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

Intel Technical Advisory

TA-1003-1

5200 NE Elam Young Parkway
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July 11, 2012

LOW PROBABILITY THAT 750W POWER SUPPLY MAY NOT MEET AC SURGE TESTING LIMITS FOR IEC (International) or / EN (European) 61000-4-5 regulatory standards

Products Affected

Intel® Server System R1000GZ/GL product family, R2000GZ/GL family, P4000IP/GP/SC/CP product family , Intel ® Workstation System P4000CR product family, Intel ® Server Chassis P4000L/M/S product family and Intel ® Power Supply FXX750PCRPS installed or shipping into countries that have adopted the IEC (International) or / EN (European) 61000-4-5 regulatory standard. Regulatory compliance for products shipping into North America, Asia (except Korea), Mexico, South America, and others countries / regions that have not adopted IEC /EN 61000-4-5 ARE NOT AFFECTED by this Advisory

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Product name	MM#	description
P4208IP4LHGC	916062	Intel® Server System
P4308GP2MHGC	919856	Intel® Server System
P4308SC2MHGC	919789	Intel® Server System
R1208GZ4GCSAS	916999	Intel® Server System

R1208GZ4GS9	922760	Intel® Server System
R1304GZ4GS9	922759	Intel® Server System
R2208GZ4GC10G	917015	Intel® Server System
R2208GZ4GS9	922762	Intel® Server System
R2216GZ4GC	917002	Intel® Server System
R2216GZ4GCLX	918537	Intel® Server System
R2224GZ4GCSAS	917013	Intel® Server System
R2308GZ4GS9	922775	Intel® Server System
R2312BB4GCSSPP	921887	Intel® Server System
R2312GZ4GCSAS	917018	Intel® Server System
R2312GZ4GS9	922784	Intel® Server System
E1208GL4GC	918881	Intel® Server System
E1208GL4GCN	922999	Intel® Server System
E2312GL4GC	918882	Intel® Server System
FXX750PCRPS	915604	Intel® Power supply
L2208GZ4GX	921486	Intel® Server System
L2224GZ4GX	921487	Intel® Server System
P4208CP4MHGC	918995	Intel® Server System
P4208XXMHGC	916310	Intel® Server Chassis
P4208XXMHGR	916312	Intel® Server Chassis
P4216XXMHGC	916309	Intel® Server Chassis
P4216XXMHGR	916311	Intel® Server Chassis
P4304CR2LFGN	916048	Intel® Workstation System
P4308CP4MHGC	918994	Intel® Server System
P4308IP4LHGC	916065	Intel® Server System
P4308XXMFGN	916330	Intel® Server Chassis
P4308XXMFGR	916329	Intel® Server Chassis
P4308XXMHGC	916320	Intel® Server Chassis
P4308XXMHGN	916328	Intel® Server Chassis
P4308XXMHGR	916327	Intel® Server Chassis
R1208GZ4GC	916995	Intel® Server System
R1304GZ4GC	916994	Intel® Server System
R2208GL4GS	917008	Intel® Server System
R2208GZ4GC	917001	Intel® Server System
R2224GZ4GC4	921971	Intel® Server System
R2308GL4GS	917011	Intel® Server System
R2308GZ4GC	917004	Intel® Server System
R2312GL4GS	917012	Intel® Server System
R2312GZ4GC4	921972	Intel® Server System

Description

A very small number of Intel® Server systems with 750W Common Redundant Power Supply may experience surge failures at 2KV common mode surge testing. While this is not a safety issue, the 2KV common mode is a requirement

for certifications in certain markets that have adopted IEC (International) or / EN (European) 61000-4-5 regulatory standards.

Root Cause

The problem was isolated to the PSU microcontroller reset IC turning the PSU off during surge. Not all power supplies are susceptible due to shifts in parametric data and tolerances.

Corrective Action / Resolution

Intel has certification reports based on valid samples of product demonstrating compliance for the field; however Intel cannot ensure the compliance of each and every unit. To provide additional margin to address shifts in parametric data and tolerances Intel has increased the power supply surge immunity by improving noise immunity of the power supply microcontroller reset IC. This has been done in two phases:

Phase 1 - Product has been made compliant by adding an insulator between the transformer wires and daughter card within the power supply. These power supplies remain at a E98791-006 version but have been marked with a GREEN DOT (see picture). This creates an estimated margin of 10% and allows shipments to resume immediately.

Phase 2 - The power supply incorporates the first change plus changes of two resistors. This creates an estimated combined margin of 20%. The Power supply version will evolve from E98791-006 to E98791-007 to incorporate both changes. New system builds will include the -007 version and will begin to ship on July 27th.

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

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