

1. Opening Remarks

The meeting opened at 9:00 am with thanks to WD for hosting the meeting and self-introductions of the attendees.

2. Attendance

Mr. Paul von Stamwitz	AMCC
Mr. Mickey Felton	EMC Corp.
Mr. Douglas Wagner	FCI
Mr. Chris Cicchetti	Finisar Corp.
Mr. Elwood Parsons	Foxconn Electronics
Mr. Mike Fitzpatrick	Fujitsu
Mr. Masakazu Kawamoto	Fujitsu Kawasaki
Mr. Nathan Hastad	General Dynamics
Mr. Rob Elliott	Hewlett Packard Co.
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Dan Colegrove	Hitachi Global Storage Tech.
Mr. James Rockrohr	IBM
Mr. George O. Penokie	Independent
Mr. Harvey Newman	Infineon Technologies
Dr. Mark Seidel	Intel Corp.
Mr. Pak Seto	Intel Corp.
Mr. Michael Jenkins	LSI Corp.
Mr. Kevin Witt	Maxim Integrated Products
Mr. Guillaume Fortin	PMC-Sierra
Mr. Tim Symons	PMC-Sierra
Mr. Gourgen Oganessyan	Quellan
Mr. Alvin Cox	Seagate Technology
Mr. Gerald Houlder	Seagate Technology
Mr. Benoit Mercier	STMicroelectronics
Mr. Stephen Finch	STMicroelectronics, Inc.
Mr. Bent Hessen-Schmidt	Synthesys Research, Inc.
Mr. Doug Loree	Toshiba
Mr. Michael Fogg	Tyco Electronics
Ms. Ashlie Fan	TycoElectronics
Mr. Dan Gorenc	TycoElectronics
Mr. Scott Shuey	TycoElectronics
Mr. Ramya Dissanayake	Western Digital
Mr. Mark Evans	Western Digital
Mr. Larry McMillan	Western Digital

34 People Present

3. Review of documents and proposals

Carry overs from previous meetings were included in the new business.

4. New Business

4.1 Proposed Cable Tables for SAS-2 ([07-471r2](#)) [McSorley]

Edits included adding backplanes and lengthy discussion of the changes proposed. Final determination was that the changes were the right approach to take, but need to verify that the values are correct for backplanes and other implementations. Alvin updated the source document since Greg was not able to be present. Voted to include in SAS-2 as edited (7/1/13).

4.2 Toward SSC Modulation Specs and Link Budget ([08-027r3](#)) [Fortin, Gagnon, Hernandez]
This proposal is background information for specification changes described in 08-032. It was not discussed since it had been reviewed during the WG conference calls.

4.3 Proposed modifications to SSC profile definition ([08-032r3](#)) [Fortin]
Minor editorial changes made. Voted to include in SAS-2 as edited (14/0/5).

4.4 SAS-2: Remove restrictions for SSC ([08-014r3](#)) [Houlder, Cox]
Deleted one sentence which is a repeat of information included in 08-032. Voted to include in SAS-2 as edited (16/0/4).

4.5 SAS-2 Interconnect Signal-to-Noise Ratio Study ([07-484r1](#)) [Olawsky]
After review of the proposed change, the change was updated to simply add a statement to a note in 07-471 since the crosstalk value was already addressed in that proposal. Voted to include in SAS-2 as edited (16/0/6).

4.6 SAS-2_Transmit_Waveform_Calibration_for_RX_Testing ([07-492r1](#)) [Bari and Witt]
Background information on test methodology used in 07-486. A lively discussion went on for some time.

4.7 SAS-2 Receiver Device Physical Testing ([07-486r2](#)) [Witt & Bari]
Description of physical receiver testing. Instead of specifying both the received eye opening and the launch voltage, the proposal was revised to provide a minimum and maximum eye opening while removing the launch voltage. Voted to include in SAS-2 as edited (14/0/4).

4.8 SAS-2 StatEye v5.080111 results ([08-073r0](#)) [Elliott]
Still some concerns with the StatEye simulations but the modeling keeps improving.

4.9 SAS-2 6Gbps PHY specification ([07-339r8](#)) [Cox]
Updated figures in Annex B, replaced insertion loss and return loss with S-parameters as applicable, and made other minor editorial changes. Voted to include in SAS-2 as edited (17/0/2).

4.10 SAS-2 Calibration of Jitter Measurement Devices ([07-443r1](#)) [Cox]
Some editorial work needs to be done on this proposal when incorporated into Annex B, but no technical changes required. Needed 07-339 to be accepted before this proposal was applicable to SAS-2. Voted to include in SAS-2 (14/0/4).

4.11 SAS-2 Mini SAS 8i connectors and cable assemblies ([07-449r0](#)) [Elliott]
Not reviewed.

4.12 Considerations for Active Copper Cables for SAS ([08-033r0](#)) [Oganessyan]
Not reviewed since the material was presented during the STA function on January 14.

4.13 Proposal for SAS 2.x Specification to Enable Support for Active Cables ([08-052r0](#)) [Oganessyan]
Reviewed the basic structure. Concerns about backwards compatibility, effects of grounding changes, and protocol timing issues with longer lengths. More data is needed.

5. Review of Recommendations

The following proposals are recommended for inclusion in SAS-2 (Y/N/A)

07-471r2 as edited (7/1/13)

08-032r3 as edited (14/0/5)

08-014r3 as edited (16/0/4)

07-484r1 as edited (16/0/6)

07-486r2 as edited (14/0/4)

07-339r8 as edited (17/0/2)
07-443r1 (14/0/4)

6. Meeting Schedule

Next call 2/14/08

Topics:

StatEye results, wide cables, active cables, power management

7. Adjournment

The meeting was adjourned at 5:36 pm.