



Dell™ PowerEdge™ Systems 1900 Information Update

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

- Memory mirroring with fully buffered DIMMs
- LCD status messages
- Memory capacity reporting
- Installing a PERC5i SAS RAID controller

Memory Mirroring With Fully Buffered DIMMs

As in 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 possible short in the FBD connector. Although unlikely, this means that FBD memory mirroring cannot assure failover in all possible circumstances.

LCD Status Messages Update

Table 1 lists updates to the 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.

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 <i>Hardware Owner's Manual</i> .



Table 1. LCD Status Messages (continued)

Code	Text	Causes	Corrective Actions
E122B	0.9 V Over Voltage	0.9 V regulator voltage has exceeded the allowable voltage range.	See "Getting Help" in your <i>Hardware Owner's Manual</i> .
E122C	CPU Power Fault	A voltage regulator failure was detected when the processor regulator(s) was enabled.	See "Getting Help" in your <i>Hardware Owner's Manual</i> .



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

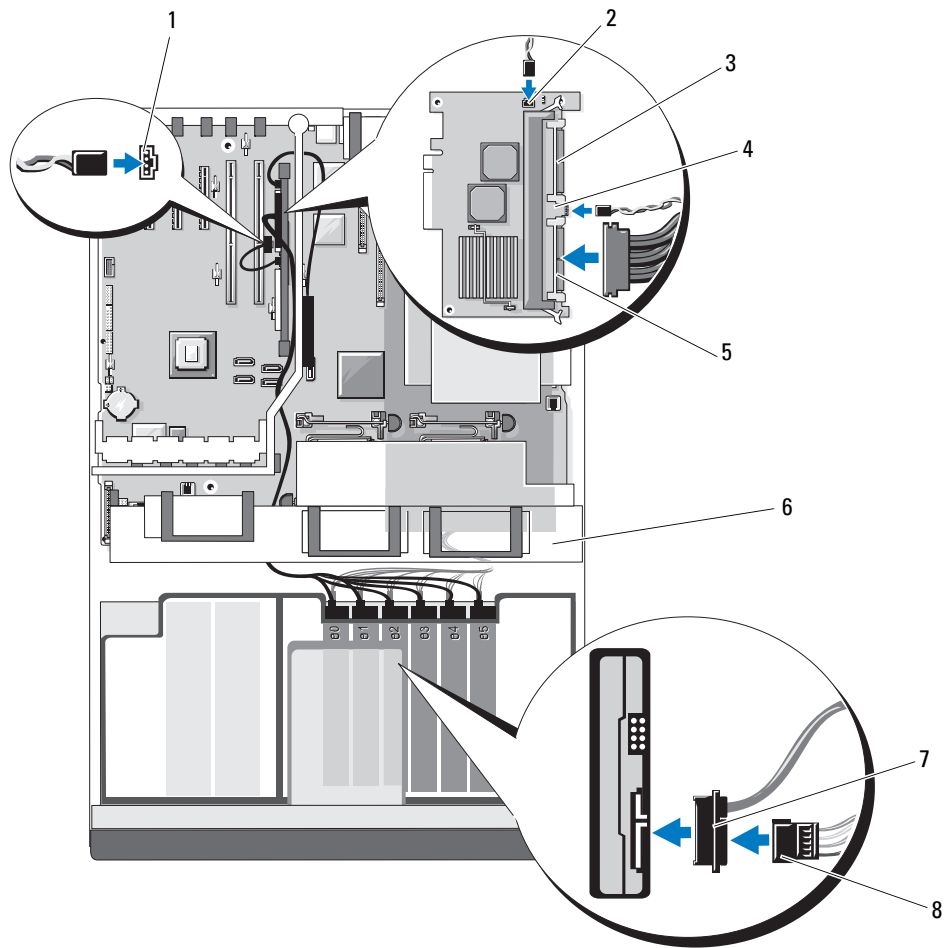
Memory Capacity Reporting

The system management software may report an incorrect memory capacity for your system. On the attributes screen for the memory array, the capacity may be stated as double the actual capacity. See support.dell.com for a downloadable BIOS update to correct this issue.

Installing a PERC5i SAS RAID Controller

The optional SAS RAID controller allows for up to six hard drives in your system. When configuring your system with a SAS RAID controller, make sure that the signal cable for drives 0 to 3 is connected to the SAS_0 connector on the SAS RAID controller, and the cable for drives 4 and 5 is connected to the SAS_1 connector (see Figure 1).

Figure 1. Six-hard-drive Configuration (SAS RAID Controller Daughter Card)



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|---|--|---|---|---|---------------------------|
| 1 | hard drive activity system board connector (HD_ACT_CARD) | 2 | SAS RAID controller daughter card battery connector | 3 | SAS_1 connector |
| 4 | hard drive LED activity cable connector | 5 | SAS_0 connector | 6 | center fan retention cage |
| 7 | hard drive interface cable connector | 8 | hard drive power connector | | |