Proposed Serial ATA Draft International Organization

ECN070v3SATA31_PM5-PUIS_Clarification
Title :PM5:PUIS Clarification
Sponsors: Intel

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### Document History

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1 Introduction

SSHDs are allowed to process commands from NVM while spun down. The Hybrid Information Feature Set describes this in relation to PM2:Standby and it should have included PM5:PUIS in the description of this behavior.

2 Technical Specification Changes

The following additions are based on the content of Serial ATA Revision 3.1, 18-July-2011. Proposed additions to SATA 3.1 text are marked in blue underline. Proposed deletions to SATA 3.1 text are marked in red strikethrough. Black text is the original SATA 3.1 text. Section headers correspond to the section in SATA 3.1 into which the proposed text is to be inserted.
3  [Editor’s note TP_042v13_SATA31_Hybrid_Information 13.20.5]

d) the following commands shall be able to return command completion without error while in the
PM2:Standby state or in the PM5: PUIS and spin-up subcommand not supported state:

A) all read commands, if the requested logical sectors are in the non-volatile caching medium;

B) all write commands, if the device stores all of the data for the command in the non-volatile
   caching medium;

C) commands to read the following logs:
   a) Identify Device Data log;
   b) Hybrid Information log;
   c) Power Conditions log;
   d) Queued Error log;
   e) NCQ NON-DATA log; and
   f) NCQ Send and Receive log;

D) IDENTIFY DEVICE command;

E) CHECK POWER MODE command;

F) SMART RETURN STATUS command; and

G) SECURITY UNLOCK command, if supported;