

Minutes SAS PHY conference call, July 22, 2002

The meeting was called to order at 2:05 pm, Monday, July 22, 2002

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

Richard McMillan	Adaptec, Inc.
Bernhard Laschinsky	Agere Systems
Ken Paist	Agere Systems
John Loffink	Dell
Brent Peterman	FCI
Doug Wagner	FCI
Bob Thornton	Fujitsu
Barry Olawsky	HP
Mark Seidel	Intel
Jay Diepenbrock	IBM
Mike Jenkins	LSI Logic
Joe Dambach	Molex
Russ Brown	Maxtor
Alvin Cox	Seagate
Allen Kramer	Seagate
Mike Jensen	STMicroelectronics

16 people present.

Agenda:

1. Keying requirement for external 4x connector - All configurations currently XAUI compliant PHY and grounds are located in fixed positions. No smoke if Tx hooked to Tx of different interfaces? Could impact SFF-8470 if no key required - same connector for 10Gb FCAL, XAUI, SAS, Infiniband with no key.

In a unanimous vote by the call participants it was decided that keying is required since there is no control over the expanded use of this connector and other specification may allow non-AC coupled transceivers. SAS shall not use the side latch version since there is an unkeyed version used by Infiniband. Bob Thornton to update SFF-8470 to reflect keying requirements. SAS version needs to be clearly identified and SAS Section 5 references for external connector must be changed to SFF-8470. A matrix for application/termination would be helpful to show the need for keying.

2. RCD time requirement - Any data to support longer time requirement (currently 320nS). Last call! Bring data!

In a unanimous vote by the call participants it was decided that RCD should be changed to 750 000 UI (OOB) and that RCD output shall be at the level described by idle time. The cumulative ppm drift should not cause any issues due to this longer RCD value.

3. Test load - Continue discussion, need zero length figures (Kramer).

XUAI text mentions approximation of 20 inches of backplane as the compliance load target. How does this relate to cable? Alvin to send Mike Jenkins the Hitachi Cable contact information. Mike will also report the status of the FCAL version in mid-August. Optional compliance points should remain optional. Relationships of transmit and receive compliance points may provide options for

use of tables. Alvin Cox to review with Mike Jenkins concerning exact wording of tables and possible impact of compliance test load to test requirements. Zero length test loads help to test transmitter characteristics.

4. Common mode shift oxide stress - Intel update, additional considerations by others, PSCSI and FCAL experience/differentiation.

Need to consider the DC component of the termination rather than just at the transfer rate. Steps are a problem. Revisit the termination specification. Suggested to place a limit on the blocking capacitor value (10nF + 20%). Resistive divider reduces the impact of the initial step. Time constants need more consideration. Discussion to continue.

5. New business.

No new business added which is not already under another heading.

Schedule:

07/29/02 TELECONFERENCE INFORMATION:

- * Start Date/Time: 07/29/02 MON 02:00 PM CDT
- * End Date/Time: 07/29/02 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: 7/29/2002

Time: 1:45PM, (GMT -05:00) Central Time, USA & Canada (DayLight Time)

Meeting Number: 281981011

Meeting Password: testpat

Agenda:

- Test loads.**
- Common mode shift oxide stress.**
- Test Patterns.**
- New business.**

The meeting was adjourned at 4:15 pm CDT, Monday, July 22, 2002