<Esc><Shift><?>	ANSI
<Page Down>	<Esc></>	ANSI
<Shift><Tab>	<Esc><[><Shift><z>	ANSI

System Memory Features

Your system features redundant memory, which provides the system with a failover memory bank when an active memory bank has excessive single-bit errors. This failover occurs without the need to halt or restart the system. You can enable this feature in the System Setup program. For more information about the System Setup program, see your *User's Guide*.

To enable the **Redundant Memory** option in the System Setup program, all memory slots in the system must be populated, and all memory modules must be of the same type and size.

The redundant memory options vary according to the number of populated memory banks and whether identical memory modules are installed in each bank:

- **Disabled** — One or more banks are not populated, or not all memory modules are of the same type and size.
- **Disabled** and **Spare Bank Enabled** — All three memory banks are populated with memory modules of the same size and type.