

Unconfirmed Meeting Minutes: IEEE P802.3cy Greater than 10 Gb/s Electrical  
Automotive Ethernet Task Force  
January 11, 2022  
Telephonic

Prepared by Jon Lewis

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force meeting convened at 10:01 AM (US EST), Tuesday January 11, 2022 by Steve Carlson, Task Force Chair.

Attendance is listed in Appendices A & B

Administrative Matters

Steve Carlson displayed the agenda in  
[https://www.ieee802.org/3/cy/public/jan22/agenda\\_3cy\\_01c\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/agenda_3cy_01c_0122.pdf).

The Task Force Chair noted that introductions would be skipped.

Steve Carlson reviewed the agenda in  
[https://www.ieee802.org/3/cy/public/jan22/agenda\\_3cy\\_01c\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/agenda_3cy_01c_0122.pdf).  
Mr. Carlson asked if there were any modifications to the agenda, none responded.

**Motion #1: Move to approve the agenda as shown in  
[https://www.ieee802.org/3/cy/public/jan22/agenda\\_3cy\\_01c\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/agenda_3cy_01c_0122.pdf)**

**M: George Zimmerman**

**S: Bob Voss**

**Motion Passed by unanimous consent (Procedural > 50%)**

**Motion #2: Move to approve the minutes from the 23 November and 7, 14, & 21 December ad hoc teleconferences, and the 9 & 16 November Plenary teleconference meetings as posted.**

**M: N. Wienckowski**

**S: Ragnar Jonsson**

**Motion Passed by unanimous consent**

Mr. Carlson reviewed Task Force decorum and asked if anyone from the press was present, none responded.

Mr. Carlson reviewed the Task Force organization, the goals for the meeting, access to the reflector and website, and ground rules for the meeting.

**Attendance**, Mr. Carlson noted that the attendance for this meeting was being recorded in IMAT and noted that there was no session code for this plenary meeting series.

Mr. Carlson reviewed the instructions for Direct Vote Live and noted that the URL was the same for each meeting.

**IEEE Patent Policy**, at **10:15 AM**, Mr. Carlson asked if any participant had not seen the patent policy slides (agenda slides 14-18), none responded. Mr. Carlson made the call for potentially essential patents at **10:16 AM**, and none responded.

Mr. Carlson asked if anyone had not heard and needed to hear the IEEE-SA copyright policy. None responded. He showed the IEEE-SA copyright slides (agenda slides 19-21).

Mr. Carlson asked if anyone had not heard and needed to hear the IEEE-SA participation behavior policy. None responded. He showed the IEEE-SA participation behavior slide, (agenda slide 22).

Mr. Carlson asked if anyone had not heard and needed to hear the IEEE-SA participation policy on “individual process”. None responded. He showed the IEEE-SA participation slides on “individual process”, (agenda slides 23-24).

Mr. Carlson turned the meeting over to David Law, Working Group Chair to confirm Natalie Wienckowski as the Task Force Vice Chair.

**Motion #3: Move to confirm Natalie Wienckowski as the Vice Chair for the IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force.**

**M: George Zimmerman**

**S: Haysam Kadry**

**(>=75% by rule)**

**Motion Passes by unanimous consent**

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.

**Liaisons:** None

The Chair shared the location of the Action Items for the Task Force, AKA the To – Do List, which will be reviewed and updated during the meeting. (agenda slide 31)

Mr. Carlson showed the Task Force documentation (agenda slides 32-34)

Mr. Carlson showed the Task Force virtual meetings slides from the agenda and suggested that participants review if they needed a refresher (agenda slides 35-37).

*PRESENTATIONS:*

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

**Title: Parameter Values for Micro-Reflection Limits**

URL: [https://www.ieee802.org/3/cy/public/jan22/jonsson\\_3cy\\_02\\_01\\_11\\_22.pdf](https://www.ieee802.org/3/cy/public/jan22/jonsson_3cy_02_01_11_22.pdf)

Presenters: Ragnar Jonsson, Marvell

**Straw Poll #1:** I support adopting the micro-reflection parameters for 802.3cy as described in slide 4 of jonsson\_3cy\_01\_11\_22.pdf.

Y: 49

N: 1

**Motion #4:** Move to adopt the micro-reflection parameters for 802.3cy as described in slide 4 of jonsson\_3cy\_01\_11\_22.pdf, with editorial license

**M:** Ragnar Jonsson

**S:** Hossein Sedarat

**Technical  $\geq 75\%$**

**Motion Passes by unanimous consent**

**Title: FEC and Interleaving Proposal**

URL: [https://www.ieee802.org/3/cy/public/jan22/jonsson\\_tu\\_castrillon\\_3cy\\_01\\_01\\_11\\_22.pdf](https://www.ieee802.org/3/cy/public/jan22/jonsson_tu_castrillon_3cy_01_01_11_22.pdf)

Presenters: Ragnar Jonsson, Marvell

**Straw Poll #2:** I support adopting the following FEC and Interleaving: RS(936,846) with L=1,2,4,8.

Y: 45

N: 1

**Motion #5:** Move to adopt the following FEC and Interleaving: RS(936,846) with L=1,2,4,8 with editorial license to implement

**M:** Ragnar Jonsson

**S:** Mike Tu

**Technical ( $\geq 75\%$ )**

**Motion Passes by unanimous consent**

**Title: Enhancing Robustness of Link Synchronization in Automotive Ethernet at 802.3cy-Part II**

URL: [https://www.ieee802.org/3/cy/public/jan22/Wu\\_3cy\\_01a\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/Wu_3cy_01a_0122.pdf)

Presenters: Peter Wu, Marvell Semiconductor

**Motion #6:** Move to adopt the link synchronization scheme updates proposed on Page 6 in wu\_3cy\_01a\_0122.pdf

**M:** Peter Wu

**S:** Mike Tu

**Technical ( $\geq 75\%$ )**

## **Motion Passes by unanimous consent**

**Title: Enhancing Robustness of Link Synchronization in Automotive Ethernet at 802.3cy-Part III**

URL: [https://www.ieee802.org/3/cy/public/jan22/Wu\\_3cy\\_02a\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/Wu_3cy_02a_0122.pdf)

Presenters: Peter Wu, Marvell Semiconductor

Mr. Carlson reviewed the information on Future Meetings. March 2022 virtual plenary meeting details were discussed due to the increased meeting fees. (agenda slides 48 - 50)

**Title: Comment IEEE P802.3cy/D0.4**

URL: [https://www.ieee802.org/3/cy/public/jan22/diminico\\_3cy\\_01\\_1\\_4\\_22.pdf](https://www.ieee802.org/3/cy/public/jan22/diminico_3cy_01_1_4_22.pdf)

Presenters: Chris DiMinico, MC Communications

**Title: P802.3cy To Do List**

URL: <https://ieee802.org/3/cy/todo/index.html>

Presenter: Natalie Wienckowski, GM

The to-do list was reviewed and updated. Please see the latest list on the website.

The Chair noted that the agenda had been completed and asked if there was any further business. None responded.

**The meeting was recessed at 11:59 AM US EST and will resume January 18, 2022 at 10:00 AM US EDT.**

**The meeting resumed at 10:02 AM US EST on January 18, 2022 by Steve Carlson, Task Force Chair.**

Steve Carlson displayed the agenda in

[https://www.ieee802.org/3/cy/public/jan22/agenda\\_3cy\\_01c\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/agenda_3cy_01c_0122.pdf).

Mr. Carlson reviewed Task Force decorum and asked if anyone from the press was present, none responded.

Mr. Carlson reviewed the Task Force organization, the goals for the meeting, access to the reflector and website, and ground rules for the meeting.

**Attendance**, Mr. Carlson noted that the attendance for this meeting was being recorded in IMAT and through the teleconference tool and gave the session code for this interim meeting.

**IEEE Patent Policy**, at **10:11 AM**, Mr. Carlson asked if any participant had not seen the patent policy slides (agenda slides 14-18), none responded. Mr. Carlson made the call for potentially essential patents at **10:13 AM**, and none responded.

Mr. Carlson asked if anyone had not heard and needed to hear the IEEE-SA copyright policy. None responded. He showed the IEEE-SA copyright slides (agenda slides 19-21).

Mr. Carlson asked if anyone had not heard and needed to hear the IEEE-SA participation behavior policy. None responded. He showed the IEEE-SA participation behavior slide, (agenda slide 22).

Mr. Carlson asked if anyone had not heard and needed to hear the IEEE-SA participation policy on "individual process". None responded. He showed the IEEE-SA participation slides on "individual process", (agenda slides 23-24).

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.

**Liaisons:** None

*PRESENTATIONS:*

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

**Title: P802.3cy Lane Swap Information Reporting**

URL: [https://www.ieee802.org/3/cy/public/jan22/Wienckowski\\_3cy\\_01\\_01\\_18\\_22.pdf](https://www.ieee802.org/3/cy/public/jan22/Wienckowski_3cy_01_01_18_22.pdf)

Presenter: Natalie Wienckowski, GM

Straw Poll #3: Which option do you prefer for reporting the pair swap info?

1. Option 1, use Envelope Header information
2. Option 2, use reserved D9 bits in MultiGBASE-T1 OAM symbols
3. Option 3, use reserved bit 3 in message field for both LEADER (MASTER) and FOLLOWER (SLAVE)
4. All options are okay

1: 8    2: 2    3: 4    4: 18 (Pick one)

**Title: Link Synchronization proposal at 802.3cy**

URL: [https://www.ieee802.org/3/cy/public/jan22/Wu\\_3cy\\_03\\_0122.pdf](https://www.ieee802.org/3/cy/public/jan22/Wu_3cy_03_0122.pdf)

Presenter: Peter Wu, Marvell Semiconductor

Mr. Carlson asked if any 802.3 voters would object to entertaining a motion inside of the 2-week Motion review period, none responded.

**Motion #7: Move to adopt the link synchronization scheme update proposed on Page 4 in wu\_3cy\_03\_0122.pdf.**

**M: Peter Wu**  
**S: Mike Tu**  
**Technical (>=75%)**  
**Motion passes by unanimous consent**

Comment Resolution:

Mr. Carlson asked the Task Force if there were objections to including the late comments, none responded.

Marek Hajduczenia proceeded to resolve comments against D0.4.

Comment resolution concluded.

Mr. Carlson reviewed the future meetings and March 2022 virtual plenary meeting slides (pages 42-45).

**Motion #8: Move to instruct the Chief Editor to create D0.5 from D0.4, adopted baselines, and closed comments, with editorial license to implement.**

**M: Natalie Wienckowski**

**S: Marek Hajduczenia**

**Motion expected by unanimous consent**

**(Technical >= 75%)**

**Motion Passes by unanimous consent**

**Title: P802.3cy To Do List**

URL: <https://ieee802.org/3/cy/todo/index.html>

Presenter: Natalie Wienckowski, GM

Mr. Carlson noted that the agenda had been exhausted and adjourned the meeting

**The Meeting was adjourned at 11:51 AM US EST on January 18, 2022**

*Appendix A: Attendees at the IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force, January 11, 2022.*

<b>Name</b>	<b>Employer</b>	<b>Affiliation</b>
Akin, Sami	Volkswagen AG	Volkswagen Ag
Araki, Nobuyasu	Yazaki Corporation	Yazaki Corporation
Borda, jamila josip	BMW Group	BMW Group
bordogna, mark	Intel Corporation	Intel Corporation
Boyer, Rich	Aptiv - Signal and Power Solutions	Aptiv Signal and Power Solutions
Carlson, Steven	High-Speed Design Inc.	HSD, Robert Bosch GmbH, Ethernovia
Carty, Clark	Cisco Systems, Inc.	Cisco Systems, Inc.
Castrillon, Mario	Marvell	Marvell
Dai, Shaoan	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
Dawson, Fred	Chemours Canada Company	Chemours Canada Company
Deandrea, John	Finisar Corporation	Finisar Corporation
DiBiaso, Eric	TE Connectivity	TE Connectivity
Diminico, Christopher	M C Communications, LLC	Panduit Corp.
Donahue, Curtis	Rohde & Schwarz	Rohde & Schwarz
Feyh, German	Broadcom Corporation	Broadcom Corporation
Gao, Xiangrong	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Glanzner, Martin	SEI ANTech-Europe GmbH	SEI Automotive Europe GmbH
Goralka, Chris		FIT
Graba, James	Broadcom Corporation	Broadcom Corporation
Grow, Robert	RMG Consulting	RMG Consulting, KDPOF
Gubow, Martin	Keysight Technologies	Keysight Technologies
Hess, David	CORD DATA	Cord Data / Cord Data
Hyakudai, Toshihisa		Sony Corporation
Ichimaru, Toshihiro		Sumitomo Electric Industries, LTD
Jonsson, Ragnar	Marvell Semiconductor, Inc.	Marvell
Kadry, Haysam	Ford Motor Company	Ford Motor Company
Kagami, Manabu	Nagoya Institute of Technology	Nagoya Institute of Technology (NITech)
KAWAHARA, KEISUKE	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
Koependoerfer, Erwin	LEONI Kabel GmbH	LEONI
Kondo, Taiji	MegaChips Corporation	INDEPENDENT; Individual
Lackner, Hans	QoSCom GmbH	QoSCom - Quality in Communications - GmbH
Laubach, Mark	IEEE member / Self Employed	IEEE member / Self Employed
Law, David	Hewlett Packard Enterprise	Hewlett Packard Enterprise
Le Cheminant, Greg	Keysight Technologies	Keysight Technologies
Lewis, Jon	Dell Technologies	Dell Technologies
Little, Terrance	Foxconn Electronics Inc.	Foxconn Electronics Inc.
Martino, Kjersti	Inneos	Inneos
Mcclellan, Brett	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
McMillan, Larry	Western Digital Corporation	Western Digital Corporation
Mueller, Thomas	Rosenberger	Rosenberger

<b>Name</b>	<b>Employer</b>	<b>Affiliation</b>
Neulinger, Christian	MD Elektronik	MD Elektronik
NIIHARA, YOSHIHIRO	Fujikura Ltd.	Fujikura Ltd.
Pandey, Sujan	Huawei Technologies (Netherlands) B.V.	Huawei Technologies (Netherlands) B.V.
Rabinovich, Rick	Keysight Technologies	Keysight Technologies
Reinhard, Michael	SEI ANTech-Europe GmbH	SEI ANTech-Europe GmbH
Sedarat, Hossein	Ethernovia	Ethernovia
Shiino, Masato	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
Southern, Tom	Broadcom Corporation	Broadcom Corporation
Tofanicchio, Giuseppe		STMicroelectronics
Tu, Mike	Broadcom Corporation	Broadcom Corporation
Vanderlaan, Paul	UL LLC	UL LLC
Voss, Robert	Panduit Corp.	Panduit Corp.
Wienckowski, Natalie	General Motors Company	General Motors Company
Wu, Peter	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
YANG, Yumeng	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Yi, Louise	Foxconn Electronics Inc.	Foxconn Electronics Inc.
Zhang, Tingting		Huawei Technologies Co., Ltd
Zimmerman, George	CME Consulting	CME Consulting/ADI, APL Group, CommScope, Cisco Systems, Marvell, and SenTekse
Zou, Congshi	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd



*Appendix B: Attendees at the IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force, January 18, 2022.*

Add George

<b>Name</b>	<b>Affiliation</b>	<b>Employer</b>
Akin, Sami	Volkswagen Ag	Volkswagen AG
Borda, jamila josip	BMW Group	BMW Group
Boyer, Rich	Aptiv Signal and Power Solutions	Aptiv - Signal and Power Solutions
Carlson, Steven	HSD, Robert Bosch GmbH, Ethernovia	High-Speed Design Inc.
Carty, Clark	Cisco Systems, Inc.	Cisco Systems, Inc.
Castrillon, Mario	Marvell	Marvell
Chang, Jae-yong	Keysight Technologies	
Deandrea, John	Finisar Corporation	Finisar Corporation
DiBiasco, Eric	TE Connectivity	TE Connectivity
Donahue, Curtis	Rohde & Schwarz	Rohde & Schwarz
Feyh, German	Broadcom Corporation	Broadcom Corporation
Glanzner, Martin	SEI Automotive Europe GmbH	SEI ANTech-Europe GmbH
Goralka, Chris	FIT	
Graba, James	Broadcom Corporation	Broadcom Corporation
Grow, Robert	RMG Consulting, KDPOF	RMG Consulting
Gubow, Martin	Keysight Technologies	Keysight Technologies
Hajduczenia, Marek	Charter Communications	Charter Communications
Hess, David	Cord Data / Cord Data	CORD DATA
Hyakudai, Toshihisa	Sony Corporation	
Jonsson, Ragnar	Marvell	Marvell Semiconductor, Inc.
Kadry, Haysam	Ford Motor Company	Ford Motor Company
Kagami, Manabu	Nagoya Institute of Technology (NITech)	Nagoya Institute of Technology
KAWAHARA, KEISUKE	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
Koependoerfer, Erwin	LEONI	LEONI Kabel GmbH
Kondo, Taiji	INDEPENDENT; Individual	MegaChips Corporation
Lewis, Jon	Dell Technologies	Dell Technologies
Little, Terrance	Foxconn Electronics Inc.	Foxconn Electronics Inc.
Madgar, Zahy	Valens Semiconductor	Valens Semiconductor
Martino, Kjersti	Inneos	Inneos
Mcclellan, Brett	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
McMillan, Larry	Western Digital Corporation	Western Digital Corporation
Mueller, Thomas	Rosenberger	Rosenberger
Neulinger, Christian	MD Elektronik	MD Elektronik
NIIHARA, YOSHIHIRO	Fujikura Ltd.	Fujikura Ltd.
Pandey, Sujan	Huawei Technologies (Netherlands) B.V.	Huawei Technologies (Netherlands) B.V.
Patel, Harsh	Amphenol Corporation	Amphenol ICC
Powell, William	INDEPENDENT	INDEPENDENT
Reinhard, Michael	SEI ANTech-Europe GmbH	SEI ANTech-Europe GmbH

<b>Name</b>	<b>Affiliation</b>	<b>Employer</b>
Sedarat, Hossein	Ethernovia	Ethernovia
sisk, jason	University of New Hampshire InterOperability Laboratory (UNH-IOL)	University of New Hampshire InterOperability Laboratory (UNH-IOL)
Souvignier, Tom	Broadcom Corporation	Broadcom Corporation
Tu, Mike	Broadcom Corporation	Broadcom Corporation
Wienckowski, Natalie	General Motors Company	General Motors Company
Wu, Peter	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
Yi, Louise	Foxconn Electronics Inc.	Foxconn Electronics Inc.
Zhang, Tingting	Huawei Technologies Co., Ltd	
Zimmerman, George	CME Consulting	CME Consulting/ADI, APL Group, CommScope, Cisco Systems, Marvell, and SenTekse