

# IEEE P802.3ck 100 Gb/s, 200 Gb/s and 400 Gb/s Electrical Interfaces Task Force

Minutes for Telephonic meetings for July-August 2021 D2.1 comment resolution:  
July 21, July 27, July 28, August 9, August 10, August 11, August 18, 2021  
Online Meeting

Prepared by Kent Lusted and Beth Kochuparambil

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# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – July 21, 2021

*Prepared by Beth Kochuparambil*

Proposed Agenda:

- Approval of the Agenda
- IEEE Patent Policy reminder
- IEEE Copyright reminder
- IEEE Participation Requirements reminder
- Task Force Status
- Chief Editor's Report
- D2.1 Comment Agenda
- Comment Resolution
  - Cross clause comments, excluding 29, 75, 76
  - See slide 6 of [https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_01\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_01_0721.pdf)

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair. (Note: all times are Pacific time zone unless otherwise indicated)

Meeting began with the agenda presentation  
[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_01\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_01_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Chair tabled approval of Ad Hoc minutes to next week and noted the comment resolution agenda was just a different way to write what was sent via email (yet essentially the same). She asked if there was objection to the shown agenda. No one responded.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded. Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

Chair noted that editors are using a “bucket” for comments deemed non-controversial. The bucket proposed responses would be adopted with motions later in the meeting series.

It was noted that comments currently collected in the “bucket” are to be reviewed by participants and if any of them are to be taken out of the bucket, participants are to notify leadership by 25 July, 2021. See:

[https://www.ieee802.org/3/ck/comments/draft2p1/8023ck\\_D2p1\\_comments\\_proposed\\_bucket1.pdf](https://www.ieee802.org/3/ck/comments/draft2p1/8023ck_D2p1_comments_proposed_bucket1.pdf)

Reviewed the Draft 2.1 Telephonic interim meeting series details. Addressing late comments is subject to task force approval after all on-time comments are addressed

Chair noted that several presentations were received late and thus indicated on the website. She asked if there was opposition to seeing melliz\_01a and ran\_03 related to AC common mode noise. No one responded.

Beth also noted that an update of cc discussion slides (brown\_01a) was posted for today’s discussion.

Comment resolution began.

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 3-5 (overview of AC common mode)

### **Presentation #1:**

“Measuring Common Mode Voltage”, Rich Mellitz

See: [https://www.ieee802.org/3/ck/public/21\\_07/mellitz\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/mellitz_3ck_01a_0721.pdf)

Interest was expressed in direction of method; further work was encouraged.

### **Presentation #2:**

“Module AC common mode tolerance”, Adee Ran

See: [https://www.ieee802.org/3/ck/public/21\\_07/ran\\_3ck\\_03\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/ran_3ck_03_0721.pdf)

- Hesitation expressed due to Correlated CM not being included

### **Straw Poll #1:**

I would support the AC CM voltage test methodology in Comment #123 and the related presentation mellitz\_3ck\_01a\_0721?

- A. Yes
- B. No
- C. Need more information
- D. Abstain

Results: A: 18, B: 6, C: 12, D: 3

(see comment #123)

### **Straw Poll #2:**

I support the AC CM voltage test methodology in Comment #123 and the related presentation mellitz\_3ck\_01a\_0721:

- A. Yes
- B. No

Results: A: 15, B: 16

(see comment #123)

### **Straw Poll #3:**

### **Straw Poll #4:**

To address comments #46 and #121, for the module output and host output AC CM noise (max), I would support: (Straw Poll 3 - pick 1; Straw Poll 4 - Chicago Rule)

- A. no change
- B. change to 25 mV
- C. change to 30 mV

SP3 - Pick 1 - Results: A: 12, B: 13, C: 9

SP4 - Chicago Rule - Results: A: 15, B: 25, C: 21

(see comment #46)

Given remaining time and discussion needed, comments 51&55 are deferred to next week

**Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 9-10

Reminder to record attendance on IMAT.

Chair reminded the task force comment resolution will continue Tuesday and Wednesday, July 27 & 28, 7-10am PDT and to watch the reflector for proposed comment agenda. She also reminded participants about the working group meeting July 22nd.

Meeting broke around 10:00am PDT.

# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – July 27, 2021

*Prepared by Beth Kochuparambil*

Proposed Agenda:

- Approval of the Agenda
- Approval of July 14 Ad Hoc minutes
- IEEE Patent Policy reminder
- IEEE Copyright reminder
- IEEE Participation Requirements reminder
- Task Force Status
- D2.1 Comment Agenda
- Comment Resolution
  - Bucket 1
  - 120G comments
  - See slide 6 of [https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_02a_0721.pdf)

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair.  
(Note: all times are Pacific time zone unless otherwise indicated)

Meeting began with the agenda presentation

[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_02a_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Chair noted that due to PTO and sickness minutes from last week were not yet posted. She would get them online as soon as possible. She also noted the correction of the link for the comment agenda being \_02a version (not \_02 version as emailed). The chief editor's report was also stricken. She asked if there was objection to the modified agenda. No one responded.



Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded. Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

It was noted that comments currently collected in the “bucket” were to be reviewed by participants and if any of them are to be taken out of the bucket, participants were to notify leadership by 25 July, 2021. See:

[https://www.ieee802.org/3/ck/comments/draft2p1/8023ck\\_D2p1\\_comments\\_proposed\\_bucket1.pdf](https://www.ieee802.org/3/ck/comments/draft2p1/8023ck_D2p1_comments_proposed_bucket1.pdf)

Chair reviewed the Draft 2.1 Telephonic interim meeting series and estimated recirculation ballot schedule.

Chair noted that several presentations were received late and thus indicated on the website. She asked if there was opposition to seeing ran\_01a and ran\_02 related to annex 120G comments. No one responded.

Comment resolution began.

Chair thanked those who reviewed “bucket1” comments. Several requests were received to pull comments from this bucket.

**Motion #1:**

Move to adopt the proposed responses in 8023ck\_D2p1\_comments\_proposed\_bucket1.pdf, with the exception of comments 17, 22, 47, 60, 65, 67, 69, 70, 77.

M: Mike Dudek

S: Piers Dawe

Technical (>= 75%)

Motion passed by unanimous consent.

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02_0721.pdf)

See slides 2-4 (overview of EH/VEC measurement mask/window,)

### **Presentation #3:**

“Phase-weighted distribution for calculating C2M eye parameters”, Adee Ran

See: [https://www.ieee802.org/3/ck/public/21\\_07/ran\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/ran_3ck_01a_0721.pdf)

Clarifying questions on benefits and methodology.

### **Straw Poll #5:**

### **Straw Poll #6:**

For the eye opening method in 120G.5.2, I would support: (Straw Poll 5 - Chicago Rule; Straw Poll 6 - Pick 1)

- A. a weighted method similar to comment #39 and ran\_01a
- B. a multi-sided eye mask similar to comment #106
- C. no change
- D. need more information

SP5 - Chicago Rule - Results: A: 25, B: 15, C: 13, D: 11

SP6 - Pick 1 - Results: A: 15, B: 8, C: 11, D: 8

(see comment #39)

It was noted that this straw poll is on method change, NOT on the values.

### **Straw Poll #7:**

I support resolving comment #39 using the proposal in ran\_01a (slide 9) except with standard deviation ( $\sigma_r$ ) of 0.02 UI.

- E. Yes
- F. No

Results: A: 21, B: 11

(see comment #39)

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02_0721.pdf)

See slides 6-10

**Presentation #4:**

“Validating C2M VEC and VEO Limits at TP1a/TP4”, Ali Ghiasi

See: [https://www.ieee802.org/3/ck/public/21\\_07/ghiasi\\_3ck\\_01\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/ghiasi_3ck_01_0721.pdf)

Slide 7 & 8

Ali Ghiasi withdrew other VEC/VEO value comments 61, 59, 66, 68 given that further evaluation is needed given methodology change just adopted in comment #39.

**Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02_0721.pdf)

See slides 5 (reference receiver g\_DC values)

Chair reminded the task force comment resolution will continue tomorrow/Wednesday July 28, 2021, 7-10am PDT and will continue 120G comment resolution.

Meeting broke around 10:00am PDT.

# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – July 28, 2021

*Prepared by Beth Kochuparambil*

Continue approved agenda from 27 July

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair. (Note: all times are Pacific time zone unless otherwise indicated)

Beth welcomed attendees.

Meeting began with the agenda presentation:

[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_02a_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded. Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair noted that there was an update to the 120G discussion slides. (brown\_02a)  
Chief Editor, Matt Brown, noted that there is likely to be a bucket2 posted this week.

Chief Editor, Matt Brown, introduced the comment agenda for the meeting:

[https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_02a_0721.pdf)

Comment Resolution resumed.  
Comment resolution resumed.

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02a_0721.pdf)  
See slides 5, 13-16

### **Presentation #5:**

“Validating C2M VEC and VEO Limits at TP1a/TP4”, Adee Ran

See: [https://www.ieee802.org/3/ck/public/21\\_07/ran\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/ran_3ck_02a_0721.pdf)

- There was no objection to seeing the updated presentation “\_02a\_”.
- Presenter noted the removed slides addressed a topic outside the scope of the comment and encouraged that discussion is best suited for future comment rounds
- Discussed various ways to edit the table

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02a_0721.pdf)  
See slides 17-19

There was an update made to slide 19. See:

[https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02b_0721.pdf)

### **Straw Poll #8:**

I support addressing comments #51 and #55 using slide 19 of brown\_3ck\_02b\_0721:

- A. Yes
- B. No

Results: A: 15, B: 12

(see comment #51)

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02a_0721.pdf)  
See slide 21

### **Straw Poll #9:**

To address comment #53, I support implementing the suggested remedy:

- A. Yes

B. No

Results: A: 18, B: 5

(see comment #53)

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_02a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_02a_0721.pdf)

See slide 20-21

Chair noted that prelim minutes and closed comment reports will be posted soon. Comment resolution will resume on Monday-Wednesday, the 9th-11th of August. She also noted that a bucket2 was likely and to watch the reflector for the announcement.

Beth took a show of hands for the week of August 16th, should we need more time for comment resolution.

Meeting broke at ~10:05 a.m.

# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – August 9, 2021

*Prepared by Kent Lusted and Beth Kochuparambil*

Proposed Agenda:

- Approval of the Agenda
- IEEE Patent Policy reminder
- IEEE Copyright reminder
- IEEE Participation Requirements reminder
- Reminder of Ground Rules and Operations
- Task Force Status
- Comment Resolution
  - “Bucket2”
  - CC topics: Np value, transition time
  - 163\*, 162\*
  - remaining CC and 120G
  - See slides 5-9 of [https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_04b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_04b_0721.pdf)
- Late Comments
- Closing Business

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair.  
(Note: all times are Pacific time zone unless otherwise indicated)

Meeting began with the agenda presentation  
[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_04\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_04_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Presented the proposed agenda and noted that the agenda would cover the meetings on 9, 10, and 11 August. Chair asked if there was objection to the shown agenda. No one responded.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded.

Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

Chair announced she would be adding meetings August 18 & 25 for continued comment resolution, if needed, although indicated project schedule impact of using these meetings. She noted that if we address late comments, they would be after all ontime comments.

Chief Editor, Matt Brown, introduced the comment agenda for the meeting:

[https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_04a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_04a_0721.pdf)

Comment Resolution resumed.

**Motion #2:**

Move to adopt the proposed responses in 8023ck\_D2p1\_comments\_proposed\_bucket2.pdf  
with the exception of comments 118, 101, 111, 115, 117, 91, 43

M: Jim Weaver

S: Piers Dawe

Technical (>= 75%)

Motion passed by unanimous consent.

**Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 17-18



## **Presentation #6:**

“Discussion on Np for TX Output and RX Interference Tests”, Mike Dudek

See: [https://www.ieee802.org/3/ck/public/21\\_07/dudek\\_3ck\\_01\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/dudek_3ck_01_0721.pdf)

- This was a review of a presentation given at the July 14 ad hoc.
- Questions clarified the proposal
- Discussed comparison to SNR ISI and previous relevant parameters
- Discussed suggested to specify this parameter as dB rather than a ratio and 120F

## **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 6-7

Matt announced that we'll skip ahead of cross clause topics signal level, ERL Tfx, IL terminology, units for the time being.

## **Consensus Discussion Slides - Matt Brown, Phil Sun, Howard Heck**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 6-7

Chief Editor, Matt, reminded participants of comment resolution status as well as topics of focus at the next meeting. Beth reminded participants that comment resolution would continue the next day, 10 August 2021.

Meeting ended at ~10:00 a.m.

# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – August 10, 2021

*Prepared by Kent Lusted and Beth Kochuparambil*

Continue approved agenda from 09 August.

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair.  
(Note: all times are Pacific time zone unless otherwise indicated)

Beth welcomed attendees.

Meeting began with the agenda presentation:  
[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_04\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_04_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded.  
Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

Chair reminded participants to review late comments as we will make a decision after all on time comments are addressed.

Chief Editor, Matt Brown, reported the status within the comment agenda for the week:  
[https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_04b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_04b_0721.pdf)

Comment Resolution resumed.

**Consensus Discussion Slides - Matt Brown, Phil Sun, Howard Heck**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)  
See slides 6-7

**Consensus Discussion Slides - Howard Heck, Chris DiMinico**

See: [https://www.ieee802.org/3/ck/public/21\\_07/heck\\_3ck\\_01b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/heck_3ck_01b_0721.pdf)  
See slides 2-4

**Presentation #7:**

“Improving the CR loss budget”, Piers Dawe

See: [https://www.ieee802.org/3/ck/public/21\\_07/dawe\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/dawe_3ck_01a_0721.pdf)

- Chair noted that this late presentation was an update from a previously seen ad hoc presentation. She asked if there was objection to seeing this late presentation. No one responded.
- During the presentation, errors were noted on slide16 (text cut off page) & 30 (error) to be updated as 01a

**Straw Poll #10:**

I support P802.3ck specifying multiple CR host types such as in dawe\_3ck\_01\_0721.

- A. Yes
- B. No
- C. Abstain

Results: A:7 , B:24 , C:8

(see comment #92)

**Consensus Discussion Slides - Howard Heck, Chris DiMinico**

See: [https://www.ieee802.org/3/ck/public/21\\_07/heck\\_3ck\\_01b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/heck_3ck_01b_0721.pdf)  
See slides 5-12

The editor for Cable assembly clauses was having audio issues. Matt asked if there was objection to going back to CC comments while technical issues were resolved. No one responded.

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 13

### **Straw Poll #11: (direction)**

I support making the changes proposed in the suggested remedy for comment #100.

- A. Yes
- B. No
- C. Need more information

Results: A:11 , B:8 , C:10

*(see comment #100)*

### **Straw Poll #12: (decision)**

I support making the changes proposed in the suggested remedy for comment #100.

- A. Yes
- B. No

Results: A:16 , B:14

*(see comment #100)*

Beth gave notice to the task force that the meeting on 18 August, 2021 will likely be needed to address on time comments; then the discussion would be needed regarding late comments. She reminded participants that comment resolution will continue the next day, 11 August, 2021.

Meeting broke at ~10:00 a.m.

# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – August 11, 2021

*Prepared by Kent Lusted and Beth Kochuparambil*

Continue approved agenda from 09 August.

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair.  
(Note: all times are Pacific time zone unless otherwise indicated)

Beth welcomed attendees.

Meeting began with the agenda presentation:

[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_04\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_04_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded.  
Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

Chair reminded participants to review late comments as we will make a decision after all on time comments are addressed; likely on the 18th of August.

Chief Editor, Matt Brown. reported the status within the comment agenda for the week:  
[https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_04b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_04b_0721.pdf)

Comment Resolution resumed.

**Consensus Discussion Slides - Howard Heck, Chris DiMinico**

See: [https://www.ieee802.org/3/ck/public/21\\_07/heck\\_3ck\\_01b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/heck_3ck_01b_0721.pdf)  
See slides 13-20

**Presentation #8:**

“MDI Naming and MDI Pin Mapping”, Ali Ghiasi

See: [https://www.ieee802.org/3/ck/public/21\\_07/ghiasi\\_3ck\\_02\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/ghiasi_3ck_02_0721.pdf)

- Questions surrounded clarifying the proposal.
- Chief editor suggested that a clearer proposal (showing the modified table) would be helpful in making a decision.

Next meeting is Wednesday 18 August, 2021. We have 9 on time cross clause and 120G comments to address. We will then discuss if we should address 30 late comments.

Meeting broke at ~10:00 a.m.

# IEEE P802.3ck 100 Gb/s Electrical Lane Task Force – August 18, 2021

*Prepared by Kent Lusted and Beth Kochuparambil*

Proposed Agenda:

- Approval of the Agenda
- IEEE Patent Policy reminder
- IEEE Copyright reminder
- IEEE Participation Requirements reminder
- Reminder of Ground Rules and Operations
- Comment Resolution
  - CC topics: signal level, IL terminology, units
  - 120G topics: test setup figures, pattern table
  - See slide 5 of [https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_07\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_07_0721.pdf)
- Late Comments
- Closing Business

Presentations posted at: [https://www.ieee802.org/3/ck/public/21\\_07/index.html](https://www.ieee802.org/3/ck/public/21_07/index.html)

Meeting began at ~7:00 a.m. Pacific by Beth Kochuparambil, IEEE 802.3ck Task Force Chair.  
(Note: all times are Pacific time zone unless otherwise indicated)

Meeting began with the agenda presentation:

[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_07\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_07_0721.pdf)

Chair reminded participants that Task Force attendance would be taken from the webex logs.

The chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Presented the proposed agenda. It was clarified that the late comments item on the agenda will lead with a discussion of IF we should address the comments. Chair asked if there was objection to the shown agenda. Chair asked if there was objection to the agenda. No one responded.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded. Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

Matt introduced the comment agenda for the meeting:

[https://www.ieee802.org/3/ck/public/21\\_07/comagenda\\_3ck\\_07a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/comagenda_3ck_07a_0721.pdf)

Comment Resolution resumed.

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 11-12

### **Presentation #9:**

“Effect of pattern on Vdiffptp”, Adeo Ran

See: [https://www.ieee802.org/3/ck/public/21\\_07/ran\\_3ck\\_04b\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/ran_3ck_04b_0721.pdf)

- Chair asked if there was objection to seeing an updated presentation “\_04b”. No one objected.
- Clarifying questions on the analysis assumptions and proposed solution.

### **Straw Poll #13: (decision)**

I support closing comment #37 updating 120G.5.1 as follows: "The signal levels are as defined in 120E.3.1.2, with the exception that differential signal voltage are measured with a PRBS31Q (see 120.5.11.2.2) test pattern or a valid 100GBASE-R, 200GBASE-R, or 400GBASE-R signal."

- C. Yes
- D. No

Results: A:10 , B:14

(see comment #37)



Chair reminded the task force of proper decorum and respect for one another.

### **Consensus Discussion Slides - Matt Brown**

See: [https://www.ieee802.org/3/ck/public/21\\_07/brown\\_3ck\\_01a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/brown_3ck_01a_0721.pdf)

See slides 14-15

- Matt summarized the previous ad hoc presentation and discussion.
- The ad hoc presentation was shown briefly:  
[https://www.ieee802.org/3/ck/public/adhoc/july14\\_21/brown\\_3ck\\_adhoc\\_01\\_071421.pdf](https://www.ieee802.org/3/ck/public/adhoc/july14_21/brown_3ck_adhoc_01_071421.pdf)

Chair showed slides 22-25 of an updated agenda deck:

[https://www.ieee802.org/3/ck/public/21\\_07/agenda\\_3ck\\_07a\\_0721.pdf](https://www.ieee802.org/3/ck/public/21_07/agenda_3ck_07a_0721.pdf)

Piers Dawe withdrew 20 late comments (145, 146, 148, 153, 126, 134, 128, 129, 135, 141, 142, 143, 147, 149, 150, 151, 152, 130, 144, and 133)

Chair outlined topics of remaining late comments and suggested a straw poll. Discussion on the straw poll was primarily on procedure and time/meeting impacts. Given multiple negative views expressed, she withdrew the strawpoll and asked if there was objection to closing remaining late comments with proposed responses (reject). No one objected.

### **Motion #3:**

Move that the IEEE P802.3ck Task Force generate Draft 2.2 for WG Recirculation from D2.1 and closed comments.

M: Chris DiMinico

S: Phil Sun

Technical ( $\geq 75\%$ )

Motion passed by unanimous consent. Piers Dawe abstained from this vote.

Beth discussed timeline for liaison communications of draft 2.2 and intends to review offline or in ad hoc setting before bringing them to the Working Group floor.

She also announced that the 25 August meeting is cancelled and thanked all editors and participants for the discussions during Draft 2.1 comment resolution. Ad hocs will be announced via the reflector.

Beth declared the meeting adjourned. The meeting ended at ~9:50 a.m.

## Attendees

Name	Affiliation	Employed by	7/21	7/27	7/28	8/9	8/10	8/11	8/18
Adam Healey	Broadcom	Broadcom	x	x	x	x	x	x	
Adee Ran	Cisco	Cisco	x	x	x	x	x	x	x
Alan Kinningham	I-PEX	I-PEX	x	x	x		x	x	
Alex Haser	Molex	Molex	x	x	x	x	x	x	x
Ali Ghiasi	Ghiasi Quantum/Inphi	Ghiasi Quantum/Inphi	x	x	x	x	x	x	x
Arthur Marris	Cadence	Cadence	x		x				
Ashley Moran	IEEE SA	IEEE SA						x	
Ayal Shoval	Synopsys	Synopsys	x	x	x	x	x	x	x
Ayla Chang	Huawei	Huawei	x						
Beth Kochuparambil	Cisco	Cisco	x	x	x	x	x	x	x
Bo Zhang	Marvell	Marvell	x						
Brandon Gore	Samtec	Samtec	x	x	x				
Bruce Champion	TE Connectivity	TE Connectivity	x		x	x	x	x	x
Burrell Best	Samtec	Samtec				x			
Champion (Chien Ping) Kao	Cornelis Networks	Cornelis Networks	x	x	x	x	x	x	x
Chan Chih (David) Chen	Applied Optoelectronics	Applied Optoelectronics	x	x	x			x	
Charles Su	Huawei	Huawei	x						
Chris DiMinico	PHY-SI	PHY-SI	x	x	x	x	x	x	x
Christian Orlando	IEEE-SA	IEEE-SA					x		
Christy Bahn	IEEE-SA	IEEE-SA							x
Curtis Donahue	Rohde & Schwarz	Rohde & Schwarz	x	x					
Daniel Perez	IEEE-SA	IEEE-SA	x		x				
Dave Estes	Spirent	Spirent	x						
David Cassan	Alphawave IP	Alphawave IP	x		x		x		x
David Malicoat	Senko	Independent	x	x	x		x	x	x
David Piehler	Dell EMC	Dell EMC	x						
Ed Frlan	Semtech	Semtech	x	x					

Ed Ulrichs	Intel	Intel	x			x		x	
Enis Akbaba	Maxim Integrated	Maxim Integrated	x	x	x	x		x	x
Eugene Opsasnick	Broadcom	Broadcom	x	x	x	x	x	x	x
Fang He	Zhaolong Interconnect	Zhaolong Interconnect						x	
Frank Chang	Source Photonics	Source Photonics	x	x		x		x	x
Gary Nicholl	Cisco	Cisco			x			x	x
Geoff Zhang	Xilinx	Xilinx	x	x	x	x	x	x	
George Zimmerman	ADI, APL Group, Cisco, CommScope, Marvell, SenTekSe	CME Consulting						x	
Hai-Feng Liu	HG Genuine	HG Genuine	x						
Hansel Dsilva	Achronix	Achronix	x						
Hessam Mohajeri	Cadence	Cadence		x		x	x	x	
Hormoz Djahanshahi	Microchip	Microchip	x	x	x		x	x	x
Hossein Sedarat	Ethernovia	Ethernovia	x						
Howard Heck	Intel	Intel	x	x	x	x	x	x	x
Inho Kim	Max Linear	Max Linear	x		x				
Istvan BakroNagy	EFFECT Photonics	EFFECT Photonics	x	x	x		x		
James Weaver	Arista	Arista	x	x	x	x	x	x	
James Withey	Fluke	Fluke					x		
James Young	Commscope	Commscope			x		x		
Jane Lim	Cisco	Cisco	x	x	x		x		x
Jeff Chen	Source Photonics	Source Photonics							x
Jeff Slavick	Broadcom	Broadcom	x		x		x	x	
Jeffery Maki	Juniper	Juniper						x	x
Jerry Pepper	Keysight	Keysight	x						
Jinhua Chen	Luxshare ICT	Luxshare ICT	x	x	x				
Jodi Haasz	IEEE SA	IEEE SA	x	x		x			
Joel Goergen	Cisco Systems, Inc.	Cisco Systems, Inc.	x						
John Calvin	Keysight	Keysight	x	x	x	x	x	x	x
John Ewen	Marvell	Marvell	x	x	x	x	x	x	x
John Kamino	OFS Optics	OFS Optics	x						
John Yurtin	Aptiv	Aptiv			x				
Joshua Kim	Hirose	Hirose	x	x	x	x	x	x	

Juan Martinez	IBM	IBM				x	x		
Kae Dube	UNH-IOL	UNH-IOL	x						
Kan Tan	Tektronix	Tektronix	x						
Karl Bois	TE Connectivity	TE Connectivity	x	x					
Kishore Kota	Marvell	Marvell	x						
Kumaran Krishnasamy	Broadcom	Broadcom	x	x	x	x	x	x	x
Liav Ben-Artzi	Marvell	Marvell	x	x	x	x	x	x	x
Lokesh Kabra	Synopsys	Synopsys	x						
Luis Boluna	Keysight	Keysight					x	x	
Lu-Vong Phan	ZT Systems	ZT Systems	x		x		x	x	
Mabud Choudhury	OFS	OFS	x						
Marco Mazzini	Cisco	Cisco	x						
Mark Gustlin	Cisco	Cisco	x			x			
Mark Kimber	Semtech	Semtech	x	x	x	x	x	x	x
Mark Nowell	Cisco	Cisco	x						
Matt Brown	Huawei	Huawei	x	x	x	x	x	x	x
Mau-Lin Wu	Mediatek	Mediatek	x	x	x	x	x	x	x
Mike Dudek	Marvell	Marvell	x	x	x	x	x	x	
Mike Klempa	Amphenol	Amphenol					x		
Mike Li	Intel	Intel	x	x	x	x	x	x	x
Nathan Tracy	TE Connectivity	TE Connectivity		x	x	x	x	x	x
Patricia Roder	IEEE	IEEE					x		
Patrick Casher	Foxconn Interconnect	Foxconn Interconnect	x	x	x		x	x	
Patrick Cui	Source Photonics	Source Photonics						x	x
Paul Brooks	Viavi	Viavi	x	x		x	x		
Pavel Zivny	Tektronix	Tektronix	x	x	x			x	
Phil Sun	Credo	Credo	x	x	x	x	x	x	x
Piers Dawe	NVIDIA	NVIDIA	x	x	x	x	x	x	x
Pirooz Tooyserkani	Cisco	Cisco	x	x	x	x	x	x	x
Priyank Shukla	Synopsys	Synopsys	x	x	x				
Qingya She	Fujitsu	Fujitsu		x	x				
Rajmohan Hegde	Broadcom	Broadcom	x	x	x				
Rich Mellitz	Samtec	Samtec	x	x	x	x	x	x	x
Rick Rabinovich	Keysight	Keysight	x	x	x	x	x	x	x
Sam Kocsis	Amphenol	Amphenol	x	x	x	x	x	x	x
Scott Irwin	Mosys	Mosys				x			

Scott Sommers	Molex	Molex	x	x	x	x	x	x	x
Scott Walley	Max Linear	Max Linear	x	x	x	x	x	x	x
Shayan Shahramian	Alphawave	Alphawave	x	x	x	x	x	x	x
Sheng Zhang	Source Photonics	Source Photonics		x	x		x		x
SJ Yu	Foxconn Interconnect	Foxconn Interconnect			x				
Stephen Didde	Keysight	Keysight	x	x	x	x	x	x	x
Steve Sekel	Wilder Tech	Wilder Tech	x	x	x	x	x	x	x
Steve Trowbridge	Nokia	Nokia						x	x
Tao Hu	Marvell	Marvell	x			x	x		x
Ted Sprague	Infinera	Infinera	x						
Terry Little	Foxconn Interconnect	Foxconn Interconnect	x	x	x			x	
Tobey PR Li	Mediatek	Mediatek	x	x	x	x	x	x	x
Tom Palkert	Macom/Samtec	Macom/Samtec	x	x	x		x	x	
Tom Thompson	IEEE SA	IEEE SA							x
Toshiaki Sakai	Socionext	Socionext	x	x	x	x	x	x	x
Upen Kareti	Cisco	Cisco	x	x	x	x	x	x	
Varun Garg	Keysight	Keysight	x				x		
Viet Tran	Keysight	Keysight	x						
Xiang He	Huawei	Huawei	x	x					
Yasuo Hidaka	Credo	Credo	x			x	x	x	x
Yi Sun	OFS Optics	OFS Optics	x						
Yong Kim	Axonne	Axonne	x						
Yu (Helen) Xu	Huawei	Huawei	x						