IEEE 802.3 Higher Speed Study Group Closing Plenary Report

Atlanta, Ga November 15, 2007

John D'Ambrosia, Chair jdambrosia@ieee.org

IEEE 802.3 HSSG Organization

- Study Group Chair:
 - John D'Ambrosia (<u>jdambrosia@ieee.org</u>)
- Web Master
 - Frank Chang (<u>ychang@vitesse.com</u>)
- "Reach" Ad Hoc Chair
 - Andy Moorwood (<u>amoorwood@extremenetworks.com</u>)
- "Fiber Optic" Ad Hoc Chair
 - Dan Dove (<u>dan.dove@hp.com</u>)

Reflector and Web

To subscribe to the HSSG reflector, send an email to:

ListServ@ieee.org

with the following in the body of the message (do not include "<>"):

subscribe stds-802-3-hssg <yourfirstname> <yourlastname>
end

Send HSSG reflector messages to:

STDS-802-3-HSSG @listserv.ieee.org

HSSG web page URL:

http://www.ieee802.org/3/hssg/

HSSG Approved Project Documents

- PAR
 - http://ieee802.org/3/hssg/PAR/par_0707.pdf
- 5 Criteria
 - http://ieee802.org/3/hssg/PAR/HSSG_5C_0707.pdf
- Objectives
 - http://ieee802.org/3/hssg/PAR/HSSG_Objectives_0707.pdf

Accomplishments For the Week

- Tutorial
 - Estimated 225 attendees
 - Thanks to: Chris Cole, Chris DiMinico, Howard Frazier, Adam Healey, John Jaeger, Jack Jewell, Mark Nowell, Steve Trowbridge, and the HSSG!
 - □ http://www.ieee802.org/802_tutorials/nov07/HSSG_Tutorial_1107.zip
- No comments regarding PAR received
- Responded to 2 liaison letters
- Heard 42 Technical Presentations
- Heard 2 track reports

Presentations

	General		
1	Howard Frazier	Getting to working group ballot	
2	Ilango Ganga	IEEE 802.3 Architecture and 40/100GbE	ganga_01_1107.pdf
3	David Law	IEEE 802.3 Clause 30 Management, MIB, registers, and fuction	law_01_1107.pdf
4	Ilango Ganga	IEEE P802.3ba document structure	ganga_02_1107.pdf
	Architecture		
5	Howard Frazier	APL Update	frazier_01_1107.pdf
6	Trey Malpass	PBL Model update	malpass_01_1107.pdf
7	Gary Nicholl	Architectural and Implementation considerations for 40GE and 100GE PCS	nicholl_01_1107.pdf
8	Mark Gustlin	MTTFPA Considerations for 40GE and 100GE	gustlin_01_1107.pdf
9	Pete Anslow	Error Distribution in Optical Links	anslow_01_1107.pdf
10	Steve Trowbridge	Throughput of different lane aggregation methods	trowbridge_02_1107.pdf
11	Joel Goergen	Consideration for Electrical Interfaces	goergen_02_1107.pdf
12	Chris Cole	Nx10G Electrical I/O Issues	cole_02_1107.pdf
13	Ali Ghiasi	Comparison of Linear vs Limiting Electrical Interface for 4x10G and 10x10G	ghiasi_01_1107.pdf
14	Steve Trowbridge	FEC applicability to 40 GbE and 100 GbE	trowbridge_03_1107.pdf
	OTN		
15	Steve Trowbridge	40 GbE and 100 GbE PCS considerations: November 2007 update	trowbridge_01_1107.pdf
16	Jorge-Peter Elbers	OTN-Compatible 40 GBe and 100GBe interfaces	elbers_01_1107.pdf
17	Trey Malpass	40GE OTN Support Consideration	malpass_02_1107.pdf
I			

Presentations

	Optical PMDs		
18	Robert Lingle	10G transmission over OM3 MMF with relaxed TOSA specifications	sun_01_1107.pdf
19	Mike Shahine	100GbE Components for SMF Reaches	shahine_01_1107.pdf
20	Radha Nagarajan	Photonic Integration Considerations for the 100GbE SMF PHYs	nagarajan_01_1107.pdf
21	Youichi Akasaka	Feasibility Study for 25Gb/s10km Transmission Using DML	isono_01_1107.pdf
22	Matt Traverso	SMF 1310nm PMD Link	traverso_01_1107.pdf
23	Marcus Duelk	Analysis of 4x25-Gb/s 40-km 1310-nm PMD with SOA Pre-Amplifier	gutierrez_01_1107.pdf
24	Marcus Duelk	Using SOAs as Booster and/or Preamplifier for 4x25Gb/s 40-km 1310-nm PMD	gutierrez_02_1107.pdf
25	Marcus Duelk	4x25-Gb/s 40-km 1310-nm PMD with SOA Pre-Amplifier: Impact of Channel Spacing	gutierrez_03_1107.pdf
26	Kengo Matsumoto	WDM Alternatives for 100GE 40km SMF application	matsumoto_01_1107.pdf
27	Ted Woodward	A Use Case for Short Haul Metro WDM Related to 40 km PHY Definition	woodward_01_1107.pdf
28	Karim Tatah	100 Gb/s Active Optics Cables	tatah_01_1107.pdf
29	Chris DiMinico	Network Topologies and Distances	diminico_01_1107.pdf
30	Paul Kolesar	Next generation MMF specs in TIA and ISO	kolesar_01_1107.pdf
31	Pete Anslow	Single Mode Fibre Skew Variation and Link Models	anslow_02_1107.pdf
	Pete Anslow	Single Mode Fibre Skew Variation and Link Models Worksheet	anslow_03_1107.xls
32	Eddie Tsumura	An alternate SMF 100GE reach objective to 10km	cole_01_1107.pdf
33	Joel Goergen	Support for the 10km Objective	goergen_01_1107.pdf
34	Marcus Duelk	4x25-Gb/s 40-km 1310-nm PMD with SOA Pre-Amplifier: Variation of SOA Gain	gutierrez_04_1107.pdf
35	Chris Cole	10km SMF Reach Objective Relative Cost Analysis	cole_03_1107.pdf

Presentations

	Cu Cabling PMDs		
36	Chris DiMinico	Considerations for HSSG Cu cable assembly interconnect specifications	diminico_02_1107.pdf
37	Hiroshi Takatori	40/100G Copper Feasibility	takatori_02_1107.pdf
38	Ali Ghiasi	Higher Speed Copper Operation	ghiasi_02_1107.pdf
39	Gourgen Oganessyan	Considerations for Active Cables for Higher Speed Ethernet	oganessyan_01_1107.pdf
40	A Enteshari	Towards 100G over 100 Meters of CAT-7	kavehrad_01_1107.pdf
	Backplane		
41	Rich Mellitz	40GbE Feasibility Over 4-lane 802.3ap Compliant Backplane With KR	mellitz_01_1107.pdf
42	Hiroshi Takatori	10GBASE-KR for 40G Backplane	takatori_01_1107.pdf

Liaison Letters

ITU-T SG15

- Intends to specify mappings into the OTN for 40GbE and 100 GbE
- Discussion of possible ways how it can be addressed
- Draft response addressed in nicholl_02_1107
- Draft response approved by SG (All: 93/0/5)

OIF

- Update on CEI-25 Project (electrical signaling)
- Initially targeting short reach applications at 28 Gb/s with NRZ
- Draft response in healey_01_1107
- Draft response approved by SG (All: 93/0/0)

Motion

- Move that 802.3 approve and forward the liaison letter (nicholl_02_1107) with appropriate edits by the Chair (or his appointed agent) and appropriate approvals by the EC to the ITU-T SG15.
- Technical (>75%)
- Moved by: John D'Ambrosia
- Second: John Jaeger
- 802.3 Voters (Y/N/A): 56 / 0 / 2
- Motion passes

Motion

- Move that 802.3 approve and forward the liaison letter (healey_01_1107) with appropriate edits by the Chair (or his appointed agent), to the OIF.
- Technical (≥75%)
- Moved by: John D'Ambrosia
- Second: John Jaeger
- 802.3 Voters Approved by voice vote
- Motion passes

Motion # 1 (SG Motion)

- Move that:
 - The HSSG requests that IEEE 802.3 extend the Higher Speed Study Group.
- Moved by Ali Ghiasi
- Second by Pete Tomaszewski
- Procedural (>50%)
- All Yes 105 No 0 Abstain 1
- Motion Passes

Motion

- Move that the HSSG requests that IEEE 802.3 extend the Higher Speed Study Group.
- **(>50%)**
- Moved by John D'Ambrosia on behalf of the Higher Speed Study Group
- Seconded by : N / A
- 802.3 Voters (Y/N/A): 61 / 0 / 1
- Motion Passes

Future Meetings

- January 2008 Interim
 - Wed Fri, Jan 23 25
 - Portland, OR
- March 2008 Plenary
 - Tuesday Thursday, March 18 20
 - Caribe Royale Orlando All Suites Resort and Convention Center
 - Orlando, FL, USA

Thank You!