Unapproved Minutes
IEEE P802.3bj 100 Gb/s Backplane and Copper Cable Task Force
Plenary Meeting
January 22-24, 2013
Phoenix, AZ, USA
Prepared by Kent Lusted (802.3bj Task Force, Tues-Thurs)

Table of Contents

IEEE 802.3bj Task Force Meeting – 22 January 2013 morning:
Prepared by Kent Lusted

IEEE P802.3bj Task Force interim meeting convened at 9:08am, Tuesday, 22 January 2013, by John D'Ambrosia, IEEE P802.3bj Chair.

Agenda & General Information
By – John D'Ambrosia
See -- http://www.ieee802.org/3/bj/public/jan13/agenda_3bj_01a_0113.pdf
- Chair reviewed the agenda.
- Introductions – Everyone introduced themselves and stated their affiliation.

Motion #1: Move to approve the agenda
- Moved by: B. Kochuparambil
- Second by: Tom Palkert
- Approved by voice vote without opposition

Motion 2: Move to approve the Nov 2012 minutes
- Moved by: Adee Ran
- Second by: B. Kochuparambil
- Approved by voice vote without opposition

Chair asked if there were any reporters in the room. No reporters in the room. John D'Ambrosia will be talking with the press regarding IEEE activities but will only disclose high level details available from the published meeting minutes.

John D'Ambrosia requests permission to photo the task force for the historical archives. No objections were heard.

Chair thanks Luxtera for hosting the meeting.

Chair continued with the introductory presentation
- Goals for the meeting: PAR modifications and approval, D1.3 comment resolution, Big Ticket items, lay the groundwork for D1.4 and Work Group ballot.
- Ground Rules were reviewed
- IEEE Structure, Bylaws & Rules

IEEE Patent Policy: Chair reads aloud the patent policy text on the 4 slides contained in the agenda. Chair calls for potentially essential patents. No one responded. Chair read the Guidelines for IEEE-SA meetings. No response.

Chair gives overview of the 802.3 Standards Process. Reviews the project objectives. Reviews the working group ballot process and the sponsor ballot process.

Reviewed open Action Items. All action items reviewed and status updated.
- ACTION ITEM: Charles Moore and Mike Dudek to continue ongoing refinement of RX tests for all 3 PMDs.
- ACTION ITEM. Rick Mellitz to update COM within 2 weeks based on accepted responses to Draft 1.3 comments.

No liaisons and communications were received.

Chair reviewed status of Task Force project documents.

Chair reviewed process for going to Working Group ballot.

EEE and error indication comments will be discussed starting at 1:15 pm Tuesday.

9:40 a.m. Chair gives control of the Task Force meeting to Adam Healey, Chief Editor, for comment resolution.

Presentation #1
Title: Editor's report
By – Adam Healey
See – http://www.ieee802.org/3/bj/public/jan13/healey_3bj_01_0113.pdf
Discussion: Clarifying questions were discussed regarding the presentation.

~130 comments received are deemed non-controversial and will be considered in a bucket motion. Task force urged to review and notify editor of comment(s) that should be considered outside of the bucket motion by the Task Force.

Break at 10:00 a.m. Resume at 10:23 a.m.

Presentation #2
Title: 100G BASE-KP4 Interference tolerance ad hoc
By – Charles Moore
See -- http://www.ieee802.org/3/bj/public/jan13/moore_3bj_01_0113.pdf
Discussion:

Presentation #3
Title: PKG RL Ad-Hoc Summary
By – Liav Ben-Artsi
See -- http://www.ieee802.org/3/bj/public/jan13/benartsi_3bj_01a_0113.pdf

Discussion: Clarifying questions were asked and answered.

Presentation #4
Title: Adding a Simple Package Model to the Channel Response
By – Rich Mellitz
See -- http://www.ieee802.org/3/bj/public/jan13/mellitz_3bj_01b_0113.pdf
Discussion: Clarifying questions were asked and answered.
Action Item: Rich to submitted updated presentation for posting. Done!

Comment resolution begins.

Reminder that EEE and error indication comments will be discussed starting at 1:15 pm today. Error indication comment resolution may be delayed to Thursday after 802.3bm meeting is finished.

Ali Ghasi presentation (http://www.ieee802.org/3/bj/public/jan13/ghiasi_3bj_01_0113.pdf) will not be presented in its entirety but only referenced when required by the specific comment.

Presentation #5
Title: RX Interference Testing Process Overview Using COM
By – Rich Mellitz
See -- http://www.ieee802.org/3/bj/public/jan13/mellitz_3bj_03_0113.pdf
Discussion: Clarifying questions were asked and answered.

Updated presentations are posted to the website.

Break for lunch at 12:09 p.m.

IEEE Joint 802.3bj and 802.3bm Task Force Meeting – 22 January 2013:
Prepared by Kent Lusted

Session starts at 1:17 p.m. by John D'Ambrosia, IEEE P802.3bj Chair.

Presentation #6
Title: EEE Modifications
By – Steve Trowbridge
See -- http://www.ieee802.org/3/bj/public/jan13/trowbridge_3bj_01_0113.pdf
Discussion: Clarifying questions were asked and answered.

Joint session comment resolution begins. Comments resolved in the joint session are as follows (see 802.3bj comment database for specific details on each comment):
- #117
- #115
- #116

Presentation #7
Title: Option to Bypass Error Marking
By – Adee Ran
See -- http://www.ieee802.org/3/bj/public/jan13/ran_3bj_01a_0113.pdf
Discussion: Clarifying questions were asked and answered.

Presentation #8
Title: RS-FEC Operating Modes and Analysis regarding marking error blocks
By – Zhongfeng Wang and Stephen Bates
See -- http://www.ieee802.org/3/bj/public/jan13/wang_3bj_01a_0113.pdf
Discussion: Clarifying questions were asked and answered.

Comment resolution continues with comments:
- #18
- #205
- #241
- #110
- #281
- #158
- #212

End of joint 802.3bj and 802.3bm session. Break at 3:04 pm.

Prepared by Kent Lusted

Resume at 3:27 pm.

Expected end time for today is 6pm. Announced start time on Wednesday is 8:30 a.m.

Presentation #9
Title: Data for Comment 33 and 223
By – Rich Mellitz
See -- http://www.ieee802.org/3/bj/public/jan13/mellitz_3bj_02_0113.pdf
Discussion: Clarifying questions were asked and answered.

Comment resolution continues.

Mike Dudek and Charles Moore appointed to resolve RX interference tolerance test representing task force consensus (comment #226) by Thursday closing.

Action Item: Chair and Chief Editor to discuss comment #210 with 802.3 maintenance chair.

RX interference tolerance ad hoc will meet for consensus building of a response after the meeting Wednesday night in breakout meeting room (Cassidy).

Meeting will resume at 8:30am on Wednesday.

Break for the day at 6:03 pm, 22 January 2013.

IEEE 802.3bj Task Force Meeting – 23 January 2013:

Prepared by Kent Lusted

IEEE P802.3bj Task Force interim meeting resumed at 8:45 am, Wednesday, 23 January 2013, by John D'Ambrosia, IEEE P802.3bj Chair.

RX interference tolerance ad hoc will meet for consensus building of a response after the meeting Wednesday night in breakout meeting room (Cassidy).

Call for reporters. No response.

Patent Policy: Chair displays patent related slides. No one responded. Call for patents. No responded. Chair displays guidelines slides. No responded.

Comment resolution begins.

Presentation #10
Title: 802.3bj Draft 1.3 Comment #191
By – Arthur Marris
See -- http://www.ieee802.org/3/bj/public/jan13/brown_3bj_03a_0113.pdf
Discussion: Clarifying questions were asked and answered.

Break at 10:00 am. Resume at 10:29 am.

Comment resolution continues.

All updated presentations are posted to the web.

Break at 12:00 pm. Resume at 1:25 pm.

Comment resolution continues.

Reminder to sign into IMAT for attendance.

Break at 3:03 pm. Resume at 3:37 pm.

Comment resolution continues.

ACTION ITEM: Mark Bugg to send link to presentation from which the worst case S-parameters came from.

Reminder that RX interference tolerance ad hoc will meet for consensus building of a response after the meeting Wednesday night in breakout meeting room (Cassidy). Approximately 5:30 pm.

Break for the day at 5:30 pm, 23 January 2013.

IEEE 802.3bj Task Force Meeting – 24 January 2013:

Prepared by Kent Lusted

IEEE P802.3bj Task Force interim meeting resumed at 8:35 am, Thursday, 24 January 2013, by John D'Ambrosia, IEEE P802.3bj Chair.

Reminder to sign into IMAT.

Several updated presentations received.

Call for reporters. No response.

Patent Policy: Chair displays patent related slides. No one responded. Call for patents. No responded. Chair displays guidelines slides. No responded.

Meeting turned over to Matt Brown for comment resolution.

Presentation #11
Title: 100GBASE-KP4 (Comment #222, 221/95)
By – Kent Lusted
See -- http://www.ieee802.org/3/bj/public/jan13/lusted_3bj_01a_0113.pdf
Discussion: Clarifying questions were asked and answered.

~130 comments received are deemed non-controversial and will be considered in a bucket motion. Task force urged to review and notify editor of comment(s) that should be considered outside of the bucket motion by the Task Force.

Comment resolution continues.

Presentation #12
Title: 100GBASE-KP4 PMA EEE Behavior Addresses comments 94, 218, 219, 220
By – Matt Brown
See – http://www.ieee802.org/3/bj/public/jan13/brown_3bj_01a_0113.pdf
Discussion: none

Comment resolution continues.

Presentation #13
Title: Clause 94 comment resolution Addresses various comments
By – Matt Brown
See – http://www.ieee802.org/3/bj/public/jan13/brown_3bj_02_0113.pdf
Discussion: none

Comment resolution continues.

Break at 10:00 am. Resume at 10:24 am.

Presentation #14
Title: RX Interference Testing Process Overview Using COM
By – Rich Mellitz
See – http://www.ieee802.org/3/bj/public/jan13/mellitz_3bj_03a_0113.pdf
Discussion: Clarifying questions were asked and answered.

Comment resolution continues.

Presentation #15
Title: Information for resolving comments #21 and #19
By – Charles Moore
See -- http://www.ieee802.org/3/bj/public/jan13/moore_3bj_02_0113.pdf
Discussion: Clarifying questions were asked and answered.

Break for lunch at 12:01 pm. Resume at 1:16 pm.

Comment resolution resumes.

Presentation #16
Title: Low frequency jitter tolerance Comments 109, 133, 140
By – Charles Moore
See -- http://www.ieee802.org/3/bj/public/jan13/dawe_3bj_01_0113.pdf
Discussion: Clarifying questions were asked and answered.

The following comments were considered outside of the bucket motion by the task force during comment resolution: 125, 126, 166, 262, 171, 172, 173, 165, and 235.   All other bucket-worthy comments will be processed as a bucket motion.

Break at 3:23 pm. Resume at 3:45 pm.

Comment resolution completed.

Email will be sent to reflector with draft 1.4 review timeline.

Motion 3: Move to:
- Adopt proposed responses to remaining "non-controversial" comments as indicated in healey_3bj_01_0113.pdf
- Generate Draft 1.4 from Draft 1.3 and closed comments
- Pre-submit Draft 1.4 to IEEE 802.3 in anticipation of requesting WG ballot at the March Plenary
  M: A. Healey
  S: C. Moore
  Technical (>= 75%)
  Y: 21+15=36, N: 0, A: 0
  Results: PASSES

There was a brief discussion on implications of 400G CFI at March plenary.

Request for a photograph. No one objected.

Continued with Agenda, see http://www.ieee802.org/3/bj/public/jan13/agenda_3bj_01a_0113.pdf

Reviewed future meeting schedule. Deadline for March registration is today. Book Geneva and York hotels.

Chair thanks Tom Palkert and Luxtera for hosting the interim.

Motion 4: Move to adjourn
M: Brad Booth
S: Hugh Barrass
Passes by voice vote without opposition.

Meeting ends at 4:25 pm, 24 January 2013.

Open Action Items:

Volunteer	Action	Date Assigned	Status
Merrick Moeller	Provide updated CFP4 simulation results at next meeting	7/17/2012	
Charles Moore, Mike Dudek	~~Run ad hoc to provide proposal with complete characteristics and parameters in Table 94-7, of Draft 1.1 for submission against draft 1.2~~ Run ad hoc for RX tests for all 3 PMDs.	~~25 September 2012~~ 22 January 2013	~~closed~~ Open
Kent Lusted, Adee Ran, Matt Brown	Run ad hoc which defines suitable pattern, methodology, and values for 100GBASE-KP4 TX.	25 September 2012	Ongoing
Task Force Channel Submitters	Compare diff return loss of target channels against informative limit for Cl 93 and Cl 94.	25 September 2012	Ongoing
Chris Diminico	Run ad hoc to harmonize electrical cable and transmitter parameters for Clause 92.	26 September 2012	Ongoing
Task Force Channel Submitters	Correlate their submitted channels against informative channel models and COM results.	26 September 2012	Ongoing
Rich Mellitz, Liav Ben-Artsi	Run ad hoc to resolve return loss in P802.3bj	15 November 2012	Ongoing
Rich Mellitz	Update COM within 2 weeks based on accepted responses to Draft 1.3 comments.	22 January 2013	Open
John D'Ambrosia, Adam Healey	Discuss comment #210 with 802.3 maintenance chair.	22 January 2013	Open
Mark Bugg	Send link to presentation from which the worst case S-parameters came from.	23 January 2013	Open

Attendee List:

IEEE 802.3bj 100Gb/s Cu & BP TF, Nov. 2012 Plenary			22-Jan-13	23-Jan-13	24-Jan-13
Last Name	**First Name**	**Affiliation**	**Tuesday**	**Wednesday**	**Thursday**
Abbas	Ghani	Ericsson, UK			x
Anslow	Pete	Ciena Corporation			x
Barrass	Hugh	Cisco	x	x	x
Ben-Artsi	Liav	Marvell	x	x	x
Braun	Ralf-Peter	Deutsche Telekom, T-Systems			x
Brown	Matt	Applied Micro	x	x	x
Bugg	Mark	Molex	x		x
Casher	Patrick	Molex	x	x	x
Chen	Qi	Lorom Group	x	x	x
Cole	Chris	Finisar			x
D'Ambrosia	John	Dell	x	x	x
Dawe	Piers	IPtronics			x
DiMinico	Christopher	MC Communications/Leoni	x	x	x
Dudek	Mike	QLogic	x	x	x
Farhoodfar	Arash	Cortina Systems	x		
Ghiasi	Ali	Broadcom			x
Gustlin	Mark	Xilinx			x
Healey	Adam	LSI	x	x	x
Holden	Brian	Kandou Bus	x	x	x
Huang	Xi	Huawei	x	x	x
Jewell	Jack	Independent			x
Kochuparambil	Elizabeth	Cisco Systems	x	x	x
Kono	Masashi	Hitachi	x		x
Law	David	HP		x	
LeCheminant	Greg	Agilent Technologies			x
Li	Mike	Altera	x	x	x
Liu	Zhenyu	Marvell Semiconductor	x	x	x
Lusted	Kent	Intel	x	x	x
Maki	Jeffery	Juniper Networks			x
Marris	Arthur	Cadence	x	x	x
McDonough	John	NEC America		x	x
McSorley	Greg	Amphenol	x	x	x
Meghelli	Mounir	IBM	x	x	x
Mellitz	Richard	Intel	x	x	x
Moore	Charles	Avago Technologies	x	x	x
Nolan	John	Qlogic	x	x	x
Palkert	Tom	Xilinx, Luxtera, Molex	x		
Parthasarathy	Vasudevan	Broadcom	x	x	x
Rabinovich	Rick	Alcatel-Lucent		x	x

IEEE 802.3bj 100Gb/s Cu & BP TF, Nov. 2012 Plenary			22-Jan-13	23-Jan-13	24-Jan-13
Last Name	First Name	Affiliation	Tuesday	Wednesday	Thursday
Ran	Adee	Intel	x	x	x
Shanbhag	Megha	TE Connectivity	x	x	x
Sommers	Scott	Molex	x	x	x
Szczepanek	Andre	Inphi			x
Tremblay	Francois	Semtech			x
Trowbridge	Steve	Alcatel-Lucent			x
Valliappan	Magesh	Broadcom	x	x	x
Walker	Clinton	Intel	x	x	x
Wang	Zhongfeng	Broadcom	x	x	x
Warland	Tim	Applied Micro			x
Xu	Junyi	Marvell	x	x	x
Zambell	Andrew	FCI	x	x	
Zivny	Pavel	Tektronix	x	x	x
Gaist	Chen	Mellanox	x	x	x
Li	Shaohua	brocade	x	x	
Ogura	Ichiro	Petra			x