

To: T10 SAS Protocol Working Group

From: Brian Day, LSI Logic

Subject: 07-228 SAS-2 ResetStatus port selector fixxes

Revision History

Revision 0 - Initial draft (May , 2006)

Related Documents

sas2r09a - Serial Attached SCSI - 2 Draft revision 09a

06-478r2 - SAS 2: Changes for the NEGOTIATED PHYSICAL LINK RATE

Overview

Two of the states for the ResetStatus related to the port selector are incorrectly dependent on the value of the ATTACHED SATA PORT SELECTOR bit.

Proposed Changes

6.8.3.5 SP3:OOB_AwaitCOMINIT_Sent state

6.8.3.5.1 State description

This state waits for a COMINIT Transmitted message.

If the phy supports SATA port selectors, ~~the ATTACHED SATA PORT SELECTOR bit is set to zero in the SMP DISCOVER response (see 10.4.3.7) and the SMP DISCOVER LIST response (see 10.4.3.13.3)~~, and this state receives a COMWAKE Detected message, this state shall:

- a) if the ResetStatus state machine variable is not set to PHY_RESET_PROBLEM, SPINUP_HOLD, or UNSUPPORTED_PHY_ATTACHED, set the ResetStatus state machine variable to PORT_SELECTOR; [and](#)
- b) [if the attached sata port selector bit is set to zero in the SMP DISCOVER response \(see 10.4.3.7\) and the SMP DISCOVER LIST response \(see 10.4.3.13.3\):](#)
 - A) set the ATTACHED SATA PORT SELECTOR bit to one in the SMP DISCOVER response and the SMP DISCOVER LIST response; and
 - B) send a SATA Port Selector Change confirmation to the link layer.

6.8.3.6 SP4:OOB_COMSAS state

6.8.3.6.1 State description

Upon entry into this state, the phy shall send a Transmit COMSAS message to the SP transmitter.

This state waits for receipt of a COMSAS Transmitted message and/or a COMSAS Detected message.

If the phy supports SATA port selectors, ~~the ATTACHED SATA PORT SELECTOR bit is set to zero in the SMP DISCOVER response (see 10.4.3.7) and the SMP DISCOVER LIST response (see 10.4.3.13.3)~~, and this state receives a COMWAKE Detected message, this state shall:

- a) if the ResetStatus state machine variable is not set to PHY_RESET_PROBLEM, SPINUP_HOLD, or UNSUPPORTED_PHY_ATTACHED, set the ResetStatus state machine variable to PORT_SELECTOR; [and](#)
- b) [if the attached sata port selector bit is set to zero in the SMP DISCOVER response \(see 10.4.3.7\) and the SMP DISCOVER LIST response \(see 10.4.3.13.3\):](#)

- A) set the ATTACHED SATA PORT SELECTOR bit to one in the SMP DISCOVER response and the SMP DISCOVER LIST response; and
- B) send a SATA Port Selector Change confirmation to the link layer.