

Proposal to make the Features register in the READ LOG EXT command Log Address specific

To: T13 Technical committee
From: Mladen Luksic
Western Digital
Phone: (949) 672-6189
Email: mladen.luksic@wdc.com
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1 Introduction

There is a conflict between ATA/ATAPI-7 standard and SATA II specifications regarding READ LOG EXT command. In the ATA/ATAPI-7 standard, *Information Technology – At Attachment with Packet Interface – 7 Volume 1 – Register Delivered Command Set, Logical Register Set*, Revision 4b, 21 April 2004, page 189, paragraph 6.31.4 Inputs, Features register is reserved. At the same time, SATA II specifications document, *Serial ATA II: Extensions to Serial ATA 1.0a*, Revision 1.2, 27 August 2004, page 52, paragraph 4.3.1. Counter Reset Mechanism, describes as one of the two possible mechanisms to read and reset Phy Event Counters the reception of READ LOG EXT command for log page 11h with bit 0 in the Features register set to “1”. However, the Features register being reserved implies that bit 0 in the Features register is “0”.

2 Proposal

A proposal is submitted herein to make Features register in the READ LOG EXT command Log Address specific for all Log Addresses defined in this standard. To this end the changes to portions of the text in *Information Technology – AT Attachment – 8 ATA/ATAPI Command Set (ATA8-ACS)*, Revision 1b, 14 October 2004, page 152, paragraph 7.31.2 Inputs, are proposed as follows:

7.31.2 Inputs

All Log Addresses in this standard reserve the Features register.

Word	Name	Description
00h	Feature	Log Address specific
01h	Count	Sector Count - Specifies the number of sectors to be read from the specified log. The log transferred by the drive shall start at the sector in the specified log at the specified offset, regardless of the sector count requested
02h-04h	LBA	<p>Bit Description</p> <p>47:32 Reserved</p> <p>31:16 Sector Offset - Specifies the first sector of the log to be read.</p> <p>15:8 Reserved</p> <p>Log Address - Specifies the log to be returned as described in Table 36. A device may support a subset of the available logs. Support for individual logs is determined by support for the associated feature set. Support of the associated log(s) is mandatory for devices implementing the associated feature set. The host vendor specific logs may be used by the host to store any data desired. If a host vendor specific log has never been written by the host, when read the content of the log shall be zeros. Device vendor specific logs may be used by the device vendor to store any data and need only be implemented if used.</p> <p>7:0</p>
05h	Command	2Fh