

Attendance

Mr. Ziad Matni	Agere
Mr. Bernhard Laschinsky	Agere
Mr. Henry Wong	Avago
Mr. Paul von Stamwitz	AMCC
Mr. Doug Wagner	FCI
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Harvey Newman	Infineon Technologies
Dr. Mark Seidel	Intel Corp.
Mr. James Rockrohr	IBM
Mr. Michael Jenkins	LSI Logic Corp.
Mr. Jeff Choun	Marvel
Mr. Richard Uber	Maxtor Corp.
Mr. Galen Fromm	Molex Inc.
Mr. Yuriy Greshishchev	PMC-Sierra
Mr. Alvin Cox	Seagate Technology
Mr. Kevin Witt	Vitesse Semiconductor

16 people present

Agenda

1. Yuri and Galen - provide a draft specification first cut for the external cable.
06-104r0 SAS-2 External link crosstalk budget suggestion and analyses [Yuriy Greshishchev and Galen Fromm]
<http://www.t10.org/ftp/t10/document.06/06-104r0.pdf>

Discussed alignment of crosstalk sources and the affect on the summation.

Should apply to a 10-meter cable rather than specifically mini 4x. Galen indicated that existing mini 4x meet the -36dB number.

Barry will review the power summation original proposal for verification of existing specification number and equation.

Noise floor may be an issue to achieve a 10-meter cable as well as the insertion loss ratio.

Yuriy to simulate at 3G for next call.

How do we know if a 10-meter cable won't work in a 3G system? Can this be tested?

2. All - Will a drive, expander, or initiator at 3Gbps that is SAS only accept SSC at 3Gbps?

No input yet.

3. All - Investigate impact on SSC on design. A few details are mentioned under SSC Considerations.

Desired to incorporate into 6G specification.

How to handle aggregation? Data stream coming in with no SSC versus going out with SSC would not have enough aligns to allow the output to be slowed by SSC. This may be able to be controlled by the SAS credits for flow management, but how complicated is the control scheme?

SSC appears to be an "all or none" proposition unless the clock design in the silicon allows differentiation. Need feedback from expander designers.

EMI compliance concerns if SSC gets turned on or off based on individual component support. Would swapping in a non-supporting target such as SAS 1.1 drive have an impact of regulatory compliance?

4. New items

SAS (50 ohm common mode load) versus SATA (open circuit) 2V transient being specified with different loads. Is it an issue, especially regarding internal cables and white box applications? Discuss on next call.

5. Schedule

Next call on March 2, 2006 (2 weeks).

PARTICIPANT INFORMATION:

All Participants should use the following information to reach the conference calls:

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

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

PARTICIPANT CODE: 3243413

<https://seagate.webex.com/seagate>

Topic: SAS PHY working group

Date: Thursday, March 2, 2006

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

Meeting number: 822 135 571

Meeting password: 10meter