

# Minutes IEEE P802.3ch Multigig Automotive Ethernet PHY TF AdHoc meeting April 18, 2018

Prepared by George Zimmerman

## Proposed Agenda:

1. Agenda/Admin: George Zimmerman, agenda\_3chah\_01\_041618.pdf
2. SG Chair's comments: no presentation (Natalie Wienckowski for Steve Carlson, who was not present)
3. Presentations:
  - a. Eric DiBiaso, Bert Bergner (presenting), Chris Mandel, "High Speed Channel Modeling and Analysis – Part 2" , TE Connectivity
4. Discussion & Next steps – All

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

## Agenda/Admin George Zimmerman acting as ad hoc chair:

Meeting began at 7:05am PT.

## Introductions & Affiliations.

### Presented file: [agenda 3chah 01 041618.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 7:23AM 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/reflecto.html>. If you cannot subscribe to the reflector for some reason, and need additional assistance please contact the Task Force chair.

## Chair's Comments – Natalie Wienckowski for Steve Carlson

Natalie Wienckowski, on behalf of Steve Carlson, Chair of the IEEE P802.3ch Task Force reminded the group that the instructions for presenters had been updated to move up the required dates for submission of presentations – and presentation requests are due May 3, with initial presentations May 7. This based on prior experience and Task Force members are encouraged to take these updated deadlines seriously.

Additionally Natalie reviewed the 'to do' spreadsheet, listing parts of the draft to be completed. The spreadsheet was updated and uploaded after the meeting.

## Presentations/Discussion:

**Presentation: [High Speed Channel Modeling and Analysis – Part 2](#), Eric DiBiaso, Bert Bergner (presenting), and Chris Mandel, TE Connectivity.**

The presenter reviewed simulation results for return loss and insertion loss based on 24 AWG cabling for reaches beyond 10m and based on 3 different connector design tolerances. There were questions as to why we were considering larger gauge copper prior to PHY studies. The results reviewed two substantially different 26 AWG constructions (SPP vs STP) with different return loss profiles - there were questions regarding the construction of the 24 AWG cabling (to be answered later). The results showed substantial dependence of high frequency return loss on the connector topology used. The presenter suggested that the high frequency return loss violations were dominated by the board-end connector (the MDI connector) – there was some discussion of de-embedding this from the link segment return loss results.

Additionally, the results suggested relaxing the insertion loss limit based on the usage of 24 AWG, including temperature effects.

Discussion closed with a call for discussion of PHY tradeoffs.

## Closing Business

The next meeting will be May 2 at 7am pacific time.

Meeting closed –8:51am PDT

## Attendees (from Webex + emails)

First	Last	Affiliation
Shaziah	A	GM
Dale	Amason	NXP
Jim	Bauer	Marvell
Bert	Bergner	TE
Mark	Bohm	Microchip
Youssef	Bouri	Aptiv
Stefan	Buntz	Daimler
Mabud	Choudhury	OFS
Eric	DiBiaso	TE
Marc	Dupuis	WebIndustries
ZHINENG	FAN	Amphenol
German	Feyh	Broadcom
Matthias	Fritsche	Harting
Mike	Gardner	Molex
Claude	Gauthier	NXP
Amrit	Gopal	Ford
Yasuhiro	Hyakutake	Adamant
Venkat	Iyer	Microchip

Haysam	Kadry	Ford
Taiji	Kondo	Megachips
Christian	Mandel	TE
Larry	Matola	Aptiv
Brett	McClellan	Marvell
Wes	Mir	Aptiv
Doug	Oliver	Ford
Sujan	Pandey	NXP
Harsh	Patel	Molex
Damien	QUENSON	Acome
Vimalli	Raman	Yazaki-Europe
Thomas	Reinders	Aptiv
Litsa	Rubino	Aptiv
Masood	Shariff	Commscope
Tom	Souvignier	Broadcom
Yves	Stricot	Aptiv
Geoff	Thompson	GraCaSI/Independent
Giuseppe	Tofanicchio	ST
Mike	Tu	broadcom
Natalie	Wienckowski	GM
James	Withey	Fluke Networks
Peter	Wu	Marvell
Jens	Wülfing	TE
Kent	Younglove	Yazaki-US
John	Yurtin	Aptiv
Conrad	Zerna	Fraunhofer IIS
George	Zimmerman	CME Consulting, Inc./ADI, Aquantia,
Helge	Zinner	Continental
TOTAL	46	Attendees