Minutes of SAS PHY Working Group conference call July 10, 2008

T10/08-278r0

Attendance:

| Mr. Greg McSorley      | Amphenol              |
|------------------------|-----------------------|
| Mr. Mickey Felton      | EMC                   |
| Mr. Elwood Parsons     | Foxconn Electronics   |
| Mr. Barry Olawsky      | Hewlett Packard Co.   |
| Mr. James Rockrohr     | IBM Corp.             |
| Mr. Harvey Newman      | Infineon Technologies |
| Mr. Michael Jenkins    | LSI Corp.             |
| Mr. Gabriel Romero     | LSI Corp.             |
| Mr. Kevin Witt         | Maxim Semiconductor   |
| Mr. Galen Fromm        | Molex Inc.            |
| Mr. Guillaume Fortin   | PMC-Sierra            |
| Mr. Yuming Tao         | PMC-Sierra            |
| Mr. Gourgen Oganessyan | Quellan               |
| Mr. Joseph Chen        | Samsung               |
| Mr. Alvin Cox          | Seagate Technology    |
| Mr. Allen Kramer       | Seagate Technology    |
| Mr. Bruce Johnson      | Seagate Technology    |
| Mr. Benoit Mercier     | STMicroelectonics     |
| Mr. Larry McMillan     | WDC                   |
| Mr. Ramya Dissanayake  | WDC                   |
| Mr. Ramez Rizk         | WDC                   |
|                        |                       |

21 in attendance

## Agenda:

1. External mini-SAS Cable keying

Galen indicated that a ½ space concept in the same area as the existing keys may be proposed instead of the original one that added keys to the opposite side of the housing. Drawings will be available next week.

## 2. Update on receiver testing.

Numerous issues have been identified but still not resolved with StatEye. Expectations are that it will take over a month past the F2F to get anything working. Still looking into leveraging "XWDPJ" from FCAL See 07-553v1 on the T11 site for pdf and zip files for this type of simulation.

3. Addition of 3.0 and 1.5 Gbps to receiver tests for SAS 2 devices. No work on this until the simulation programs are working.

4. Comments on reverse JTF? <u>http://www.t10.org/ftp/t10/document.08/08-248r0.pdf</u> Some concerns that old equipment has some issues with this concept, but that should not be the deciding factor on usage.

## 5. Quellen presentation on powered cables.

Quellen presented test data on crosstalk and previews of a reference voltage supply control circuit. Crosstalk number look good in the original presentation, but testing will be expanded to include additional cases.

6. New items.

Questions on OOB transmitter output requirements.

Alvin will post information regarding this on the reflector to help the discussion. Since the OOB specifications for transmitter and receiver have been moved to separate paragraphs in the specification, there may be some questions as to what the specifications actually are. Rob Elliott made a note that the concept of the resulting signal level from the transmitter after the TCTF seems to be lost. Alvin's comment was that maybe the information in the receiver section regarding the delivered OOB signal at IR and CR should actually be put in the transmitter section or that some note added to the transmitter table that the signal levels are tested with both the zero length test load and the TCTF or reference channel. Please be ready to discuss on 7/15.