

Unconfirmed Meeting Minutes: IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY  
Task Force  
July 12-13, 2017  
Berlin, Germany

Prepared by Jon Lewis

IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force meeting convened at 9:00AM, Wednesday, July 12, 2017 by Steve Carlson, Task Force Chair.

Attendance is listed in Appendix A

Administrative Matters

Steve Carlson displayed the agenda in [agenda\\_3ch\\_01a\\_0717.pdf](#).

The Task Force Chair called for introductions and affiliations.

Steve Carlson reviewed the agenda in [agenda\\_3ch\\_01a\\_0717.pdf](#).

**Motion #1: Move to approve the agenda as shown in [agenda\\_3ch\\_01a\\_0717.pdf](#)**

**M: Nathalie Wienckowski S: Matthias Fritsche  
Approved by voice without opposition (Procedural > 50%)**

The Chair then asked for comments or corrections to the minutes of the last meeting. No responses were heard.

**Motion #2: Move to approve the minutes of the May 2017 IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force Meeting.**

**M: Nathalie Wienckowski S: Alon Regev  
Approved by voice without opposition (Procedural > 50%)**

The Chair then resumed the review of presentation [agenda\\_3ch\\_01a\\_0717.pdf](#).

- Mr. Carlson noted that there should be no recording or photography without permission.
- Mr. Carlson asked if anyone was attending from the press including those who would run a public blog on this meeting. None responded.

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 **9:17 AM**, Mr. Carlson showed slides 0 through 4 patent policy from [agenda 3ch 01a 0717.pdf](#). Mr. Carlson showed slide 0 and read aloud slides 1 through 4. Mr. Carlson made the call for potentially essential patents at **9:20 AM**, and none responded. Mr. Carlson then completed the reading of slide #4.

Mr. Carlson reviewed slide 17 entitled “Participation in IEEE 802 Meetings” and asked if there was any discussion necessary with the Task Force. None responded.

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 noted that no liaisons were received.

*PRESENTATIONS:*

The Chair then moved to the presentations for the meeting.

**Title: Ad hoc report ([zimmerman 3ch 01 0717.pdf](#))**

**Presenter: George Zimmerman, Commscope, Aquantia, LTC, CME Consulting, Cisco, ADI, BMW, APL Group**

**Title: 802.3ch channel options ([mueller channel options 01a 0717.pdf](#))**

**Presenter: Thomas Muller, Rosenberger**

**Title: Measurement Results of Single Balanced Twisted-Pair Shielded cable up to 7.3 Ghz ([hopkinson shariff 3ch 01 0717.pdf](#))**

**Presenter: Masood Shariff, Commscope**

**The meeting recessed for a short break at 10:42 AM.**

**The meeting resumed at 11:03 AM.**

**Title: GM Wire Testing Requirements ([Wienckowski.3ch 02 0717.pdf](#))**

**Presenter: Nathalie Wienckowski, GM**

**The preceding presentation was shown at the Task Force’s request**

**Title: Automotive Cable Comparison ([Wienckowski.3ch 01b 0717.pdf](#))**

**Presenter: Nathalie Wienckowski, GM**

**Title: RF Ingress Measurements for Shielded Twisted Pair (STP) Cables from Automotive BCI Test ([cohen shirani 3ch 01 0717.pdf](#))**

**Presenter: Ramin Shirani, Aquantia**

**The Task Force broke for lunch at 11:52 AM**

**The Task Force resumed from lunch at 1:11 PM.**

The Chair resumed the meeting and continued with the meeting agenda.

Future Attendance Straw Polls:

Attend September 2017 Interim in Charlotte, NC, USA

Y: 18 N: 23 M: 17

Attend November 2017 Interim in Orlando, FL, USA

Y: 30 N: 6 M: 21

**Title: Energy Efficient Ethernet, Wake Signals and Deep Sleep for Automotive Ethernet ([zimmerman 3ch 02a 0717.pdf](#))**

**Presenter: George Zimmerman, CME Consulting Inc.**

**Title: Considerations for Coding and Baud Rate of a Multi-Gig Phy for Automotive ([Sedarat Shirani 3ch 02 0717.pdf](#))**

**Presenter: Hossein Sedarat, Aquantia**

Straw Poll #1:

I support that the 802.3ch Task Force focus PHY development on shielded balanced pair media, with transmission parameters as described in [http://www.ieee802.org/3/ch/public/jul17/hopkinson\\_shariff\\_3ch\\_01\\_0717.pdf](http://www.ieee802.org/3/ch/public/jul17/hopkinson_shariff_3ch_01_0717.pdf), and the STP noise immunity parameters

[http://www.ieee802.org/3/ch/public/jul17/cohen\\_shirani\\_3ch\\_01\\_0717.pdf](http://www.ieee802.org/3/ch/public/jul17/cohen_shirani_3ch_01_0717.pdf), for the 5 Gb/s and 10 Gb/s rates.

Y: 34 N: 2 A: 21

The schedule for the next Ad Hoc call was discussed and Nathalie W. will send out the information on the reflector.

**The meeting recessed for a short break at 2:51 PM.**

**The meeting resumed at 3:03 PM.**

Presentations continued.

**Title: Link Segment Measurement of Optical Fiber ([hyakutake 3ch 01 0717.pdf](#))**

**Presenter: Yasuhiro Hyakutake, Adamant Co., Ltd.**

**Title: High Temperature Performance of Multimode Optical Fibers ([swanson 3ch 01 0717.pdf](#))**

**Presenter: Steve Swanson, Corning**

**Title: Optical PHY proposal for NGAUTO ([swanson 3ch 02b 0717.pdf](#))**

**Presenter: Steve Swanson, Corning**

Straw Poll #2: I can support the adoption of the objective defined in [swanson NGAUTO 02b 0717.pdf](#)

“Define the performance characteristics of an automotive link segment and an optical PHY to support 10 Gb/s point-to-point operation over this link segment supporting up to 4 inline connectors and up to at least 15m on automotive cabling”

Y: 21 N: 26

The Chair discussed potential timelines for the Task Force.

The Chair noted that the agenda had been completed and asked if there was any further business.

George Zimmerman, P802.3cg Chair, brought to the Task Force’s attention that P802.3cg has a response to liaison responses to both ISO/IEC and TIA TR42. The decision of the Task Force was to allow the outgoing liaisons to report on the work done by the Task Force.

### **Adjournment**

**Motion #3: To adjourn the meeting.**

**M: Brett McClellan            S: Ramin Sharani**

**MOTION PASSES by voice without opposition**

**The Meeting was adjourned at 4:48 PM**

*Appendix A: Attendees at the IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force Meeting, July 12, 2017.*

<b>IEEE P802.3ch Task Force July'17</b>				<b>7/12/17</b>
<b>Last Name</b>	<b>First Name</b>	<b>Employer</b>	<b>Affiliation</b>	<b>Wednesday</b>
Abedy	Yossuf	Pulse Electronics	Pulse Electronics	X
Akasaki	Shogo	DENSO	DENSO	X
Angha	Ali	Spirent Communications	Spirent Communications	X
Bains	Amrik	Cisco	Cisco	X
Bergner	Bert	TE Connectivity	TE Connectivity	X
Beruto	Piergiorgio	Canova Tech SRL	Canova Tech SRL	X
Brandt	David	Rockwell Automation	Rockwell Automation	X
Brillhart	Theo	Fluke Electronics	Fluke Electronics	X
Buntz	Stefan	Daimler AG	Daimler AG	X
Carlson	Steve	High Speed Design	Robert Bosch	X
Chadha	Mandeep	Microsemi	Microsemi	X
Choudhary	Mabud	OFS	OFS	X
Dachin	Tseng	Realtek	Realtek	X
Dai	Lizhi	Mediatek	Mediatek	X
Dalmia	Kamal	Aquantia	Aquantia	X
Engels	Yuan	Leoni	Leoni	X
Farjadrad	Ramin	Aquantia	Aquantia	X
Flatman	Alan	LAN Technologies	LAN Technologies	X
Fritsche	Matthias	Harting	Harting	X
Gauthier	Claude	OmniPHY	OmniPHY	X
Graber	Steffen	Pepperl+Fuchs	Pepperl+Fuchs	X
Grau	Olaf	Robert Bosch	Robert Bosch	X
Grow	Robert	RMG Consulting	RMG Consulting	X
Hayashi	Takehiro	HAT Lab	HAT Lab	X
Hess	Dave	Cord Data	Cord Data	X
Hogenmiller	Thomas	Bosch	Bosch	X
Hoglund	David	Johnson Controls	Johnson Controls	X
Hyakutake	Yasuhiro	Adamant Co., Ltd	Adamant Co., Ltd	X
Jones	Peter	Cisco	Cisco	X
Kagami	Manabu	Toyota CRDL	Toyota CRDL	X
Kawatsu	Yasuaki	Apresia Systems	Apresia Systems	X
Klaus	Andrew	Marvell	Marvell/Jaspar	X
Kobayashi	Shigetou	TE Connectivity	TE Connectivity	X
Kohler	Daniel	Morethan IP	Morethan IP	X
Krieger	Olaf	Volkswagen	Volkswagen	X

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Lackner	Hans	QoSCom Gmbh	QoSCom Gmbh	X
Lewis	Jon	Dell   EMC	Dell   EMC	X
Lin	Alex	Mediatek	Mediatek	X
Madgar	Tzahi	Valens	Valens	X
Maguire	Valerie	Siemon	Siemon	X
Mardmuller	Christian	Renesas	Renesas	X
Marris	Arthur	Cadence	Cadence	X
Masuda	Takeo	OITDA	OITDA	X
Matheus	Kirsten	BMW	BMW	X
McClellan	Brett	Marvell	Marvell	X
Medina	Marcel	Spirent	Spirent	X
Montemuzzo	Nicola	Canova Tech SRL	Canova Tech SRL	X
Munson	Carrie	Pulse Electronics	Pulse Electronics	X
Muyshondt	Henry	Microchip Technology	Microchip Technology	X
Nordin	Ron	Panduit	Panduit	X
Petrie	Richard	Microchip	Microchip	X
Pischi	Neven	Independent	Independent	X
Pohmerer	Rainer	Leoni	Leoni	X
Rashidi	Habib	Pulse Electronics	Pulse Electronics	X
Regev	Alon	Ixia	Ixia	X
Rosbach	Martin	Nexans	Nexans	X
Schicketanz	Dieter	Consultant	Reutlingen University	X
Sedarat	Hossein	Aquantia	Aquantia	X
Shariff	Masood	Commscope	Commscope	X
Shirani	Ramin	Aquantia	Aquantia	X
Swanson	Steve	Corning	Corning	X
Tan	Alex	NXP	NXP	X
Tost	Johann	Rohde & Schwarz	Rohde & Schwarz	X
Vaden	Sterling	Surtec, Ind.	Vaden Enterprises	X
Vanderlaan	Paul	Berk-Tek LLC	Berk-Tek LLC	X
Wang	Min	Waymo	Waymo	X
Wechsler	Christoph	Audi	Audi	X
Wienckowski	Natalie	GM	GM	X
Withey	James	Fluke	Fluke	X
Xu	Dayin	Rockwell Automation	Rockwell Automation	X
Zerna	Conrad	Frannhofer IIS	Frannhofer IIS	X

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Zimmerman	George	CME Consulting	Commscope, Aquantia, LTC, CME Consulting, Cisco, ADI, BMW	X
Zinner	Helge	Continental	Continental	X
Zweck	Harald	Infineon Technologies	Infineon Technologies	X