

Minutes IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet PHY TF AdHoc meeting November 23, 2021

Prepared by Natalie Wienckowski

Proposed Agenda:

Title	Presenters(s)	Affiliation(s)
Agenda	Natalie Wienckowski (ad hoc Chair)	General Motors
TF Chair's Comments	Steve Carlson	High Speed Design, Robert Bosch GmbH, Ethernovia
802.3cy Ingress Noise Measurement Results	Thomas Müller	Rosenberger
OAM changes to add lane information	Natalie Wienckowski	General Motors
Pre-review Drafts	Steve Carlson Natalie Wienckowski	High Speed Design, Robert Bosch GmbH, Ethernovia General Motors
P802.3cy To-do list	Natalie Wienckowski	General Motors
Closing Remarks	Steve Carlson	High Speed Design, Robert Bosch GmbH, Ethernovia

See [adhoc webpage for agenda deck and presentations](#)

Agenda/Admin Natalie Wienckowski as ad hoc chair:

Meeting began at 11:02 am ET.

Introductions & Affiliations.

Presented file: [cy Task Force adhoc agenda 11 23 21.pdf](#)

1. Reviewed the Attendance information related to the ad hoc.
2. Displayed patent slide deck and asked if any participant had not read the IEEE-SA Patent Slides slide set, none responded.
Call for Patents was made at 11:09 am Eastern Time, none responded
3. Displayed the IEEE-SA Copyright policy slide and asked if any participant had not read the IEEE copyright slide set, none responded.
4. Displayed the IEEE-SA Participation slide and reviewed it.
5. 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/cy/reflector.html>. If you cannot subscribe to the reflector for some reason, and need additional assistance please contact the Task Force chair.

Chair's comments: None at this time

Presentations/Discussion:

Presentation: [802.3cy Ingress Noise Measurement Results](#) (Thomas Müller, Rosenberger)

Thomas shared ingress noise test measurement results. He tested with three different potential shield terminations to show the impact of this on ingress noise. Two different cables were tested, one with an in-line connection and one without an in-line connection. The differential ingress noise (< 10 mV) is much lower than the common mode ingress noise (< 80 mV) at 100V/m.

There was a question about different types of grounding and the impact. Future work could be done on this, but there are quite a few options and they can't all be tested.

There was a question as to whether this type of testing could be used to predict PHY emissions. This could potentially be done by injecting an expected signal based on PSD mask. Thomas will look at this.

Thomas will check to see if the values are peak or RMS. This will be included in an update to the presentation.

There was a question about the mode conversion of the cable. Most of the testing is on longer cables. Thomas doesn't have mode conversion measurements on these links.

Presentation: [OAM changes to add lane information](#) (Natalie Wienckowski, General Motors)

Natalie shared some background on OAM for P802.3cy as discussed in previous meetings and some options for adding additional content that are needed for a multi-lane PHY. Think about the options and what you may prefer for a future discussion.

It was noted that the number of lanes may not be needed in the OAM as it shouldn't change and could be sent during link up.

Please consider other information that may need to be added to the OAM.

Presentation: [Pre-review Drafts](#) (Steve Carlson, High Speed Design, Robert Bosch GmbH, Ethernova ; Natalie Wienckowski, General Motors)

Steve and Natalie shared information on the upcoming TF early draft review. It is requested the people concentrate on reviewing for missing content and not for typos and formatting.

Comments should be created for simple items, e.g. providing a table name.

For new content or Technical changes, presentations should be created with or without a comment submitted. Please note, these presentations need to be shared during a December ad-hoc if there is a desire to do a motion during the January Interim.

Presentation: [P802.3cy To-do list usage](#) (Natalie Wienckowski, General Motors)

The to-do list was reviewed and updated. Participants are urged to review the list for topics they can support and for missing topics. Please send a message to the reflector with requested changes to the list.

The current list can be found on this page: [To Do spreadsheets](#)

Closing Discussion

Thanks to everyone for their continued work and support through the marathon of on-line meetings.

The November 30th meeting is cancelled. Our next meeting will be on December 7th.

Happy Thanksgiving to those in the US.

Meeting adjourned at 11:43 AM ET.

Attendees (download participant list, email)

First	Last	Affiliation
Ali	Javed	Molex
Brett	McClellan	Marvell
Chris	DiMinico	MC Communications, PHY-SI, SenTekse / Panduit
Christian	Neulinger	MD Elektronik
Dave	Hess	Cord Data
Eric	DiBiaso	TE Connectivity
George	Zimmerman	CME Consulting / ADI, APL Group, Cisco Systems, CommScope, Marvell, SenTekSe
German	Feyh	Broadcom
Harsh	Patel	Amphenol ICC
Haysam	Kadry	Ford
Hossein	Sedarat	Ethernovia
Jamila	Borda	BMW
Jim	Graba	Broadcom
Jonathan	Silvano de Sousa	GG - Austria
Kambiz	Vakilian	Broadcom
Keisuke	Kawahara	FURUKAWA ELECTRIC
Leon	Bruckman	Huawei
Marty	Gubow	Keysight
Michael	Reinhard	SEI ANTech
Mike	Tu	Broadcom
Natalie	Wienckowski	General Motors
Nik	Dimitrakopoulos	Rohde & Schwarz
Peter	Wu	Marvell
Ragnar	Jonsson	Marvell
Rich	Boyer	Aptiv
Sami	Akin	VW
Steve	Carlson	High Speed Design, Robert Bosch GmbH, Ethernovia
Sujan	Pandey	Huawei

First	Last	Affiliation
Terry	Little	Foxconn Interconnect Technology
Thomas	Müller	Rosenberger
Tingting	Zhang	Huawei
Toshihiro	Ichimaru	Sumitomo
TOTAL	32	Attendees