



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

Intel Technical Advisory

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Drive errors may occur when using certain 3rd 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 operating system and RAID error logs, when certain 3rd party drives 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.

Root Cause

The SAS expander chip on Intel® Server Drive Enclosure AXX6DRV3GEXP and AXX4DRV3GEXP experience an undesired flow-control behavior when connected to a SATA disk drive running at 3.0 Gb/s. Drives operating at 3.0 Gb/s may not receive proper data or SATA flow control and may result in a timeout error. There is no timeout at 1.5 Gb/s. This interoperability limitation of the SAS expander with SATA disk drive is currently seen on Western Digital's RE3 series SATA drives.

Corrective Action / Resolution

Currently there are no plans to update the SAS expander chip on the enclosures. Choose one of the following workarounds when seeing above symptom:

- 1) Jumper all the 3rd party drives to 1.5 Gb/s speed prior to installation into server systems. Please refer to the drive manufacturers' documentation to manage this setting
- 2) Use Intel backplane firmware 2.12, which locks the SATA drive speed to 1.5 Gb/s.

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

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