

To: T10 Technical Committee
From: Tim Symons, PMC-Sierra (Tim_Symons@pmc-sierra.com)
Date: 5 July 2007
Subject: 07-307r0 SAS-2 Zone group valid bit

Revision Information

- Revision 0: First draft.

Referenced Document

sas2r10 Serial Attached SCSI – 2 (SAS-2) revision 10

Overview

Fix for SAS2r10 Editors Note 11

The zone route table of a zoning expander device may contain SAS address entries with the ZONE GROUP VALID bit set to zero. e.g. The zone table entries for SAS addresses of end devices attached to expander devices 4 and 5 shown in figure 51, do not have valid zone groups, because they are not attached to zoning expander devices.

Figure 51 shows an example of one ZPSDS in a SAS domain.

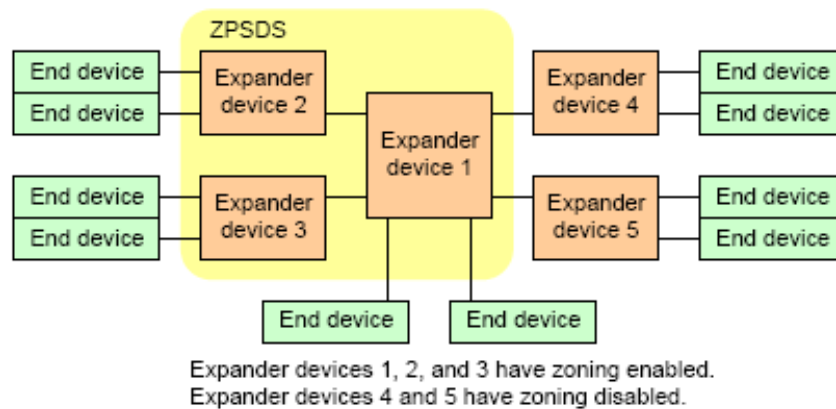


Figure 51 — One ZPSDS example

The zone group of the phy on the boundary of the ZPSDS shall be asserted as the zone group for SAS addresses with the ZONE GROUP VALID bit set to zero

This proposal adds definition text for the zone group valid bit and the zone route table.

[Suggested additions to SAS-2 existing text (included in black), new additional text shown in red

4.9.3.4 Zoning expander route table

A zoning expander route table is an expander-based expander route table (see 4.6.7.3) that is able to hold the zone group of each routed SAS address.

Figure 56 shows a representation of the zoning expander route table.

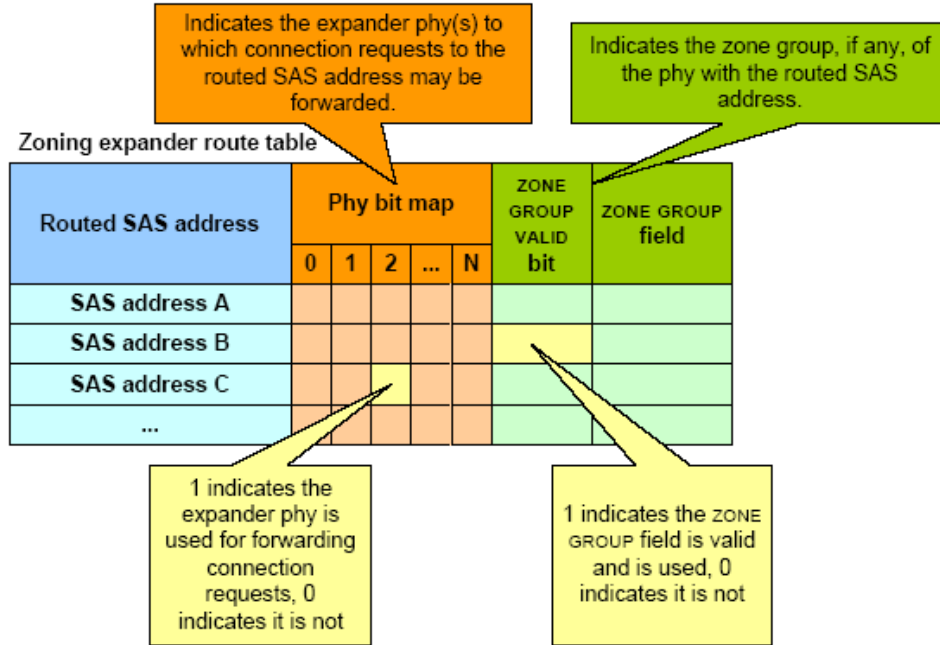


Figure 56 — Zoning expander route table

If a SAS address is in the expander routing table and the ZONE GROUP VALID bit is set to zero, then the zone group of the destination expander phy shall be the zone group for the SAS address. If the ZONE GROUP VALID bit is set to zero and the phy is inside the ZPSDS the destination zone group shall be set to 1 and the OPEN always allowed. The zone group shall be checked by the zoning expander device at the boundary of the ZPSDS.

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