Minutes of SAS PHY Working Group teleconference Nov 19, 2006 T10/06-461r0

Attendance:

Mr. Bernhard Laschinsky	Agere Systems
Mr. Ziad Matni	Agere Systems
Mr. Bryan Kantack	Agilent Technologies, Inc.
Mr. Jesse Jaramillo	Amphenol
Mr. Kevin Marks	Dell, Inc.
Mr. Ramez Rizk	Emulex
Mr. Kiran Venanabhatla	Finisar
Mr. David Freeman	Finisar
Mr. Michael Fitzpatrick	Fujitsu
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Dan Colegrove	HGST
Mr. George O. Penokie	IBM Corp.
Mr. Harvey Newman	Infineon Technologies
Mr. Schelto van Doorn	Intel Corp
Dr. Mark Seidel	Intel Corp.
Mr. Michael Jenkins	LSI Logic Corp.
Mr. Keith Maloney	LSI Logic Corp.
Mr. Bian Day	LSI Logic Corp.
Mr. Paul Wassenberg	Marvell Semiconductor, Inc.
Mr. Galen Fromm	Molex
Mr. Hock Seow	NEC Electronics America, Inc
Mr. Henry Wong	PMC-Sierra
Mr. Robert Watson	PMC-Sierra
Mr. Rick Hernandez	PMC-Sierra
Mr. Alvin Cox	Seagate Technology
Mr. Bruce Johnson	Seagate Technology
Mr. Daniel Smith	Seagate Technology
Ms. Judy Westby	Seagate Technology
Mr. Benoit Mercier	STMicroelectonics
Mr. Stephen Finch	STMicroelectronics
Mr. Doug Loree	Toshiba

31 in attendance

Agenda:

1. OOB signals to be 1,5 Gbps for all future implementations?
2. New items
3. http://www.t10.org/ftp/t10/document.06/06-324r5.pdf

1. OOB signals to be 1,5 Gbps for all future implementations?

Reasons for 1.5Gbps OOB:
OOB detection typically done with separate circuitry.
OOB circuitry benefits from 1.5Gbps limit.
1.5Gbps is easier to send through the channel and has less loss than higher frequencies. Also does not require equalization for recovery.

Previous discussion on the topic:
http://www.t10.org/ftp/t10/document.05/05-209r0.pdf

Discussed the possible issues as speed rates increase and how this might be addressed with SAS-2. Transmission of OOB does not necessarily need to be tied to the supported data communication frequencies. It was indicated that the 11001100 clock-like pattern at 1.5Gbps

(already allowed by SATA) is much easier to emulate as speeds go higher and is relatively easy for the OOB detector to recognize. A proposal to use the clock-like pattern as a primary burst signal for SAS-2 and provide wording to allow the G1 Align0 pattern as an alternate (for SAS-2 designs that are already near completion) will be posted by Seagate.

2. New items
No new items.

3. Review of 06-324r5
Did a quick verification of previous updates and continued the review of this proposal. Discussion ended on page 15 of 30 due to time constraints. Steve will update per the comments today and we will review updates during the next call prior to continuation.

Next conference call October 26, 2006

Agenda:
1. Status of OOB transition requirement proposal
2. New items
3. http://www.t10.org/ftp/t10/document.06/06-324r6.pdf

PARTICIPANT INFORMATION:

Toll Free Dial in Number: (866) 279-4742
International Access/Caller Paid Dial In Number: (309) 229-0118

PARTICIPANT CODE: 3243413

Webex information:
https://seagate.webex.com/seagate

Topic: SAS-2 PHY WG
Date: Thursday, Oct 26, 2006
Time: 10:00 am, Central Daylight Time (GMT -05:00, Chicago)
Meeting number: 826 515 680
Meeting password: 6gbpsSAS