

To: T10 Technical Committee  
 From: Zenta Darnell, Vitesse Semiconductor ([zdarnell@vitesse.com](mailto:zdarnell@vitesse.com))  
 Date: 26 June 2006  
 Subject: T10/06-304r0 SAS 2.0 SMP Function Result Priority

### **Revision History**

Revision0 (27 June 2006) first revision

### **Related Documents**

Serial Attached SCSI –2 (SAS 2) 05  
 SAS-2 SMP Lists (DISCOVER LIST) 06-037r6

### **Overview**

It has been determined that there needs to be prioritization of the SMP function results: essentially defining which parameters for the SMP Target firmware to check first when processing a SMP request. This function list was generated from proposal 06-037r6, it may not include all the new SMP functions proposed for SAS-2.

### **Suggested Changes**

Table 142 defines the priority of the SMP Function results defined in Table 141. Function validity should be checked in the order defined in this table.

**Table 142 — Function result priority per SMP Function**

<b>SMP Function (per Table 139)</b>	<b>SMP Function Result Priority (per Table 141)</b>
REPORT GENERAL	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED
REPORT MANUFACTURER	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED
READ GPIO REGISTER	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED
REPORT ZONE PERMISSION	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED
DISCOVER	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) SMP FUNCTION FAILED 5) SMP FUNCTION ACCEPTED

**Table 142 Continued — Function result priority per SMP Function**

<b>SMP Function (per Table 139)</b>	<b>SMP Function Result Priority (per Table 141)</b>
REPORT PHY ERROR LOG	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) SMP FUNCTION FAILED 5) SMP FUNCTION ACCEPTED
REPORT PHY SATA	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) PHY DOES NOT SUPPORT SATA 5) SMP FUNCTION FAILED 6) SMP FUNCTION ACCEPTED
REPORT ROUTE INFORMATION	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) INDEX DOES NOT EXIST 5) SMP FUNCTION FAILED 6) SMP FUNCTION ACCEPTED
REPORT PHY EVENT INFORMATION	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) SMP FUNCTION FAILED 5) SMP FUNCTION ACCEPTED
DISCOVER LIST	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) UNKNOWN DESCRIPTOR LIST 4) UNKNOWN PHY FILTER 5) SMP FUNCTION FAILED 6) SMP FUNCTION ACCEPTED
CONFIGURE GENERAL	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED
WRITE GPIO REGISTER	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED

**Table 142 Continued — Function result priority per SMP Function**

<b>SMP Function (per Table 139)</b>	<b>SMP Function Result Priority (per Table 141)</b>
CONFIGURE ZONE PERMISSION	1) INVALID REQUEST FRAME LENGTH 2) SMP FUNCTION FAILED 3) SMP FUNCTION ACCEPTED
ZONED BROADCAST	1) INVALID REQUEST FRAME LENGTH 2) SMP ZONE VIOLATION 3) SMP FUNCTION FAILED 4) SMP FUNCTION ACCEPTED
CONFIGURE ROUTE INFORMATION	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) INDEX DOES NOT EXIST 5) SMP FUNCTION FAILED 6) SMP FUNCTION ACCEPTED
PHY CONTROL	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) UNKNOWN PHY OPERATION 5) PHY DOES NOT SUPPORT SATA (TRANSPORT SATA PORT SELECTION SIGNAL) 6) SMP FUNCTION FAILED 7) SMP FUNCTION ACCEPTED
PHY TEST FUNCTION	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) UNKNOWN PHY TEST FUNCTION 5) PHY TEST FUNCTION IN PROGRESS 6) SMP FUNCTION FAILED 7) SMP FUNCTION ACCEPTED
CONFIGURE PHY EVENT INFORMATION	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) PHY EVENT INFORMATION SOURCE NOT SUPPORTED 5) SMP FUNCTION FAILED 6) SMP FUNCTION ACCEPTED

**Table 142 Continued — Function result priority per SMP Function**

<b>SMP Function (per Table 139)</b>	<b>SMP Function Result Priority (per Table 141)</b>
CONFIGURE PHY ZONE	<ol style="list-style-type: none"><li>1) INVALID REQUEST FRAME LENGTH</li><li>2) PHY DOES NOT EXIST</li><li>3) PHY VACANT</li><li>4) SMP FUNCTION FAILED</li><li>5) SMP FUNCTION ACCEPTED</li></ol>

NOTE: Management device servers compliant with previous versions of this standard may use any priority for reporting function results other than SMP FUNCTION ACCEPTED.