To: T10 Technical Committee
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Subject: T10/05-280 SAT: COMRESET Notification

Revision History
Revision 0 - Initial draft of document
Revision 1 - Based on input from the July T10 SAT meeting:
- Updated language to change COMRESET to link reset
- Changed additional sense code
- Added language to indicate for PATA, UNIT ATTENTION should be indicated for both devices
  on the channel
- Added definition for parallel ATA bus

Related Documents
SAT (T10/1711-D) Revision 4

1 Overview

This proposal addresses the situation in which an ATA device controller by SATL undergoes a COMRESET operation. Depending on the device this may result in settings on the device being reset to their default operations without notification to an application client that may have changed the default settings or running settings of the device.

2 Document Changes

2.1 Changes to SAT (T10/1711-D)

2.2 Glossary Change
3.x.x Parallel ATA Bus: An interface that contains no more than two ATA devices connected by a single signal path using parallel signalling. (See ATA/ATAPI-7)

2.3 Unit Attention Change

Change section 5.2 to read as follows:

5.2 Unit Attention
The SATL shall emulate reporting of UNIT ATTENTION conditions in such a manner that asynchronous conditions that occur on the ATA interface are reported with their corresponding UNIT ATTENTION through the SCSI command model. A SATL that detects a link reset for a serial ATA device or initiates any reset of an ATA device shall report a UNIT ATTENTION condition for the logical unit corresponding to the ATA device, with an additional sense code of POWER ON, RESET, OR BUS DEVICE RESET OCCURRED. The method that a SATL uses for detecting a link reset on the serial ATA connection is vendor-specific.

A SATL shall report a UNIT ATTENTION condition, occurring because of a reset condition initiated by the ATA host, on any logical unit corresponding to an ATA device on the parallel ATA bus.
The SATL shall report UNIT ATTENTION conditions in accordance with SAM-3. In particular, the SATL shall report UNIT ATTENTION conditions even when the SCSI command being processed results in no action on the ATA interface (e.g. a READ(10) command with a transfer length of zero).

When a SATL may be accessed by multiple I_T nexuses (e.g. when the SATL receives SCSI commands through a SCSI transport), the SATL shall report pending UNIT ATTENTION conditions to all applicable SCSI initiator ports.