

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

Intel Technical Advisory

TA-1003-1

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

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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

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

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| 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 |
| | 02.012 | |

DescriptionA 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.

Enterprise Platforms & Services Division Intel Corporation