

# IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force Interim Meeting

Approved Meeting Minutes, prepared by John D'Ambrosia, Mark Nowell, and Kent Lusted

## 21 September 2023

September 2023 interim

IEEE P802.3dj Task Force May 2023 Meeting Task Force Page - [https://www.ieee802.org/3/dj/public/23\\_0921/index.html](https://www.ieee802.org/3/dj/public/23_0921/index.html)

Session called to order at 9:00 a.m. eastern (all times eastern) by John D'Ambrosia, Chair of P802.3cw, P802.3dj and P802.3df Task Forces.

Chair reminded participants to declare their name and affiliation in the online meeting tool. Failure to declare would result in expulsion from the meeting.

Chair thanked participants that traveled to the September 2023 interim meeting in Brazil last week.

Chair noted that links to IMAT, DVL, and the IEEE policies were added to the meeting webpage for reference.

Chair noted that he expected to use DVL for straw poll and motions during the meeting.

### Agenda:

Title	<b>Agenda and General Information</b>
Presenters	John D'Ambrosia
URL	<a href="https://www.ieee802.org/3/dj/public/23_0921/agenda_3dj_b_230921.pdf">https://www.ieee802.org/3/dj/public/23_0921/agenda_3dj_b_230921.pdf</a>

Chair welcomed everyone to the meeting.

Chair noted that he received an updated contribution from Kent Lusted with additional technical information. He asked if there was objection to hearing the updated presentation. No one responded.

Chair reminded participants to sign into IMAT for Task Force and IEEE 802.3 Working Group attendance.

Chair reviewed the agenda (Slide #3) and noted presentation order. Chair noted that individuals should check the webpage for the latest version of each presentation. Chair noted that all of the presentation times were subject to change.

Chair asked if there were any objections to the agenda. There were none. The agenda was considered approved by unanimous consent.

Chair reviewed meeting decorum. (See Slide #3) Chair asked if there were any members of the press present. No one responded.

Chair reviewed attendance. (See Slide #4) Chair noted that Task Force meeting attendance would be through the IEEE Meeting Attendance (IMAT).

Chair reviewed the goals for the session (see slide #10).

Chair reviewed ground rules. (See Slide #11)

Chair reviewed the current state of the Task Force. (See Slide #8.)

Chair reviewed voting in the task force. (See Slide #9) Chair noted that the straw polls would use the online Zoom tool. Motions would be taken with the Direct Vote Live tool if there was not unanimous consent. Chair noted that he reserved the right to take informative straw polls by 802.3 WG voting membership.

Slide #10 - Chair noted that the information regarding the IEEE SA Policies had been sent out via the Task Force reflector , and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy and IEEE Code of Ethics

Chair asked if anyone needed to review the policies at that time – there were no requests to do so from in-person nor remote attendees.

Chair presented the third slide (See Slide #28) of the IEEE SA Patent Policy slides. Chair did call for Potentially Essential Patents, and no one came forward.

Chair presented the second slide (See Slide #33) of the IEEE SA Copyright Policy slides. Chair noted – “By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.”

Chair reminded participants of the IEEE Code of Ethics and Conduct. (See slide #36) He noted “All participants in IEEE-SA activities are expected to adhere to the core principles underlying the IEEE Code of Ethics and IEEE Code of Conduct”

Chair presented the second slide (See Slide #37) of the IEEE SA Participation Policy slides. Chair noted – “Participants in the IEEE-SA “individual process” shall act independently of others, including employers. By participating in standards activities using the “individual process”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation.”

Vice Chair reminded participants to declare their affiliation in the online meeting tool. Failure to declare affiliation would result in expulsion from the meeting.

#### **Presentation #1**

Title	<b>Reliability Analysis of In-Band signaling Message Fields for Type 2 PHYs</b>
Presenters	Sridhar Ramseh
URL	<a href="https://www.ieee802.org/3/dj/public/23_0921/ramesh_3dj_01a_2309.pdf">https://www.ieee802.org/3/dj/public/23_0921/ramesh_3dj_01a_2309.pdf</a>

Author noted an error on slide 5 and slide 6 and would provide an updated version ‘01a’.

Questions were asked and answered.

Chair reminded participants to declare their affiliation in the meeting tool.

### Presentation #2

Title	<b>Reference: Transmitter Training Proposal for 256GFC</b>
Presenters	Anil Mehta
URL	<a href="https://www.ieee802.org/3/dj/public/23_09/mehta_3dj_01_2309.pdf">https://www.ieee802.org/3/dj/public/23_09/mehta_3dj_01_2309.pdf</a>

Questions were asked and answered.

Chair reminded participants to sign into IMAT for Task Force attendance.

### Presentation #3

Title	<b>Observations on 200G/lane AUI BER Allocation for Type 1 and Type 2 PHYs</b>
Presenters	Kent Lusted
URL	<a href="https://www.ieee802.org/3/dj/public/23_0921/lusted_3dj_01a_230921.pdf">https://www.ieee802.org/3/dj/public/23_0921/lusted_3dj_01a_230921.pdf</a>

Questions were asked and answered.

### Straw Poll #1:

I would support adopting C2C DER<sub>0</sub> = 0.67E-5 and C2M DER<sub>0</sub> = 2E-5 for the case when the AUI DER<sub>0</sub> is split across the C2M and the C2C inside of a Type 1 or Type 2 PHY per lusted\_3dj\_01a\_230921, slide 7

(Pick one)

Results (all): Y: 57, N: 0, A: 13

Chair asked if there would be opposition to attempt the vote by unanimous consent. No one responded.

<b>Motion #1</b>	Move to adopt C2C DER <sub>0</sub> = 0.67E-5 and C2M DER <sub>0</sub> = 2E-5 for the case when the AUI DER <sub>0</sub> is split across the C2M and the C2C inside of a Type 1 or Type 2 PHY per lusted_3dj_01a_230921, slide 7
<b>Technical (&gt;= 75%)</b>	
<b>Moved by</b>	Matt Brown
<b>Second by</b>	Tobey P.-R. Li
<b>Results 802.3 (y/n/a)</b>	passed by unanimous consent 10:49 a.m.

Vice-Chair confirmed the unanimous consent.

Chair reminded participants to sign into IMAT for Task Force attendance.

break at 10:50 a.m. Resumed at 10:55 a.m.

Chair reminded participants to sign into IMAT for Task Force attendance.

**Straw Poll #2:**

I would support adopting C2M DER\_0 = 2E-5 for the case when the AUI is only a C2M (no C2C) inside of a Type 1 or Type 2 PHY per choice A in lusted\_3dj\_01a\_230921, slide 9

(Pick one)

Results (all): Y: 48, N: 7, A: 20

Chair asked if there would be opposition to attempt the vote by unanimous consent. There was opposition.

<b>Motion #2</b>	Move to adopt C2M DER_0 = 2E-5 for the case when the AUI is only a C2M (no C2C) inside of a Type 1 or Type 2 PHY per choice A in lusted_3dj_01a_230921, slide 9
<b>Technical (&gt;= 75%)</b>	
<b>Moved by</b>	Matt Brown
<b>Second by</b>	Ali Ghiasi
<b>Results 802.3 (y/n/a)</b>	Y: 46, n: 4, A: 9. passed 11:21 a.m.

Vice-Chair confirmed the results.

The results of Motion #2 were:

<b>Attendee</b>	<b>Vote</b>
Adam Healey	Yes
Adee Ran	Yes
Ali Ghiasi	Yes
Andras De Koos	Yes
Angela Lambert	Abstain
Ayal Shoal	Yes
Bo Zhang	Yes
Brian Welch	No
Cathy Liu	Yes
Chul Soo Park	Abstain
David Ofelt	Yes
Edward Sprague	Yes
Eric Bernier	Yes
Eric Kimber	Yes

<b>Attendee</b>	<b>Vote</b>
Eric Maniloff	Yes
Ernest Muhigana	Abstain
Gary Nicholl	Yes
Golam Choudhury	Yes
Guangcan Mi	Yes
Hao Ren	Yes
Hideki Isono	Abstain
James Weaver	Yes
Jeffery Maki	Yes
John Deandrea	Yes
John Johnson	Abstain
Kapil Shrikhande	Abstain
Kenneth Jackson	Yes
Kihong/Joshua Kim	Yes
Leon Bruckman	Yes
Mark Sikkink	Yes
Massimo Sorbara	Abstain
Matthew Brown	Yes
Megha Shanbhag	Yes
Michael Dudek	Yes
Michael Wingrove	Yes
Pei-Rong Li	Yes
Peter Del Vecchio	Yes
Peter Stassar	Yes
Piers J G Dawe	No
Pirooz Toyserkani	Yes

<b>Attendee</b>	<b>Vote</b>
Richard Mellitz	Yes
Rick Rabinovich	Yes
Roberto Rodes	Yes
Shawn Nicholl	Yes
Shimon Muller	Yes
Shuang Yin	Yes
Taiji Kondo	Yes
Thomas Huber	Yes
Thomas Palkert	Yes
Tom Issenhuth	Yes
Toshiaki Sakai	Yes
Upen Kareti	No
William Simms	Yes
Xiang He	Yes
Yasuo Hidaka	No
Yi Sun	Yes
Yuefeng Cai	Yes
Yung Sung Son	Abstain
Zvi Rechtman	Abstain

Chair reminded participants to sign into IMAT for Task Force attendance.

Meeting chair responsibilities were passed to Kent Lusted.

John D'Ambrosia asked the meeting chair if the co-authors could address points that he may overlook in the contribution. There was no objection.

#### **Presentation #4**

Title	<b>Proposal - Support for Multiple FEC modes</b>
Presenters	John D'Ambrosia
URL	<a href="https://www.ieee802.org/3/dj/public/23_0921/dambrosia_3dj_01b_230921.pdf">https://www.ieee802.org/3/dj/public/23_0921/dambrosia_3dj_01b_230921.pdf</a>

John D'Ambrosia speaking as TF Chair noted that people were privately asking him for people to show test data related to demonstrating technical feasibility for both approaches. Author noted that he would update slide 5 to indicate it was a "single PHY" and would provide an updated '01b'.

Questions were asked and answered.

During the Q&A of presentation #4, Kent Lusted as meeting chair announced that he would be terminating the Q&A at 12:30 p.m. to preserve meeting time for Straw Polls. The queue was terminated at 12:30 p.m.

Meeting chair responsibilities were passed back to John D'Ambrosia at 12:31 p.m.

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

I would support the direction on slide #5 of dambrosia\_3dj\_01b\_230921

Results (all): Y: 15, N: 45, A: 23

Chair reminded participants to send requests for straw polls and motions to the Chair and the Recording Secretary in advance of the meeting.

Reviewed future meetings (see agenda slide #12).

Reviewed future ad hocs (see agenda slide #13)

Chair thanked participants for a successful meeting.

Chair noted the 3cw/3df/3dj Task Forces would meet during the IEEE 802 November Plenary. The exact schedule and agenda would be communicated later.

Chair noted that the meeting agenda was complete.

Meeting adjourned at 12:59 p.m.

## Attendees

Name	Employer	Affiliation
Akinwale, Oluwafemi		Intel Corporation
BARSKY, greg		Broadcom Corporation
Bernier, Eric	Huawei Technologies Canada Co., Ltd.	Huawei Technologies Canada Co., Ltd.
Brown, Matthew	Alphawave	Alphawave
Bruckman, Leon	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Cai, Yuefeng	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Calvin, John	Keysight Technologies	Keysight Technologies
Champion, Bruce	TE Connectivity	TE Connectivity
Chappell, Neveia	Keysight Technologies	Keysight Technologies
Chen, Chan	Self Employed	Independent/AOI
Choudhury, Golam	OFS	OFS
Cox, Ian		Broadcom Corporation
D'Ambrosia, John	Futurewei Technologies, U.S. Subsidiary of Huawei	Futurewei Technologies, U.S. Subsidiary of Huawei
Dawe, Piers J G	NVIDIA	Nvidia
Deandrea, John	Finisar Corporation	Finisar Corporation
de Koos, Andras	Microchip Technology Inc	Microchip Technology, Inc.
Del Vecchio, Peter		Broadcom Corporation
Dudek, Michael	Marvell	Marvell
Estes, David	Spirent Communications	Spirent Communications
Ghiasi, Ali	Ghiasi Quantum LLC	Ghiasi Quantum LLC; Marvell Semiconductor, Inc.
Gui, Tao		Huawei Technologies Co., Ltd
Gustlin, Mark	Cisco Systems, Inc.	Cisco Systems, Inc.
He, Xiang	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Healey, Adam	Broadcom Inc.	Broadcom Inc.



<b>Name</b>	<b>Employer</b>	<b>Affiliation</b>
Hidaka, Yasuo	Credo Semiconductor	Credo Semiconductor
Huang, Kechao	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Huang, Xuejue		Intel Corporation
Huber, Thomas	Nokia	Nokia
Hutchins, Jeff	Ranovus	Ranovus
Irwin, Scott	MoSys, Inc.	Peraso Technologies Incorporated
Isono, Hideki	Fujitsu Optical Components Limited	Fujitsu Optical Components Limited
Issenhuth, Tom	Issenhuth Consulting, LLC	Huawei Technologies Co., Ltd
Jackson, Kenneth	Sumitomo Electric Industries, LTD	Sumitomo Electric Industries, LTD
Jiang, Chenhui	Sicoya	Sicoya
Johnson, John	Broadcom Corporation	Broadcom Corporation
Kareti, Upen	Cisco Systems, Inc.	Cisco Systems, Inc.
Kim, Inho	MaxLinear	MaxLinear
Kim, Kihong/Joshua	Hirose Electric (USA), Inc.	Hirose Electric (USA), Inc.
Kimber, Eric	Semtech Ltd	Semtech Ltd
Kocsis, Sam	Amphenol Corporation	Amphenol Corporation
Kondo, Taiji	MegaChips Corporation	Dexerials Corporation
Lambert, Angela	Corning Incorporated	Corning Incorporated
Li, Mike-Peng	Intel	Intel
Li, Pei-Rong	MediaTek Inc.	MediaTek Inc.
Lin, Youxi	Huawei Technologies Duesseldorf GmbH	Huawei Technologies Co., Ltd
Liu, Cathy	Broadcom Corporation	Broadcom Corporation
Lusted, Kent	Intel	Intel
Maki, Jeffery	Juniper Networks, Inc.	Juniper Networks, Inc.
Malicoat, David	Malicoat Networking Solutions	Malicoat Networking Solutions; SENKO Advanced Components
Maniloff, Eric	Ciena Corporation	Ciena Corporation

<b>Name</b>	<b>Employer</b>	<b>Affiliation</b>
Maruyama, Takuto	Mitsubishi Electric US, Inc	Mitsubishi Electric US, Inc
Mellitz, Richard	Samtec, Inc.	Samtec, Inc.
mi, guangcan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Moorwood, Charles	Keysight Technologies	Keysight Technologies
Muhigana, Ernest		Lumentum
Muller, Shimon	Enfabrica Corp.	Enfabrica
MURAKAMI, YUKI	FUJITSU LIMITED	Fujitsu Limited
Murty, Ramana	Broadcom Inc.	Broadcom Corporation
Muth, Karlheinz	Broadcom Corporation	Broadcom Corporation
Nering, Raymond	Cisco Systems, Inc.	Cisco Systems, Inc.
Nicholl, Shawn	Advanced Micro Devices (AMD)	Advanced Micro Devices (AMD)
Ninomiya, Takuya		Senko Advanced Components
Nowell, Mark	Cisco Systems, Inc.	Cisco Systems, Inc.
Ofelt, David	Juniper Networks, Inc.	Juniper Networks, Inc.
Opsasnick, Eugene	Broadcom Inc.	Broadcom Inc.
Palkert, Thomas	Macom,&nbsp;Samtec	Samtec-Macom
PARK, CHUL SOO	Juniper Networks Inc.	Juniper Networks, Inc.
Parthasarathy, Vasu	Broadcom Corporation	Broadcom Corporation
Patra, lenin	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.
Rabinovich, Rick	Keysight Technologies	Keysight Technologies
Ramesh, Sridhar	MaxLinear	MAXLINEAR INC
Ran, Adee	Cisco Systems, Inc.	Cisco Systems, Inc.
Rechtman, Zvi	NVIDIA	NVIDIA
Ren, Hao	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Rodes, Roberto	II-VI	II-VI
Sakai, Toshiaki	Socionext Inc.	socionext
Savi, Olindo	Hubbell Incorporated	Hubbell Incorporated

<b>Name</b>	<b>Employer</b>	<b>Affiliation</b>
Sekel, Steve		Wilder Technologies
Shanbhag, Megha	Tyco	TE Connectivity
Shoval, Ayal	Synopsys, Inc.	Synopsys, Inc.
Sikkink, Mark	Hewlett Packard Enterprise	Hewlett Packard Enterprise
Simms, William	NVIDIA Corporation	NVIDIA Corporation
Son, Yung Sung	Optomind Inc	Optomind Inc
Sorbara, Massimo	GLOBALFOUNDRIES	GLOBALFOUNDRIES
Sprague, Edward	Infinera Corporation	Infinera Corporation
Stassar, Peter	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Sun, Yi		OFS
Toyserkani, Pirooz	Cisco Systems, Inc.	Cisco Systems, Inc.
Tracy, Nathan	TE Connectivity	TE Connectivity
Tran, Viet	Keysight Technologies	Keysight Technologies
Wang, Ruoxu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Weaver, James	Arista Networks	Arista Networks
Welch, Brian	Cisco Systems, Inc.	Luxtera
Wingrove, Michael	Ciena Corporation	Ciena Corporation
Yin, Shuang		Google
Zhang, Bo	Marvell Technology, Inc	Marvell Technology, Inc