

Motions and Straw Polls

IEEE P802.3ch Multi-Gig Automotive Ethernet Task Force

Steve Carlson, Chair

High Speed Design, Inc., Robert Bosch, Marvell

San Diego, CA USA July 11-12, 2018

Motion #1

- **Move to approve the agenda as shown in [agenda_3ch_01_0718.pdf](#)**
- **M: Bob Grow**
- **S: Thomas Hogenmueller**
- **Approved by voice without opposition (Procedural > 50%)**
- **Motion Passes**

Motion #2

- **Move to approve the minutes of the May 2018 IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY Task Force Meeting.**
- **M: Natalie Wienckowski**
- **S: Mike Gardner**
- **Approved by voice without opposition (Procedural > 50%)**
- **Motion Passes**

Motion #3

- **Move to confirm minutes for ad hocs on 5/30, 6/13, and 6/27/18 as posted.**
- **M: George Zimmerman**
- **S: Thomas Hogenmueller**
- **Approved by voice without opposition (Procedural > 50%)**
- **Motion Passes**

Motion #4

- Move to adopt PAM4 for 2.5 Gb/s, 5.0 Gb/s and 10 Gb/s.
- M: Gerrit Den Besten
- S: Tom Souvignier
- (Technical $\geq 75\%$)
- Y: 31 N: 7 A: 10
- Motion Passes

Motion#5

- Move to adopt a new Insertion Loss Limit given by the equation:

$$\text{Insertion Loss}(f) \leq 0.002 * f + 0.45 * \sqrt{f} + 1/\sqrt{f} \quad (\text{dB})$$

where

f is the frequency in MHz: $5 \leq f \leq 3000$

as shown by the “black curve” on page 7 of DiBiaso_3ch_01_0718.pdf for all 3 speeds

- M: Eric DiBiaso
- S: Natalie Wienckowski
- (Technical $\geq 75\%$)
- Y: 36 N: 2 A: 10
- Motion Passes

Motion#6

- Move to add 149.7.1.2 and 150.7.1.2 Differential characteristic impedance with the text: The nominal differential characteristic impedance of the link segment is 100 Ω .
- Move other 149.7.1.x sections down as appropriate.
- M: Natalie Wienckowski
- S: Gerrit den Besten
- (Technical \geq 75%)
- Y: 40 N: 0 A: 3
- Motion Passes

Motion #7

- Move to adopt “Link Synchronization” into Clause 149 and Clause 150 according to page 6 of “tu_3ch_02_0718.pdf”.
- M: Mehmet Tazebay
- S: Michael Tu
- Y: 31 N: 1 A: 26
- Motion Passes (Technical $\geq 75\%$)

Motion #8

- **The line Baud rate for 10 Gb/s shall be 5.625 GBaud. The 5 Gb/s shall be $\frac{1}{2}$ this rate and the 2.5 Gb/s shall be $\frac{1}{4}$ this rate.**
- **M: William Lo**
- **S: George Zimmerman**
- **(Technical $\geq 75\%$)**
- **Y: 37 N: 1 A: 7**
- **Motion Passes**

Motion #9

- Move to add OAM Channel to NGAUTO:
Clause 45 registers, Clause 149 and 150 OAM Subsections.
- M: Natalie Wienckowski
- S: Kirsten Matheus
- (Technical $\geq 75\%$)
- Y: 34 N: 0 A: 18
- Motion Passes

Motion #10

- Select FEC to be Reed-Solomon with 10-bit RS symbol, plus interleaving if needed.
- M: Ramin Farjadrad
- S: Sujan Pandey
- (Technical $\geq 75\%$)
- Y: 44 N: 1 A: 8
- Motion Passes

Motion #11

- Move to instruct the Chief Editor to create D0.5 from D0.4.1 and adopted baseline from motions in the July plenary.
- M: Natalie Wienckowski
- S: George Zimmerman
- (Technical $\geq 75\%$)
- Approved by voice without opposition
- Motion Passes

Motion #12

- Adjourn the meeting:
- M: Sujan Pandey
- S: Brett McClellan
- Approved by voice without opposition

Straw Polls

Straw Poll #1

- Chicago Rules
- At 10 Gb/s I would support a modulation of PAM:
 - A: 4
 - B: 5
 - C: 6
- A: 36 B: 8 C: 6

Straw Poll #2

- Chicago Rules
- At 2.5 Gb/s I would support a modulation of PAM:
 - A: 2
 - B: 3
 - C: 4
 - D: 5
 - E: 6
 - F: 8
- A: 20 B: 5 C: 26 D: 6 E: 2 F: 7

Straw Poll #3

- Chicago Rules
- At 2.5 Gb/s I would support a modulation of PAM:
 - A: 2
 - B: 4
 - A: 15 B: 27
- Pick One:
 - A: 15 B: 22

Straw Poll #4

- Chicago Rules
- At 2.5 Gb/s I would oppose a modulation of PAM:
- A: 2
- B: 4
- A: 15 B: 0

Straw Poll #5

- Chicago Rules
- At 10 Gb/s I would oppose a modulation of PAM:
 - A: 4
 - B: 5
 - C: 6
 - A: 0 B: 7 C: 13

Straw Poll #6

- Is anyone concerned at 10 Gb/s the burst length to be protected is greater than 120 nS?
- Y: 2
- N: 9

Straw Poll #7

- Pick one
- Is anyone concerned at 10 Gb/s the burst length to be protected is greater than 120 nS?
- Y: 1
- N: 8
- I need more information: 26
- I'm not going to have an opinion: 18

Straw Poll #8

- The line Baud rate for 10 Gb/s shall be 5.625 GBaud.
- Y: 31
- N: 0

Straw Poll #9

- Chicago Rules
- Which encoder do you prefer
 - A) 512/513
 - B) 256/257
 - C) 128/129
 - D) 64/65
- A: 6 B: 3 C: 15 D: 19

Straw Poll #10

- Pick One
- Which encoder do you prefer
 - C) 128/129
 - D) 64/65
- C: 11 D: 15

Straw Poll #11

- Should the insertion loss limit be adapted based on the outcome of the OEM poll done by Natalie?
- Y: 24
- N: 4

Straw Poll #12

- Is there interest to explore a looser insertion loss limit for 2.5Gbps to allow lower cost cabling?
- Y: 15
- N: 5

Straw Poll #13

- Is there interest to continue to explore options to address highly asymmetrical traffic applications more efficiently?
- Y: 32
- N: 1

Straw Poll #14

- Assuming no changes required to the existing PAR, should we add optional mode to support asymmetric data transmission?
- Y: 43
- N: 0

Straw Poll #15

- Should we add OAM Channel to NGAUTO:
Clause 45 registers, Clause 149 and 150 OAM
Subsections?
- Y: 30
- N: 2

Straw Poll #16

Attendance:

- Attend September 2018 interim, Dell EMC, Spokane, WA, USA:
 - Y: 25 N: 10 M: 19
- Attend November 2018 802 Bangkok, Thailand plenary:
 - Y: 27 N: 8 M: 21
- Room count: 63

Straw Poll #17

- Select FEC to be Reed-Solomon with 10-bit RS symbol plus interleaving, if needed.
- Y: 38
- N: 0

Thank You!