Unconfirmed Meeting Minutes: IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group

July 18, 2019 Vienna, Austria

Prepared by Jon Lewis

IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group (B10G) Study Group meeting convened at 8:00 AM, Thursday, July 18, 2019 by Steve Carlson, Task Force Chair.

Attendance is listed in Appendix A

ADMINISTRATIVE MATTERS

Presentation: agenda B10GAUTO 1 0719.pdf

Presenter: Steve Carlson, Chair.

The Chair called for introductions and affiliations, the participants introduced themselves, and the Chair then proceeded with the agenda.

The Chair reviewed the agenda. Mr. Carlson turned to presentation <u>agenda_B10GAUTO_1_0719.pdf</u> and reviewed the schedule of presentations for the meeting.

Motion #2: Move to approve the agenda as shown in agenda B10GAUTO 1 0719.pdf

M: Chris Mash S: Mike Gardner
(Procedural > 50%)

Approved by voice without opposition
Motion Passes

The Chair then resumed the review of presentation agenda_B10GAUTO_1_0719.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.

Mr. Carlson then continued review of the presentation, Big Ticket items for this meeting, to develop PAR, 5 Criteria, and Objectives for 10 Mb/s Single Twisted Pair Ethernet.

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

IEEE Patent Policy, Mr. Carlson read aloud the patent policy for study groups from <u>agenda_B10GAUTO_1_0719.pdf</u>, page entitled "Guidelines for IEEE-SA Meetings" (8:19 AM).

Mr. Carlson read aloud and reviewed the Participation slide.

Mr. Carlson reviewed the standards development process for IEEE and where this study group is in the process.

Mr. Carlson reviewed the WG motion from the November plenary meeting of the 802.3 WG to establish the Study Group.

LIAISONS

The Chair moved to liaisons and noted that there were no liaisons for the Study Group at this time.

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

PRESENTATIONS

The Chair then moved to the presentations for the meeting.

NOTE: Abstracts are given when supplied by the presenter.

Title: Draft PAR (B10GAUTO PAR DRAFT 01 0719.ppt)

Presenter: Steve Carlson, Robert Bosch, Marvell

Title: Draft CSD (B10GAUTO_CSD_DRAFT_01_0719.ppt)

Presenter: Steve Carlson, Robert Bosch, Marvell

Title: Greater than 10 Gb/s Automotive Ethernet Link Segment

(diminico_B10GAUTO_01_0719.pdf)

Presenter: Chris Diminico, MC Communications, PHY-SI LLC, Panduit

Title: Two Types of STP Automotive Cable Support 10G+

(sun_B10GAUTO_02a_0719.pdf)

Presenter: Evan Sun, Huawei

Title: Network Topology Analysis (mash_B10GAUTO_1_0719.pdf)

Presenter: Chris Mash, Marvell

The group took a short break at 9:59 AM.

The Study Group resumed at 10:20 AM.

Title: Draft objectives (B10GAUTO_OBJ_DRAFT_01_0719.ppt)

Presenter: Steve Carlson, Robert Bosch, Marvell

Motion #4: Move that the B10GAUTO SG adopt objectives 1,2,3,4,5,7,9,10,14 on slides 2 and 3 from B10GAUTO_OBJ_DRAFT_01_0719.ppt.

M: Chris Mash S: H. Zinner

Technical >= 75%

Y: 57 N: 0 A: 1

Motion Passes

Motion #5: Move that the IEEE 802.3 Working Group request the re-chartering of the IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group.

M: Natalie Wienckowski S: Brett McClellan

(Procedural > 50%)

Approved by voice without opposition

Motion Passes

FUTURE MEETINGS

Mr. Carlson reviewed future meetings locations from the agenda presentation.

Attendance:

Attend Sept 2019 interim, Indianapolis, IN, USA:

Y: 15 N: 17 M: 26

Attend November 2019 802 Waikoloa, HI USA plenary:

Y: 16 N: 12 M: 31

No further motions of business were offered.

Adjournment

Motion #5:

Move to adjourn.

M: Gerrett den BestenS: Bob Grow

Motion Passes by Voice without Opposition

The Meeting was adjourned at 11:21AM, Thursday, July 18, 2019.

Appendix A: Attendees at the IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group Meeting, July 18, 2019

IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Day 1 **Study Group July 2019** 18 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 Other Affiliations First Employer Thurs Name Andrä Stefan SEI Antech-Europe SEI Antech-Europe Χ GmbH GmbH Yazaki Yazaki Michikaz Χ Aono Araki Nobuyas Yazaki Yazaki Χ Klemens Audi AG Χ Bruckner Audi AG Carlson Steve High Speed Design Robert Bosch, Marvell Χ **NXP Semiconductors** Χ Den Besten Gerrit NXP Semiconductors Χ Engel Andreas TE Connetivity TE Connectivity Massad Valens Semi Valens Semi Χ Eyal X Faure Progilon Panasonic Jean-Phillipe Fukuoka Takashi Auto Networks Tech Auto Networks Tech Χ Gardner Mike Molex. LLC Molex, LLC X Steffen Graber Pepperl+Fuchs Pepperl+Fuchs Χ Robert Bosch Grau Olaf Robert Bosch Χ **RMG** Consulting **RMG** Consulting Χ Grow Robert Gubow Martin **Keysight Technologies Keysight Technologies** Χ Χ Hernandez Ceilink Corp. Ceilink Corp **Emily**

Cord Data

Yazaki

Phoenix Contact

Adamant Namiki

Precision Jewel

Dave

Bernd

Yasuhiro

Hiroaki

Hess

lto

Horrmeyer

Hyakutake

Χ

Χ

Χ

Χ

Cord Data

Yazaki

Phoenix Contact

Adamant Namiki

Precision Jewel

IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group July 2019

Day 1 18 July

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Last Name	First Name	Employer	Other Affiliations	Thurs
Kadry	Haysam	Ford Motor Company	Ford Motor Company	Х
Kagami	Manabu	NITech	NITech	Х
Koeppenober ler	Erwin	Leoni Kabel GmBH	Leoni Kabel GmBH	X
Kondo	Taiji	Megachips	Megachips	Х
Koppermüller	Daniel	MD Elektronik GmbH	MD Elektronik GmbH	Х
Kumada	Taketo	Yazaki	Yazaki	Х
Kurobe	Akio	Panasonic	Panasonic	Х
Lewis	Jon	Dell EMC	Dell EMC	X
Lin	Alex	Mediatek	Mediatek	X
Mash	Chris	Marvell	Marvell	Х
Matheus	Kirsten	BMW	BMW	Х
McClellan	Brett	Marvell	Marvell	Х
Mueller	Thomas	Rosenberger	Rosenberger	Х
Nadolny	Jim	Samtec	Samtec	Х
Ohni	Josef	MD Elektronik	MD Elektronik	Х
Pandey	Sujan	NXP	NXP	X
Preis	Roland	MD Elektronik GmBH	MD Elektronik GmbH	X
Rodenkirche	Robert	YAZAKI Europe	YAZAKI Europe	X
Rusch	Christian	TE Connetivity	TE Connectivity	Х
Salehi	Hamid Reza	Marvell	Marvell	Х
Sederat	Hossein	Ethernovia	Ethernovia	Х
Shariff	Masood	Commscope	Commscope	Х
Shiino	Masato	Furukawa Electric	Furukawa Electric	Х

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Last Name	First Name	Employer	Other Affiliations	Thurs
Stewart	Heath	Analog Devices	Analog Devices	Х
Sun	Yanbin	Huawei	Huawei	Х
Takahashi	Tadashi	Nitto Denko Corporation	Nitto Denko Corporation	Х
Takayama	Kazuya	Nitto Denko Corporation	Nitto Denko Corporation	Х
Takeuchi	Junichi	JAE Electronics	JAE Electronics	Х
Tseng	Tachin	Realtek	Realtek	Х
Tu	Mike	Broadcom Ltd.	Broadcom Ltd.	Х
Tzahi	Madgar	Valens Semi	Valens Semi	Х
Vakilian	Kambiz	Broadcom Ltd.	Broadcom Ltd.	Х
Vernickel	Ricky	Leoni	Leoni	Х
Wechsler	Christoph	Audi	Audi	Х
Wei	Dong	Futurewei Technologies	Futurewei Technologies	Х
Wienckowski	Natalie	GM	GM	Х
Wu	Peter	Marvell	Marvell	Х
Wu	Dance	Marvell	Marvell	Х
Xuehuan	Wang	Huawei	Huawei	Х
Zerna	Conrad	Frannhofer IIS	Frannhofer IIS	Χ
Zimmerman	George	CME Consulting	Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group, SensTekse	X
Zinner	Helge	Continental	Continental	Х