DELL™

Dell™ PowerEdge™ 1950 Systems Information Update

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

- Memory mirroring with fully buffered DIMMs
- LCD status messages
- Hard drive carriers
- Linux enumeration of NICs
- Autocool operation

Memory Mirroring With Fully Buffered DIMMs

Like the previous generation of memory mirroring technology, mirroring with fully buffered DIMMs (FBDs) provides enhanced protection from memory failure events, enabling a more robust computing environment. The new generation of FBD memory mirroring provides an even higher level of system reliability by providing protection against more complex failures, including multi-bit errors should they ever occur on any pair of FBDs within a mirrored branch.

However, a limitation in the chipset prevents the FBD memory mirroring from recovering from a small set of failures that could occur in specific circumstances. These circumstances include rare Advanced Memory Buffer (AMB) hardware failures or a short in the FBD connector. Although unlikely, this means that FBD memory mirroring cannot assure failover in all circumstances.

LCD Status Messages Update

Table 1 lists updated LCD status messages that can occur and the probable cause for each message. The LCD messages refer to events recorded in the system event log (SEL). For information on the SEL and configuring system management settings, see your systems management software documentation.

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Table 1. LCD Status Messages

Code	Text	Causes	Corrective Actions
E1118	CPU Temp Interface	The BMC is unable to determine the CPU(s) temperature status. Consequently, the BMC increases the CPU fan speed to maximum as a precautionary measure.	Turn off power to the system and restart the system. If the problem persists, see "Getting Help" in your *Hardware Owner's Manual*.
E122B	0.9 V Over Voltage	0.9 V regulator voltage has exceeded the allowable voltage range.	See "Getting Help" in your *Hardware Owner's Manual*.
E122C	CPU Power Fault	A voltage regulator failure was detected when the processor regulator(s) was enabled.	See "Getting Help" in your *Hardware Owner's Manual*.

NOTE: Each diagnostic LCD message is assigned a priority. The highest priority messages will supersede any group of messages with a lower priority.

Hard Drive Carriers

- The SATA interposer board described in "Installing System Components" in the *Hardware Owner's Manual* is not available for the SATAu hard drive carrier for the initial release of this product. SATA hard drives used in your system can only be installed in the SATA hard drive carrier.

- The drive carrier used for SAS drives is labeled "SAS," and is functionally equivalent to the SATAu drive carrier illustrated in the *Hardware Owner's Manual*.

Linux Enumeration of NICs

Linux operating system versions that use the **udev** kernel device manager may enumerate the NICs differently than earlier Linux versions, which used the **devfs** device manager. Although this does not affect system functionality, when using Red Hat® Enterprise Linux (version 4) or SUSE® Linux Enterprise Server 9 operating systems, the NICs may be enumerated backwards: NIC1 may be configured as **eth1** rather than as **eth0**, and NIC2 may be configured as **eth0** rather than as **eth1**. For further information and to find methods of changing default device enumerations, see the **White Papers** section at **http://linux.dell.com**.

AutoCool Operation

Whenever your system is in standby mode (powered down but still connected to AC power), internal components may generate enough heat for the system to turn on the cooling fans periodically. When this occurs, the LCD lights a solid blue background and displays the message Autocool. The system also lights the power button LED and the power supply LED.

Autocool occurs automatically and is a normal function of your system. The frequency and duration of the Autocool operation will vary according to conditions such as the ambient heat or where the system is configured in a rack.

NOTE: Although the power button and power supply LEDs are on when the Autocool feature is operating, the system is still powered down in standby mode. There are no means for controlling the Autocool mode or turning the fans off when they are engaged. The feature is solely controlled by the system BMC firmware.