

# memorandum



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T10/05-115r0

To INCITS T10 Committee From Michael Banther, HP Subject ADC-2 TapeAlert Response Parameter TSD Bit

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## Revision History

Revision 0 – Initial document.

## Background

The ADC definition of the parameter in the TapeAlert Response log page mandates setting the value of the Target Save Disable (TSD) bit to zero (ADCr07, 6.1.3 *TapeAlert Response log page*):

Table 17 — TapeAlert Response log page

Bit Byte	7	6	5	4	3	2	1	0
0	Reserved		PAGE CODE (12h)					
1	Reserved							
2	(MSB)		PAGE LENGTH (000Ch)				(LSB)	
3								
4	(MSB)		PARAMETER CODE (0000h)				(LSB)	
5								
6	DU (0)	DS (1)	TSD (0)	ETC (0)	TMC (0)	LBIN (1)	LP (1)	

See SPC-3 for descriptions of the DU bit, DS bit, TSD bit, ETC bit, TMC field, LBIN bit, and LP bit. These bits and fields shall be set to the values shown in table 17.

According to SPC-3 (SPC3r21b, 7.2.1 *Log page structure and page codes for all device types*), TSD equal to zero means that the logical unit implicitly saves the parameter value:

A target save disable (TSD) bit set to zero indicates that the logical unit implicitly saves the log parameter at vendor specific intervals. This implicit saving operation shall be done frequently enough to insure that the cumulative parameter values retain statistical significance (i.e., across power cycles).

A device server saves a log parameter in order to preserve it across a logical unit reset, a hard reset, or a power-cycle (SPC3r21b, 6.6 *LOG SENSE*):

The parameter values returned by a LOG SENSE command are determined as follows:

- The specified parameter values at the last update (i.e., in response to a LOG SELECT or LOG SENSE command or done automatically by the device server for cumulative values);
- The saved values, if saved parameters are implemented and an update has not occurred since the last logical unit reset; or
- The default values, if saved values are not available or not implemented and an update has not occurred since the last logical unit reset.

However the ADC definition of TapeAlert flags requires the device server to clear all flags on a logical unit reset (ADCr07, 4.2.6 *TapeAlert application client interface*):

The TapeAlert state flags shall be set to zero upon a logical unit reset to either the RMC or ADC device servers.



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Since an ADC device server always deactivates its flags on a logical unit reset, it doesn't make sense to save them as well. No variable information exists to preserve. Hence HP proposes changing the mandated value for TSD to one to accurately reflect the fact that the device server does not save these values in any meaningful way.

**Changes to draft standard**

Table 17 — TapeAlert Response log page

Bit Byte	7	6	5	4	3	2	1	0
0	Reserved		PAGE CODE (12h)					
1	Reserved							
2	(MSB)	PAGE LENGTH (000Ch)						(LSB)
3								
4	(MSB)	PARAMETER CODE (0000h)						(LSB)
5								
6	DU (0)	DS (1)	TSD (1)	ETC (0)	TMC (0)	LBIN (1)	LP (1)	
	.							
	.							
	.							