

Attendance:

Mr. Henry Wong	Agilent
Mr. Paul von Stamwitz	AMCC
Mr. Elwood Parsons	Foxconn
Mr. Rob Elliott	HP
Mr. Barry Olawsky	HP
Mr. Bill Bissonette	Intel Corporation
Mr. George Penokie	IBM
Mr. Mark Evans	Maxtor
Mr. Dick Uber	Maxtor
Mr. Jay Neer	Molex
Mr. Galen Fromm	Molex
Mr. Bill Lye	PMC-Sierra
Mr. Ting Chan	QLogic
Mr. Alvin Cox	Seagate Technology
Mr. Dan Smith	Seagate Technology
Mr. Bill Gintz	Sues
Mr. Kalev Sepp	Tektronix
Mr. Don Schulte	Vitesse

18 People Present

Agenda:

- 1) 05-019r1 SAS 1.1 OOB For SAS/SATA Support
<http://www.t10.org/ftp/t10/document.05/05-019r1.pdf>

Review draft white paper by Bill Bissonette concerning if damage to SATA devices is an issue. The paper should include an explanation of when the SAS signal levels would be delivered to the SATA device and give voltage level and circuit examples to aid the analysis. Dan mentioned a concern over long term electro-migration.

Paper to be available next week.

- 2) 04-378r0 SAS-1.1 Clarification of SATA Signaling Level Specification [Olawsky]
<http://www.t10.org/ftp/t10/document.04/04-378r1.pdf>

3Gbps SATA numbers in tables:

SATA and SAS specification specify amplitude differently, resulting in significantly different minimum values.

Pre-emphasis has not been included in simulations.

How real is a worst case SATA device (rise time, amplitude, jitter)? Experience is that SATA devices are much better than worst case.

Eye closure concerns due to influence of reflections from ESD diodes, connectors, etc. These factors may reduce the affects of pre-emphasis and amplitude.

Bill Bissonette and Barry Olawsky to work on 3G numbers.

- 3) Addition of FC PL-2 appendix

Annex has section on return loss. Keep in as informative as this item is expected to be included in SAS 2.

Rob and George working on text and to post a proposal for next week.

4) New 4X connector proposal needs to be drafted if it will be included in SAS 1.1. (Jay Neer)

SFF-8086 Interface

SFF-8087 Internal

SFF-8088 External

Proposal to be posted for next week. Two sections (one for internal and one for external) for each of the following:

connector configuration

pinout

electrical requirements

5) New items

5.1 Foxconn has possible proposal for small 4 lane. Elwood will contact Alvin for SATA-I/O contact information.

5.2 Power requirements for connector. SFF-8482 should be updated regarding current capability. Rob will draft wording for SAS-1.1 pointing to numbers in the SFF document.

5.3 SAS-1.1 rev 8 posted. Please review.

Next call: February 10, 2005

Thursday, 10 am CST.

Same webex and call number for all calls:

Webex:

seagate.webex.com (no www)

Topic: SAS PHY WG

Date: Every 1 week on Thursday, from Thursday, January 27, 2005 to Monday, March 21, 2005

Time: 10:00 am, Central Standard Time (GMT -06:00, Chicago)

Meeting number: 825 549 498

Meeting password: section5

Toll Free Dial in Number: (866) 279-4742

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

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