

Unconfirmed Meeting Minutes: IEEE P802.3cy Greater than 10 Gb/s Electrical
Automotive Ethernet Task Force
November 9, 2021
Telephonic

Prepared by Jon Lewis & Natalie Wienckowski

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force meeting convened at 10:01 AM (US EST), Tuesday November 9, 2021 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/nov21/agenda_3cy_01b_1121.pdf.

The Task Force Chair noted that introductions would be skipped.

Steve Carlson reviewed the agenda in
https://www.ieee802.org/3/cy/public/nov21/agenda_3cy_01b_1121.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/nov21/agenda_3cy_01b_1121.pdf**

M: Natalie Wienckoski

S: Haysam Kadry

Approved by unanimous consent (Procedural > 50%)

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

**Motion #2: Motion #2: Move to approve the minutes from the 19 & 26
October ad hoc teleconferences, and the 21 & 28 September and 12 October
Interim teleconference meetings as posted.**

M: N. Wienckowski S: Ragnar Jonsson

Motion Passed by unanimous consent

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

IEEE Patent Policy, at **10:22 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 **10:24 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 noted that participation in the November plenary series requires a registration fee and showed the registration information. (agenda slide 25)

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.

Mr. Carlson showed the Task Force documentation (agenda slides 33-35)

Mr. Carlson reviewed Task Force virtual meetings slides from the agenda (agenda slides 36-38).

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/nov21/jonsson_3cy_02_11_09_21.pdf

Presenters: Ragnar Jonsson, Marvell

A straw poll was held –

Straw Poll 1

I support adopting the micro-reflection parameters for 802.3cy as described in slides 4 of Jonsson_3cy_02_11_21.pdf

Y: 40

N: 4

There was some discussion of the potential for future adjustments to the proposed numbers based on further data on cabling.

After discussion, the Chair advised for some consensus building in preparation for a motion at the next meeting.

Title: P802.3cy Annex 165A Proposal

URL: https://www.ieee802.org/3/cy/public/nov21/Wienckowski_et_al_3cy_01_11_09_21.pdf

Presenters: Natalie Wienckowski, GM; Haysam Kadry, Ford Motor Co.; Chris DiMinico, MC Communications

Questions were asked and answered, and there was discussion that the contents of the presentation may be the subject of motions at the next meeting.

Title: Baseline Wander causes higher Implementation Loss

URL: https://www.ieee802.org/3/cy/public/nov21/feyh_3cy_01b_01_11_09_21.pdf

Presenters: German Feyh, Broadcom

Questions were asked and answered.

Title: P802.3cy To Do List

URL: <https://www.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 our website.

Mr. Carlson reviewed the information on Future Meetings.

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

The meeting was recessed at 11:15 AM US EST and will resume November 16, 2021 at 9:59 AM US EDT.

The meeting resumed at 10:02 AM US EST on November 16, 2021 by Steve Carlson, Task Force Chair.

Steve Carlson displayed the agenda in

https://www.ieee802.org/3/cy/public/nov21/agenda_3cy_01c_1121.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 noted that there was no session code for this plenary meeting series.

IEEE Patent Policy, at **10:14 AM**, Mr. Carlson asked if any participant had not seen the patent policy slides (agenda slides 16-20), none responded. Mr. Carlson made the call for potentially essential patents at **10:15 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 21-23).

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 24).

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 25-26).

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: Thoughts on the FEC for 802.3cy

URL: https://www.ieee802.org/3/cy/public/nov21/tingting_3cy_01a_11_16_21.pdf

Presenter: Tingting Zhang

Title: FEC Interleaving

URL: https://www.ieee802.org/3/cy/public/nov21/jonsson_3cy_01_11_09_21.pdf

Presenter: Ragnar Jonsson, Marvell

Title: Enhancing Robustness of Link Synchronization in Automotive Ethernet at 802.3cy

URL: https://www.ieee802.org/3/cy/public/nov21/Wu_3cy_01_1121.pdf

Presenter: Peter Wu, Marvell Semiconductor

Motion #3: Move to adopt Annex 165A introduction text on slide 3 of Wienckowski_et_al_3cy_01a_11_09_21.pdf with editorial license to implement.

M: Natalie Wienckowski

S: Haysam Kadry

Technical (>=75%)

Motion Passed by unanimous consent

Motion #4: Move to adopt updated text for reference insertion loss in Annex 165A.2 on slide 4 of Wienckowski_et_al_3cy_01a_11_09_21.pdf with editorial license to implement. (Changes to previously approved text are shown with blue highlight.)

M: Natalie Wienckowski

S: Haysam Kadry

Technical (>=75%)

Motion Passed by unanimous consent

Motion #5: Move to adopt 165A.2.1 Host PCB trace loss text on slide 5 of Wienckowski_et_al_3cy_01a_11_09_21.pdf with red text in an Editor's Note and with editorial license to implement.

M: Natalie Wienckowski

S: Haysam Kadry

Technical (>=75%)

Motion Passed by unanimous consent

Motion #6: Move to adopt 165A.3 TP0 to TP5 channel insertion loss text on slides 6 & 7 of Wienckowski_et_al_3cy_01a_11_09_21.pdf with editorial license to implement.

M: Natalie Wienckowski

S: Haysam Kadry

Technical (>=75%)

Motion Passed by unanimous consent

Motion #7: Move to adopt 165A.4 Channel return loss text on slide 8 of Wienckowski_et_al_3cy_01a_11_09_21.pdf with red text in an Editor's Note and editorial license to implement.

M: Natalie Wienckowski

S: Haysam Kadry

Technical (>=75%)

Motion Passed by unanimous consent

Motion #8: Move to adopt 165A.5 Coupling between ports on multiport designs text on slide 9 of Wienckowski_et_al_3cy_01a_11_09_21.pdf with editorial license to implement.

M: Natalie Wienckowski

S: Haysam Kadry

Technical (>=75%)

Motion Passed by unanimous consent

Title: P802.3cy To Do List

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

Presenter: Natalie Wienckowski, GM

Mr. Carlson reminded the group that future meetings are listed on the 802.3 calendar page.

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

The Meeting was adjourned at 11:58 AM US EST on November 16, 2021

Appendix A: Attendees at the IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force, November 9 2021.

Name	Employer	Affiliation
Abbott, John	Corning Incorporated	Corning Incorporated
Akin, Sami	Volkswagen AG	Volkswagen Ag
Aronson, Joseph	Texas Instruments Inc.	Texas Instruments Inc.
Borda, jamila josip	BMW Group	BMW Group
Boyer, Rich	Aptiv - Signal and Power Solutions	Aptiv Signal and Power Solutions
Bruckman, Leon	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Brychta, Michal	Analog Devices Inc.	Analog Devices Inc.
Calvin, John	Keysight Technologies	Keysight Technologies
Carlson, Steven	High-Speed Design Inc.	HSD, Robert Bosch GmbH, Ethernovia
Carty, Clark	Cisco Systems, Inc.	Cisco Systems, Inc.
Chang, Jacky	Hewlett Packard Enterprise	Hewlett-Packard Development Company, L.P.
Chang, Jae-yong		Keysight Technologies
Choudhury, Golam	OFS	OFS
Cuesta, Emilio	TE Connectivity	TE Connectivity
Dawson, Fred	Chemours Canada Company	Chemours Canada Company
DiBiaso, Eric	TE Connectivity	TE Connectivity
Diminico, Christopher	M C Communications, LLC	Panduit Corp.
Donahue, Curtis	Rohde & Schwarz	Rohde & Schwarz
Ewen, John	Marvell	Marvell
Feyh, German	Broadcom Corporation	Broadcom Corporation
Fischer, Peter	BKS Kabel-Service AG	BKS Kabel-Service AG
Graba, James	Broadcom Corporation	Broadcom Corporation
Gubow, Martin	Keysight Technologies	Keysight Technologies
Hess, David	CORD DATA	Cord Data / Cord Data
HIRASE, HIDENARI		AGC.Inc
Huszak, Gergely	Self	KONE
Ichimaru, Toshihiro		Sumitomo Electric Industries, LTD
ISHIBE, KAZUHIKO	Anritsu Company	Anritsu Company
Isono, Hideki	Fujitsu Optical Components Limited	Fujitsu Optical Components Limited
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
King, Roger	TRUMPF Photonic Components GmbH	TRUMPF Photonic Components GmbH
Kobayashi, Shigeru	AIO Core	AIO Core
Koeppendoerfer, Erwin	LEONI Kabel GmbH	LEONI
Kondo, Taiji	MegaChips Corporation	MegaChips Corporation

Name	Employer	Affiliation
Kurashima, Kazuyoshi		AGC
Lennartsson, Kent	Kvaser AB	Kvaser AB
Little, Terrance		Foxconn Electronics Inc.
Madgar, Zahy	Valens Semiconductor	Valens Semiconductor
Marques, Flavio	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
Marris, Arthur	Cadence Design Systems, Inc.	Cadence Design Systems, Inc.
Matheus, Kirsten	BMW Group	BMW Group
Mcclellan, Brett	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
McMillan, Larry	Western Digital Corporation	Western Digital Corporation
Mueller, Thomas	Rosenberger	Rosenberger
Muller, Shimon	Enfabrica Corp.	Enfabrica Corp.
Neulinger, Christian	MD Elektronik	MD Elektronik
NIIHARA, YOSHIHIRO	Fujikura Ltd.	Fujikura Ltd.
Ogura, Ichiro	PETRA	PETRA
Pandey, Sujan	Huawei Technologies (Netherlands) B.V.	Huawei Technologies (Netherlands) B.V.
Patel, Harsh	Amphenol ICC	Amphenol Corporation
Piehler, David	Dell Technologies	Dell
Pitwon, Richard	Resolute Photonics	AIO Core
Reinhard, Michael	SEI ANTech-Europe GmbH	SEI ANTech-Europe GmbH
Rettig, Thomas	Beckhoff Automation	Beckhoff Automation
Sakai, Toshiaki	Socionext Inc.	socionext
Sedarat, Hossein	Ethernovia	Ethernovia
Shiino, Masato	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
Simms, William	NVIDIA Corporation	NVIDIA Corporation
sisk, jason	University of New Hampshire InterOperability Laboratory (UNH-IOL)	University of New Hampshire InterOperability Laboratory (UNH-IOL)
Souvignier, Tom	Broadcom Corporation	Broadcom Corporation
Tran, Viet	Keysight Technologies	Keysight Technologies
Tu, Mike	Broadcom Corporation	Broadcom Corporation
Vanderlaan, Paul	UL LLC	UL LLC
Wienckowski, Natalie	General Motors Company	General Motors Company
Wu, Peter	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
Yamada, Osamu		Yazaki Corporation
YANG, Yumeng	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Zhang, Bo	Marvell Technology, Inc	Marvell Technology, Inc
Zhang, Sen		Huawei Technologies Co., Ltd
Zhang, Tingting		Huawei Technologies Co., Ltd
Zhong, Qiwen	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Zhuang, Yan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd

Name	Employer	Affiliation
Zimmerman, George	CME Consulting	CME Consulting/ADI, APL Group, CommScope, Cisco Systems, Marvell, and SenTekse

Appendix B: Attendees at the IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force, November 16, 2021.

Name	Employer	Affiliation
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	High-Speed Design Inc.	HSD, Robert Bosch GmbH, Ethernovia
Carty, Clark	Cisco Systems, Inc.	Cisco Systems, Inc.
Castrillon, Mario	Marvell	Marvell
Chang, Jae-yong		Keysight Technologies
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
Fischer, Peter	BKS Kabel-Service AG	BKS Kabel-Service AG
Fritsche, Matthias	HARTING Technologie Gruppe	HARTING Electronics GmbH
Gao, Xiangrong		Huawei
Glanzner, Martin		SEI Automotive Europe GmbH
Graba, James	Broadcom Corporation	Broadcom Corporation
Grow, Robert	RMG Consulting	RMG Consulting, KDPOF
Gubow, Martin	Keysight Technologies	Keysight Technologies
Hajduczenia, Marek	Charter Communications	Charter Communications
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
Kobayashi, Shigeru	AIO Core	AIO Core
Koeppendoerfer, Erwin	LEONI Kabel GmbH	LEONI
Kondo, Taiji	MegaChips Corporation	MegaChips Corporation
Lackner, Hans	QoSCom GmbH	QoSCom - Quality in Communications - GmbH
Lewis, Jon	Dell Technologies	Dell Technologies
Little, Terrance		Foxconn Electronics Inc.
Madgar, Zahy	Valens Semiconductor	Valens Semiconductor
MASUDA, TAKEO	OITDA	OITDA
Matheus, Kirsten	BMW Group	BMW Group
Mcclellan, Brett	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
Mu, Tong		Huawei Technologies Co., Ltd
Mueller, Harald	Endress + Hauser	Endress + Hauser

Name	Employer	Affiliation
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 ICC	Amphenol Corporation
peng, semmy		Huawei Technologies Co., Ltd
Petrarca, Ryan	TDK Corporation	TDK Corporation
Reinhard, Michael	SEI ANTech-Europe GmbH	SEI ANTech-Europe GmbH
Rettig, Thomas	Beckhoff Automation	Beckhoff Automation
Schreiner, Stephan		Rosenberger
Sedarat, Hossein	Ethernovia	Ethernovia
Shiino, Masato	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
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
Vanderlaan, Paul	UL LLC	UL LLC
Wienckowski, Natalie	General Motors Company	General Motors Company
Wu, Peter	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
Yamada, Osamu		Yazaki Corporation
YANG, Yumeng	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Zhang, Sen		Huawei Technologies Co., Ltd
Zhang, Tingting		Huawei Technologies Co., Ltd
Zhong, Qiwen	Huawei Technologies Co., Ltd	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