

IEEE 802.3

CU4HDD Study Group – Task Force Meeting Minutes – 18-Feb-2016

Prepared by Dan Smith, acting chairman of Ad Hoc calls

Call Began at 11:05 AM, MT.

Agenda:

- Yong Kim (current Task Force chairman) discussing, "PAR and Objective modification proposal to be considered in March"
- Anthony Calbone, Seagate, continuing presentation and discussion of channel specification.

Preliminaries:

1. The chairman asked if anyone was opposed to the Webex recording of the meeting, to be used only to create the written minutes (for later review) and then the deletion of the recording. No one opposed so the recording continued.
2. Initial Patent Notice and Meeting Procedures was presented. There were no responses for either so we moved forward. (for a copy, see:
3. Chairman asked if there was any other discussion beyond the agenda topics. With no response, we proceeded with the scheduled presentation and ensuing discussion.

Presentations/Discussions:

- Yong Kim briefly went over the PAR and Objectives modification, for use at the upcoming the Plenary in March. He mentioned that no cable case will be formally included in our proposal. The PAR has been updated with new wording in Section 5.2.b. (See updated document on the Ad Hoc web page.) These changes will be presented at the opening of the Plenary in March and voted on at the closing. Yong also showed the modifications to the Power Point presentation, removing the references to "twiaxial copper cable".
There was concern that backplane needs to be proven for "broad market potential".
Much discussion ensued regarding the definition of the electrical backplane or electrical interconnect – how is that perceived?
Rich Mellitz, John Di'Ambrosia, and Adam Healey need to be consulted (convinced) on the use of a non-cable application. The frustration of wording is around the idea that this standard is meant to address the electrical path inside a storage cabinet. How do we describe this new interconnect?
We will use the reflector to pass some brainstorming documentation between us to hash out the concepts and hopefully come to a better form of objectives for our proposal.

- Anthony Calbone of Seagate, presented “802.3cb_PMD_Update_2-18-2016.pdf”.
(Attached to meeting notice for this call, and later posting to the CU4HDD document site.)
He showed the new content on slides 14 through 16.
 - The total channel loss (TP0 to TP5) is being increased to 16 dB at 2.578 GHz. This will require a change to the ‘Objectives’ to stay consistent in the Working Group.
 - He showed the Enclosure Assembly loss and the Drive loss (PMD) and the accounting for the test fixturing.
 - The presentation is based on 5 Gbps. The same information will be added for 2.5 Gbps.
 - Anthony asked what would happen if the switch designers come back with large package losses. Rich said that’s what the original objectives covered and should not be a problem.
 - What are the next steps to drive contributions for the next piece? What measurements should we make to spec this further?
 - 2.5 Gbps is the next, immediate need.
 - After that, we need to socialize with the experts to ensure we have this fully understood.

Adjourned: 12:36 pm MT. Next call 25-Feb-2016.

Attendees:

| Name | Affiliation | Attended 1/20/2016 | Attended 2/4/2016 | Attended 2/18/2016 |
|------------------|----------------|-----------------------|----------------------|-----------------------|
| Calbone, Anthony | Seagate | X | X | X |
| Carlson, Mark | Toshiba | | X | X |
| Chalupsky, David | Intel | | | |
| Chandrian, Ajith | Cisco | | | |
| Chang, Jacky | HP | | | |
| Cox, Alvin | Seagate | | X | X |
| Czekalski, Marty | HGST | X | X | X |
| D’Ambrosia, John | DELL | | | |
| Feyh, German | Broadcom | | | |
| Ghani, Abbas | Ericsson | | | |
| Healey, Adam | Avago | X | | |
| Horner, Rita | Synopsys | X | | X |
| Jones, Peter | Cisco | | | |
| Kim, Yong | Broadcom | X | | X |
| Kipp, Scott | Brocade | | | |
| Law, David | HP | | | |
| Lo, William | Marvell | X | | |
| McCarthy, Mick | Analog Devices | X | | |

| Name | Affiliation | Attended 1/20/2016 | Attended 2/4/2016 | Attended 2/18/2016 |
|------------------------|----------------------|-------------------------------|------------------------------|-------------------------------|
| McMillan, Larry | Western Digital | X | X | X |
| McSorley, Greg | Amphenol | X | X | X |
| Mellitz, Rich | Intel | X | X | X |
| Poh, Ed | Molex | | | |
| Rahman, Hamza | Dell | | | |
| Schoenhals, Mark | Marvell | | | |
| Sedarat, Hossein | Aquantia | | | |
| Sinha, Santanu | Broadcom | | | |
| Skaar, Tom | Seagate | X | X | X |
| Smith, Dan | Seagate | X | X | X |
| Sommers, Scott | Molex | | | |
| Souvignier, Tom | Broadcom | | | |
| Suhler, Paul | HGST | | | |
| Sun, Phil | Marvell | | | |
| Svensen, Justin | LIT | X | | |
| Telang, Vivek | Broadcom | | | |
| Tenea, Bogdan | Ixia | | | |
| Tracy, Nathan | TE Connectivity | | | |
| Tran, Paul | Marvell | | | |
| Walker, Dylan | Walker | | | |
| Wassenberg, Paul | Marvell | | | X |
| Wu, Peter | Marvell | X | X | |
| Zemach, Rami | Marvell | | | |
| Zhang, Jin | Marvell | | X | |
| Zimmerman, George | CME Consulting, Inc. | | X | X |
| Zimmerman, Yaron | Marvell | | | |
| Attendee Count: | | 14 | 12 | 13 |