

To: T10 Technical Committee
 From: Zenta Darnell, Vitesse Semiconductor (zdarnell@vitesse.com)
 Date: 7 July 2006
 Subject: T10/06-304r2 SAS 2.0 SMP Function Result Priority

Revision History

Revision0 (27 June 2006) first revision

Revision1 (7 July 2006) added INVALID EXPANDER CHANGE COUNT result to priority lists.

Reivision2 (13 July 2006) modified should to shall and changed NOTE to normative text.

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~~ **shall** be issued in the order defined in this table.

Table 142 — Function result priority per SMP Function

SMP Function (per Table 139)	SMP Function Result Priority (per Table 141)
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

SMP Function (per Table 139)	SMP Function Result Priority (per Table 141)
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) INVALID EXPANDER CHANGE COUNT 3) SMP FUNCTION FAILED 4) 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

SMP Function (per Table 139)	SMP Function Result Priority (per Table 141)
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) INVALID EXPANDER CHANGE COUNT 6) SMP FUNCTION FAILED 7) 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) INVALID EXPANDER CHANGE COUNT 7) SMP FUNCTION FAILED 8) 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) INVALID EXPANDER CHANGE COUNT 7) SMP FUNCTION FAILED 8) SMP FUNCTION ACCEPTED

Table 142 Continued — Function result priority per SMP Function

SMP Function (per Table 139)	SMP Function Result Priority (per Table 141)
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) INVALID EXPANDER CHANGE COUNT 6) SMP FUNCTION FAILED 7) SMP FUNCTION ACCEPTED
CONFIGURE PHY ZONE	1) INVALID REQUEST FRAME LENGTH 2) PHY DOES NOT EXIST 3) PHY VACANT 4) INVALID EXPANDER CHANGE COUNT 5) SMP FUNCTION FAILED 6) SMP FUNCTION ACCEPTED

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