

Unconfirmed Meeting Minutes: IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task
Force
July 15, 2019
Vienna, Austria

Prepared by Jon Lewis & Curtis Donahue

IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force meeting convened at 8:15AM, Monday, July 15, 2019 by Steve Carlson, Task Force Chair.

Attendance is listed in Appendix A

Administrative Matters

Mr. Carlson reviewed the agenda in [agenda_3ch_01_0719.pdf](#).

The Chair called for the participants to introduce themselves.

Motion #1: Move to approve the agenda as shown in [agenda_3ch_01_0719.pdf](#)

M: Mike Gardner

S: Heath Stewart

Approved by voice without opposition (Procedural > 50%)

Motion Passes

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

M: Heath Stewart

S: Mike Gardner

Approved by voice without opposition (Procedural > 50%)

Motion Passes

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

At 8:23 AM, 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 WG Chair reviewed the IEEE structure for standards development and the bylaws by which the Task Force is governed.

IEEE Patent Policy, at **8:33 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 **8:35 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

PRESENTATIONS:

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

Title: Ad-Hoc Report ([zimmerman_3ch_01a_0719.pdf](#))

Presenter: Steve Carlson, High Speed Design, Bosch

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

Next scheduled ad hoc is 7/24/19. The meeting notice is available in the private area.

Title: TX to RX Ad-Hoc Report ([diminico_3ch_01_0719.pdf](#))

Presenter: Chris Diminico, MC Communications/Panduit

The TX to RX ad hoc will continue to meet at Friday 7-9 AM Pacific Time every week. The next meeting will be 7/26/19.

Title: Opening Editor's Report – P802.3ch Draft 2.0 ([wienckowski_3ch_03_0719.pdf](#))

Presenter: Natalie Wienckowski, General Motors

Motion #3: Move to include 6 comments (#285, 286, 287, 288, 289, & 290) submitted after P802.3ch draft 2.0 declared comment deadline of June 22, 2019 AOE, included with Editor’s proposed responses.

M: Natalie Wienckowski

S: Mike Tu

Approved by voice without opposition (Technical >= 75%)

Motion Passes

Motion #4: Move to accept all proposed “EZ bucket” resolutions sorted by clause/subclause, excluding Comments #22, #70, #88, #96, #122, #148, & #152.

M: Natalie Wienckowski

S: Brett McClellan

Approved by voice without opposition (Technical >= 75%)

Motion Passes

Motion #5: Move to accept all proposed “EZ2 bucket” resolutions sorted by clause/subclause.

M: Natalie Wiencowski

S: Brett McClellan

Approved by voice without opposition (Technical \geq 75%)

Motion Passes

Comment resolution commenced.

Title: PHY Auto Precoder Selection ([tu 3ch 01 0719.pdf](#))

Presenter: Mike Tu, Broadcom

Title: Draft Annex Tx-to-Rx-channel-draft ([diminico 3ch 02 0719.pdf](#))

Presenter: Chris Diminico, MC Communications/Panduit

The meeting recessed for the opening plenary at 9:46 AM.

The Chair called the P802.3ch Task Force meeting back to order at 1:00 PM. The Task Force begins comment resolution.

Curtis Donahue assumed the role of recording secretary for the remainder of the meeting.

The Task Force took a short break at 3:00 PM, resuming at 3:30 PM.

The Chair called the P802.3ch Task Force meeting back to order at 3:02 PM and comment resolution continued.

The Task Force meeting recessed at 5:42 PM.

Tuesday, July 16, 2019

The Task Force was brought to order at 8:02 AM.

Title: PHY Auto Precoder Selection ([tu 3ch 01a 0719.pdf](#))

Presenter: Mike Tu, Broadcom

The Task Force took a short break at 9:37 AM, resuming in one hour.

The Chair called the P802.3ch Task Force meeting back to order at 10:50 AM. Comment Resolution continued.

Title: Power Supply Ripple and MDI Return Loss Modifications ([stewart 3ch 01d 0719.pdf](#))

Presenter: Gitesh Bhagwat, Analog Devices

The group recessed for lunch at 12:05 PM

The Chair brought the meeting to order at 1:15 PM and comment resolution continued.

2:04pm: vakilian_4ch_01_0719.pdf

Title: Power Supply Ripple and MDI Return Loss Modifications
([stewart 3ch 01d 0719.pdf](#)) (update)

Presenter: Gitesh Bhagwat, Analog Devices

Title: MDI Return Loss (part 1) ([DenBesten 3ch 01a 0719.pdf](#))

Presenter: Gerrit den Besten, NXP

Title: InfoField Exchange Support for Vendor Specific Data Communication during Link Training ([Farjadrad 3ch 02 0719.pdf](#))

Presenter: Ramin Farjadrad, Aquantia

Title: InfoField Exchange Support for Vendor Specific Data Communication during Link Training ([Farjadrad 3ch 02 0719.pdf](#)) (update)

Presenter: Ramin Farjadrad, Aquantia

Motion #6: Move to approve the P802.3ch ad hoc minutes from 26 June and 10 July 2019.

M: Natalie Wienkowski S: Hamid Salehi

Approved by voice by acclamation

Motion Passes

The group recessed for lunch at 11:21 AM.

The Chair brought the meeting to order at 1:05 PM and comment resolution continued.

Title: P802.3ch Draft 2.0 Closing Editor's Report ([wienckowski 3ch 04 0719.pdf](#))

Presenter: Natalie Wienckowski, General Motors

Motion #7: Move to instruct the Editors to create D2.1 for Working Group recirculation from D2.0 and from closed comments received on D2.0.

• M: Natalie Wienckowski

• S: Brett McClellan

• Y – 31 • N – 0 • A - 1

Motion #8: Move to adjourn.

M: Curtis Donahue

S: Chris Mash

Approved by voice without opposition (Procedural > 50%)

The Task Force meeting was adjourned at 1:36 PM.

Appendix A: Attendees at the IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force Meeting, July 15-17, 2019.

IEEE 802.3 P802.3ch Multi-Gig Automotive Ethernet PHY Task Force IEEE 802.3 July 2019 (Interim and Plenary)				Interim 15 July	Day 1 15 July	Day 2 16 July	Day 3 17 July
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	Mon	Mon	Tues	Wed
Abedy	Yossuf	Pulse Electronics	Pulse Electronics	X	X	X	X
Andrae	Stefan	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH	X			
Aono	Michikazu	Yazaki	Yazaki	X	X	X	X
Araki	Nobuyasu	Yazaki	Yazaki	X			
Bhagwat	Gitesh	Analog Devices	Analog Devices	X	X	X	X
Brückner	Klemens	Audi AC	Audi AC				X
Carlson	Steve	High Speed Design	Robert Bosch, Marvell	X	X	X	X
Dawson	Fred	Chemours	Chemours				X
Den Besten	Gerrit	NXP Semiconductors	NXP Semiconductors	X	X	X	X
Diminico	Chris	PHY-SI	Panduit	X			
Donahue	Curtis	UNH-IOL	UNH-IOL	X	X	X	X
Emily	Choi	DGIST	DGIST	X			
Engels	Andreas	TE Connectivity	TE Connectivity	X	X	X	X
Eyal	Massad	Valens Semi	Valens Semi		X		
Farjadrad	Ramin	Aquantia	Aquantia		X	X	X
Fritsche	Matthias	Harting	Harting	X	X	X	

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Last Name	First Name	Employer	Other Affiliations	Mon	Mon	Tues	Wed
Fukuoka	Takashi	Auto Networks Tech	Auto Networks Tech	X	X	X	X
Gardner	Mike	Molex, LLC	Molex, LLC	X	X	X	X
Goto	Hideki	Toyota Motor Corporation	Toyota Motor Corporation	X	X	X	X
Grau	Olaf	Robert Bosch	Robert Bosch	X	X		
Grow	Robert	RMG Consulting	RMG Consulting		X	X	X
Gubow	Martin	Keysight Technologies	Keysight Technologies	X	X	X	X
Hernandez	Emily	Ceilink Corp.	Ceilink Corp.	X	X	X	X
Hess	Dave	Cord Data	Cord Data	X			X
Hoseung	Song	DGIST	DGIST	X			
Hyakutake	Yasuhiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	X	X	X	X
Ito	Hiroaki	Yazaki	Yazaki	X			
Kadry	Haysam	Ford Motor Company	Ford Motor Company	X	X	X	X
Kagami	Manabu	NITech	NITech	X	X	X	X
Koependoerler	Erwin	Leoni Kabel GmbH	Leoni Kabel GmbH	X	X	X	X
Kondo	Taiji	Megachips	Megachips	X	X	X	X
Koppermueller	Daniel	MD Elektronik GmbH	MD Elektronik GmbH	X			
Kurata	Kazuhiko	AIO Core	AIO Core	X	X	X	
Kurobe	Akio	Panasonic	Panasonic		X		

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Last Name	First Name	Employer	Other Affiliations	Mon	Mon	Tues	Wed
Landsman	David	Western Digital	Western Digital				X
Law	David	Hewlett Packard Enterprise	Hewlett Packard Enterprise			X	
Lewis	Jon	Dell EMC	Dell EMC	X			
Lin	Alex	Mediatek	Mediatek	X	X	X	X
Lo	William	Axonne Inc	Axonne Inc			X	X
Madgar	Zahy	Valens	Valens		X		
Marris	Arthur	Cadence	Cadence	X			
Mash	Chris	Marvell	Marvell				X
Masuda	Takeo	OITDA	OITDA	X	X	X	
McClellan	Brett	Marvell	Marvell	X	X	X	X
McMillan	Larry	Western Digital	Western Digital	X	X	X	X
Mellitz	Richard	Samtec	Samtec	X			
Mueller	Thomas	Rosenberger	Rosenberger	X	X	X	X
Müller	Sina	Hirschmann A&C GmbH	Hirschmann A&C GmbH		X		
Nadolny	Jim	Samtec	Samtec	X	X	X	X
Nomura	Takumi	Honda R&D	Honda R&D	X	X	X	X
Ohni	Josef	MD Elektronik	MD Elektronik	X	X	X	X
Paure	Jean-Phillipe	Panasonic	Panasonic		X		

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Last Name	First Name	Employer	Other Affiliations	Mon	Mon	Tues	Wed
Pitwon	Richard	AIO Core	AIO Core	X	X	X	
Preibisch	Jan	Nexperia	Nexperia		X	X	
Preis	Roland	MD Elektronik GmbH	MD Elektronik GmbH	X	X	X	
Rodenkirche	Robert	YAZAKI Europe Ltd	YAZAKI	X	X	X	X
Rusch	Christian	TE Connectivity	TE Connectivity	X	X	X	X
Salehi	Hamid Reza	Marvell	Marvell	X	X	X	X
Sederat	Hossein	Ethernovia	Ethernovia	X	X	X	X
Shariff	Masood	Commscope	Commscope	X			X
Shiino	Masato	Furukawa Electric	Furukawa Electric	X	X	X	X
Shirani	Ramin	Ethernovia	Ethernovia	X	X	X	X
Stewart	Heath	Analog Devices	Analog Devices	X			X
Sun	Yantim	Huawei	Huawei	X	X	X	X
Takahashi	Satoshi	POF Promotion	POF Promotion		X	X	X
Takahashi	Tadashi	Nitto Denko Corporation	Nitto Denko Corporation		X	X	X
Takayama	Kazuya	Nitto Denko Corporation	Nitto Denko Corporation		X	X	X
Takeuchi	Junichi	JAE Electronics	JAE Electronics	X	X	X	X
Tseng	Tachin	Realtek	Realtek		X	X	X
Tu	Mike	Broadcom Ltd.	Broadcom Ltd.	X	X	X	X

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Last Name	First Name	Employer	Other Affiliations	Mon	Mon	Tues	Wed
Vakilian	Kambiz	Broadcom Ltd.	Broadcom Ltd.	X	X	X	X
Vernickel	Ricky	Leoni	Leoni	X	X	X	X
Wechsler	Christoph	Audi	Audi	X	X	X	X
Wei	Dong	Futurewei Technologies	Futurewei Technologies	X	X	X	X
Wienckowski	Natalie	GM	GM	X	X	X	X
Wu	Peter	Marvell	Marvell	X	X	X	X
Zhang	Xingxin	Huawei	Huawei	X	X	X	
Zhu	Chunhui	Huawei	Huawei	X	X	X	X