

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

Intel Technical Advisory

TA-1026-01

5200 NE Elam Young Parkway Hillsboro, OR 97124

February 20, 2013

Correctable PCIe* bus errors reported with PCIe* Gen 3 add-in cards installed in riser cards used in the Intel[®] Server System R1000GZ/GL product family

Products Affected

Intel® Server System R1000GZ/GL product family (all SKUs)

- R1304GZ4GC
- R1304GZ4GS9
- R1304GL4DS9
- R1208GZ4GC
- R1208GZ4GCSAS
- R1208GZ4GS9
- R1208GL4DS

Intel® Spare Kit F1UL16RISER

Description

Some server systems within the Intel[®] Server System R1000GZ/GL product family, may exhibit an increase in correctable PCle* bus errors when configured with a PCle* Gen 3 add-in card operating at Gen 3 speeds, while installed in either riser card assembly.

Root Cause

Through an internal investigation, Intel learned of a manufacturing issue with riser cards produced from a specific supplier. Affected riser cards have the inner layer ground plane extending into the gold finger area of the riser card connector. This issue impacts signal integrity for adapter cards attempting to operate at PCIe* Gen 3 speeds.

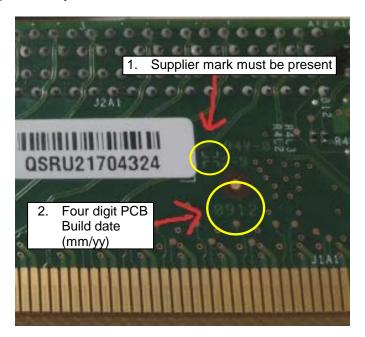
Internal testing by Intel has determined that server systems assembled with affected riser cards and configured with a PCIe* Gen 2 add-in card or a PCIe* Gen 3 add-in card running at Gen 2 speeds, are not impacted by this issue.

Server systems assembled with the affected riser cards will have an Intel manufacture build date between and including April 2012 and January 2013. However, because riser cards from different suppliers were used, server systems within this manufacture build date range may or may not include affected risers.

Customers looking to use PCIe* Gen 3 add-in cards operating at Gen 3 speeds can identify affected riser cards by the following two criteria:

- 1. The riser card will include a specific supplier mark etched onto the back side (non-connector side) of the riser card. See photograph below.
- 2. The riser card will have a 4-digit (mm/yy) build date between and including 0412 (April 2012) and 0113 (January 2013) etched into the back side of the riser card.

The following photograph identifies a riser card that <u>is</u> impacted by this issue. A riser card that does <u>NOT</u> include the specific supplier mark is <u>NOT</u> affected by this issue.



Corrective Action / Resolution

Intel has worked with its riser card supplier to correct this issue. All server systems within the Intel[®] Server System R1000GZ/GL product family manufactured after January 2013 will not be impacted by this issue.

Server systems with affected riser cards but configured with PCIe* add-in cards operating at Gen 2 speeds, are not impacted by this issue.

Customers looking to use PCIe* Gen 3 add-in cards operating at Gen 3 speeds are welcome to return the affected riser cards back to Intel for replacement riser cards. Please contact Intel using your normal warranty process, indicating that you are calling regarding TA # 1026. Have the following information when you call: the serial number(s) of the affected system(s), and the part number or PBA # of the affected item needed. Part number and PBA# can be found on a white sticker affixed to the riser card.

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