



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

Intel Technical Advisory

TA-802-2

5200 NE Elam Young Parkway
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February 21, 2006

Intel® Server Board SE7520AF2 Hot Plug SKU PCI-X Slot Power Off

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Products Affected

Product Code	MM#	Description
BAF2HPBB	871303	OEM 10-pack PCI-HP
SC5300AF2	876245	Integrated PCI-HP BIK

Description

When a hot plug system fan (SYS_FAN 1-4) is removed from the system and reinserted, all hot plug PCI-X slots (slot 1 and slot 5) may power off. As a result, the controllers installed in the PCI-X slots stop working. A system reset is required to recover. Intel Server Board SE7520AF2 Hot Plug SKUs are potentially impacted by this issue. Intel Server Board SE7520AF2 Non-Hot Plug SKUs are not affected.

Root Cause

When a hot plug system fan (SYS_FAN 1-4) is removed from the system, the other system fans speed up. When the hot plug fan is reinserted, the other fans decrease in speed. This decrease in speed causes a voltage spike on the +12V power rail which can induce a current spike through the PCI-X hot swap controller. The level of the current spike can be sufficient to exceed the over current protection limit of the PCI-X hot swap controller (approximately 750mA). This will cause the controller to shut down. Note that this failure will only occur when an adapter card is installed in one of the two hot swap PCI-X slots.

Corrective Action / Resolution

Intel has identified a software solution for this issue: a BMC Firmware and FRUSDR file modification that will more slowly ramp the fan speed down following a hot swap fan replacement. This software modification avoids current spikes caused by changes in fan speed. This software solution is included in Intel Management Module (IMM) Firmware version 0.50 and FRUSDR 6.7.2, which are posted on iBL and at <http://support.intel.com>.

Intel recommends that customers using the Intel Server Board SE7520AF2 Hot Plug SKUs update to IMM Firmware version 0.50 and FRUSDR 6.7.2 in order to avoid encountering this issue.

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

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