Attendance:

Mr. Tim Symons Adaptec
Mr. Henry Wong Agilent
Mr. Paul von Stamwitz AMCC
Mr. Elwood Parsons Foxconn

Mr. Barry Olawsky Hewlett Packard Co.

Mr. George Penokie IBM

Mr. Bill Bissonette Intel Corporation

Mr. Mike Jenkins
Mr. Brian Day
LSIL
Mr. Dan Colegrove
HGST
Mr. Mark Evans
Maxtor
Mr. Dick Uber
Mr. Bill Lye
Mr. Ting Chan
Mr. ASIL
LSIL
MRST
Maxtor
HGST
Maxtor
Mr. Dick Uber
Maxtor
GLogic

Mr. Alvin Cox Seagate Technology
Mr. Himanshu R. Desai Seagate Technology
Mr. Allen Kramer Seagate Technology

Mr. Kalev Sepp Tektronix Mr. Dave Springberg Vitesse

Mr. Mike Jackson

20 People Present

Agenda:

1) 05-007r1 SAS-1.1 external cable electrical specification http://www.t10.org/ftp/t10/document.05/05-007r1.pdf

Barry presented data and proposed new table values and entries. http://www.t10.org/ftp/t10/document.05/05-025r1.pdf

Alvin has updated 05-007 to r1 to reflect changes.

2) 05-029r0 SAS-1.1 transmitter and receiver transients subsection http://www.t10.org/ftp/t10/document.05/05-029r0.pdf

Document received no comments as far as changes required.

Started discussion on time interval and if the transients during data transfers were being considered. The primary purpose of this specification is to prevent physical damage to IC's.

3) 05-019r1 SAS 1.1 OOB For SAS/SATA Support -- Proposed Changes http://www.t10.org/ftp/t10/document.05/05-019r1.pdf

Bill Bissonette has revised and posted r1. This proposal deals with the OOB amplitudes used in SAS systems that support SATA with the intent to avoid SATA drive RX exposure to excessive amplitudes during the OOB sequences possible with the present 'toggling' algorithm. This is a controversial proposal and deserves your review before next week's meetings if your company is concerned about physical layer issues.

4) New items

See notes on 05-023r0 and 04-370r2 below.

5) T10 F2F review items (please indicate any items that are not included in the agenda or the list below):

04-222r2 SAS-1.1 More phy test patterns[Elliott]

http://www.t10.org/ftp/t10/document.04/04-222r2.pdf

Possibility that the dword addition may need to be a SAS 2 proposal rather than SAS 1.1.

04-337r2 SAS-1.1 TCTF Editorial Changes[Olawsky]

http://www.t10.org/ftp/t10/document.04/04-337r2.pdf

04-378r0 SAS-1.1 Clarification of SATA Signaling Level Specification [Olawsky] http://www.t10.org/ftp/t10/document.04/04-378r0.pdf

05-009r1 SAS-1.1 OOB AMPLITUDE MEASUREMENT METHOD [Bissonette]

http://www.t10.org/ftp/t10/document.05/05-009r1.pdf

Rev 1 was acceptable to group. Final review at PHY WG meeting.

05-023r0 SAS-1.1 Connector figures [Kachlic and Elliott]

http://www.t10.org/ftp/t10/document.05/05-023r0.pdf

Suggested the addition of single port cable picture. Rob will update accordingly.

External cable plug and receptacle pictures are in the wrong places (Figures 4 and 5 need to trade illustrations).

04-370r2 SAS-1.1 Merge IT and IR with XT and XR

ftp://ftp.t10.org/t10/document.04/04-370r2.pdf

FC-PI-2 Annex B has received some offline editorial review. Expect to see input regarding FC-PI-2 Annex B at January T10.

NOTE: 04-370r2 has changed the SAS specification from a received signal specification to a transmitter specification. This was not the original intent of the PHY WG in SAS 1.0 and we need to seriously consider what the conventions proposed by 04-0370 does to the specification.