

To: T10 Technical Committee
 From: Rob Elliott, HP (elliott@hp.com)
 Date: 28 September 2005
 Subject: 05-372r0 SES-2 Cooling element enlarge Actual Fan Speed field

Revision history

Revision 0 (28 September 2005) First revision

Related documents

ses2r10 - SCSI Enclosure Services - 2 revision 10

Overview

The ACTUAL FAN SPEED field in the Cooling element is 10 bits, and contains the fan revolutions per minutes (rpm) divided by 10. So, it supports a range of 0 rpm to 10,230 rpm.

However, 12,000 rpm fans are now available, but their rpm values are outside the range.

Therefore, one bit should be added to the field to support up to 20,470 rpm.

Suggested changes

0.0.1 Cooling element

The Cooling element manages a fan, blower, or other cooling mechanism.

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The format of the status field for a cooling element is defined in table 1.

Table 1 — Cooling element for status-type diagnostic pages

Byte\Bit	7	6	5	4	3	2	1	0	
0	COMMON STATUS								
1	IDENT	Reserved				(MSB)	(MSB)		
2	ACTUAL FAN SPEED (LSB)								
3	Rsvd	FAIL	RQSTED ON	OFF	Rsvd	ACTUAL SPEED CODE			

The COMMON STATUS field is specified in 7.2.3.

An IDENT (identify) bit set to one indicates that the enclosure services process is currently identifying the element by a visual indication because the RQST IDENT bit was set to one in the control-type diagnostic page. An IDENT bit set to zero indicates that the enclosure services process is not currently identifying the element by a visual indication based on the RQST IDENT bit in the control-type diagnostic page, or a visual indication is not implemented.

The ACTUAL FAN SPEED field ~~defines~~[indicates](#) the actual fan speed in revolutions per minute (RPM) when multiplied by a factor of 10 ([e.g., 000h indicates 0 rpm and 7FFh indicates 20 470 rpm](#)).

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