# Minutes IEEE P802.3ch Multigig Automotive Ethernet PHY TF AdHoc meeting October 4, 2017

Prepared by Natalie Wienckoski and George Zimmerman

#### **Proposed Agenda:**

- 1. Agenda/Admin: George Zimmerman, agenda\_3chah\_01a\_100417.pdf
- 2. SG Chair's comments: Steve Carlson, no presentation
- 3. Presentations:
  - a. Measurement of Coupling Attenuation for NGAUTO Eric DiBiaso & Bert Bergner, TE Connectivity
  - b. 802.3ch channel measurement results (update) Thomas Mueller, Rosenberger
  - c. Header Connectors: How to Consider in NGAUTO 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 7:00am PT.

#### **Introductions & Affiliations.**

### Presented file: agenda 3chah 01a 100417.pdf

- 1. Reviewed the Attendance information related to the ad hoc.
- 2. Displayed the Participation slide and reviewed it.
- 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 <a href="http://www.ieee802.org/3/ch/reflector.html">http://www.ieee802.org/3/ch/reflector.html</a>. 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 was unavailable for this call due to a conflict which came up shortly before the meeting.

# Presentation: Measurement of Coupling Attenuation for NGAUTO – Eric DiBiaso & Bert Bergner, TE Connectivity

The presenter discussed method for measuring coupling attenuation of Shielded Differential Pairs. Testing will be done with the setup proposed on Slide 4 without the use of the inner tube. Testing will be done with both 1 and 3 m tubes, as shown on slide 5, without the inner tube.

Additional discussions are needed to determine if the data should be normalized to 150 ohms or not.

# Presentation: 802.3ch channel measurement results (update) – Thomas Mueller, Rosenberger

The presenter shared channel measurements for Shielded Differential Pair cable and Coax cable. If PHY vendors are interested in the Touchstone files or samples, they should contact Thomas Mueller directly.

# Presentation: Header Connectors: How to Consider in NGAUTO - Natalie Wienckowski, GM North America

MDI is between the header connector and the end connector.

Look at 802.3bq early meetings for how they dealt with the header connector. George will send out links for specific presentations to look at.

Other potential parameters to consider for the MDI: Coupling attenuation,

Can use simulation to see the impact of connecting the shield to the PCB in different ways.

Should a PCB be used with the header connector measurements?

The header connector and PCB are not the same for all applications. A standard connector, like the RJ45, will not be used.

Should we measure the entire "harness" with PCB connections or should we measure each component individually?

#### **Additional Item:**

A meeting will be held on October 9<sup>th</sup> to discuss harness, cable and connector, measurement options and methods. Email Natalie if you would like to attend.

#### **Closing Business**

Next meeting scheduled for 10/18 – subject to contributions.

Meeting closed -9:18 am PT

## **Attendees (from Webex + emails)**

First	Last	Affiliation
Franz	Aletsee	hs-augsburg
Dale	Amason	nxp
Amir	Bar-Niv	aquantia
Bert	Bergner	TE Connectivity
Mark	Bohm	microchip
Rich	Boyer	delphi
David	Brandt	Rockwell Automation
Phillip	Brownlee	tdk
Stefan	Buntz	daimler
Clark	Carty	cisco
Eric	DiBiaso	TE Connectivity
Massad	Eyal	valens
ramin	farjad	aquantia
Zeph	Freeman	microchip
Amrit	Gopal	ford
Yasuhiro	Hyakutake	Adamant Co., Ltd
Dalibor	Ignjatovic	acome.fr
Matthias	Jaenecke	yazaki-europe
Evan	Jones	molex
Peter	Jones	cisco
Haysam	Kadry	ford
Michael	Kaindl	bmw
Tomohiro	Kikuta	Adamant Co., Ltd
David	Law	ieee.org
Juergen	Mandel	delphi
Kirsten	Matheus	bmw
Larry	Matola	delphi
Brett	McClellan	marvell
Wes	Mir	delphi
Thomas	Müller	rosenberger
Henry	Muyshondt	microchip
Douglas	Oliver	ford
Harsh	Patel	molex
Rainer	Pöhmerer	leoni
Vimalli	Raman	yazaki-europe
Thomas	Reinders	delphi
Litsa	Rubino	delphi
Hossein	Sedarat	aquantia
Mehmet	Tazebay	broadcom
Geoff	Thompson	Independent
Alexander	Umnov	corning
Min	Wang	waymo

Christoph	Wechsler	audi
Natalie	Wienckowski	gm
Daniel	Wiesmayer	DRÄXLMAIER Group
Peter	Wu	marvell
Kent	Younglove	yazaki
George	Zimmerman	CME Consulting
TOTAL	49	Attendees