

To: T10 Technical Committee
 From: Tim Symons, PMC-Sierra (Tim_Symons@pmc-sierra.com)
 Date: 18 Aug 2006
 Subject: 06-377r0 SAS-2 Broadcast (Activate)

Revision Information

- Revision 0: First draft.

Referenced Document

sas2r05a Serial Attached SCSI – 2 (SAS-2) revision 5a
 06-286r4 SAS-2 SMP ZONE LOCK (Tim Symons, PMC-Sierra).
 06-288r5 SAS-2 SMP ZONE ACTIVATE function (Tim Symons, PMC-Sierra)
 06-289r4 SAS-2 SMP ZONE UNLOCK (Tim Symons, PMC-Sierra)
 06-358r1 SAS-2 Zone Configuration model (Tim Symons, PMC-Sierra)

Overview

Re-define Broadcast (Reserved 3) to Broadcast (Activate) to be used by an active zone manager to request every locked zoning expander device to copy the zoning expander shadow registers into the zoning expander registers to make the values active.

4.1.12 Broadcasts

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Table 6 – Broadcast types

Broadcast	Description
...	
Broadcast (Reserved 3) Broadcast (Activate)	Reserved. SAS ports shall ignore this Broadcast. Originated by the active zone manager to request all locked zoning expander devices to copy the zoning expander shadow registers into the zoning expander registers to make the values active. Devices that are not locked zoning expander devices shall ignore this Broadcast.
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...

4.6.6.5 BPP interface

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Table16 – Expander phy to BPP requests

Message	Description
...	
Broadcast Event Notify (Reserved 3 Received) Broadcast Event Notify (Activate Received)	Request to forward a Broadcast (Reserved 3) because a Broadcast (Reserved 3) was received. Request to copy the zoning expander shadow registers into the zoning expander registers to make the values active (see 10.4.3.xx) and forward a Broadcast (Activate) because a Broadcast (Activate) was received.
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7.2.2 Primitive summary

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Table 79 - Primitives not specific to type of connection (part 1 of 2)

Primitive	Use ^a	From ^b			To ^b			Primitive sequence type ^c
		I	E	T	I	E	T	
...								
BROADCAST (RESERVED 3) BROADCAST (ACTIVATE)	NoConn	I	E		I	E		Redundant
...								

...

7.2.3 Primitive encodings

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Table 82 - Primitive encoding for primitives not specific to type of connection (part 1 of 2)

Primitive	Character			
	1st	2nd	3rd	4th (last)
...				
BROADCAST (RESERVED 3) BROADCAST (ACTIVATE)	K28.5	D04.7	D16.7	D02.0
...				

...

7.2.5.5 BROADCAST

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Table 88- BROADCAST primitives

Primitive	Description
...	
BROADCAST (RESERVED 3) BROADCAST (ACTIVATE)	Broadcast (Reserved 3) Broadcast (Activate)
...	

...

10.4.3.11 REPORT PHY BROADCASTCOUNTS function

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The ~~BROADCAST (RESERVED 3) COUNT~~ **BROADCAST (ACTIVATE) COUNT** field indicates the value of a wrapping counter counting the number of ~~Broadcast (Reserved 3)s~~ **Broadcast (Activate)s** received from an end device attached to the specified phy. This field shall be set to zero at power on. If implemented, the expander device shall increment this field at least once when it receives a ~~Broadcast (Reserved 3)~~ **Broadcast (Activate)** from an attached end device and shall not increment this field when it receives a ~~Broadcast (Reserved 3)~~ **Broadcast (Activate)** from an attached expander device.

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10.4.3.16 ZONED BROADCAST function

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Table 247 - BROADCAST TYPE field

Code	Description
...	
110b	Broadcast (Reserved 3) Broadcast (Activate)
...	

...

Annex J
(informative)

Primitive encoding

...

Table J.1 — Primitives with Hamming distance of 8 (part 1 of 3)

1st	2nd	3rd	4th	Assignment
...				
K28.5	D04.7	D16.7	D02.0	BROADCAST (RESERVED 3) BROADCAST (ACTIVATE)
...				

...