Approved Minutes

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

Interim Meeting Sept 12 - 14, 2016 Ft. Worth, TX, USA

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

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IEEE P802.3bs Task Force Meeting - Sept 12, 2016:

Prepared by John D'Ambrosia

Convened at 9:00am, 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/16 09/agenda 3bs 01 0916.pdf

Chair reviewed the agenda.

Motion #1:

Move to approve the agenda

Moved by: Tom McDermottSecond by: Mike Dudek

• 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 attendance, IMAT and attendance book.

Motion #2:

Move to approve

- June 4, 2014 TF Ad hoc http://www.ieee802.org/3/bs/public/adhoc/tf/meetingnotes 3bs TF 14 0604.pdf
- July 2016 Plenary Minutes http://www.ieee802.org/3/bs/public/16 07/minutes 3bs 0716 unapproved.pdf
- Moved by: Steve Trowbridge
- Second by: Tom McDermott
- Pass by voice vote without opposition

Chair went over Initial WG Ballot Results

- 212 Voters
- 101 Approve
- 20 Disapprove with comment
- 1 Disapprove without comment
- 16 Abstain
- 138 Ballots returned
- 65.09% Response Rate (> 50% required)
- 11.59% Abstain Rate (< 30% required)
- 83.47% Approval Rate (>= 75% required)

Chair thanked everyone who voted / submitted comments.

Chair went over goals for week.

Goals:

- Consider 574comments
 - o Hear 13 Technical presentations
- Approve generation of Draft 2.1 and WG Ballot re-circulation

Chair displayed the reflector and web page information.

Chair 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.

Chair displays the Bylaws and Rules slides.

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 noted there were no liaisons or communications to consider at this meeting.

Chair noted the Task Force ad hocs and reports for those ad hocs that had met since the July Plenary.

Presentation #1:

Title: Chief Editor's Report

By: Pete Anslow

See http://www.ieee802.org/3/bs/public/16 09/anslow 3bs 01a 0916.pdf

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

Chief editor noted that there were seven late comments, and noted to individuals the challenges with dealing with such comments. Chief Editor reviewed the comment review time cycle, and discussed the consequences with the Task Force of not considering all comments.

Task Force Comment Review started. Break at 10:33am Meeting reconvened at 10:47

Task Force Comment Review continued.

Presentation #2:

Title: Analysis of SER Degradation Parameters

By: Adee Ran

See http://www.ieee802.org/3/bs/public/16 09/ran 3bs 01a 0916.pdf

Adee Ran noted that there was an error in value truncation, and had updated the presentation. Update to be sent (link to update shown above).

Task Force Comment Review continued.

It was determined that additional time was needed to hear a presentation and discuss further on Comments #40 and #44. Task Force will meet on Tues from 8am to 9am to address this. Tracks will start their sessions at 9am on Tuesday. Chair to send message to reflector.

Meeting broke for lunch at 12:10pm.

IEEE P802.3bs Logic Track Comment Review Meeting - Sept 12, 2016:

Prepared by Mark Gustlin

Convened at 1:15pm, Chaired by Mark Gustlin, IEEE P802.3bs Clauses 117, 118, 119, 119A Editor

Comment resolution began.

Break from 3:05pm Meeting reconvened at 3:20pm

Comment resolution continued.

Break at 5:50pm for the day.

<u>IEEE P802.3bs Optics Track Comment Review Meeting – Sept 12, 2016:</u>

Prepared by Pete Anslow

Convened at 1:15 p.m., Chaired by Pete Anslow, IEEE P802.3bs Chief Editor.

Comment resolution started at 1:20 p.m.

Presentation #1:

Title: Adding wideband MMF to 400GBASE-SR16

By: Jonathan King

See http://www.ieee802.org/3/bs/public/16 09/king 3bs 01 0916.pdf

Break at 3:03 p.m. Resume at 3:25 p.m.

Comment resolution continued.

Presentation #2:

Title: TDECQ review By: Jonathan King

See http://www.ieee802.org/3/bs/public/16 09/king 3bs 03a 0916.pdf

Break for day at 5:00 p.m.

<u>IEEE P802.3bs Electrical Interface Track Comment Review Meeting – Sept 12, 2016:</u>

Prepared by Andre Szczepanek

Convened at 1:15 p.m., Chaired by Andre Szczepanek, IEEE P802.3bs Annex 120D/E Editor.

Comment resolution continued.

Break at 3:05 p.m. Resume at 3:30 p.m.

Comment resolution continued.

Presentation #1:

Title: Comment 24: Improving SNDR Measurements

By: Adam Healey

See: http://www.ieee802.org/3/bs/public/16 09/healey 3bs 02 0916.pdf

Comment resolution on related comments.

Presentation #2: Title: Comments 126, 127: CDAUI-8 C2C Jitter Budget Proposal

By: Piers Dawe

See http://www.ieee802.org/3/bs/public/16 09/dawe 3bs 01 0916.pdf

Comment resolution continued. Broke for the day at 6:10 p.m

IEEE P802.3bs Task Force Comment Review Meeting – Sept 13, 2016:

Meeting reconvened at 8:02am

Chair showed Patent Slide Set, and did call for Patents. No one stepped forward.

Chair made opening comments regarding the progress of the Task Force, and requested that all comments assigned to tracks be completed today, as requests to remove 10 comments from the "bucket" had already been received, and it was unclear what additional requests for Wed morning might still be received.

The chair noted that this Task Force Comment Review session was to address Comments #40 and #44 and to hear a presentation from Adee Ran.

Presentation #3:

Title: Link Health Reporting

By: Adee Ran

See http://www.ieee802.org/3/bs/public/16 09/ran 3bs 02a 0916.pdf

Updated presentation (added supporter) was shown. Presenter noted he would send update (link to update shown above).

Task Force Comment Review Meeting broke at 8:56am.

IEEE P802.3bs Logic Track Comment Review Meeting - Sept 13, 2016:

Prepared by Mark Gustlin

Convened at 9:06 pm, Chaired by Mark Gustlin, IEEE P802.3bs Clauses 117, 118, 119, 119A Editor

Comment resolution began

Break at 12:00pm for lunch. Reconvened at 1:05pm.

Comment resolution continued.

Break at 2:45pm. Reconvened at 3:30pm.

Comment resolution continued.

Break at 4:00pm.

75 comments resolved, 3 left for the common time since they are dependent on the electrical track.

<u>IEEE P802.3bs Optics Track Comment Review Meeting – Sept 13, 2016:</u>

Prepared by Pete Anslow

IEEE P802.3bs 200 Gb/s and 400 Gb/s optical track meeting convened at 9:04 a.m., Chaired by Pete Anslow, IEEE P802.3bs Chief Editor.

Comment resolution started at 9:05 am.

Presentation #3

Title: 400GBASE-DR4 link budget discussion

By: Jonathan King

See http://www.ieee802.org/3/bs/public/16 09/king 3bs 02 0916.pdf

Break at 10:30 a.m. Resume at 10:49 a.m.

Comment resolution continued.

Break for lunch at 12:01 p.m. Resume at 1:23 p.m.

Comment resolution continued.

Comment resolution completed at 2:47 p.m.

Break at 2:50 p.m.

<u>IEEE P802.3bs Electrical Interface Track Comment Review Meeting – Sept 13, 2016:</u>

Reconvened at 9:10 a.m., Chaired by Andre Szczepanek, IEEE P802.3bs Annex 120D/E Editor.

Comment resolution continued.

Break at 10:40 a.m. Resume at 11:00 a.m.

Comment resolution continued.

Break at 11:40 a.m. for lunch. Resume at 1:00 p.m.

Presentation #3:

Title: Proposed 120D_3_1 rearrangements to address Comments 23, 24 & 564" By: Adam Healey modified by Andre Szczepanek See http://www.ieee802.org/3/bs/public/16 09/szczepanek 3bs 02 0916.pdf

Comment resolution on related comments.

Presentation #4:

Title: Comment 33: 200GAUI-4 and 400GAUI-8 host output eye requirements By: Adam Healey

See http://www.ieee802.org/3/bs/public/16_09/healey_3bs_01_0916.pdf

Comment resolution continued.

Broke at 4:45 p.m

IEEE P802.3bs Task Force Meeting- Sept 14, 2016:

Meeting reconvened at 8:03am

Chair read Patent Policy Slides, and did Call-for-Patents. No one stepped forward.

Chief editor noted that the following comments needed to be addressed at this morning's session -

- Bucket comments requested to be removed from bucket: 498, 499, 500, 501, 511, 520, 196, 549, 550, 551
- Logic comments depending on Electrical comments: 149, 133, 150
- Comments re-opened to fix issues: 26, 366, 435, 438, 493, 306, 307, 400
- Comments reviewed at commenter's request: 17, 151, 171

Consideration of noted comments began.

Meeting break at 10:30am. Meeting reconvened at 10:47am

Consideration of noted comments continued.

Upon completion of noted comments, the chair asked the room if there were any additional comments that someone wanted to be taken out of the bucket or to be reopened. There were no requests for additional comments to be considered.

At this time the Chair noted that the Closing Reports for the Logic, Optical, and Electrical Tracks had been uploaded to the Task Force webpage. The Task Force did not request to see the Closing Reports presented. The Chairs of the Tracks indicated that there were no particular issues that needed to be highlighted.

Motion #3:

Move to:

- Adopt proposed responses to remaining comments, noted as "bucket" on slides 12 15 of anslow_3bs_01a_0916.pdf
- Generate Draft 2.1 for WG Recirculation from D2.0 and closed comments
- M: Pete Anslow
- S: Mark Gustlin
- Technical (>75%)
- Results (all): Approved by voice vote without objection

Strawpoll #1

- For the IEEE P802.3bs Nov 16 Plenary in San Antonio, Tx
 - Will attend 67
 - May attend 14
 - Won't attend 1

Chair reviewed future meetings.

- Nov 2016 Plenary
 - Week of Nov 6
 - San Antonio, TX, USA
- Jan 2017 Interim
 - Week of Jan 9
 - Huntington Beach, CA, USA
- Mar 2017 Plenary
 - Week of Mar 13
 - Vancouver, BC, Canada
- May 2017 Interim
 - Week of May 22
 - North American Location
- July 2017 Plenary
 - Week of July 9
 - Berlin, Germany

Presentation #4:

Title: Chief Editor's Closing Report

By: Pete Anslow

See http://www.ieee802.org/3/bs/public/16 09/anslow 3bs 05 0916.pdf

Chair thanked everyone who reviewed and submitted comments against D2.0, and noted that through the addressing of the comments, the quality of the document had been improved. The Chair also thanked the editorial team.

Motion #4

Motion to adjourn. Moved – David Ofelt Second – Mike Dudek

Approved by voice vote without objection.

Meeting adjourned at approximately 11:35am

Attendees

IEEE P802.3bs Task Force			9/12	9/13	9/14
Last Name	First Name	Employer / Affiliation	Mon	Tues	Wed
Abbott	Justin	Lumentum			Х
Ali	Tamer	MediaTek	Х	Х	
Andres	David	Marvell Semiconductor			Х
Anslow	Pete	Ciena Corporation	Х	х	Х
Baden	Eric	Broadcom	Х	Х	Х
Baldwin	Thananya	Ixia	X	Х	Х
Bhatt	Vipul	Finisar	Х	х	
Bliss	Will	Broadcom			Х
Booth	Brad	Microsoft			Х
Bouda	Martin	Fujitsu	Х	Х	
Brooks	Paul	Viavi Solutions	X	х	Х
Brown	Matt	Applied Micro	х	х	Х
Butter	Adrian	Global Foundries	Х	Х	Х
Cady	Ed	Luxshare			Х
Caggioni	Francesco	APM			Х
Cole	Chris	Finisar			Х
D'Ambrosia	John	Futurewei, subsidiary of Huawei	Х	Х	Х
Dawe	Piers	Mellanox	Х	Х	Х
Diddle	Stephen	Keysight Technologies	х	х	Х
Dillard	John	Microsemi	Х	Х	Х
Dudek	Mike	Cavium	х	х	Х
Dupuis	Marc	Web Industries		х	
Estes	Dave	Spirent Communications	х	х	Х
Ewen	John	Global Foundries		х	Х
Fife	James	eTopus Tech		x	х
Flatman	Alan	LAN Technologies			Х
Ghiasi	Ali	Ghiasi Quantum, Ghiasi Quantum / Huawei	Х	х	Х
Gorshe	Steve	Microsemi	Х	х	Х
Grow	Bob	RMG Consulting	Х		Х
Guo	Bujin	AOI	Х	х	Х
Gupta	Atul	MACOM		х	Х
Gustlin	Mark	Xilinx	Х	х	Х
Hayakawa	Akinoh	Fujitsu Laboratories	Х	х	Х
Healey	Adam	Broadcom LTD	Х	х	Х
Hegde	Raj	Broadcom		х	Х
Hidaka	Yasuo	Fujitsu Laboratories of America	Х	х	Х
Huang	Xi	Huawei	Х		
Ingham	Jonathan	Foxconn Interconnect Technology	Х	х	
Isono	Hideki	Fujitsu Ltd.	х	х	Х
Issenhuth	Tom	Microsoft			Х
Jackson	Kenneth	Sumitomo	Х		
Johnson	Stephen	UNH-IOL		х	
Kaku	Shineyo	Allied Telesis			Х
	Upen				
Kareti	Reddy	Cisco	Х	Х	Х
Kimber	Mark	Semtech	Х	Х	
Klempa	Mike	UNH-IOL	Х	Х	Х
Kolesar	Paul	CommScope	Χ	X	Х

Lane	Brett	Panduit Corp.	X		
LeCheminant	Greg	Keysight Technologies	Х		Х
Leizerorich	Hanan	MultiPhy		Х	
Lewis	Dave	Lumentum	X	Х	
Li	Mike	Intel		Х	х
Lim	Jane	Cisco	X		х
Liu	Hai-Feng	Intel		Х	х
Lusted	Kent	Intel			х
Maki	Jeffery	Juniper Networks	Х	Х	
Malkman	Yonaton	Mellanox	Х	Х	х
Marris	Arthur	Cadence	Х		х
McDermott	Tom	Fujitsu	Х	Х	
McDonough	John	NEC America	Х	Х	х
McSorley	Greg	Amphenol	х	Х	х
Mellitz	Richard	Samtec	х	Х	х
Mooney	Paul	Spirent Communications	X	X	Х
Muir	Ron	JAE		- •	X
Murray	Dale	Light Counting			X
Nakamoto	Edward	Spirent Communications	+	X	X
Nelson	John	Arista	х	X	X
Nicholl	Gary	Cisco	^	X	^
Nishimura	Takeshi	Yamaichi Electronics			
Norimatsu	Takayasu	Hitachi		X	v
Nowell					X
	Mark	Cisco		X	X
Ofelt	David	Juniper Networks	X	Х	Х
Palkert	Tom	Molex / Macom	X	Х	Х
Parthasarathay	Vasudevan	Broadcom		Х	
Patra -	Lenin	Marvell Semiconductor			Х
Pepper	Gerald	Ixia	X	Х	Х
Pham	Phong	US Conec Ltd	X	Х	Х
Piehler	David	Dell		Х	Х
Rabinovich	Rick	IXIA	Х	Х	Х
Ran	Adee	Intel	X	Х	Х
Rechtman	Zvi	Mellanox	X	Х	Х
Rodgers	David	Teledyne LeCroy	X		
Rotolo	Salvatore	STM Microelectronics	Х	Х	Х
Sakai	Toshiaki	Socionext	Х	Х	х
Shrikhande	Kapil	Innovium	Х	Х	Х
Slavick	Jeff	Broadcom, Ltd.	Х	Х	х
Sommers	Scott	Molex	х	Х	Х
Sone	Yoshiaki	NTT	Х	Х	
Sparrowhawk	Bryan	Leviton			Х
Sprague	Ted	Infinera	х	Х	Х
Srivastava	Atul	NEL / NTT	X	X	X
Stassar	Peter	Huawei	X	X	X
Stone	Rob	Broadcom	X		
Sun	Phil	Credo Semiconductor	X	X	х
Swanson	Steve	Corning	X	X	X
Szczepanek	Andre	Inphi	X	X	X
Tailor	Bharat	Semtech Corp	^	^	
Talloi Takahara	Tomoo				X
	Kohichi	Fujitsu Laboratories	X	X	Х
Tamura	NUHICHI	Oclaro Japan	X	X	

Tracy	Nathan	TE Connectivity	Х	х	х
Traverso	Matthew	Cisco	Х	Х	Х
Trowbridge	Steve	Nokia	Х	Х	Х
Twombly	Jeff	Credo Semiconductor		Х	
Uday	Poosalla	GigPeak			Х
Ulrichs	Ed	Source Photonics	Х	Х	
Vanderlaan	Paul	Nexans	Х		
Wang	Xinyuan	Huawei	Х	Х	
Webb	Chris	Teledyne LeCroy			Х
Welch	Brian	Luxtera	Х	Х	
White	Martin	Cavium			Х
Xu	Qing	Belden	Х		Х
Xu	Yu	Huawei	Х	Х	Х
Zambell	Andrew	FCI		Х	Х
Zhang	Huanlin	Applied Optoelectronics	Х		
Zhenwei	Cui	Huawei		Х	
Zhuang	Yan	Huawei			х
Zivny	Pavel	Tektronix	Х	Х	Х