

Unconfirmed Meeting Minutes: Joint IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY
Task Force and IEEE Greater than 10 Gb/s Automotive
Ethernet Electrical PHYs Study Group
September 10-12, 2019
Indianapolis, IN USA

Prepared by Jon Lewis and George Zimmerman

IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force and IEEE Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group meeting convened at 8:30AM, Tuesday, September 10, 2019 by Steve Carlson, Task Force Chair.

Attendance is listed in Appendix A

Administrative Matters

Mr. Carlson reviewed the agenda in [agenda_3ch_B10GAUTO_01_0919.pdf](#).

The Chair called for the participants to introduce themselves.

Motion #1: Move to approve the agenda as shown in [agenda_3ch_B10GAUTO_01_0919.pdf](#)

M: Hamid Salehi S: William Lo
Approved by voice without opposition (Procedural > 50%)
Motion Passes

Motion #2: Move to approve the minutes of the July 2019 IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force Meetings.

M: Natalie Wienckowski S: George Zimmerman
Approved by voice without opposition (Procedural > 50%)
Motion Passes

Mr. Carlson noted that there should be no recording or photography.

Mr. Carlson asked if anyone was attending from the press including those who would run a public blog on this meeting. None responded.

The Task Force Chair reviewed the goals for the meeting, big ticket items, access to the reflector and website, and ground rules for the meeting.

Attendance, Mr. Carlson advised the group of the IEEE meeting attendance tool and procedures, including both the attendance book and the web attendance tracking tool.

The Chair reviewed the IEEE structure for standards development and the bylaws by which the Task Force is governed.

IEEE Patent Policy, at **8:45 AM**, Mr. Carlson showed the patent slides and proceeded to read aloud slides 1 and 2. Mr. Carlson made the call for potentially essential patents at **8:47 AM**, and none responded. Mr. Carlson then read aloud slides 3 and 4.

Mr. Carlson showed slide 16 entitled “Participation in IEEE 802 Meetings” and proceeded to read the slide aloud. Mr. Carlson asked if there was any discussion on the slide, none responded.

The Chair reviewed the IEEE 802.3 Standards process and where the Task Force was in the process and the process by which we will develop the standard.

The Chair then showed the locations of the approved project documents for the Task Force and reviewed the objectives for the Task Force.

Liaisons:

None

The Chair then showed the specific changes that have been completed to allow this joint meeting at the July 2019 Plenary closing meeting.

PRESENTATIONS:

Mr. Carlson then moved to the presentations for the meeting.

Title: Ad-Hoc Report ([zimmerman 3ch 02 0919.pdf](#))

Presenter: George Zimmerman, CME Consulting/ADI, APL Group, Aquantia, BMW, Cisco, CommScope, SenTekse

Motion #3: Move to confirm posted ad hoc minutes from 4 Sept 2019.

M: George Zimmerman S: Greg McSorley

Approved by voice without opposition (Procedural > 50%)

Motion Passes

Wednesday, 7-9AM Pacific Time every 2 weeks.

Next scheduled ad hoc is 9/18/19. The meeting notice is available in the private area.

Title: TX to RX Ad-Hoc Report ([diminico 3ch 03 0919.pdf](#))

Presenter: Chris Diminico, MC Communications/Panduit

Motion #4: Move to confirm posted ad hoc minutes as posted from 8/16, 8/23, and 9/6.

M: Chris Diminico S: Eric DiBiaso

Approved by voice without opposition (Procedural > 50%)

Motion Passes

Mr. Diminico noted that at the time the ad hoc would not meet as the goals had been achieved and that no further action was expected.

Title: Opening Editor's Report – P802.3ch Draft 2.1 ([wienckowski 3ch 01a 0919.pdf](#))
Presenter: Natalie Wienckowski, General Motors

Motion #5: Move to include 1 comment (#169) submitted after P802.3ch draft 2.1 declared comment deadline of August 22, 2019 AOE, included with Editor's proposed responses.

M: Natalie Wienckowski S: Tom Souvignier
(Technical >= 75%)

Y: 25 N: 0 A: 1

Motion Passes

Motion #6: Move to accept all proposed "EZ bucket" resolutions sorted by clause/subclause, excluding Comments #22, #79, & #130

M: Natalie Wienckowski S: George Zimmerman
(Technical >= 75%)

Y: 22 N: 0 A: 0

Motion Passes

Comment resolution commenced.

The Chair reminded the group about the scope of the draft and how scope is determined.

The joint meeting took a short break at 10:07 AM.

The joint meeting resumed at 10:32 AM.

Comment resolution continued.

Title: Timing in PHY startup (D2.1 Comment #169)
([zimmerman 3ch 01a 0919.pdf](#))

Presenter: George Zimmerman, CME Consulting

The group recessed for lunch at 12:04 PM.

The Chair brought the meeting to order at 1:30 PM.

The Chair explained Standards Association ballot and how to join the ballot group and the requirements for comment submittal.

Comment Resolution continued.

Straw Poll #1: I believe we need to do something for the higher frequency PSANEXT and PSAFEXT for 2.5GBASE-T1 and 5GBASE-T1.

Y: 22

N: 2

The group recessed for a short break at 3:04 PM.

The group resumed at 3:30 PM.

Comment Resolution continued.

The Chair indicated that the group would recess early so that the remaining comments can be worked on for resolution Wednesday morning.

The joint meeting recessed for the day at 4:33 PM.

The Chair called the joint meeting to order at 9:06 AM.

Comment resolution continued for P802.3ch.

Motion #7: Move to include 1 comment (#170) submitted after P802.3ch draft 2.1 declared comment deadline of August 22, 2019 AOE, not included with Editor's proposed responses.

M: Bob Grow S: Haysam Kadry

(Technical >= 75%)

Approved by voice without opposition

Motion Passes

Title: 8023ch_D2p1.pdf Annex149C Comments ([diminico 3ch 01a 0919.pdf](#))

Presenter: Chris DiMinico, MC Communications

The Chair discussed the timeline and that the group was still on the adopted timeline. A contingent telephonic interim was announced on October 15, 2019 at 7:00 AM Pacific US time.

Attendance:

Attend Nov 2019 802 Waikoloa plenary:

Y: 13 N: 5 M: 11

Attend Jan 2020 interim, Geneva, CH:

Y: 10 N: 4 M: 18

The Chair recessed the meeting at 10:00 AM. He noted that the Study Group would be starting at 1:30 PM and P802.3ch meeting would resume at 9:00 AM Thursday morning.

The Chair resumed the meeting at 1:33 PM.

Mr. Carlson noted that this afternoon the meeting would be for the Greater than 10 Gb/s Automotive Study Group

Administrative Matters

Mr. Carlson reviewed the agenda in [agenda_3ch_B10GAUTO_01_0919.pdf](#).

The Chair called for the participants to introduce themselves.

Mr. Carlson noted that there should be no recording or photography.

Mr. Carlson asked if anyone was attending from the press including those who would run a public blog on this meeting. None responded.

Motion #8: Move to approve the agenda as shown in [agenda_B10GAUTO_1_0919.pdf](#)

M: Brett McClellan S: Bob Grow
Approved by voice without opposition (Procedural > 50%)
Motion Passes

Motion #9: Move to approve the minutes of the July 2019 IEEE Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group meeting.

M: Natalie Wienckowski S: Hamid Salehi
Approved by voice without opposition (Procedural > 50%)
Motion Passes

The Chair reviewed the goals for the meeting, big ticket items, access to the reflector and website, and ground rules for the meeting.

Attendance, Mr. Carlson advised the group of the IEEE meeting attendance tool and procedures, including both the attendance book and the web attendance tracking tool.

The Chair reviewed the IEEE structure for standards development and the bylaws by which the Study Group is governed.

IEEE Patent Policy, at **1:49 PM**, Mr. Carlson showed the pre-PAR patent slide “Guidelines for IEEE-SA Meetings”.

Mr. Carlson showed slide 13 entitled “Participation in IEEE 802 Meetings” and proceeded to read the slide aloud. Mr. Carlson asked if there was any discussion on the slide, none responded.

The Chair reviewed the IEEE 802.3 Standards process and where the Study Group was in the process and the process by which we will develop the standard.

The Chair then showed the locations of the approved project documents for the Study Group and reviewed the objectives for the Study Group.

Liaisons:

None

The Chair then showed the specific changes that have been completed to allow this joint meeting at the July 2019 Plenary closing meeting.

PRESENTATIONS:

Mr. Carlson then noted that no presentations were received for the meeting.

Mr. Carlson showed the draft [PAR](#) and [CSD](#) discussion ensued on both documents.

The group took a short break at 3:00 PM.

The group resumed at 3:25 PM.

Mr. Carlson showed the draft [Objectives](#) and discussion ensued.

Motion #10: Move to adopt the objective as follows:

Define the performance characteristics of an automotive link segment and an electrical PHY to support 25 Gb/s point-to-point operation over this link segment supporting up to 2 inline connectors for at least 11 m on at least one type of automotive cabling.

M: Natalie Wienckowski S: James McIntosh

(Technical >= 75%)

Y: 29 N: 0 A: 3

Motion Passes

Straw Poll #3: I prefer having the B10GAUTO ad hoc calls on: (Chicago Rules)

1. Alternate Wednesday's from .ch
2. Friday

1: 21 2: 5

Straw Poll #4: Attendance (B10GAUTO):

Attend Nov 2019 802 Waikoloa plenary:

Y: 26 N: 7 M: 9

Attend Jan 2020 802.3 interim, Geneva, CH:

Y: 12 N: 3 M: 25

The Chair informed the group that the Study Group was adjourned and that the P802.3ch Task Force meeting would resume at 9:00 AM on Thursday and that there would be no meeting on Friday.

The meeting recessed for the day at 4:55 PM.

The Chair brought the meeting to order at 9:01AM and comment resolution continued. Mr. Lewis handed the recording secretary duties to Mr. Zimmerman, who assumed the taking of minutes.

The meeting began with the Chief Editor providing a preview of the changes to the draft based on the comment resolution from the meeting.

The joint meeting took a short break at 10:10 AM.

The joint meeting resumed at 10:30 AM, and continued reviewing the proposed changes to the draft.

Title: P802.3ch Draft 2.1 Closing Editor's Report ([wienckowski 3ch 02 0919.pdf](#))
Presenter: Natalie Wienckowski, General Motors

Motion #11: Move to instruct the Editors to create D2.2 for Working Group recirculation from D2.1 and from closed comments received on D2.1 with editorial license to update PICS as needed and align with IEEE802.3 style.

M: Natalie Wienckowski

S: Brett McClellan

(Technical >= 75%)

• Y – 36 • N – 0 • A – 0

Motion Passes

The Chair then discussed logistics for the Contingent Interim Teleconference to respond to comments on draft 2.2. The teleconference will be held on Tuesday October 15, from 7am to 9am pacific time.

Motion #:12 Move to adjourn.

M:Haysam Kadry

S:Marty Gubow

Approved by voice without opposition (Procedural > 50%)

The Task Force meeting was adjourned at 11:21AM.

Appendix A: Attendees at the IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force Meeting, September 10-12, 2019.

Joint IEEE 802.3 P802.3ch Multi-Gig Automotive Ethernet PHY Task Force & B10GAUTO Study Group - IEEE 802.3 July 2019				Day 1 10 Sept	Day 2 11 Sept	Day 3 12 Sept
By choosing to attend and sign in to this meeting, you acknowledge and agree that your personal data will be documented for IEEE standards development purposes to comply with policies and procedures, legal and accreditation requirements, and evaluation of patent claims by patent offices. See Front Page for additional information.						
Last Name	First Name	Employer	Other Affiliations	Tues	Wed	Thurs
A	Shaziah	GM	GM	X	X	X
Araki	Nobuyasu	Yazaki	Yazaki		X	X
Boyer	Rich	Aptiv	Aptiv	X	X	X
Carlson	Steve	High Speed Design	Robert Bosch, Marvell	X	X	X
Chalupsky	David	Intel	Intel	X	X	X
Choudhury	Mabud	OFS	OFS	X		
Dalmia	Kamal	Synaptics	Synaptics	X	X	
Dawson	Fred	Chemours	Chemours	X	X	X
DiBiaso	Eric	TE Connectivity	TE Connectivity	X	X	X
Diminico	Chris	PHY-SI	Panduit	X	X	
Emily	Choi	DGIST	DGIST		X	X
Gardner	Mike	Molex, LLC	Molex, LLC	X	X	X
Gauthier	Claude	NXP Semiconductors	NXP Semiconductors	X	X	X
Graber	Steffen	Pepperl+Fuchs	Pepperl+Fuchs			X
Grow	Robert	RMG Consulting	RMG Consulting/KDPOF	X	X	X
Gubow	Martin	Keysight Technologies	Keysight Technologies	X	X	X

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Last Name	First Name	Employer	Other Affiliations	Tues	Wed	Thurs
Hajduzenia	Marek	Charter	Charter			X
Hyakutake	Yasuhiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel		X	X
Ito	Hiroaki	Yazaki	Yazaki	X	X	X
Kadry	Haysam	Ford Motor Company	Ford Motor Company	X	X	X
Kondo	Taiji	Megachips	Megachips	X	X	X
Law	David	Hewlett Packard Enterprise	Hewlett Packard Enterprise	X	X	
Lewis	Jon	Dell EMC	Dell EMC	X	X	
Lo	William	Axonne Inc	Axonne Inc	X	X	X
Maguire	Valerie	Siemon	Siemon			X
Mau-Lin	Wu	Mediatek	Mediatek	X		
McClellan	Brett	Marvell	Marvell	X	X	X
McIntesh	James	Microchip	Microchip	X	X	X
McMillan	Larry	Western Digital	Western Digital	X	X	
McSorley	Greg	Amphenol	Amphenol	X		
Miller	Will	Wilder Technologies	Wilder Technologies	X		
Nadolny	Jim	Samtec	Samtec	X	X	X
Neveux	Paul	Superior Essex	Superior Essex			X

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Last Name	First Name	Employer	Other Affiliations	Tues	Wed	Thurs
Patel	Harsh	Molex, LLC	Molex, LLC	X	X	X
Perez Aranda	Rubeh	KDPOF	KDPOF		X	X
Rakanovic	Demir	U-Blox	U-Blox	X		
Renteria	Victor	Bel Fuse Inc	Bel Fuse Inc		X	X
Salehi	Hamid Reza	Marvell	Marvell	X	X	
Sayre	Edward	NESA	NESA	X		
Sederat	Hossein	Ethernovia	Ethernovia	X	X	X
Sedio	Steve	TDK	TDK		X	X
Shariff	Masood	Commscope	Commscope		X	X
Shiino	Masato	Furukawa Electric	Furukawa Electric	X	X	X
Souvignier	Tom	Broadcom Ltd.	Broadcom Ltd.	X	X	X
Sparrowhawk	Bryan	Leviton	Leviton			X
Stewart	Heath	Analog Devices	Analog Devices		X	
Takahashi	Satoshi	POF Promotion	POF Promotion		X	X
Takayama	Kazuya	Nitto Denko Corporation	Nitto Denko Corporation	X	X	X
Takeuchi	Junichi	JAE Electronics	JAE Electronics	X	X	X
Tu	Mike	Broadcom Ltd.	Broadcom Ltd.	X	X	

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Last Name	First Name	Employer	Other Affiliations	Tues	Wed	Thurs
Vanderlaan	Paul	UL LLC	UL LLC	X		X
Voss	Bob	Panduit	Panduit			X
Wang	Roy	HPE	HPE			X
Wienckowski	Natalie	GM	GM	X	X	X
Wu	Peter	Marvell	Marvell	X	X	X
Wu	Dance	Marvell	Marvell	X	X	X
Zhang	Xingxin	Huawei	Huawei	X	X	
Zhu	Chunhui	Huawei	Huawei		X	
Zimmerman	George	CME Consulting	Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group, SensTek	X	X	X