

1) The meeting opened at 9:02 am and participants introduced themselves.

2) Attendance:

Mr. Ron Roberts	A	Broadcom Corp.
Mr. Kevin Marks	P	Dell, Inc.
Mr. Douglas Wagner	P	FCI
Mr. Elwood Parsons	P	Foxconn Electronics
Mr. Mike Fitzpatrick	P	Fujitsu
Mr. Rob Elliott	P	Hewlett Packard Co.
Mr. Barry Olawsky	V	Hewlett Packard Co.
Mr. Dan Colegrove	P	Hitachi Global Storage Tech.
Mr. George O. Penokie	P	IBM / Tivoli Systems
Mr. Schelto van Doorn	V	Intel Corp
Mr. Bill Bissonette	A	Intel Corp.
Mr. Avraham Shimor	P	M-Systems
Mr. Martin Czekalski	P	Maxtor Corp.
Mr. Jay Neer	P	Molex Inc.
Mr. Jerry Kachlic	V	Molex
Mr. Hock Seow	V	NEC
Mr. Bill Lye	A	PMC-Sierra
Mr. Yuriy Greshishchev	AV	PMC-Sierra
Mr. Ting Li Chan	V	QLogic Corp.
Mr. Alvin Cox	V	Seagate Technology
Mr. Vit Novak	P	Sun Microsystems, Inc.
Mr. Robert Kando	A	Texas Instruments
Ms. Ashlie Fan	P	TycoElectronics
Mr. Dan Gorenc	A	TycoElectronics
Mr. Gregory Tabor	P	Vitesse Semiconductor
Mr. Michael Yeager	V	Vitesse Semiconductor

26 People Present

Status Key: P - Principal  
 A,A# - Alternate  
 AV - Advisory Member  
 L - Liaison  
 V - Visitor

3) Agenda: Letter ballot resolution

3.1) Discussion began with working the internal compact connector issues and 05-139r0.

The result was to leave the tables defining the controller/backplane connector signal assignments and remove the controller/backplane signal assignments from the figures defining cables, so they just define the cables themselves. Additional cable figures will be added to describe hybrid cables like 8484 to 8087. An informative annex might be added including connector + cable in the same figure. Since so many figures are involved, the changes will be review in a special PHY WG meeting scheduled next Monday afternoon 1:00 pm CDT as indicated below:

**PARTICIPANT INFORMATION:**

All Participants should use the following information to reach the conference call:  
 Toll Free Dial in Number: (866) 279-4742

International Access/Caller Paid Dial In Number: (309) 229-0118  
PARTICIPANT CODE: 3243413

url: seagate.webex.com (no www)  
Topic: SAS PHY WG  
Date: Monday, May 9, 2005  
Time: 1:00 pm, Central Daylight Time (GMT -05:00, Chicago)  
Meeting number: 825 549 498  
Meeting password: cabletable

Figures for the cables in annex and tables cover:

8088 to 8088

8088 to 8470

8470 to 8470

8484 to 8484

8484 to 8087

8087 to 8087

8484 to 8482

8484 to SATA host

8087 to 8482

8087 to SATA host

Refer to SFF for identification of high speed signal locations for internal and external. SFF-8484 and SFF-8470 identify signal lines. SFF-8088 and SFF-8087 need identification added to pins regarding signal type (high speed, ground, sideband).

### 3.2) 05-138r0

External compact connector pin assignment changed to match internal compact connector pin assignment. Letter ballot comment to accept 138r1 as letter ballot resolution. Rev 1 to add illustration provided by Barry Olawsky.

11/0/1 to accept

### 3.3) Sideband name and position

Addressed how hybrid pinout maps into each other.

George to provided pin assignment that allows flat cable connection between connector sideband signals in a hybrid cable (8484 to 8087).

### 3.4) Keying

Keying (only 1 key per device):

End device 3

Subtractive 5

Table 1

Keying to use "shall" instead of "may" or "should".

### 3.5) Identity marks

Receptacle:

subtractive: diamond  
table: circle  
end device: diamond and circle (side by side)

Cable: Diamond on one end and circle on the other.

Vote on requiring the logo near receptacle ended up at (0-2-10) after a changing of votes shifted the result and then broke a tie. Since there was no clear majority on this issue, the item was deferred to STA. STA determined that logos shall be present.

3.6) Phy error log  
Leave as is.

3.7) Rejected request to add precalculated Z1tol values.

3.8) Intra-pair skew  
Change from 20pS to 50pS.

3.9) Low-loss TCTF  
Update coefficients to correct equation to match loss curve.

3.10) Annex B  
Change from normative to informative. Update to change a small number of "shall" in the text and increase references from chapter 5.

3.11) OOB toggling will remain as the issue has been worked with the SATA PHY group.

3.12) Fixed and free connector designation statement clarified with additional sentence that states that fixed and free names are independent of the application.

3.13) Cable requirement footnotes were clarified. Also added reference to section 5.3.3 to clarify performance characteristics of the cable.

3.14) Remaining letter ballot comments are editorial and will be worked by the editors.

4) Meeting adjourned at 7:20 pm

5) PHY WG meeting scheduled next Monday afternoon 1:00 pm CDT concerning cable tables and figures:

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