SAS PHY 8/12/02 teleconference results

The meeting was called to order at 2:02 pm, Monday, August 12, 2002

The following were in attendance for all or part of the meeting:

Bernhard Laschinsky	Agere Systems
Ken Paist	Agere Systems
Barry Olawsky	HP
Lou Fasano	IBM
George Penokie	IBM
Dennis Mairet	IBM
Mark Seidel	Intel
Russ Brown	Maxtor
Alvin Cox	Seagate
Allen Kramer	Seagate

10 people present.

1. OOB

Tom Grieff noted that he thought a change proposed from the PHY working group in the RCD in the speed negotiation window was not completely thought out. He suggested that the PHY group look again at the lockup time, which should be a larger portion of the window.

Tom was not available for the call. Alvin to work offline with Tom and communicate results to group.

2. LED driver

Suggested solution: 15mA current source (sink), non-adjustable, what tolerance? 3.6V maximum? Be prepared with driver capability information.

Backwards compatibility?
FCAL impact?
Probable notice of LED intensity at a factor of 2 for current difference.
Two choices seem logical:

A. Current source (DC):
15mA +/- 25% maximum current variation from .5V to 2.5V, max V_{off} of 3.6V

B. Open drain/collector:

Minimum sink current	Max. voltage	Max. applied voltage
15mA	0.2V	3.6V

3. Test Patterns

Kramer, Brown, and Laschinsky to determine test pattern set. Work with Jim Coomes regarding scrambling algorithm. FCAL does not scramble data, so patterns may need modification for equivalent testing with SAS.

Bernhard to post pattern list on reflector. Can do translation of coding and scrambling to give proper patterns for payload on transmission line. Discuss required patterns on next call.

4. Test loads

Jenkins to report on T11 status. Cox to review current PHY section test references to compliant loads.

Carryover.

5. Common mode shift oxide stress

Intel to update model, additional considerations by others, PSCSI and FCAL experience/differentiation. Concern mentioned by Brown due to optional transmitter AC coupling. Should AC coupling of the transmitter be optional?

Look at USB, IB and 1394 hot plug electrical specifications.
PSCSI and FCAL do not have electrical specification limits concerning PHY.

Schedule:

08/19/02 TELECONFERENCE INFORMATION:

* Start Date/Time: 08/12/02 MON 02:00 PM CDT
* End Date/Time: 08/12/02 MON 04:00 PM CDT

PARTICIPANT CODE: 441949
* Toll Free Dial in Number: (877)214-6371
* International Access/Caller Paid Dial In Number: (504)588-9086

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Name: SAS PHY WG
Date: 8/19/2002
Time: 1:45PM, (GMT -05:00) Central Time, USA & Canada (DayLight Time)
Meeting Number: 281981011
Meeting Password: testPattern

Agenda:

LED driver.
OOB (RCD).
Test Patterns.
Test loads.
Common mode shift oxide stress.
New business.

The meeting was adjourned at 3:55 pm CDT, Monday, August 12, 2002