Minutes IEEE 802.3 Multigig Automotive Ethernet PHY SG AdHoc meeting May 17, 2017

Prepared by Natalie Wienckowski

Proposed Agenda:

1. Agenda/Admin: Natalie Wienckowski, agenda_3NGAUTOah_01_041917.pdf
2. SG Chair's comments: Steve Carlson, no presentation
3. Presentation: Automotive Fiber Standard – Frank Flens & Jonathan King of Finisar
4. Next steps

Presentations were posted to the adhoc webpage the evening before

Agenda/Admin Natalie Wienckowski acting as ad hoc chair:

Meeting began at 7:05am PT.

Introductions & Affiliations.

Presented file: agenda_3NGAUTOah_01_051717.pdf

1. Reviewed the Attendance information related to the ad hoc.
2. Displayed the Participation slide and reviewed it.
3. Displayed pre-par patent slide deck, and reviewed it.
4. Reminded participants to indicate full names and employer/affiliation for the meeting minutes.

The reflector and website are now up, and we are now using the NGAUTO reflector. Instructions for subscribing to the reflector may be found at http://www.ieee802.org/3/NGAUTO/reflector.html. If you cannot subscribe to the reflector for some reason, and need additional assistance please contact the study group chair.

Presentations/Discussion:

Chair's Comments & Discussion Steve Carlson, Chair, Multigig Automotive Ethernet PHY Study Group: Steve was not able to attend. Natalie informed the group that the NesCom email ballot will end on May 18, 2017.

Presentation: Frank Flens & Jonathan King of Finisar, Automotive Fiber Standard

The presenter discussed reasons that the existing 10GBASE-S standard is not suitable for automotive. He gave examples of items that would need to be changed and reasons for these proposed changes. There were questions regarding fiber lifetime as there have been issues with POF. The presenter informed the group that glass would be required for this application and they use 30 years for the expected life. There was also a question about bend radius, Steve Swanson, Corning, stated they have fiber that can accept a bend as small as 5 mm. There was discussion around the connectors for this and the need for requirements to ensure that dust incursion is not an issue. It was also mentioned that an "expanded beam" can be used as this is less sensitive to dust/debris and may be suitable for the shorter automotive lengths.

There was some discussion regarding “active cables”. This allows the interface to the ECU to be electric, but may make it difficult to mix devices from different suppliers as there are no requirements on the optical transmitters/receivers or the cabling in this case. Also, this is probably not suitable for in-lines. It is possible to do a hybrid network where part of the cable is electric and part is optical in this case.

Closing Business: Natalie Wienckowski, General Motors

Future Meetings

The next meeting will be the regular study group interim meeting in New Orleans. The schedule for additional ad hoc meetings will be determined at this meeting.

If you plan to present anything at this meeting you need to inform Steve ASAP.

Meeting closed –7:56 am PT

Attendees (from Webex + emails)

First	Last	Affiliation
Tobias	Belitz	Renesas
David	Brandt	Rockwell Automation
Phillip	Brownlee	TDK
Eric	DiBiaso	TE
Marc	Dupuis	Webindustries
Frank	Flens	Finisar
Matthias	Fritsche	Harting
Mike	Gardner	Molex
Hossein	Ghafarian	Tu-Berlin
Kurt	Herrmann	Gebauer & Griller
Yasuhiro	Hyakutake	Adamant JP
Dalibor	Ignjatovic	Acome
Chad	Jones	Cisco
Tomohiro	Kikuta	Adamant Co., Ltd
Jonathan	King	Finisar
David	Law	HPE
Alex	Lin	MediaTek
Kirsten	Matheus	BMW
Brett	McClellan	Marvell
Wes	Mir	Delphi
Geet	Modi	Texas Instruments
Bryan	Moffitt	Commscope
Thomas	Müller	Rosenberger
Takeshi	Nish	Yeu
Doug	Oliver	Ford
Harsh	Patel	Molex
Rainer	Pöhmerer	Leoni
G.	Raghu	TI

Vimalli	Raman	Yazaki-Europe
Tamir	Reshef	Semtech
Masood	Shariff	Commscope
Steve	Swanson	Corning
Geoff	Thompson	Independent (GraCaSI)
Alexander	Umnov	Corning
Lisa	Ward	Rhode-Schwarz
Karl	Weber	Beckhoff
Natalie	Wienckowski	GM
Peter	Wu	Marvell
Helge	Zinner	Continental