

Dell™ PowerEdge™ 6850 Systems

Information Update

信息更新

Mise à jour des informations

Aktuelle Informationen

アップデート情報

설명서 갱신본

Actualización de información

Dell™ PowerEdge™ 6850 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.

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

- Expansion-card slot restrictions
 - Intel® PRO/1000 MT dual-port server adapter expansion-card slot 2 restriction
 - Adaptec SCSI Card 39160 expansion-card slot restriction
- System start-up behavior
- Integrated NIC IPMI port functionality
- Remote Access Controller card interaction with integrated video
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Expansion-Card Slot Restrictions

Intel PRO/1000 MT Dual-Port Server Adapter Expansion-Card Slot 2 Restriction

Do not install an Intel PRO/1000 MT dual-port server adapter card in expansion-card slot 2. Your system's expansion-card slot 2 is a hot-pluggable PCI-X connector, and the Intel PRO/1000 MT dual-port server adapter card does not support hot-pluggable slot capabilities. If this adapter model is installed in slot 2 and the AC power cord is disconnected from the system or if AC power is lost, the card is not detected by BIOS when the system is turned on.



NOTE: Although the slot 2 indicator is green after the system is turned on following an AC power loss, the Intel PRO/1000 MT dual-port server adapter card is not detected by BIOS.

This restriction does not apply to the Intel PRO/1000 MT single-port server adapter card.

Adaptec SCSI Card 39160 Expansion-Card Slot Restriction

If you add an Adaptec SCSI Card 39160 to a system running the Microsoft Windows 2000 Server operating system, and a Dell™ Remote Access Controller 4/P (DRAC 4/P) card is installed in expansion-card slot 7, the Adaptec 39160 card must be installed in expansion-card slot 2.

System Start-Up Behavior

The following system behaviors during system start-up are normal and do not indicate a problem with the system:

- When AC power is applied to the system, if the System Setup program's **AC Power Recovery** option is not set to allow the system to power up when AC power is applied, the cooling fans will spin-up briefly and then stop. (See your *User's Guide* for information on the System Setup program.)
- It may take 30 seconds or longer for video to display after the system is powered on.

Integrated NIC IPMI Port Functionality

If you configure the integrated NIC for Intelligent Platform Management Interface (IPMI) pass-through traffic, and you also configure the system to boot from the network using the same IPMI port, the NIC will not be available for management traffic during system boot. After system boot is completed, IPMI functionality is automatically restored.

In addition, if you configure the NIC to support IPMI management traffic, the NIC driver's Large-Send Offload (LSO) feature will be disabled on that port.

Remote Access Controller Card Interaction With Integrated Video

If you install an optional remote access controller card for remote systems management, the system's front and back panel video ports will be disabled.

System and Status Messages

System Screen Messages

Table 1-1 provides an additional system message that your system may display on the screen. See "System Messages" in your *Installation and Troubleshooting Guide* for information about other system messages.

Table 1-1. System Messages

Line 1 Message	Line 2 Message	Causes
E1000	FAIL SAFE	Failsafe event.

LCD Status Messages

Table 1-2 provides an updated list of system status messages that the system's front-panel LCD may display at system startup if a memory error occurs. See "System Messages" in your *Installation and Troubleshooting Guide* for additional information about system messages.

Table 1-2. LCD Status Messages

Line 1 Message	Line 2 Message	Causes	Corrective Actions
<i>SYSTEM ID</i>	<i>SYSTEM NAME</i>	<i>SYSTEM ID</i> is a unique name, five characters or less, defined by the user. <i>SYSTEM NAME</i> is a unique name, 16 characters or less, defined by the user. The system ID and name display under the following conditions: • The system is powered on. • The power is off and active POST errors are displayed.	This message is for information only. You can change the system ID and name in the System Setup program. See your <i>User's Guide</i> for instructions.
E0000	OVRFW CHECK LOG	LCD overflow message. A maximum of three error messages can display sequentially on the LCD. The fourth message displays as the standard overflow message.	Check the SEL for details on the events.

Table 1-2. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E1000	FAIL SAFE	Failsafe event.	Capture the event log and see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E1000	MISCONFIG	Missing or improperly installed VRMs.	See "Installing a Processor VRM" in your <i>Installation and Troubleshooting Guide</i> . If the VRMs appear to be properly configured and installed, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E0119	TEMP AMBIENT	Ambient system temperature is out of acceptable range.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> .
E0119	TEMP PROC #	The specified processor is out of acceptable temperature range.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> .
E0119	TEMP PLANAR	System board temperature is out of acceptable temperature range.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> .
E0212	PROC VTT	Processor VTT voltage is out of acceptable voltage range.	See "Troubleshooting Power Supplies" in your <i>Installation and Troubleshooting Guide</i> .
E0212	VOLT PG n	System power supply is out of acceptable voltage range; faulty or improperly installed power supply.	See "Troubleshooting Power Supplies" in your <i>Installation and Troubleshooting Guide</i> .
E0212	VOLT PG n Video	Video voltage is out of acceptable voltage range.	See "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E0212	VOLT BATT ROMB	Faulty RAID battery.	Replace the RAID battery. See "Activating the Optional Integrated RAID Controller" in your <i>Installation and Troubleshooting Guide</i> .

Table 1-2. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E0212	VOLT BATT CMOS	Faulty system battery.	See "Troubleshooting the System Battery" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E0276	PROC # STATUS	Faulty or improperly installed processor.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> .
E0276	PROC # VCORE	The VCORE voltage of the specified processor is out of acceptable range.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> . If the problem still persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E0276	VRM # PG	The voltage of the specified VRM is out of acceptable range.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> . If the problem still persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E0276	VCACHE # PG	The voltage of the specified VCACHE is out of acceptable range.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> . If the problem still persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
E0276	PS AC CURRENT	Power supply AC current is out of acceptable range.	See "Troubleshooting Power Supplies" in your <i>Installation and Troubleshooting Guide</i> .
E0276	PS OVER CURRENT	Power supply current is out of acceptable range.	See "Troubleshooting Power Supplies" in your <i>Installation and Troubleshooting Guide</i> .

Table 1-2. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E0412	RPM FAN PS BLANK	Power supply fan RPM is out of acceptable range.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> .
E0412	RPM FAN <i>n</i> FAN REDUNDANCY LOST	Specified cooling fan is faulty, improperly installed, or missing.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> .
E0780	PROC # CONFIG ERR	The specified processor has a configuration error.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> .
E0780	PROC # DISABLED	The specified processor is disabled.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> .
E0780	PROC <i>n</i> PRESENCE	Microprocessor is not installed in socket <i>n</i> .	Install a microprocessor in socket <i>n</i> . See "Installing a Processor" in your <i>Installation and Troubleshooting Guide</i> .
E07F0	PROC <i>n</i> IERR	Faulty or improperly installed microprocessor.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> .

Table 1-2. LCD Status Messages (*continued*)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E07FA	PROC <i>n</i> THERMTRIP	Specified microprocessor is out of acceptable temperature range and has halted operation.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, ensure that the microprocessor heat sinks are properly installed. See "Removing a Processor" in your <i>Installation and Troubleshooting Guide</i> . NOTE: The LCD continues to display this message until the system's power cord is disconnected and reconnected to the AC power source, or the SEL is cleared using either Server Assistant or the BMC Management Utility. See the <i>Dell OpenManage Baseboard Management Controller User's Guide</i> for information about these utilities.
E0876	PS <i>n</i> MISSING PS <i>n</i> STATUS	No power available from the specified power supply; specified power supply is improperly installed or faulty.	See "Troubleshooting Power Supplies" in your <i>Installation and Troubleshooting Guide</i> .
E0876	PS <i>n</i> PREDICTIVE	Power supply voltage is out of acceptable range; specified power supply is improperly installed or faulty.	See "Troubleshooting Redundant Power Supplies" in your <i>Installation and Troubleshooting Guide</i> .
E0876	PS <i>n</i> AC LOST PS <i>n</i> AC RANGE	Power source for specified power supply is unavailable, or out of acceptable range.	Check the AC power source for the specified power supply.
E0876	PS # AC OUT OF RANGE - APPLY 200-240V	The AC power to the specified power supply is out of operating range.	Check the power source and verify that it is supplying 215-220V power. If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .

Table 1-2. LCD Status Messages (*continued*)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E0880	PS REDUNDANCY LOST	Power supply redundancy has been lost because a power supply has been removed from the system.	Reinstall the power supply to restore redundancy.
E0D76	BP DRIVE <i>n</i>	Faulty or improperly installed hard drive or RAID controller.	See "Troubleshooting SCSI Hard Drives," "Troubleshooting a RAID Controller Card," and "Troubleshooting the Integrated RAID Controller" in your <i>Installation and Troubleshooting Guide</i> .
E0D76	SCSI CONNECTOR	SCSI cable is not connected.	See "Troubleshooting SCSI Hard Drives" in your <i>Installation and Troubleshooting Guide</i> .
EB107	PROC BUS PERR PROC INIT ERR PROC PROTOCOL ERR	Faulty or improperly installed microprocessor or system board.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EB107	PROC MACHINE CHK	Faulty or improperly installed microprocessor or system board.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EB107	PROC HOT	Processor is out of acceptable temperature range and has halted operation.	See "Troubleshooting System Cooling Problems" in your <i>Installation and Troubleshooting Guide</i> .
EB10C	ECC UNCORR ERR ECC UNCORR ERR BANK #	Uncorrectable ECC errors have occurred in system memory. The affected memory bank may be specified.	See "Troubleshooting System Memory" in your <i>Installation and Troubleshooting Guide</i> .

Table 1-2. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
EB10C	MEMORY HOT PLUG FAIL	An attempt to remove hot-plug memory failed.	See "Troubleshooting System Memory" in your <i>Installation and Troubleshooting Guide</i> .
EB113	I/O CHANNEL CHK	System I/O channel check error has occurred.	See "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EB113	PCI PARITY ERR	PCI parity error has occurred.	See "Troubleshooting Expansion Cards" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EB113	PCI SYSTEM ERR	PCI system error has occurred.	See "Troubleshooting Expansion Cards" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EB113	PCIE FATAL ERR	Fatal PCIe error has occurred.	See "Troubleshooting Expansion Cards" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EB113	PCIE NON FATAL ERR	Non-fatal PCIe error has occurred.	See "Troubleshooting Expansion Cards" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .

Table 1-2. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
EB113	CHIPSET ERR	An error has occurred in the chipset.	See "Troubleshooting the Microprocessors" in your <i>Installation and Troubleshooting Guide</i> . If the problem persists, see "Troubleshooting Expansion Cards" in your <i>Installation and Troubleshooting Guide</i> . If the problem still persists, see "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
EFFF2	ROMB PRESENCE	Integrated RAID controller is activated.	Information only.
I0000	BIB	BMC unable to read BIOS Initial Block (BIB).	See "Getting Help" in your <i>Installation and Troubleshooting Guide</i> .
IB110	SBE LOG DISABLED	Single-bit error log disabled.	Information only.
IB110	LOGGING DISABLED	BIOS logging disabled.	Information only.
IB10C	MEMORY SPARED	Memory spare bank enabled.	Information only.
IB10C	MEMORY MIRRORED	Memory mirroring enabled.	Information only.
IB10C	MEMORY RAID	Memory RAID enabled.	Information only.
IB10C	MEMORY ADDED CARD #	Hot-plug memory added.	Information only.
IB10C	MEMORY REMOVED	Hot-plug memory removed.	Information only.
IS000	INTRUSION	System cover has been removed.	Information only.

NOTE: For the full name of an abbreviation or acronym used in this table, see the "Glossary" in your *User's Guide*.

IRQ5 Availability

IRQ5 is available for use and is not pre-assigned to a remote access controller. See "IRQ Assignment Conflicts" in your *Installation and Troubleshooting Guide* for a complete list of IRQ assignments.

Environmental Data Sheets

For additional information about environmental measurements for specific system configurations, see www.dell.com/environment_datasheets.

Removing and Installing a Hot-Pluggable Memory Riser Card

As explained in "Removing and Installing a Hot-Pluggable Memory Riser Card" in your *Installation and Troubleshooting Guide*, the green power indicator on the memory riser card blinks while the riser card prepares for removal. Depending on your system's configuration, the riser card may power down so quickly that the indicator may not have time to blink before it turns off.

Hot-Adding a Memory Riser Card

Presently, only the Microsoft Windows Server 2003 Enterprise and Data Center Edition operating systems support the hot-add memory feature. Future releases of other operating systems may also support the feature. See your operating system's documentation to verify if hot-add memory is supported. If memory is hot-added to a system that is running an operating system that does not support the feature, the operating system will not recognize the new memory. The following procedure explains how to safely hot-add a memory riser card.



NOTE: The system supports hot-add memory only when the memory is not operating in RAID, mirror, or spare-bank mode. See "System Memory" in your *Installation and Troubleshooting Guide* for more information.



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 Open the system. See "Opening the System" in your *Installation and Troubleshooting Guide*.
- 2 Install the memory modules in the memory riser card. See "Installing Memory Modules" in your *Installation and Troubleshooting Guide*.



NOTE: Do not install an empty memory riser card.

- 3 Remove the proper filler bank. See "Removing a Memory Riser Card Filler Blank" in your *Installation and Troubleshooting Guide*.



NOTE: A memory riser card must be hot-added into memory slots A, B, C, and D in sequential order only. For example, do not hot-add a memory riser card into memory slot D if slots A, B, and C are empty.

- 4 Install and power-up the memory riser card. See step 7 and step 8 in "Removing and Installing a Hot-Pluggable Memory Riser Card" in your *Installation and Troubleshooting Guide*.
- 5 Close the system. See "Closing the System" in your *Installation and Troubleshooting Guide*.

Processor Upgrades

If you add one or more processors to your system, ensure that all processors have the same stepping value and the same cache size and technology. If you install processors with different speeds, they will operate at the speed of the slowest processor.

You must install all voltage regulator modules (VRMs) included in the upgrade kit in addition to the processors. See "Processors" in your *Installation and Troubleshooting Guide* for details on installing processors and VRMs.

Memory Test at System Startup

The **System Memory Testing** option in the System Setup program is disabled by default. If the option is enabled, the system memory is tested at each system startup. Systems with large memory configurations may take more time to complete the memory test. See your *User's Guide* for information on the System Setup program.

Linux Operating System Information

Booting Red Hat Enterprise Linux AS (Version 4) for Intel x86 With More than Eight Logical Processors

A system running the Red Hat Enterprise Linux AS (version 4) for Intel x86 operating system will fail to boot if it is configured with more than eight logical processors. To work around this issue, pass the parameter `apic=bigsm` to the kernel command line at system boot. A correction for this issue will be available in a future Red Hat Enterprise Linux Version 4 Update.

Using More than Eight Logical Processors With Red Hat Enterprise Linux (Version 4) for Intel EM64T

A limitation in the Red Hat Enterprise Linux (version 4) for Intel EM64T operating system will cause the operating system to use no more than eight logical processors even if more processors are present in your system. On systems with more than eight logical processors, the Linux operating system will recognize and report only eight processors. For more information about this limitation, see the *Red Hat Enterprise Linux 4 Update 3 Release Notes* on the Red Hat web site at <http://www.redhat.com/docs/manuals/enterprise/>.

Rebooting Red Hat Enterprise Linux AS (Version 4) for Intel EM64T

The system may hang when the message `Restarting System` appears while rebooting a system running the Red Hat Enterprise Linux AS (version 4) for Intel EM64T operating system. If this occurs, use the power button to power off the system. A correction for this issue will be available in a future Red Hat Enterprise Linux Version 4 Update.

NIC Device Names

In a system using the Linux operating system without an optional PCI-X NIC card installed, the integrated NICs are assigned device names *eth0* and *eth1*. However, if you install a PCI-X NIC card, the card's NIC port is assigned device name *eth0* (a dual-port card will be assigned device names *eth0* and *eth1*) and the integrated NICs will be assigned subsequent numbers. The designations are assigned in the order of the PCI bus scan.

Microsoft Windows Server 2003 Installation With More than Eight Logical Processors

A system configured with more than eight logical processors may hang during installation of versions of Microsoft Windows Server 2003 Standard or Enterprise Edition earlier than SP1. To avoid this issue, temporarily disable **Logical Processor** in the System Setup program. (See your *User's Guide* for information on the System Setup program.)

Microsoft Windows 2000 Installation

Installation of Microsoft Windows 2000 Server or Microsoft Windows 2000 Advanced Server is *not* supported on PowerEdge 6850 systems featuring dual-core processors with L3 cache.



NOTE: Installation of Microsoft Windows 2000 Server or Microsoft Windows 2000 Advanced Server is supported on PowerEdge 6850 systems featuring single-core processors (with or without L3 cache) and dual-core processors with L2 cache only.

The processor type can be obtained by one of the following methods:

- Check your system purchase order details.
- Check the system startup screen.
- Check **CPU Information** in the system setup program.

Console Redirection—Escape Key Sequences

The following table updates the escape key sequences for function keys in the "Using Console Redirection" section of your *User's Guide*.

Table 1-3. Escape Sequences for Function Teams

Key(s)	Supported Sequence
<F1>	<Esc><1>
<F2>	<Esc><2>
<F3>	<Esc><3>
<F4>	<Esc><4>
<F5>	<Esc><5>
<F6>	<Esc><6>
<F7>	<Esc><7>
<F8>	<Esc><8>
<F9>	<Esc><9>
<F10>	<Esc><0>
<F12>	<Esc><@>