

Minutes IEEE P802.3ch Multigig Automotive Ethernet PHY TF AdHoc meeting October 18, 2017

Prepared by George Zimmerman

Proposed Agenda:

1. Agenda/Admin: George Zimmerman, agenda_3chah_01_101817.pdf
2. SG Chair's comments: Steve Carlson, no presentation
3. Presentations:
 - a. Automotive Ethernet Harness Meeting Summary – Natalie Wienckoski, GM North America
 - b. STP Cable in Automotive Environment – Taketo Yamada, YAZAKI
 - c. 802.3 Primer for Baselines – Natalie Wienckoski, GM North America
4. Discussion & Next steps – All

Presentations were posted to the adhoc webpage the evening before

Agenda/Admin George Zimmerman acting as ad hoc chair:

Meeting began at 7:04am PT.

Introductions & Affiliations.

Presented file: [agenda 3chah 01 101817.pdf](#)

1. Reviewed the Attendance information related to the ad hoc.
2. Displayed the Participation slide and reviewed it.
3. Displayed patent slide deck, and reviewed it.
Call for Patents was made at 7:10AM Pacific Time, none responded
4. Reminded participants to indicate full names and employer/affiliation for the meeting minutes.

Instructions for subscribing to the reflector may be found at <http://www.ieee802.org/3/ch/reflector.html>. If you cannot subscribe to the reflector for some reason, and need additional assistance please contact the Task Force chair.

Presentations/Discussion:

Chair's Comments & Discussion Steve Carlson, Chair, IEEE P802.3ch Task Force: Steve reminded the group:

- Make presentation requests for the November plenary before October 26
- Pdfs of the presentations are due before Friday November 3
- 802.3ch is planned to meet all day Wednesday and Thursday morning. 802.3cg will cover automotive-related work up front, to minimize overlap, beginning Monday afternoon.
- There is no ad hoc meeting in 2 weeks (Nov 1) due to overlap with the automotive 2017 IEEE Standards Association (IEEE-SA) Ethernet & IP @ Automotive Technology Day.

Presentation: Automotive Ethernet Harness Meeting Summary – Natalie Wienckoski, GM North America ([Automotive Ethernet Harness mtg summary.pdf](#))

The presenter was reviewed the results of a meeting held October 9th to discuss harness, cable and connector, measurement options and methods. Minutes of the meeting were posted to the adhoc website. A participant noted that in addition to coupling data, PHY vendors could use absolute noise levels expected in EMC environments, if those measurements were available.

Presentation: STP Cable in Automotive Environment – Taketo Yamada, YAZAKI ([171018 STP cable in automotive enviroment.pdf](#))

The presenter was unable to connect to audio. The ad hoc Chair shared the slides with time for discussion. The presentation gave a summary of automotive environmental impairments, such as temperature, humidity, aging, and wire bands, and gave their impact on automotive cabling. There was some discussion about the impacts of the various impairments and accounting for them with margin. The presentation focused particularly on STP cabling. The presentation presented that the existing cabling for 1Gbps showed suck-outs at 3.2 GHz, where the insertion loss increased dramatically (and return loss decreased). The presentation and discussion confirmed that changes in cable construction could move these suck-outs to higher frequencies – often at an increase in cable complexity and difficulty of manufacture. The discussion then centered around the value of using cabling already used in the automotive environment, and presenters of cabling data were encouraged to provide information on the maturity of the cabling (e.g., in cabling-lab development, in automotive qualification, in automotive pre-production, in automotive production (for N years or M vehicles... if you're going for extra credit).

Presentation: 802.3 Primer for Baselines – Natalie Wienckoski, GM North America ([wienckowski 3ch baselines.pdf](#))

The presenter reviewed best practices for presenting and getting baselines accepted.

Additional Item:

Closing Business

There will be no more ad hoc meetings prior to the November interim. The November 1 meeting is cancelled.

Meeting closed –9:00 am PT

Attendees (from Webex + emails)

First	Last	Affiliation
Franz	Aletsee	HS-Augsberg
Dale	Amason	NXP
Jim	Bauer	marvell
Bert	Bergner	TE Connectivity

Rich	Boyer	Delphi
David	Brandt	Rockwell Automation
Stefan	Buntz	Daimler
Steve	Carlson	High Speed Design/Robert
Mabud	Choudhury	OFS
Massad	Eyal	Valens
Ramin	Farjad	Aquantia
Matthias	Fritsche	Harting
Mike	Gardner	Molex
Claude	Gauthier	OmniPHY
Yasuhiro	Hyakutake	Adamant
Dalibor	Ignjatovic	Acome
Chad	Jones	Cisco
Evan	Jones	Molex
Tomohiro	Kikuta	Adamant
Taketo	Kumada	Yazaki
David	Law	HPE
David	Malicoat	Senko
Brett	McClellan	Marvell
Greg	McSorley	Amphenol-highspeed
Wes	Mir	Delphi
Thomas	Müller	Rosenberger
Sujan	Pandey	NXP
Harsh	Patel	Molex
Vimalli	Raman	Yazaki
Victor	Renteria	Belfuse
Litsa	Rubino	Delphi
Ramin	Shirani	Aquantia
Mehmet	Tazebay	Broadcom
Eric	Thompson	Analog Devices
ALEXANDER	UMNOV	Corning
Natalie	Wienckowski	GM
Peter	Wu	Marvell
Kent	Younglove	Yazaki
George	Zimmerman	CME Consulting/Aquantia,
Helge	Zinner	Continental
TOTAL	40	Attendees