



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

# Intel Technical Advisory

TA-0958-2

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April 14, 2011

## Drive errors may occur when using certain 3<sup>rd</sup> party drives operating at 3.0 Gb/s in expander backplanes.

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### Products Affected

Intel® Server Drive Enclosure AXX6DRV3GEXP  
Intel® Server Drive Enclosure AXX4DRV3GEXP

### Description

Drives may go offline or report errors in the operating system and RAID error logs when Western Digital RE3 series SATA drives are used and set to operate at 3.0 Gb/s and are installed in an Intel® Server Backplane AXX6DRV3GEXP or AXX4DRV3GEXP. The issue is only seen when the drives run at SATA 3.0 Gb/s, and does not occur at 1.5 Gb/s. Although most other drive models operate correctly when set to 3.0 Gb/s, it is possible that this issue could be experienced when using other drive models as well.

### Root Cause

The SAS expander chip on Intel® Server Drive Enclosure AXX6DRV3GEXP and AXX4DRV3GEXP may experience an undesired flow-control behavior when connected to some SATA disk drive models when they are running at 3.0 Gb/s. Drives operating at 3.0 Gb/s may not receive proper data or SATA flow control which can then result in a drive timeout error. This issue is not experienced when drives have negotiated to 1.5 Gb/s SATA bus speed. This interoperability limitation of the SAS expander with SATA disk drive is currently seen on Western Digital's RE3 series SATA drives and may be experienced with other SATA drive models as well when they are set to run at 3.0 Gb/s SATA bus speed.

### Corrective Action / Resolution

The issue will be fixed in hot-swap controller firmware. It is targeted to be publicly released in July, 2011. All customers using Intel® Server Drive Enclosure AXX6DRV3GEXP and AXX4DRV3GEXP with SATA hard-drives and RAID controllers are advised to update their hot-swap controller firmware to the new version. Once the firmware is ready, the URL for download will be added to this document

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

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