



This Technical Advisory describes an issue which may or may not affect the customer's product

Intel Technical Advisory

TA1020-02

5200 NE Elam Young Parkway
Hillsboro, OR 97124

September 7, 2012

Special Handling Instructions if a system exhibits a shut down with power supply amber LED illuminated – additional caution required

Description

Intel Server Products are designed with an over current protection methodology to shut down a system turning off the Power Supply in the event of an excessive power draw. This failure type is indicated by the system automatically powering down and solid illumination of the amber LEDs on the affected power supply/supplies.

An issue has been identified where a short may assert the PSON signal. An exothermic event may occur when the PSON signal is asserted in combination with a high power rail shorted to ground.

If the shorts occur while the system is running, then the Over Current Protection (OCP) will work as designed and shutdown the system. The abnormal PSON behavior might occur when the system attempts to power on while the short described is present.

Intel recommends that customers take precautionary measures when dealing with any system shutdown and amber power supply LED. These symptoms could be related to a short circuit.

In rare instances in which an OCP event occurs, the system will need operator intervention. In addition to the procedures captured in existing product documentation, this technical advisory highlights additional actions to be taken.

In order to return the system to operation after an OCP event, please utilize the process outlined below Caution Required.

Caution Required

The system should be removed from the installation and troubleshooting be conducted in an appropriate location equipped to accommodate the possibility of an exothermic event typically associated with smoke and or a burning smell. When troubleshooting, before reconnecting power to the system, ensure that the top cover of the system is installed.

Root Cause and Next Steps

For questions on how to trouble shoot a system shut down with amber LED contact your Intel Sales Representative for support. Your Intel Sales Representative will also be able to assist in RMA for any defective components.

Intel is currently validating the long term corrective action specifically to correct the power supply's response to the PSON signal. There will be a firmware update to the power supplies that will ensure that the PSON signal is valid before resetting the over current protection and allowing the power supply to turn on.

The firmware is field updatable for the Intel® Xeon® E5 series Server Products generation, the power supply firmware is packaged in the Baseboard Management Controller (BMC) releases. The BMC automatically updates the power supply firmware when it detects an out of date version.

The updated power supply firmware will be included in the next BMC version. This is targeted to be available for download from the Intel Support website by October 8, 2012.

Products Affected

The following Intel® Xeon® E5 series Server Products are potentially affected by this issue:

Product Code	MM#	Product Code	MM#
P4304CR2LFJN	916047	H2216LPFJR	921310
P4304CR2LFJNL	921563	H2216LPJR	919014
P4304CR2LFKN	916046	H2216LPQJR	919015
P4308GP2MHJC	919857	H2312LPFJR	921309
P4216IP4LHJC	916059	H2312LPJR	919008
P4308IP4LHJC	916064	H2312LPQJR	919009
P4308IP4LHJCL	921562	H2216WPFJR	921316
H2216JFFJR	921304	H2216WPJR	919018
H2216JFJR	918307	H2216WPQJR	919019
H2216JFQJR	918308	H2312WPFJR	921315
H2312JFFJR	921303	H2312WPJR	919016
H2312JFJR	918305	H2312WPQJR	919017
H2312JFQJR	918306	P4216XXMHJC	916974
H2312XXJR	919020	P4308XXMHJC	916316
H2216XXJR	919021		

Please contact your Intel Sales Representative if you require more specific information about this issue.

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