Approved Minutes

IEEE P802.3bs 200 GbE & 400 GbE Task Force

Interim Meeting
Jan 9 – 10, 2017
Huntington Beach, CA, USA

Prepared by John D'Ambrosia, Futurewei, subsidiary of Huawei

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IEEE P802.3bs Task Force Meeting – Jan 9, 2017:

Prepared by John D'Ambrosia

Convened at 9:01am, Chaired by John D'Ambrosia, IEEE P802.3bs Task Force Chair

Introductions were made.

Agenda & General Information

By - John D'Ambrosia

See - http://www.ieee802.org/3/bs/public/17_01/agenda_3bs_01a_0117.pdf

Chair reviewed the agenda.

Motion #1:

Move to approve the agenda

Moved by: Steve Trowbridge

· Second by: Mark Gustlin

Pass by voice vote without opposition

Chair reminded attendees to observe decorum rules.

Chair noted that photography and recording not allowed without permission.

Chair called for members of the press or individuals reporting publicly on the meeting to identify themselves. No one responded.

Chair reviewed "Participation in IEEE 802 Meetings" slide.

Chair reviewed attendance, IMAT and attendance book.

Motion #2:

Move to approve

- Nov 2016 Plenary Minutes http://www.ieee802.org/3/bs/public/16 11/minutes 3bs a 1116 unapproved.pdf
- Moved by: Thananya BaldwinSecond by: Mike Dudek
- Pass by voice vote without opposition

Chair went over WG Recirculation Ballot Results

- 212 Voters
- 137 Approve
- 7 Disapprove
- 23 Abstain
- 167 Ballots returned
- 78.77% Response Rate (> 50% required)
- 13.77% Abstain Rate (< 30% required)
- 95.14% Approval Rate (>= 75% required)

Chair thanked everyone who voted / submitted comments.

Chair went over goals for week.

Goals:

- Consider 37 comments
 - o Additional 24 "late" comments, if no objections
- Hear 2 Technical presentations
- Approve generation of Draft 3.0
- Consensus Building Items for work during Sponsor Ballot
 - o "Clean-up" electrical jitter measurements
 - TDECQ details
 - Clock Content Analysis

Chair asked if there was any objections to hearing the 24 additional "late" comments. There were none, so the comments will be considered by the Task Force.

Chair displayed the reflector and web page information.

Chair went over Private Area information, and noted that the draft, and any other content, is posted for Task Force review only, and neither the content nor access information should be copied or redistributed to others in violation of document copyrights.

IEEE Patent Policy: Chair reviewed the Patent related slides on the 5 slides contained in the agenda. Chair calls for potentially essential patents. No one responded. Chair read the Guidelines for IEEE-SA meetings.

Chair advised the WG attendees that:

- The IEEE's patent policy is described in Clause 6 of the IEEE-SA Standards Board Bylaws;
- Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
- There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither
 the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any
 assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for
 the use of the standard under development.

Chair reviewed the ground rules. Chair reviewed IEEE Structure. Chair displays the Bylaws and Rules & References slide. Chair reviewed IEEE 802.3 Standards Process slides.

Chair noted the Task Force had the following communications to consider at this meeting.

• OIF - http://www.ieee802.org/3/minutes/jan17/incoming/OIF to IEEE P802d3bs cd Dec 2016.pdf

Mike Dudek gave an overview of the liaison. Chair had previously reviewed the liaison with 802.3cd chair and Steve Trowbridge, OIF liaison. It was not felt that a response was necessary. Chair asked if there were any differing opinions, and there were none.

Chair noted the Task Force ad hocs and reports for those ad hocs (SMF, Electrical) that had met since the Nov Plenary.

Chair went over the schedule for the week. It was noted that there would be a 1 hour meeting after lunch for the Task Force to discuss the Clock Content issue noted in "Goals for week." After TF discussion the following was decided.

- After TF discussion that ended at 2pm, Logic Track and SMF Track would meet. The SMF track would address TDECQ. It was indicated that the Logic Track would need minimal time and was anticipated would finish addressing its comments today.
- The SMF and Electrical Tracks would meet on Tuesday during their given track times.
- o The TF would reconvene at 3:30pm on Tuesday for its closing business.

Chair noted that pending this week's meeting's results, there was the potential that there would be an adjacent, co-located interim the Sunday before the March Plenary. Chair would consult with the chief editor, and a decision would be announced at the Closing WG meeting on Thursday night.

Presentation #1:

Title: Chief Editor's Opening Report

By: Pete Anslow

See http://www.ieee802.org/3/bs/public/17_01/anslow_3bs_01_0117.pdf

Chief editor thanked the editorial team for their hard work and support of the WG Ballot.

Chief Editor resumed Chief Editor's Report discussing plan on addressing comments.

Task Force Comment Review started at 9:48am.

Break at 10:11am

Meeting reconvened at approximately 10:35am

Comment resolution continued.

At 11:30am Pete Anslow re-presented the presentation noted below that had been previously given during the Dec 19 Electrical Interface Ad hoc call, related to Clock Content analysis.

Presentation #2:

Title: Four Lane Interleaving

By: Pete Anslow

See http://www.ieee802.org/3/bs/public/adhoc/elect/19Dec_16/anslow_01_121916_elect.pdf

Discussion after the presentation was limited to questions of clarification.

Lunch break at 12:00pm Reconvened at 1:04pm.

Chair led TF discussion on Clock Content analysis. General discussion regarding the issues highlighted in presentation given by Anslow. Chair noted potential presentations during discussion on potential changes, including implementation approaches and moving scramblers, and the subsequent analysis. Pete Anslow agreed to providing patterns for further analysis. Chair asked

Mark Gustlin, Logic Ad Hoc Chair, about ad hoc calls to address the issue. Mark indicated that the ad hoc would hold weekly calls starting in two weeks. TF Meeting broke at approximately 1:50pm.

IEEE P802.3bs Logic Track Comment Review Meeting - Jan 9, 2017:

Prepared by Mark Gustlin

Convened at 2:15pm, Chaired by Mark Gustlin, IEEE P802.3bs Clauses 117, 118, 119, 119A Editor

Comment resolution started. Comment resolution ended.

Meeting broke at 3pm.

IEEE P802.3bs Optical Track Comment Review Meeting – 9 January, 2017:

Prepared by Pete Anslow

IEEE P802.3bs optical track meeting convened at 2:30 p.m., Monday, 9 January, 2017, chaired by Pete Anslow, IEEE P802.3bs Chief Editor.

Comment resolution started at 2:30 p.m.

Presentation #1:

Title: Repeatability of TDECQ results when the FFE equalization taps are optimized using MMSE By: Pavel Zivny

See http://www.ieee802.org/3/bs/public/17_01/zivny_3bs_01_0117.pdf

Comment resolution continued.

Break at 3:27 p.m. Resume at 4:00 p.m.

Comment resolution completed at 5:36 p.m.

Break for the day.

IEEE P802.3bs Electrical Track Comment Review Meeting – Jan 10, 2017:

Prepared by Andre Szczepanek

IEEE P802.3bs 200 & 400 Gb/s electrical track meeting convened at 8:08 a.m., Tuesday, Jan 10, 2017, chaired by Andre Szczepanek, IEEE P802.3bs Annex 120D/E Editor.

"Participation in IEEE 802 Meetings" slide was shown.

Comment resolution started.

Presentation #1:

Title: Comments #15, #29, & #30: Addressing Jitter related comments

By: Adee Ran

See http://www.ieee802.org/3/bs/public/17_01/ran_3bs_01_0117.pdf

Break at 9:55 a.m. Resume at 10:20 a.m.

Comment resolution continued. Comment resolution ended.

Broke at 12:02 p.m.

IEEE P802.3bs Task Force Meeting – Jan 10, 2017:

Prepared by John D'Ambrosia

Reconvened at 3:39pm, Chaired by John D'Ambrosia, IEEE P802.3bs Task Force Chair

There were no calls to revisit any comments.

Motion #3:

Move to:

• Generate Draft 3.0, from D2.2 and closed comments, for Sponsor Ballot.

M: Pete Anslow S: Mark Gustlin Technical (≥75%)

Results All (y/n/a): 58 / 0 / 5

Motion Passes

Presentation #3:

Title: Chief Editor's Closing Report

By: Pete Anslow

See http://www.ieee802.org/3/bs/public/17_01/anslow_3bs_04_0117.pdf

Chair reviewed future meetings.

- See: http://www.ieee802.org/3/interims/index.html
- Mar 2017 Plenary
 - Week of Mar 13
 - Vancouver, BC, Canada
- May 2017 Interim
 - Week of May 22
 - New Orleans, LA, USA
- July 2017 Plenary
 - Week of July 9
 - Berlin, Germany
- Sept 2017 Interim
 - Week of Sept 11
 - North American Location
- Nov 2017 Plenary
 - Week of Nov 6
 - Orlando, FL, USA

Chair noted agenda was complete.

Motion to adjourn M: Thananya Baldwin

S: Steve Trowbridge

Motion passes by voice vote without opposition.

Meeting adjourned at 4:10pm.

Attendees

IEEE P802.3bs Task Force			1/9	1/10
Last Name	First Name	Employer / Affiliation	Mon	Tues
Abbott	Justin	Lumentum		Х
Ahmad	Mohammad	TE Connectivity	Х	
Anslow	Pete	Ciena Corporation	Х	Х
Baldwin	Thananya	Ixia	Х	
Booth	Brad	Microsoft		х
Braun	Ralf-Peter	Deutsche Telekom	Х	Х
Brooks	Paul	Viavi Solutions	Х	х
Brown	Matt	Applied Micro	Х	
Butter	Adrian	Global Foundries	Х	Х
Caggioni	Francesco	APM	Х	
Chang	Frank	Inphi	Х	Х
Chen	C.C David	AOI	Х	
Choudhury	Mabud	OFS	Х	
Cole	Chris	Finisar		х
D'Ambrosia	John	Futurewei, subsidiary of Huawei	Х	Х
Dawe	Piers	Mellanox	Х	х
Diddi	Stephen	Keysight Technologies	Х	Х
Dillow	Daniel	Amphenol		Х
Duda	James	Acacia Communications	Х	
Dudek	Mike	Cavium	Х	Х
Estes	Dave	Spirent Communications	Х	Х
Ewen	John	Global Foundries	Х	Х
Fife	James	eTopus Tech	Х	Х
French	John	Central Calibration	Х	Х
Ghiasi	Ali	Ghiasi Quantum, Ghiasi Quantum / Huawei	Х	Х
Gorshe	Steve	Microsemi	Х	Х
Guckenberger	Drew	Molex	Х	
Gupta	Atul	MACOM	Х	Х
Gustlin	Mark	Xilinx	Х	Х
Hayakawa	Akinoh	Fujitsu Laboratories	Х	х
Healey	Adam	Broadcom LTD	Х	Х
Hegde	Raj	Broadcom	Х	х
Hidaka	Yasuo	Fujitsu Laboratories of America	Х	х
Horner	Rita	Synopsys	Х	Х
Huang	Xi	Huawei	Х	Х
Ingham	Jonathan	Foxconn Interconnect Technology	х	
Isono	Hideki	Fujitsu Optical Components	Х	Х
Jackson	Kenneth	Sumitomo	Х	
Kareti	Upen Reddy	Cisco	Х	х
Kimber	Mark	Semtech	Х	х

Klempa	Mike	UNH-IOL	х	
Kolesar	Paul	CommScope	Х	
Krishnasamy	Kumaran	Broadcom		х
LeCheminant	Greg	Keysight Technologies	Х	х
Lewis	Dave	Lumentum	Х	х
Li	Mike	Intel		х
Liu	Hai-Feng	Intel	Х	х
Liu	Zhenyu	Credo Semiconductor	Х	х
Maki	Jeffery	Juniper Networks	Х	
Malicoat	David	Malicoat Networking Solutions / Kazan Networks	Х	Х
Malkman	Yonaton	Mellanox		Х
McDonough	John	NEC America	Х	
Mei	Richard	Commscope	Х	
Mellitz	Richard	Samtec	Х	Х
Nicholl	Gary	Cisco	Х	
Ofelt	David	Juniper Networks	Х	
Palkert	Tom	Molex / Macom		Х
Parthasarathay	Vasudevan	Broadcom		Х
Pepper	Gerald	Ixia	Х	
Pham	Phong	US Conec Ltd	Х	Х
Rabinovich	Rick	IXIA	Х	Х
Ran	Adee	Intel	Х	Х
Sakai	Toshiaki	Socionext	Х	Х
Sayre	Edward	Samtec	Х	Х
Shrikhande	Kapil	Innovium	Х	Х
Sommers	Scott	Molex	Х	Х
Squiers	Ron	Mentor Graphics	Х	Х
Srivastava	Atul	NEL / NTT	Х	
Stassar	Peter	Huawei	Х	Х
Stone	Rob	Broadcom	Х	
Swanson	Steve	Corning	Х	
Szczepanek	Andre	Inphi	Х	Х
Takahara	Tomoo	Fujitsu Laboratories	Х	Х
Thaler	Pat	Broadcom	Х	х
Tracy	Nathan	TE Connectivity		Х
Trowbridge	Steve	Nokia	Х	х
Ulrichs	Ed	Source Photonics	Х	х
Vanderlaan	Paul	Nexans	Х	
Wahn	Haifel	Huawei		х
Walter	Edward	AT&T	Х	
Wang	Tongtong	Huawei	Х	Х
Wang	Xinyuan	Huawei	Х	
Welch	Brian	Luxtera	Х	

Wertheim	Oded	Mellanox	х	х
Wey	Shan	ZTE	Х	
Xu	Qing	Belden	Х	
Xu	Yu	Huawei	Х	
Young	Adrian	Leviton	Х	
Zhang	Huanlin	Applied Optoelectronics	Х	
Zhuang	Yan	Huawei		Х
Zivny	Pavel	Tektronix	Х	Х