Minutes of SAS PHY Working Group conference call August 2, 2007 T10/07-362r0

Attendance:

Mr. Bryan Kantack	Agilent Technologies, Inc.
Mr. Paul von Stamwitz	AMCC
Mr. Jesse Jaramillo	Amphenol
Mr. Greg McSorley	Amphenol
Mr. Jaremy Flake	ATL Technology
Mr. Kevin Witt	Dallas Semiconductor
Mr. Mickey Felton	EMC
Mr. Elwood Parsons	Foxconn Electronics
Mr. Mike Fitzpatrick	Fujitsu
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Dan Colegrove	Hitachi Global Storage Tech.
Mr. James Rockrohr	IBM Corp.
Mr. Harvey Newman	Infineon Technologies
Dr. Mark Seidel	Intel Corp.
Mr. Gabriel Romero	LSI Logic Corp.
Mr. Bernhard Laschinsky	LSI Logic Corp.
Mr. John Lohmeyer	LSI Logic Corp.
Mr. Galen Fromm	Molex Inc.
Mr. Hock Seow	NEC Electronics America, Inc
Mr. Rick Hernandez	PMC-Sierra
Mr. Guillaume Fortin	PMC-Sierra
Mr. Joseph Chen	Samsung
Mr. Alvin Cox	Seagate Technology
Mr. Benoit Mercier	STMicroelectonics
Mr. Bent Hessen-Schmidt	Synthesys Research, Inc.
Mr. Doug Loree	Toshiba
Mr. Dan Gorenc	TycoElectronics
Mr. Scott Shuey	TycoElectronics
Mr. Larry McMillan	WDC
Mr. Ramya Dissanayake	WDC

30 in attendance

Agenda:
1. StatEye (and other) simulation updates.
StatEye 5 has development site up and running, code available. Not tied directly to SAS environment yet (10 meter cable channel not run on the simulation) but debugged and should be ready for presentation on next week's conference call.

2. 07-304 SAS-2 Zero-length test load [Olawsky]
http://www.t10.org/ftp/t10/document.07/07-304r2.pdf
Measurements indicate that equivalent time scope has more accurate results (less insertion loss) than real time scopes. The effects of instrumentation are mentioned in the text, however, the measurements show it to be more than anticipated. No BERT testing available. Agilent to check on providing information regarding real time and equivalent time scope measurements.

3. New items
This is a list of concerns that need to be looked at. Please review and provide feedback.

a) Jitter tolerance test clarification?

b) Are passive interconnect specifications acceptable for 6G?

c) Test procedures for all numbers? When draft is complete, what is missing?

d) Looking at table 59 in SAS2r11 we have a specification for imbalance of 10%. From note "e", as long as the calculated rms amplitude is of the + and - legs differ by +/-5% of the midpoint it meets the spec. However, the legs could have virtually unlimited imbalance and still have the same rms amplitude. Is this a correct interpretation?

e) Do we need frequency rate of change control for SSC to avoid abrupt frequency shifts in the SSC profile?

f) What are other deficiencies in the specification?

g) Should note 17 remain?

4. 07-339r0 SAS-2 6 Gbps PHY specification [Cox]
http://www.t10.org/ftp/t10/document.07/07-339r0.pdf
This is the continuation of 07-063. Includes text from SAS-2r10 as the basis for the SAS-2 PHY spec. Currently up to the 6G transmitter device section. Look at changes up to this point, as they are many. Comments are encouraged. If there is something that doesn't look right, please provide input on how to fix it. Target draft completion by next week's call (include transmitter and receiver sections.

5. Schedule

Face-to-face August 15 and 16 in Lisle, IL
http://www.t10.org/ftp/t10/t10r/2007/r0707166.htm

Next call:
August 9, 2007 10:00 am CDT

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Webex information:
https://seagate.webex.com/seagate
Topic: SAS-2 PHY WG
Date: Thursday
Time: 10:00 am, Central Daylight Time (GMT -05:00, Chicago)
Meeting number: 826 515 680
Meeting password: 6gbpsSAS