Minutes of SAS PHY Working Group conference call August 9, 2007 T10/07-364r0

Attendance:

Mr. Jesse Jaramillo	Amphenol
Mr. Chuck Hill	Alta Engineering
Mr. Jaremy Flake	ATL Technology
Mr. Kevin Witt	Dallas Semiconductor
Mr. Ramez Rizk	Emulex
Mr. Mike Fitzpatrick	Fujitsu
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Rob Elliott	Hewlett Packard Co.
Mr. Dan Colegrove	Hitachi Global Storage Tech.
Mr. Harvey Newman	Infineon Technologies
Dr. Mark Seidel	Intel Corp.
Mr. Joel Silverman	Kawasaki Microelectronics
Mr. Michael Jenkins	LSI Logic Corp.
Mr. Gabriel Romero	LSI Logic Corp.
Mr. John Lohmeyer	LSI Logic Corp.
Mr. Jackie Chow	Marvell Semiconductor, Inc.
Mr. Galen Fromm	Molex Inc.
Mr. Hock Seow	NEC Electronics America, Inc
Mr. Joseph Chen	Samsung
Mr. Alvin Cox	Seagate Technology
Mr. Benoit Mercier	STMicroelectonics
Mr. Doug Loree	Toshiba
Mr. Scott Shuey	TycoElectronics
Mr. Mahbubul Bari	Vitesse Semiconductor
Mr. Larry McMillan	WDC
Mr. Ramya Dissanayake	WDC
Mr. Sanjay Sethi	

27 in attendance

Zero length test load:

Did a quick review of 07/07-013r7 which substantiates the approach taken in 07-304 for updating the PHY section. Waiting on posting of 07-304r3.

SAS-2 Zero-Length Test Load Characterization [Olawsky]
http://www.t10.org/ftp/t10/document.07/07-013r7.pdf

SAS-2 Zero-Length Test Load Section [Olawsky]
http://www.t10.org/ftp/t10/document.07/07-304r2.pdf

SAS-2 6Gbps PHY specification

Alvin did a quick review of the status which included the initial draft of the transmitter section and still needed completion of the receiver section. He promised the updated proposal with the receiver section to be posted Thursday night or Friday morning so it could be worked on at the face-to-face on 8/15-8/16. See link below for the updated proposal.

Alvin posed the question of how to handle the eye opening amplitude since the reference receiver was changed to 1000 mV. The transmitter device table allows a range of 800 – 1200 mV, so how

can the number in the table reflect the reference transmitter delivered signal requirement as well as that of the “real” transmitter?

Discussed the common mode plot and indications are that other specifications are making this a flat line. Hardware may not be able to support the graph as currently proposed.

Cable suppliers need to review the Scd21 numbers.

Another question that came up was the ability to provide enough amplitude for OOB through the 10-meter cable. A quick look at the cable loss for the SAS-2 OOB signaling showed that this is not an issue.

SAS-2 6Gbps PHY specification [Cox]
http://www.t10.org/ftp/t10/document.07/07-339r2.pdf

Next meeting:

Interim face-to-face meeting (PHY WG only)
An interim face-to-face SAS-2 PHY WG meeting is planned for August 15 and 16.
The meeting will be held at the Molex campus in Lisle, IL.
Many thanks to Molex hosting this meeting.

Date:
Wednesday August 15th 8am – 5pm
Thursday August 16th 8am - noon

Address:
Molex
2222 Wellington Court
Lisle, IL 60532

http://www.t10.org/ftp/t10/t10r/2007/r0707166.htm

No conference call on 8/16.