

To: T10 Technical Committee  
 From: Tim Symons, PMC-Sierra (Tim\_Symons@pmc-sierra.com)  
 Date: 7 Sept 2006  
 Subject: T10/06-418r0 SAS-2 Enable disable zone management function revision

**Revision Information**

- Revision 0: Initial proposal

**Referenced Documents**

sas2r05b Serial Attached SCSI – 2 (SAS-2) revision 5b  
 06-358r4 SAS-2 Zone configuration model (Tim Symons, PMC-Sierra)

**Overview**

To enable and disable zoning in a zoning expander device there is a requirement for the device to be managed and configured to meet the requirements of a ZPSDS. This proposal is to allow the SMP ENABLE DISABLE ZONING function to be only processed when the zoning expander device is locked, and only originated by an active zone manager. The requirements of the function are unchanged, and the function becomes an SMP zone configuration function as defined in 06-358r4 SAS-2 Zone configuration model (Tim Symons, PMC-Sierra).

**Table 202 – FUNCTION RESULT field**

Code	Name	SMP function(s)	Description
04h	INVALID EXPANDER CHANGE COUNT	... ENABLE DISABLE ZONING	The management device server supports the SMP function, but the EXPECTED EXPANDER CHANGE COUNT field does not match the current expander change count. The ADDITIONAL RESPONSE BYTES may be present but shall be ignored.
24h	PHYSICAL PRESENCE NOT ASSERTED	ENABLE DISABLE ZONING	<del>Physical presence was required but was not detected by the expander device when the SMP function was requested. The ADDITIONAL RESPONSE BYTES field may be present but shall be ignored.</del>
23h	ZONE LOCK VIOLATION	... ENABLE DISABLE ZONING	A zoning expander device that is zone locked, receives an SMP request function from a source that is not the active zone manager.

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**Table 203 - Function result priority**

SMP Function	SMP Function Result Priority
ENABLE DISABLE ZONING	... 1) INVALID REQUEST FRAME LENGTH; 2) SMP_ZONE_VIOLATION; 3) ZONE LOCK VIOLATION; 4) UNKNOWN ENABLE DISABLE ZONING VALUE; 5) PHYSICAL PRESENCE NOT ASSERTED; 6) INVALID EXPANDER CHANGE COUNT 7) SMP FUNCTION FAILED 8) SMP FUNCTION ACCEPTED

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#### 10.4.3.16 ENABLE DISABLE ZONING function

The ENABLE DISABLE ZONING function enables or disables zoning. **This function is used to set the ZONING ENABLED bit in the REPORT GENERAL response.** This SMP function shall be supported by SMP target ports in zoning expander devices (see 4.9). Other SMP target ports shall not support this SMP function. **This SMP function shall only be processed if the zoning expander device is locked.**

~~This SMP function shall only be processed if:~~

- ~~a) the request is received from an SMP initiator port that has access to zone group 2 (see 4.9.3.2); or~~
- ~~b) the request is received from any SMP initiator port while physical presence is asserted.~~

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