SAS PHY Teleconference Thursday, October 3, 2002 T10/02-399r0

Attendance:

| Richard McMillan    | Adaptec |
|---------------------|---------|
| Bernhard Laschinsky | Agere   |
| Ken Paist           | Agere   |
| Takeshi Okuyama     | Fujitsu |
| Barry Olawsky       | HP      |
| Andrew Cable        | Intel   |
| Mark Seidel         | Intel   |
| Mike Jenkins        | LSIL    |
| Russ Brown          | Maxtor  |
| Alvin Cox           | Seagate |
| Bruce Johnson       | Seagate |
| Al Kramer           | Seagate |

12 people in attendance.

1. External connector (Cox)

Reference T10/02-391r0. Review and vote on proposal.

Cox will update to rev 1 and include gender changes in the section titles. Unanimous approve to forward for specification update with 391r1.

## 2. Common mode specification (Brown)

Brown will revise the common mode proposal with various updates from the discussion during the call and post it for additional review. Transient level of 1.2 V agreed upon as close, but achievable. Discussed paper by Bruce Johnson concerning FM test specification. Will continue consideration, but don't want to make a mistake of adding something late without thinking it out. Will discuss on next call. Y1 and Y2 values should be dropped from transmit and receive tables.

3. Define conditions for "loss of signal"

Alvin to contact Mark Evans and find out where this parameter came from. Alvin will also clean up SMP REPORT PHY ERROR LOG based on the current implementation/proposal wording to aid in the review.

Discuss on next call.

4. Review what PHY group wants to count on the SMP REPORT PHY ERROR LOG.

List below made intially by PHY working group. Is this what we want? What interactive errors stop counts on others?

PHY group suggested error report items in order of significance:

\* Loss of signal

- \* OOB signal detected but can't negotiate OOB (expander log)
- \* Speed negotiation at each speed (count of successes for G1, G2, ?)
- \* Disparity error count
- \* Illegal character count
- \* CRC error count
- \* Loss of synchronization

PHY group to reconsider list as is currently proposed. Juzer has provided the following link that should be considered when evaluating the need for this log page.

www.reed.com/Papers/EndtoEnd.html

The paper presents a persuasive but heuristic argument of the end-toend principle. The principle suggests that functions (like loss of signal and other error check functions) placed at low levels of a system may be redundant or of little value when compared with the cost of providing them at that level.

Seagate input that log page is needed.

5. Status of proposals:
 a) Test load Written and being reviewed prior to posting.
 b) Test patterns Deciding how to document. Technical work
completed.
 c) OOB signaling levels Offline work is being done by the
editors.

6. New items

FM specification. See Item 2 above.

7. Meeting schedule

Due to T11 meeting next week, the next Monday call will be Monday, October 14, 2002.

Next call:

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SAS PHY Teleconference Monday, October 14, 2:00 pm - 4:00 pm CDT
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PARTICIPANT INFORMATION:

All Participants should use the following information to reach the conference call: Toll Free Dial in Number: (866) 279-4742 International Access/Caller Paid Dial In Number: (309) 229-0118

PARTICIPANT CODE: 3243413

Webex information:

Meeting Summary Meeting Name: SAS PHY WG Scheduled Time: 10/14/2002 at 1:45PM (GMT -05:00) Central Time, USA & Canada (DayLight Time).

Meeting Number: 281981011

Any meeting attendee can use this number to join the meeting, at https://seagate.webex.com/join/

Password: FMtesting