802.3 Plenary Meeting
IEEE P802.3bp 1000BASE-T1 Task Force
Chair: Steven B. Carlson
San Diego, CA

<u>**Tuesday July 15, 2014**</u>
09:00 - Meeting convened

09:00 - Steven Carlson - Agenda and General Information
  ● Appointment of Recording Secretary - Curtis Donahue
  ● Welcome and Introductions
  ● Review Agenda
  ● Task force decorum

09:07 - The chair remembers Hugh Barrass

09:23 - The chair calls for potentially essential patents, and slides 1-4 were read.
  ● The Call for Patents was made and no response was received

09:31 - Xiaofeng Wang - Answer to PoDL Questions
  ● The chair decides to set aside 13:30-14:00 for discussions related to his topic

09:43 - Adam Healey - IEEE P802.3bj Task Force Comment Tool Tutorial
    Mr. Healey gave a tutorial on the use of the comment tool with tips on how to be a good
    commenter
10:14 - The chair called for a 15 minute break

10:32 - Reconvened

10:44 - Chris DiMinico/Mehmet Tazebay - Channel Definitions Ad hoc Report
    The ad hoc reported on further work on the test annexes

11:08 - Mehmet Tazebay - EMC & Noise Ad Hoc Report
    The ad hoc reported on the on-going work with the PoDL TF on noise. An update to the
    TX_PSD mask was proposed, and new information on connector vibrations was
    discussed.
11:22 - Zhenyu Liu - Updates to PAM3 Mapping for 802.3bp

11:27 - Thomas Müller - IEEE 1000BASE-T1 Connector vibration test results
    Additional test data on high-frequency performance when vibration is present was
    discussed.
11:44 - Xiaofeng Wang - On Symbol Mapping for 1000BASE-T1

12:26 - The chair called a break for lunch

13:35 - Reconvened

13:35 - [William Lo - Encoder / FEC / PAM3 Proposal](#)

13:55 - [Zhenyu Liu - Line Code and FEC performance](#)

14:19 - [BZ Shen - A Baseline Proposal for 1000BASE-T1 Mapping and FEC](#)

    Three different mappings were presented; the data show they are very close in performance.

14:59 - The chair recessed the meeting until July 16, 2014 at 10:00
- The meeting was recessed while Ahmad Chini and William Lo are still in the queue for discussion. The meeting will resume with the queue intact.

Wednesday July 16, 2014

10:15 - The chair reconvened the meeting
- Continue discussions regarding BZ Shen's presentation

10:34 - The chair called for a 10 minute break

10:45 - Reconvened

10:46 - [William Lo - Auto-Negotiation Status Update](#)

11:01 - [William Lo - Training & EEE Proposal](#)

11:22 - [Jim Graba - EEE Proposal for 1000BASE-T1](#)
    Both EEE proposals have many point of commonality. Both presenters agreed to work on a joint EEE proposal.

11:42 - [Peiqing Wang/Mehmet Tazebay - 1000BASE-T1 PHY Synchronization Method & Start-up Process and Link Failure Case Analysis](#)

12:14 - The chair called a break for lunch

13:30 - Reconvened

13:30 - [Ahmad Chini - Effect of Scrambling Choices on 1000BASE-T1 Emission](#)

13:50 - [Chris DiMinico - 802.3bp Baseline Optional Link Segment](#)

14:15 - [Chris DiMinico - Channel Definitions Ad hoc Report](#)

- Addressing specifically what was discussed/modified in the Ad Hoc

14:26 - [David Brandt - Industrial Automation IoT Market](#)
      The group voted to hear this presentation, which was submitted during the meeting.

14:39 - The chair recessed the meeting until July 17, 2014 at 09:00

Thursday July 17, 2014
09:15 - The chair reconvened the meeting

09:16
Motion #1
Move that the IEEE P802.3bp Task Force adopt proposal in diminico_3bp_02a_0714pdf slides 7-11 as replacement text for Annex 97B Alien Crosstalk Test Procedure IEEE P802.3bp draft standard and give editorial license to implement.
Moved by: Chris DiMinico
Seconded by: Bob Wagner

All in Room   Y: 57   N: 0   A: 1
802.3 voters only   Y: 35   N: 0   A: 0
Technical 75% required
Result: Motion passes

09:27
Motion #2
Move that the IEEE P802.3bp Task Force adopt proposal in diminico_3bp_01b_0714.pdf slides 7-13 as 97.4.4.2 Link transmission parameters for link segment type B and give editorial license to implement.
Moved by: Chris DiMinico
Seconded by: Bob Wagner

All in Room   Y: 64   N: 0   A: 1
802.3 voters only   Y: 33   N: 0   A: 0
Technical 75% required
Result: Motion passes

09:42
Motion #3
Move that the IEEE P802.3bp Task Force adopt TX_PSD as defined in tazebay_3bp_01_0714.pdf (page #3).

Moved by: Mehmet Tazebay
Seconded by: William Lo

All in Room   Y: 58   N: 0   A: 5
802.3 voters only   Y: 35   N: 0   A: 2
Technical 75% required
Result: Motion passes

09:45
Motion #4
Move that the IEEE P802.3bp Task Force adopt 750Mbaud/sec for baud rate as defined in lo_3bp_01a_0714.pdf (page #15).
Moved by: William Lo
Seconded by: Mehmet Tazebay

All in Room   Y: 54   N: 0   A: 6
802.3 voters only   Y: 34   N: 0   A: 2
Technical 75% required
Result: Motion passes

09:50
Motion #5
Move that the IEEE P802.3bp Task Force adopt the mapping scheme 3B2T for 1000BASE-T1 as defined in shen_3bp_01_0714.pdf (page #4).
Moved by: Mehmet Tazebay
Seconded by: BZ Shen
The mover requested a roll call vote. Mr. David Law, the 802.3 Chair, assisted in the voting process.

Roll Call Vote

Name	Company	Affiliation	All in Room vote	802.3 only vote
Bernd Horrneyer	Phoenix Contact	Phoenix Contact	Yes	Yes
Richard Mei	CommScope	CommScope	Yes	Yes
BZ Shen	Broadcom	Broadcom	Yes	Yes
Xiaofeng Wang	Qualcomm	Qualcomm	No	No
Carlos Pardo	KDPOF	KDPOF	Yes	Yes
Yong Kim	Broadcom	Broadcom	Yes	Yes
Karl Weber	Beckhoff	Beckhoff	Yes	Not Applicable

Phillip Brownlee	Coilcraft	Coilcraft	Yes	Yes
Mike Tu	Broadcom	Broadcom	Yes	Not Applicable
Hui Pan	Broadcom	Broadcom	Yes	Not Applicable
Peiqing Wang	Broadcom	Broadcom	Yes	Not Applicable
Jim Graba	Broadcom	Broadcom	Yes	Not Applicable
Thuyen Dinh	Pulse	Pulse	Abstain	Not Applicable
Neven Pischl	Broadcom	Broadcom	Yes	Not Applicable
Tom Brown	Vitesse	Vitesse	Yes	Not Applicable
Mike Gardner	Molex	Molex	Yes	Yes
Dave Dwelley	Linear Technology	Linear Technology	Yes	Yes
Mark Laubach	Broadcom	Broadcom	Yes	Yes
Zhenyu Liu	Marvell	Marvell	No	No
Shaoan Dai	Marvell	Marvell	No	No
Mandeep Chadha	Vitesse	Vitesse	Yes	Yes
Will Bliss	Broadcom	Broadcom	Yes	Yes
Dave Hess	Cord Data	Self	Yes	Yes
Farid Hamidy	Pulse	Pulse	Yes	Not Applicable
Andy Gardner	Linear Tech	Linear Tech	Yes	Not Applicable
Henry Muyshondt	Microchip Technology	Microchip Technology	No	No
Liang-wei Huang	Realtek	Realtek	Yes	Yes
Stefano Valle	STMicroelectronics	STMicroelectronics	Yes	Yes
Jin Zhang	Marvell	Marvell	No	No
Dale Amason	Freescale	Freescale	Yes	Not Applicable
Steve Shellhammer	Qualcomm	Qualcomm	No	No
Peter Wu	Marvell	Marvell	No	No
Kirsten Matheus	BMW	BMW	Yes	Yes
Thomas Hogenmüller	Robert Bosch	Robert Bosch	Yes	Yes
Geoff Thompson	Gracaisi	Robert Bosch	Yes	Yes
Sujan Pandey	NXP	NXP	Yes	Yes
Antony Joseph	NXP	NXP	Yes	Not Applicable
Mike Klempa	UNH-IOL	UNH-IOL	Abstain	Not Applicable
Alex Seiger	UNH-IOL	UNH-IOL	Abstain	Not Applicable

Hui Ling Lou	Marvell	Marvell	No	Not Applicable
Zhipei Chi	Marvell	Marvell	No	Not Applicable
Efstathios Larios	Jaguar Land Rover	Jaguar Land Rover	Yes	Not Applicable
Sasha Babenko	Molex	Molex	Yes	Yes
Ahmad Chini	Broadcom	Broadcom	Yes	Not Applicable
George Zimmerman	CME Consulting	CommScope	Yes	Yes
Masood Shariff	CommScope	CommScope	Yes	Not Applicable
Theo Brillhart	Fluke	Fluke	Abstain	Not Applicable
David Law	HP UK Ltd	HP UK Ltd	Yes	Yes
Rainer Poehmerer	Leoni	Leoni	Yes	Yes
Larry Matola	Delphi	Delphi	Yes	Not Applicable
William Lo	Marvell	Marvell	No	No
Mike Bennett	3MG Consulting	3MG Consulting	Abstain	Abstain
Wayne Larsen	CommScope	CommScope	Yes	Yes
Alan Flatman	LAN Technologies	LAN Technologies	Abstain	Abstain
Curtis Donahue	UNH-IOL	UNH-IOL	Abstain	Abstain
Garold Yurko	TE Connectivity	TE Connectivity	Yes	Yes
Marek Hajduczenia	Bright House Networks	Bright House Networks	Yes	Yes
Thomas Müller	Rosenberger	Rosenberger	Yes	Yes
Bob Wagner	Panduit	Panduit	Abstain	Abstain
David Brandt	Rockwell Automation	Rockwell automation	Abstain	Not Applicable
Nick Duer	General Cable	General Cable	Yes	Not Applicable
Mehmet Tazebay	Broadcom	Broadcom	Yes	Yes

All in Room   Y: 43   N: 10   A: 9
802.3 Voters Only   Y: 27   N: 8   A: 4
Technical 75% required
Result: Motion passes

11:15 - The chair discusses the P802.3bp Strawman Timeline

11:20
Motion#6
To adopt the timeline as captured in P802.3bp_strawman_timeline_0714.pdf, with editorial license to create 802.3 timeline graphic.
Moved by: Chris DiMinico
Seconded by: Gary Yurko

Voice Vote
Technical 75% required
Result: Motion passes by voice without opposition

11:31 - The chair asks who will attend the September interim
Yes: 22   Maybe: 11   "Absolutely will not be caught dead in Kanata": 5

11:33 - The chair entertains a motion to adjourn

11:33
<u>Motion #7</u>
To adjourn the meeting
Moved by: Mehmet Tazebay
Seconded by: Mike Gardner
Result: Motion passes by voice without opposition

11:35 - The meeting was adjourned

P802.3bp Task Force Sign-In Sheet _July 2014_

RICHARD MEI   COMMSCOPE   COMMSCOPE   RM

Name	Company	Affiliation	T	W	Th
Steve Carlson	HSD	Marvell, Broadcom, Huawei	SPC	SPC	
Thomas Hogenmueller	Bosch	Bosch	TH		
Benson Huang	Realtek	Realtek	Huang	Huang	Huang
Mandeep Chadha	Vitesse	Vitesse	AA	AA	AA
Garold Yurko	TE	TE	Gry	Gry	Gry
Larry Matola	DELPHI	DELPHI	YM	YM	YM
Rainer Pöhmerer	LEONI	LEONI	JR	JR	JR
Thomas Müller	Rosenberger	Rosenberger	M	M	
Bernd Horrmeger	Phoenix Contact	Phoenix Contact	HG	HG	HG
Jim Graba	Broadcom	Broadcom	JZ	JZ	JZ
Peiqing Wang	Broadcom	Broadcom	PW	PW	PW
Ahmad Chini	Broadcom	Broadcom	A.C		
Mehmet Tazebay	Broadcom	Broadcom	W	W	W
Zhenyu Liu	Marvell	Marvell	ZL	ZL	ZL
Efstathios Larios	Jaguar Land Rover	Jaguar Land Rover	EL	EL	EL
Nick Duer	General Cable	General Cable	ND	ND	ND
Tom Brown	Vitesse	Vitesse	TB	TB	TB
Hui Pan	Broadcom	Broadcom	HP		HP
Yasuaki Kawatsu	Hitachi Metals	Hitachi Metals	Y.C.		
Carlos Pardo	KDPOF	KDPOF			
Sujan Pandey	NXP	NXP	J		J
BZ Shen	Broadcom	Broadcom	BZS	BZS	BZS
Mike Tu	Broadcom	Broadcom	Tu		
Henry Muyshondt	Microchip	Microchip	HM	HM	HM
Stefano Valle	STMicroelect.	STMicroelect.	SV	SV	SV
Wayne Larsen	Commscope	Commscope			WL
Yonga Kim	Broadcom	Broadcom			YK
Sudku S	Marvell	Marvell			SS
Sagar Tamhane	MARVELL	MARVELL			

P802.3bp Task Force Sign-In Sheet _July 2014_

Mark Lausach   Broadcom   Broadcom   un

Name	Company	Affiliation	T	W	Th
Mitsuhiko Mizuno	Denso	Denso	MM		
Farid Hamidy	Pulse	Pulse	FH	FH	FH
Shigeru Kobayashi	TE Connectivity	TE Connectivity	SK		
Ruben Perez-Aranda	KDPOF	KDPOF	RPA		
Xiao Feng Wang	Qualcomm	Qualcomm	XFW	XFW	XFW
Shaoan Dai	Marvell	Marvell	SD	SD	SD
Seungsu Kim	Hyundai Motor Company	Hyundai Motor Company	Sm	Sm	Sm
Woo Sub Kim	Hyundai Motor Company	Hyundai Motor Company	W	W	W
Hayato Yuki	Sumitomo	Sumitomo	YW		
Curtis Donahue	UNH-IOL	UNH-IOL	CKD	CKD	CKD
Shahar Feldman	Microsemi	Microsemi	SF	DA	
Dale Amason	Freescale	Freescale	DA	D	DA
Mike Bennett	3MG Consulting	3MG Consulting	MB	MB	MB
Vijaya Ceekala	Texas Instruments	Texas Instruments	C		
Will Bliss	Broadcom	Broadcom	WB		
Chris Dinivico	MC Communications	Panduit	C.D		
William Lo	Marvell	Marvell	WL	WL	WL
Sasha Babenko	Molex	Molex	S.B.	S.B	S.B
Mike Gardner	Molex	Molex	MG	MG	MG
Naoshi Serizawa	Yazaki	Yazaki	NS		
Takayuki Tajima	Yazaki	Yazaki	T.T		
David Brandt	Rockwell	Rockwell	DB	DB	DB
Kirsten Matheus	BMW	BMW	KM	KM	KM
Alex Seiger	UNH-IOL	UNH-IOL		AMR	AMR
Ahmad Chini	Broadcom	Broadcom	AC	AC	AC
Woo Sub Kim	Hyundai Motor Company	Hyundai Motor Company			HL
Hui-Ling Lou	Marvell	Marvell			LP
Vladan Petrovic	Marvell	Marvell			

P802.3bp Task Force Sign-In Sheet — July 2014

Will Bliss   Broadcom   Broadcom   WB

Name	Company	Affiliation	T	W	Th
DAVID BRANDT	ROCKWELL	ROCKWELL			
Mitsuru Inaba	Yokogawa Electric	Yokogawa Electric			
Theo Brillhart	Fluke	Fluke			
Sujan Pandez	NXP	NXP			
Antony Joseph	NXP	NXP			
Farid Hamidy	Pulse	Pulse			
~~HENDY MUYSHONDT~~	~~MICROCHIP~~	~~MICROCHIP~~			
~~Mehmet Tazé~~					
Mike Th	Broadcom	Broadcom			
Hui PAN	Broadcom	Broadcom			
DAVE HESS	CORD DATA	CORD DATA			
GEOFF THOMPSON	GraCaSI	Bosch			
Peter Wu	Marvell	Marvell			
George Zimmerman	CME Consulting	Commscope			
CHRIS DIMINICO	MC Communications	PANDUIT			
Mike Klempa	UNH IOL	UNH IOL		MK	MK
Paul Vanderlaan	Berk-Tek LLC	Berk-Tek LLC			
MASOOD SHARIFF	COMMSCOPE	COMMSCOPE			
Jeff Poulsen	Leviton	Leviton			
George Zimmerman	CME Consulting	Commscope			
MAREK HAJDUCZENIA	BHN	BHN			
CHRIS DIMINICO	MC COMMUNICATIONS	PANDUIT			
ALAN FLATMAN	LAN TECHNOLOGIES	LAN TECHNOLOGIES			
THUYEN DINH					
ANTONY JOSEPH	NXP	NXP			
NEVEN PISCHL	BROADCOM	BROADCOM			
Jin Zhang	Marvell	Marvell			
Zhipei Chi	Marvell	Marvell			
EDWARD Au	MARVELL	MARVELL			
Mingguang Xu	Marvell	Marvell			

OVER