T10/08-195r0

To	From	Subject	Date
INCITS T10 Committee	Curtis Ballard, HP	ADC-3 Host Reported Error Additional Information	23 April, 2008

Revision History
Revision 0 – Initial document.

Related Documents

adc3r00a – Automation Drive Commands

Background

Tape libraries frequently try to collect information about drive behavior that can be used to help troubleshoot system problems. With the current ADC standard the library can use the VHF data and the TapeAlert flags to track some information about drive issues but it isn't possible to exactly match a specific error with sense data reported by the customers ISV application.

This proposal introduces a method for a tape drive to report to the library when it has reported an error on the host interface so that the library may log the error in its logs to provide an exact match to the error that will be available in the customer logs. The library may also provide communication mechanisms that are not available to the drive such as SMI-S, SNMP, or email notifications.

In the proposed changes that follow, new text appears in blue, deleted text appears in red strikeout comments appear in green.

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Proposed Changes to ADC-3

Changes to section 6.1.2.2

6.1.2.2 Very high frequency data log parameter

The very high frequency data log parameter format is shown in table 17.

Table 17 – Very high frequency data log parameter format

Byte \ Bit	7	6	5	4	3	2	1	0
0	(MSB)			PARAMETER CODE (0000h)				
1								(LSB)
2	DU (0)	DS (1)	TSD (0)	ETC (0)	TMC (00)		LBIN (1)	LP (1)
3	PARAMETER LENGTH (04h)							
4	VHF data descriptor							
7								

The PARAMETER CODE field shall be set to 0000h to indicate the very high frequency data log parameter.

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.

The PARAMETER LENGTH field shall be set to 04h.

The VHF data descriptor is defined in table 18.

Table 18 – VHF data descriptor

Byte \ Bit	7	6	5	4	3	2	1	0
0	PAMR	HIU	MACC	CMPR	WRTP	CRQST	CRQRD	DINIT
1	INXTN	Rsvd	RAA	MPRSNT	Rsvd	MSTD	MTHRD	MOUNTED
2	DT DEVICE ACTIVITY							
3	VS	Reserved	TDDEC	EPP	ESR	RRQST	INTFC	TAFC

Comment: Only the HRE bit is defined by this proposal so the text describing the other fields is not repeated here.

The tape diagnostic data encrypt created (TDDEC) bit shall be set to one indicates that the DT device has created a new Tape Diagnostic Data log page entry (see SSC-3) since the last retrieval of any of the parameters from the Tape Diagnostic Data log page by this I_T nexus. A TDDEC bit set to zero indicates that the DT device has not created a new Tape Diagnostic Data log page entry since the last retrieval of any of the parameters from the Tape Diagnostic Data log page by this I_T nexus.