Minutes of SAS PHY Working Group conference call August 30, 2007

T10/07-379r0

Attendance:

Mr. Charles Hill	Alta Engineering
Mr. Jesse Jaramillo	Amphenol
Mr. Jaremy Flake	ATL Technology
Mr. Mickey Felton	EMC
Mr. Ramez Rizk	Emulex
Mr. Douglas Wagner	FCI
Mr. Mike Fitzpatrick	Fujitsu
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Dan Colegrove	Hitachi Global Storage Tech.
Dr. Mark Seidel	Intel Corp.
Mr. Michael Jenkins	LSI Corp.
Mr. Gabriel Romero	LSI Corp.
Mr. Jacky Chow	Marvell Semiconductor, Inc.
Mr. Kevin Witt	Maxim Semiconductor
Mr. Galen Fromm	Molex Inc.
Mr. Rick Hernandez	PMC-Sierra
Mr. Guillaume Fortin	PMC-Sierra
Mr. Yuming Tao	PMC-Sierra
Mr. Tim Symons	PMC-Sierra
Mr. Joseph Chen	Samsung
Mr. Alvin Cox	Seagate Technology
Mr. Benoit Mercier	STMicroelectonics
Mr. Scott Shuey	TycoElectronics
Mr. Mahbubul Bari	Vitesse Semiconductor
Mr. Larry McMillan	WDC
Mr. Ramya Dissanayake	WDC

26 in attendance

1. Test illustrations/descriptions [Felton]

http://www.t10.org/ftp/t10/document.07/07-377r0.pdf

RTTL figure shows that there is trace between the connector and the measurement point. The Molex fixture has 2" of micro strip traces on each side.

Annex B may mention the trace existence with regards to measurement. Since the traces are included in the S-parameter file, Galen and Mickey will work on including the information in the explanation file associated with the s-parameter postings and determine if a general figure can be included in Annex B (or elsewhere) in the standard as informative.

- Use a consistent format for graphs and provide equations. Jenkins and Witt have supplied the figures. The table entries may be sufficient to provide the "equations" for the editor (Elliott) to draw in his preferred format.
- Alvin to look at "repeating pattern" usage.
- Mickey and Alvin to review references to figures.
- Alvin to talk to STA about adding a strong statement regarding compatibility with SATA at 6Gbps. Fitzpatrick will support as needed.

2. Receiver test delivered signal [Newman, Hessen-Schmidt, Witt, Jenkins]

Kevin shared a presentation which combined element from LRM and FCAL to establish the test signal required to test the receiver device. He will post as is and details over time. SAS-2 Comprehensive Stressed Receiver Sensitivity Test (07-380) [Witt] http://www.t10.org/ftp/t10/document.07/07-380r0.pdf 3. Cable specification update [Olawsky, Fromm, Wingard]

Galen posted NEXT files: http://www.t10.org/ftp/t10/document.07/07-376r0.pdf http://www.t10.org/ftp/t10/document.07/07-376r0.s4p He will also post FEXT files. Barry needs data from Amphenol before he can proceed.

4. Common mode voltage limit [Jenkins + anyone who can help]

Straight line was not accepted. Need data to determine how to change the graph.

5. StatEye updates [Newman]

Alvin,

I did want to just inform you that the v5 work is making good progress. The DFE, FIR and 8b10b features are functioning as expected, however, I haven't manage to get the v4 and v5 correlating for the scrambled 10m cable. Clearly, I have to get to the bottom of this and will be right back to asap with hopefully good news, and the final 8b10b results.

I would appreciate it if you could communicate this to the task group, and invite them to send me any questions they have. And also point them to the website for a more detailed update of the progress.

www.stateye.org

Many thanks for the patience; it will be worth waiting for....

Cheers, Anthony anthony.sanders@infineon.com

6. Appendix material for JTF tuning [Cox]

Alvin received the source document from Chuck. He will convert to proposal form and post next week.

7. Updated 07-339 per meeting input [Cox] http://www.t10.org/ftp/t10/document.07/07-339r3.pdf Comments?

Next conference call: 9/6/07

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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