Dell™ Systems

Information Update



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Notes, Notices, and Cautions



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

SNOTICE: 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.

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

- Flashing your system BIOS
- Memory installation guidelines
- 2-GB memory module support
- PCI bus scan order
- Microprocessor tray
- Microprocessor features
- Microprocessor and VRM mixing
- Front-bezel chassis intrusion
- Integrated SCSI controller support

CAUTION: Before you perform any procedures inside your system, read and follow all safety precautions in your *System Information* document.

CAUTION: Only trained service technicians are authorized to remove the covers and access components inside the system.

Flashing Your System BIOS

If you flash your BIOS to an earlier version, unexpected system failures and data loss can occur, including nonrecoverable system failure.

See the readme files that are included with each BIOS version and the important information on the Dell Support website at **support.dell.com**.

Memory Installation Guidelines

- Each bank must contain identical modules. You must install memory modules in matched sets of four, two in each memory riser card.
- Install identical memory modules in sockets A and B for bank 1 before installing modules in sockets for bank 2, and so on.
- If you are populating memory banks with different sized memory modules, you must populate the memory banks with memory modules of decreasing size, starting with the largest memory modules in bank 1.
- Memory banks must be populated sequentially, which means that there can be no empty banks between the first and last populated banks.

2-GB Memory Module Support

Your system supports 2-GB memory modules using the newest memory riser card. The new memory riser card also supports memory module capacities that are less than 2 GB. Figure 1-1 shows the memory riser card that supports 2-GB memory modules.



Memory Riser Card for 2-GB Memory Module Support Figure 1-1.

PCI Bus Scan Order

Certain operating systems do not allow the PCI bus number of the system's boot controller to change after the operating system loads. Installing an expansion card with its own PCI bridge chip in an expansion slot earlier in the PCI bus scan order than the boot controller can cause the renumbering of the boot controller PCI bus number.

To allow your operating system to properly utilize the boot controller expansion card, install the boot controller card, such as a RAID or SCSI controller card, in expansion slot 2. For more information, see "PCI Bus Scan Order" in your Installation and Troubleshooting Guide.

Microprocessor Tray



🔨 CAUTION: Before you perform any procedures inside your system, read and follow all safety precautions in your System Information document.



NOTE: For steps 1 through 5, see your *Installation and Troubleshooting Guide* for details.

To open the microprocessor tray, perform the following steps:

- **1** Open the bezel.
- Turn off the system, including any attached peripherals, and disconnect the system 2 from the electrical outlet.

- **3** Remove the back cover.
- **4** Remove the front cover.
- **5** Raise the following components to the service position:
 - Memory riser cards
 - Peripheral riser card
 - Fans
- **6** While grasping the microprocessor tray handles, press the release levers with your thumbs and rotate the tray handles up until the tray is released from the front panel (see Figure 1-2).

Figure 1-2. Opening the Microprocessor Tray



Microprocessor Features

The Intel[®] Xeon[™] Processor MP in your system provides 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 platform can support
- Increased number of transactions that can be executed simultaneously by the system

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

More information about Hyper-Threading can be found at developer.intel.com.

Microprocessor and VRM Mixing

Your system does not support mixing processors or VRMs. If you mix processors or VRMs, the messages in Table 1-1 display during POST.

Message	Causes	Corrective Actions
Mismatch VRM <i>n</i>	Latest processor revision with out-of-date VRMs, or mixed versions of VRMs	Ensure that you have the correct version of VRMs installed for the processors in your system.
		Ensure that all VRMs are identical.
VID mismatch n	Mixed processors	Ensure that the processors are the same version.

Table 1-1. System Messages

Front-Bezel Chassis Intrusion

The **Embedded Server Management** option on the System Setup main screen displays a secondary screen which allows you to enable or disable the **Front-Bezel Chassis Intrusion** feature. (The default is disabled.)

Integrated SCSI Controller Support

The integrated SCSI controller on the I/O riser card supports both external SCSI tape devices and internal SCSI hard drives. To support internal SCSI hard drives, connect the SCSI interface cable from the SCSIA connector on the I/O riser card to the primary connector on the SCSI backplane board.