

To: T10 Technical Committee

From: Kevin Marks
Date: April 11, 2006

Subject: T10/06-183r0 - ADC-2: Device Statistics log page parameter updates

Revision History

Revision 0 (04/11/06) - Initial proposal

Related Documents

Automation/Drive Interface - Commands - 2 (ADC-2) Revision 4 (ADC2r04)

New text to be added

Text to be deleted

Editorial Text

Overview

Proposal T10/05-213r5 added log page 14h (Device Statistics log page) to SSC-3 from ADC and added several new parameter code values (statistics counter). This proposal syncs up ADC-2 and SSC-2.

And alternate method would be to just reference SSC-3 in ADC-2 Table 12 — Log page codes.

Suggested Changes to ADC2:

6.1.5 Device Statistics log page

The Device Statistics log page (see table 28) defines data counters associated with utilization of the DT device. An ADC device server that implements the Device Statistics log page shall implement one or more of the defined parameters. Support for the individual parameters in the Device Statistics log page is optional. Parameters shall not be set to zero or changed via a LOG SELECT command.

<< Page is based on SPC-4 log structure. If ADC-2 will be based on SPC-3 this need to be modified to match >>

Table 28 - Device Statistics log page

Byte\Bit	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	1	<u>0</u>
<u>0</u>	<u>DS</u>	SPF (0b) Reserved	PAGE CODE (14h)					
1	SUBPAGE CODE (00h) Reserved							
<u>2</u> <u>3</u>	(MSB)	PAGE LENGTH (n-3) (LSB)						
	Device statistics log parameters							
4	First device statistics log parameter							
<u>n</u>	Last device statistics log parameter							

See SPC-43 for a description of the DS bit, SPF bit, PAGE CODE field, SUBPAGE CODE field and PAGE LENGTH field.

The device statistics log parameter format is shown in table 29.

<u>Table 29 – Device statistics log parameter format</u>

Byte\Bit	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	1	<u>0</u>
<u>0</u>	(MSB)	PARAMETER CODE						
<u>1</u>		(LSB)						
<u>2</u>	<u>DU(0)</u>	Obsolete	TSD (0 <u>b</u>)	ETC(0 <u>b</u>)	TMC(0 <u>0b</u>) FORMAT AND I			
<u>3</u>		PARAMETER LENGTH (n-3)						
4	(MSB)	DEVICE STATISTICS DATA COUNTER						
<u>n</u>			DEVICE	JIA HOHICO	DATA CO	ONTER		(LSB)

The PARAMETER CODE field is defined in table 30.

<u>Table 30 – Device Statistics log parameter codes</u>

<u>Code</u>	Description	
<u>0000h</u>	Lifetime media loads	
<u>0001h</u>	Lifetime cleaning operations	
<u>0002h</u>	Lifetime power on hours	
<u>0003h</u>	Lifetime media motion (head) hours	
<u>0004h</u>	Lifetime meters of tape processed	
<u>0005h</u>	Lifetime media motion (head) hours when incompatible media was last loaded	
<u>0006h</u>	Lifetime power on hours when the last temperature condition occurred (TapeAlert code 24h)	
<u>0007h</u>	Lifetime power on hours when the last power consumption condition occurred (TapeAlert code 1Ch)	
<u>0008h</u>	Media motion (head) hours since last successful cleaning operation	
<u>0009h</u>	Media motion (head) hours since 2 nd to last successful cleaning operation	
<u>000Ah</u>	Media motion (head) hours since 3 rd to last successful cleaning operation	
<u>000Bh</u>	Reserved (or Obsolete or Lifetime power on hours when the last operator initiated forced reset and/or emergency eject occurred?)	
<u>000Ch – 0FFFh</u>	Reserved	

<u>1000h</u>	Reserved (or Obsolete or Media motion (head) hours for each medium type and other parameter format?)		
00051001h-7FFFh	Reserved		
8000h – FFFFh	Vendor specific		

Parameter codes corresponding to values of time shall be reported in hours and rounded up to the next whole hour.

See SPC-43 for descriptions of the DU bit, DS bit, TSD bit, ETC bit, TMC field, LBIN bit and FORMAT AND LINKING field bits and fields shall be set to the values shown in table 29.

The PARAMETER LENGTH field indicates the number of bytes in the DEVICE STATISTICS DATA COUNTER field that follows.

The DEVICE STATISTICS DATA COUNTER field contains is the value of the requested data counter.