

Minutes IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet PHY TF AdHoc meeting February 16, 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 |
| Calculated SNR Margin for 24AWG | Ragnar Jonsson | Marvell |
| 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 10:03 am ET.

Introductions & Affiliations.

Presented file: [cy Task Force adhoc agenda 02 16 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 10:09 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: [Calculated SNR Margin for 24AWG \(Ragnar Jonsson, Marvell\)](#)

Ragnar updated the CCC to add a model of the 24AWG cable presented last week:

https://www.ieee802.org/3/cy/public/adhoc/Gianordoli_Silvano_de_Sousa_3cy_01a_02_09_21.pdf. He shared the results of the CCC using this model for an 11m link segment at 20°C and at 95°C. He has requested additional information on the echo and EMI characteristics of the cable. He compared his calculation of the IL of the cable at 105C from the measured and found that the calculated IL was slightly better than the measured. This may be due to effects of the insulation which are not included in his model.

The numbers are based on discussion in earlier meetings. They are not representative of a specific implementation. These may be pessimistic for some designs and optimistic for others.

Information is still needed for the noise this device could see.

AFE noise could potentially be lowered, but this may mean that other items that are being ignored today need to be included.

Request that cable data presented includes information on micro reflections.

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

The To-Do list was 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.

Haysam is looking for feedback on advanced PCB board types that others have used for Automotive Applications.

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

Closing Discussion

Future meeting notices can be found on the 802.3 calendar. The upcoming Skype meetings will be changed to Microsoft Teams meetings.

Any topic that you may request a Motion for at the March 16th Plenary call must be presented no later than the March 1st ad hoc call.

WG Plenary meetings will be on March 8th, March 11th, and March 18th. You will need to attend meetings on at least 6 of the 8 days to get attendance credit.

The March 1st meeting is on a Monday.

In the US, DST starts on March 14th. This will move the meeting times for those outside the US for P802.3cy. Please check the 802.3 calendar carefully for meeting times as different meeting times may be shifted for different participants, depending upon the time zone they are based on.

Thanks for the work everyone is doing.

You can now download the ics file to add all 802.3meetings to your Outlook or other non-Google calendar.

Meeting adjourned at 11:17 AM ET.

Attendees (snapshot of participants in meeting, email)

| First | Last | Affiliation |
|-----------|------------------|--|
| | | |
| Brett | McClellan | Marvell |
| Christian | Neulinger | MD Elektronik |
| Dan | Kennefick | Daikin America |
| David | Law | HPE |
| Emilio | Cuesta | TE Connectivity |
| Eric | DiBiaso | TE Connectivity |
| Erwin | Köependörfer | Leoni Kabel GmbH |
| George | Zimmerman | CME Consulting / ADI, APL Group, Cisco Systems, CommScope, Marvell, SenTekSe |
| German | Feyh | Broadcom |
| Harsh | Patel | Molex |
| Haysam | Kadry | Ford |
| Hossein | Sedarat | Ethernovia |
| Jim | Graba | Broadcom |
| Jonathan | Silvano de Sousa | GG - Austria |
| Kambiz | Vakilian | Broadcom |
| Louise | Yi | FIT |
| Makoto | Nariya | Sony |
| Michael | Reinhard | SEI ANTech |
| Mike | Tu | Broadcom |
| Natalie | Wienckowski | General Motors |
| Nobuyasu | Araki | Yazaki |
| Olaf | Grau | Robert Bosch GmbH |
| Olindo | Savi | Hubbell |
| Peter | Wu | Marvell |
| Ragnar | Jonsson | Marvell |
| Rich | Boyer | Aptiv |
| Ryan | Petrarca | TDK |

| First | Last | Affiliation |
|--------------|-------------|--|
| Shaowu | Huang | Marvell |
| Stefan | Gianordoli | GG Group |
| Steve | Carlson | High Speed Design, Robert Bosch GmbH, Ethernovia |
| Sujan | Pandey | Huawei |
| Taiji | Kondo | MegaChips |
| Terry | Little | Foxconn Interconnect Technology |
| Thomas | Müller | Rosenberger |
| Tom | Souvignier | Broadcom |
| Toshihiro | Ichimaru | Sumitomo |
| Yoshihiro | Niihara | Fujikura Ltd. |
| | | |
| TOTAL | 37 | Attendees |

Presenters (36)

- Boyer, Rich - External Network
- 👤 Brett McClellan (Marvell) Guest
- 👤 Christian Neuling - MD Elektronik Guest
- 👤 Dan Kennefick Guest
- 👤 Emilio Cuesta (TE Connectivity) Guest
- 👤 Eric DiBiaso - TE Guest
- 👤 Erwin Koeppendoerfer; Leoni Kabel GmbH Guest
- 👤 George Zimmerman (CME Cnsltng/ADI,...
- 👤 German Feyh (Broadcom) Guest
- 🕒 Grau Olaf (XC/EKE1)
- 👤 Haysam M. Kadry [Ford] Guest
- 👤 Hossein Sedarat (Ethernovia) Guest
- 👤 Jim Graba (Broadcom) Guest
- 👤 Kambiz Vakilian(Broadcom) Guest
- 👤 Louise Yi (FIT) Guest
- 👤 Makoto Nariya (Sony) Guest
- 👤 Michael Reinhard - SEI ANTech Guest
- 👤 Mike Tu (Broadcom) Guest
- Natalie A. Wienckowski
- 👤 Nobuyasu Araki YAZAKI Guest
- 👤 Olindo Savi [Hubbell] Guest
- 👤 Patel, Harsh Guest
- 👤 Peter Wu, Marvell Guest
- 👤 Ragnar Jonsson (Marvell) Guest
- 👤 Ryan Petrarca (TDK) Guest
- 👤 Shaowu Huang (Marvell) Guest
- 👤 Shaowu Huang (Marvell) Guest
- 👤 Stefan Gianordoli, GG Group Guest
- 👤 Steve Carlson (HSD, Bosch, Ethernovia) Guest
- 👤 Sujan Pandey (Huawei) Guest
- 👤 Taiji Kondo, MegaChips Guest
- 👤 Terry Little (FIT) Guest
- 👤 Thomas Mueller (Rosenberger) Guest
- 👤 Tom Souvignier (Broadcom) Guest
- 👤 Toshihiro Ichimaru (Sumitomo) Guest

👤 Yoshihiro Niihara - Fujikura Ltd.

Jonathan Silvano de Sousa (GG - AUSTRIA)

