To: T10 Technical Committee
From: Rob Elliott, HP (elliott@hp.com) and Jay Neer, Molex (jay.neer@molex.com).
Date: 29 April 2007
Subject: 07-209r0 SAS-2 Mini SAS 4x cable plug pull tab color

Revision history
Revision 0 (29 April 2007) First revision

Related documents
sas2r09 - Serial Attached SCSI - 2 (SAS-2) revision 9

Overview
Mini SAS 4x cable plug connectors using pull-tabs (as shown in the figures) use a color matching PANTONE 279C (i.e., light blue) to differentiate them from other uses of similar connectors like PCI Express. The color should be mentioned by SAS-2.

Also, the first figure does not show color on the tab portion like the others. An updated figure from Cleaver Brinkerhoff (courtesy of Molex) is provided.

Suggested changes

2.4 Other references

For information on the current status of the listed documents, or regarding availability, contact the indicated organization.

Serial ATA 2.6 (SATA-2). 15 February 2007

> NOTE 1 - For information on the current status of Serial ATA documents, see the Serial ATA International Organization at http://www.sata-io.org.

SFF-8086, *Compact Multilane Series: Common Elements*

SFF-8087, *Compact Multilane Series: Unshielded*

SFF-8088, *Compact Multilane Series: Shielded*

SFF-8223, *2.5" Drive Form Factor with Serial Connector*

SFF-8323, *3.5" Drive Form Factor with Serial Connector*

SFF-8523, *5.25" Drive Form Factor with Serial Connector*

SFF-8410, *HSS Copper Testing and Performance Requirements*

SFF-8416, *Measurement and Performance Requirements for HPEI Bulk Cable*

SFF-8460, *HSS Backplane Design Guidelines*

SFF-8470, *Shielded High Speed Multilane Copper Connector*

SFF-8482, *Unshielded Dual Port Serial Attachment Connector*

SFF-8484, *Multi-Lane Unshielded Serial Attachment Connectors*

SFF-8485, *Serial GPIO (SGPIO) Bus*

> NOTE 2 - For more information on the current status of SFF document, contact the SFF Committee at 408-867-6630 (phone), or 408-867-2115 (fax). To obtain copies of these documents, contact the SFF Committee at 14426 Black Walnut Court, Saratoga, CA 95070 at 408-867-6630 (phone) or 408-741-1600 (fax) or see http://www.sffcommittee.org.

OMG Unified Modeling Language (UML) Specification. Version 1.5, March 2003.

NOTE 3 - For more information on the UML specification, contact the Object Modeling Group at http://www.omg.org.

PANTONE® Color Formula Guide

NOTE 4 - Pantone® and PANTONE MATCHING SYSTEM® are registered trademarks of Pantone, Inc. For more information on Pantone colors, contact Pantone, Inc. at http://www.pantone.com.

5.2.3.3.2 Mini SAS 4x connectors

5.2.3.3.2.1 Mini SAS 4x cable plug connector

The Mini SAS 4x cable plug connector is the free (plug) 26-circuit Shielded Compact Multilane connector defined in SFF-8088 and SFF-8086.

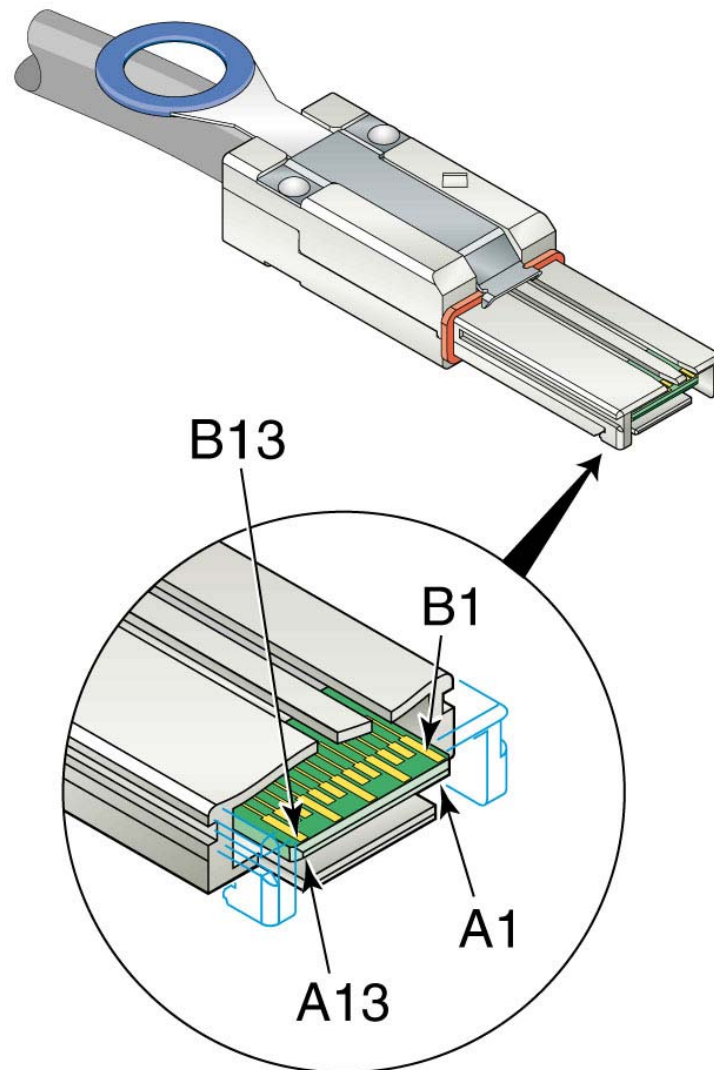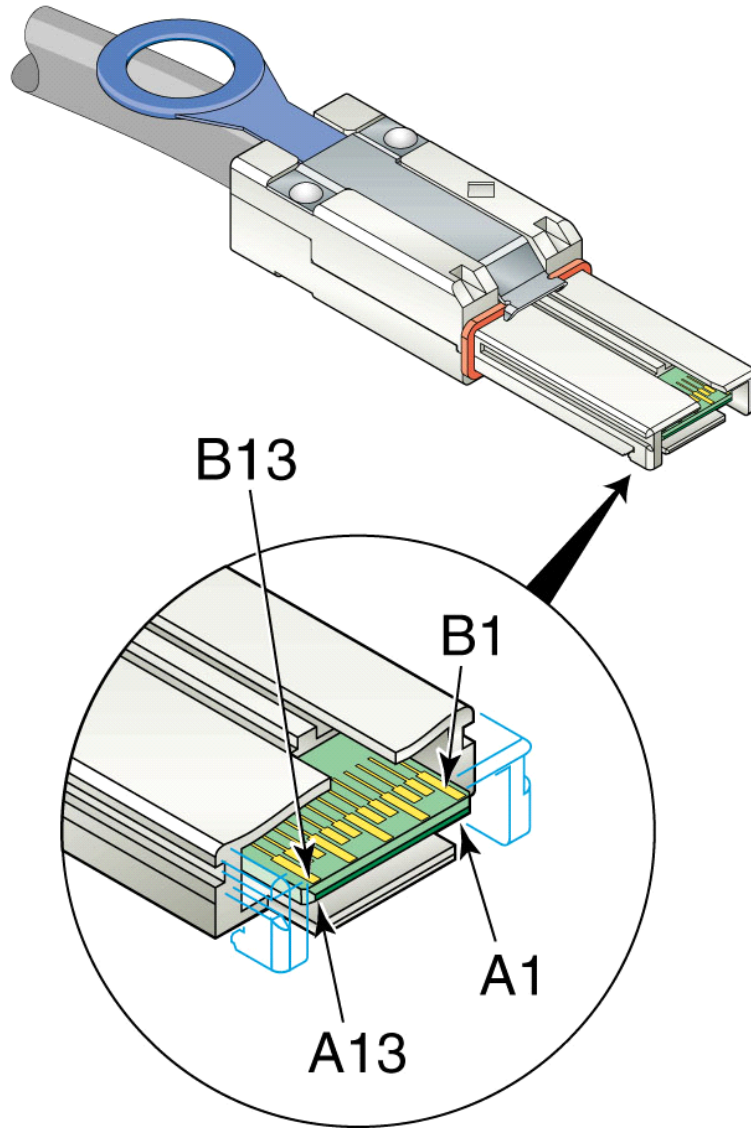Figure 75 shows the Mini SAS 4x cable plug connector.

Figure 75 — Mini SAS 4x cable plug connector [old]

Figure 75 shows the Mini SAS 4x cable plug connector.

Figure 75 — Mini SAS 4x cable plug connector [new]

If constructed with a pull tab as shown in figure 75, the pull tab should use PANTONE 279 C (i.e., light blue coated).

Table 43 (see 5.2.3.3.2.3) defines the pin assignments for the Mini SAS 4x cable plug connector.
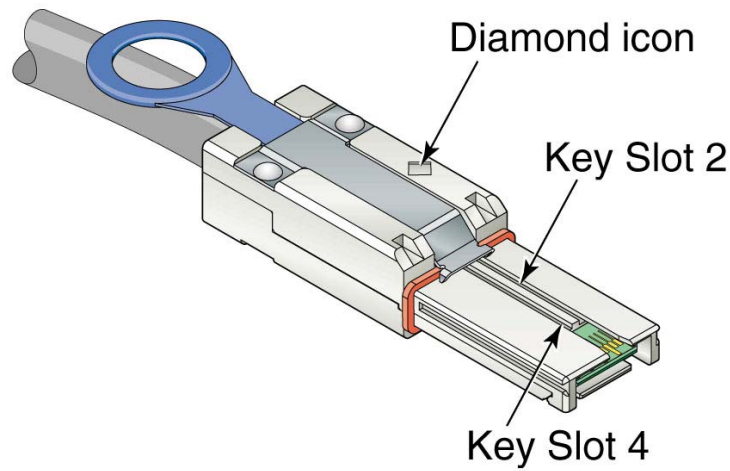
Mini SAS 4x cable plug connectors shall include key slots to allow attachment to Mini SAS 4x receptacle connectors (see 5.2.3.3.2.2) with matching keys.

Table 41 defines the icons that shall be placed on or near Mini SAS 4x cable plug connectors and the key slot positions (see SFF-8088) that shall be used by Mini SAS 4x cable plug connectors.

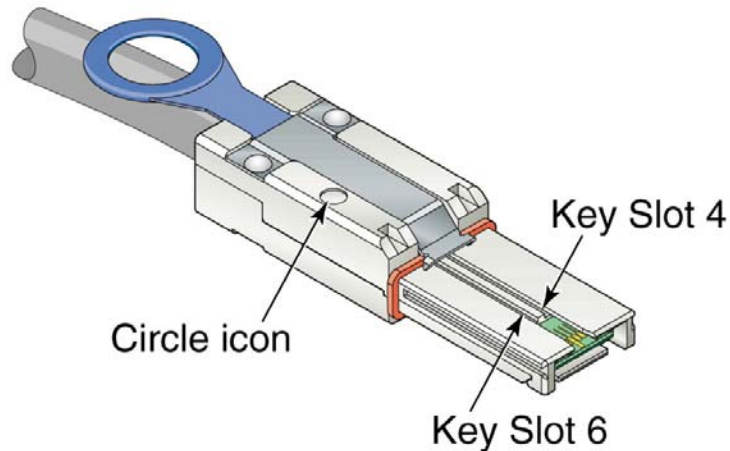**Table 41 — Mini SAS 4x cable plug connector icons and key slot positions**

Use	Icon	Key slot positions	Reference
End of a SAS external cable that attaches to an end device, an enclosure out port, or an enclosure universal port	Diamond	2, 4	Figure 76
End of a SAS external cable that attaches to an end device, an enclosure in port, or an enclosure universal port	Circle	4, 6	Figure 77

Figure 76 shows the key slots on the Mini SAS 4x cable plug connector that attaches to an end device or an enclosure universal port (see figure 79 in 5.2.3.3.2.2), or an enclosure out port (see figure 80 in 5.2.3.3.2.2).

Figure 76 — Mini SAS 4x cable plug connector that attaches to an enclosure out port

Figure 77 shows the key slots on the Mini SAS 4x cable plug connector that attaches to an end device or an enclosure universal port (see figure 79 in 5.2.3.3.2.2), or an enclosure in port (see figure 81 in 5.2.3.3.2.2).

Figure 77 — Mini SAS 4x cable plug connector that attaches to an enclosure in port