

intel® Technical Advisory

TA 784-04

5200 NE Elam Young Parkway
Hillsboro, OR 97124

December 9, 2005

System Hang Failures have been observed with a low percentage of Intel® Server Boards SE7221BK1 and SE7221BK1LX

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Products Affected

Product Code
SE7221BK1
SE7221BK1LX
BBKBB
BBKBBLX
SR1425BK1
SR1425BK1NA

Description

Intel and customers have observed a very low percentage of system hang failures with the Intel® Server Board SE7221BK1-E. The system hang may occur during any stage of operation including the POST, normal OS run conditions, or system stress testing. When the failure occurs during POST, a consistent POST LED code is not displayed.

A very low percentage of the Intel Server Boards SE7221BK1-E with PBA numbers C78048-407 and C67508-407, and previous revisions, may potentially experience this issue. The reported failure rate is very small (less than 1% of the Intel Server Boards SE7221BK1-E shipped).

Root Cause

Noise produced by the processor voltage regulator (VR) circuit (dc to dc converter) is coupled to the processor's power good signal (VTT_POWER_GD). When the VTT_POWER_GD signal de-asserts, the processor goes into a reset condition. The noise coupled onto the VTT_POWER_GD signal may cause the reset threshold to be erroneously crossed, causing unstable operations.

Corrective Action / Resolution

Intel has identified a minor hardware change, addition of one 1000 pico Farad capacitor to processor power good signal, which eliminates the noise on this signal. This hardware change resolves the system hang issue. This hardware change has completed validation testing and has been incorporated in Intel® Server Board SE7221BK1-E PBA numbers PBA number C78048-408 and C67508-408. For more detail on this change, please reference Product Change Notification # 105631-00.

All of Intel's inventory of Intel® Server Boards SE7221BK1-E with PBA numbers C78048-407 and C67508-407, and previous revisions, will be reworked to PBA numbers C78048-408 and C67508-408 prior to shipment. Both reworked boards and new board builds will be labeled as PBA numbers C78048-408 and C67508-408.

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Intel recommends that customers who experience this issue with the Intel® Server Board SE7221BK1-E return the affected boards through the normal warranty replacement process. Customers should indicate that they are calling regarding TA 784-04, and have the following information available: the part number requested, and the serial number(s) for the system(s) or board(s) needing the replacement part.

Distributors wishing to return their product inventory may do so under a technical RMA. To initiate a technical RMA, distributors may contact the following toll free numbers, and reference TA 784-04.

Americas: 1-800-INTEL4U or 1-800-468-3548
EMEA: 00 44 1793 403063 (not toll free)
APAC: 604-859-3344
IJKK: 81-29-847-0993 or 81-29-847-5417

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

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