IEEE 802.3 Beyond 400 Gb/s Ethernet (B400G) Study Group, Sept 2021 Electronic Interim Series Approved Meeting Minutes, Prepared by Tom Issenhuth, John D'Ambrosia

Session called to order at 10:02 am ET (all times ET), 02 Sept 2021

Meeting called to order by John D'Ambrosia, who chaired the meeting.

Chair showed IMAT information and asked everyone to sign-in as meeting attendance would be taken from IMAT.

Presentation #1 Agenda and General Information

Presenter: John D'Ambrosia

URL: https://www.ieee802.org/3/B400G/public/21 09/agenda b400g a 210902.pdf

Chair asked if there were any objections to the agenda, there were none, and the agenda (Slide #2) was considered approved.

Minutes -

Aug 2021 Session - https://www.ieee802.org/3/B400G/public/21 08/minutes b400G 2108 unapproved.pdf

Chair asked if there were any other corrections, there were none. The minutes were considered approved.

Chair noted that the information regarding the procedures had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Pre-PAR patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time – there were no requests to do so. Chair asked if anyone needed any of these policies reviewed in-depth. There were no requests.

Chair presented the (See Slide #24) of the IEEE SA Pre-PAR Patent Policy slides.

Chair presented the second slide (See Slide #26) 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 presented the second slide (See Slide #29) 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."

Chair reviewed voting in Study Group Sessions (See Slide #5) and noted that any motions that did not have unanimous consent would be done via a role call vote using the Zoom tool, and votes would be recorded in the minutes.

Chair reviewed goals for this meeting. See Slide #6. Chair reviewed timeline for the Study Group. See Slide #8. Chair reviewed liaisons for the SG to consider. See Slide #9

D'Ambrosia asked Issenhuth to assume chairing the call, as he is a co-author on the following presentation and might wish to speak to presentation. Issenhuth began chairing meeting at 10:16am.

Presentation #2 Project documentation for 802.3df – timeline considerations

Presenter Mark Nowell

URL https://www.ieee802.org/3/B400G/public/21 09/nowell b400g 01a 210902.pdf

Updated to 1a version, editorial changes only

There was general discussion about the presentation.

Presentation #3 Draft Project Documentation Update

Presenter John D'Ambrosia

URL https://www.ieee802.org/3/B400G/public/21 09/dambrosia b400g 01 210902.pdf

There was general discussion about the presentation, which included the proposed draft PAR and CSD.

D'Ambrosia resumed chairing the meeting @ 10:59 am, and review / editing of the draft project documentation began. Chair noted that the updated file was being saved as draft_projdoc_21_0902.pdf and would be uploaded after the meeting.

Chair asked if there were any objections to the dates on slide 6 of draft_projdoc_21_0902.pdf and there were none.

Break was called at 11:34am
Break ended at 11:40am

It was pointed out that an updated version of

https://www.ieee802.org/3/B400G/public/21 08/ran b400g 01 210826.pdf was not posted. Chair asked if there were any objections to updating the minutes of the previous meeting to reflect the new presentation and there were none.

Chair reviewed the future meetings.

Chair reminded everyone of next week's meeting.

Session broke at 12:17 pm

IEEE 802.3 Beyond 400 Gb/s Ethernet (B400G) Study Group, Sept 2021 Electronic Interim Series Unapproved Meeting Minutes, Prepared by Tom Issenhuth, John D'Ambrosia

Session reconvened at 10:02 am ET (all times ET), 09 Sept 2021

Meeting called to order by John D'Ambrosia, who chaired the meeting.

Chair showed IMAT information and asked everyone to sign-in as meeting attendance would be taken from IMAT.

Chair noted that the information regarding the procedures had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Pre-PAR patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time – there were no requests to do so.

Chair asked if anyone needed any of these policies reviewed in-depth. There were no requests.

Chair presented the (See Slide #24) of the IEEE SA Pre-PAR Patent Policy slides.

Chair presented the second slide (See Slide #26) 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 presented the second slide (See Slide #29) 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."

Chair reviewed voting in Study Group Sessions (See Slide #5) and noted that any motions that did not have unanimous consent would be done via a role call vote using the Zoom tool, and votes would be recorded in the minutes.

Chair informed everyone that the November plenary meeting will be virtual, and registration and a meeting fee would be required.

Add something on possible November meeting fee?

Mr. Law asked the chair to make any changes to the draft par, if necessary, in the "MyProject" system.

Chair reviewed goals for this meeting. See Slide #6.

Chair reviewed timeline for the Study Group. See Slide #8.

Presentation #4 Feasibility study of coherent 800Gb/s for 10km & 40km

Presenter Huijian Zhang

URL https://www.ieee802.org/3/B400G/public/21 09/zhang b400g 01a 210909.pdf

There was general discussion about the presentation.

Presentation #5 Draft PAR Update
Presenter John D'Ambrosia

URL https://www.ieee802.org/3/B400G/public/21 09/Draft P802.3df 210903.pdf

There was general discussion about the presentation.

Chair asked if anyone wanted to re-review the draft CSD and there were no requests. Chair noted the draft CSD information is located at https://www.ieee802.org/3/B400G/public/21 09/Draft CSD 210903.pdf

Motion #1 - Project Documentation

Motion	 Move to adopt: The PAR responses in Draft_P803.3df_210903.pdf The CSD "Managed Objects", "Coexistence", "Broad Market Potential", "Compatibility", "Distinct Identity", "Technical Feasibility", and "Economic Feasibility" responses, as per Draft_CSD_210903.pdf
M:	Mark Nowell
S:	Matt Brown
Technical (>=75%)	
All (y/n/a)	Approved by Unanimous Consent
Results	Passes

Chair noted that the September 21st meeting will be cancelled.

Session broke at 11:17 am

IEEE 802.3 Beyond 400 Gb/s Ethernet (B400G) Study Group, Sept 2021 Electronic Interim Series Unapproved Meeting Minutes, Prepared by Tom Issenhuth, John D'Ambrosia

Session reconvened at 10:02 am ET (all times ET), 28 Sept 2021

Meeting called to order by John D'Ambrosia, who chaired the meeting.

Chair showed IMAT information and asked everyone to sign-in as meeting attendance would be taken from IMAT.

Chair noted that the information regarding the procedures had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Pre-PAR patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time – there were no requests to do so.

Chair asked if anyone needed any of these policies reviewed in-depth. There were no requests.

Chair presented the (See Slide #24) of the IEEE SA Pre-PAR Patent Policy slides.

Chair presented the second slide (See Slide #26) 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 presented the second slide (See Slide #29) 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."

Chair reviewed voting in Study Group Sessions (See Slide #5) and noted that any motions that did not have unanimous consent would be done via a role call vote using the Zoom tool, and votes would be recorded in the minutes.

Chair reviewed goals for this meeting. See Slide #6. Chair reviewed timeline for the Study Group. See Slide #8.

Chair noted that the information in the adopted PAR/CSD presentations that were approved in the last meeting were entered into the IEEE 802 Mentor database. The URL on the B400G home webpage was updated to reflect the respective URLs as defined by the Mentor tool. No information was modified from what was contained in the presentations adopted by the study group.

Chair discussed liaisons. It was agreed that the liaison to ITU-T SG15 be deferred to the November meeting. The liaison to IOWN was discussed and no further changes were made to the document.

Motion #2 - Liaison to IOWN

Motion	Move that the IEEE Beyond 400Gb/s Ethernet Study Group approve: • IEEE_802d3_to_IOWN_b400g_0921_draft.pdf with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to IOWN.
M:	Tom Huber
S:	Robert Lingle
Technical (>=75%)	
All (y/n/a)	Approved by Unanimous Consent
Results	Passes

Chair discussed the upcoming meetings for the Oct 2021 session.

Session adjourned at 10:22 am

Attendees

Name	Employer	Affiliation	9/2	9/9	9/28
BakroNagy, Istvan	EFFECT Photonics	Effect Photonics	1	0	0
Bernier, Eric		Huawei Technologies Canada; Huawei Technologies Co., Ltd	1	1	1
Bernstein, Gary	Leviton Manufacturing Co.	The Siemon Company	0	1	0
Bois, Karl	TE Connectivity	TE Connectivity	1	1	1
Brooks, Paul	Viavi solutions GmbH	Viavi Solutions	0	0	1
Brown, Matthew	Huawei Technologies Canada	Huawei Technologies Canada	1	1	0
Bruckman, Leon	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	1	0
Calvin, John	Keysight Technologies	Keysight Technologies	1	1	0
Carty, Clark	Cisco Systems, Inc.	Cisco Systems, Inc.	1	1	0
Casher, Patrick		Foxconn Interconnect Technologies (FIT)	1	1	0
Cassan, Dave	Alphawave	Alphawave	1	1	0
Chang, Yongmao	Inphi Corporation	Source Photonics	0	1	0
Chen, Chan	Applied Optoelectronics, Inc.	Applied Optoelectronics, Inc.	1	1	1
cheng, weiqiang		China Mobile Communications Corporation (CMCC)	1	1	0
Choudhury, Golam	OFS	OFS	0	0	1
D'Ambrosia, John	Futurewei Technologies	Futurewei Technologies, U.S. Subsidiary of Huawei	1	1	1
Didde, Stephen	Keysight Technologies	Keysight Technologies	1	0	0
Dudek, Michael	Marvell	Marvell	1	1	0
Estes, David	Spirent Communications	Spirent Communications	0	0	1
Ewen, John	Marvell	Marvell	1	1	0
Ferretti, Vincent	Corning Incorporated	Corning Incorporated	1	0	1
Geng, Limin	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	1	1
Ghiasi, Ali	Ghiasi Quantum LLC	Ghiasi Quantum LLC, Marvell	1	0	0
Goodwill, Dominic		Huawei Technologies Canada; Huawei Technologies Co., Ltd	1	1	1
Gore, Brandon	Samtec, Inc.	Samtec, Inc.	1	1	0
Gorshe, Steven Scott	Microchip Technology, Inc.	Microchip Technology, Inc.	0	0	1
Gubow, Martin	Keysight Technologies	Keysight Technologies	0	0	1
Gustlin, Mark	Cisco Systems, Inc.	Cisco Systems, Inc.	1	1	1
Haasz, Jodi	IEEE - Institute of Electrical and Electronics Engineers	IEEE Standards Association (IEEE-SA)	1	1	0
Haser, Alexandra	Molex Incorporated	Molex Incorporated	1	1	0
He, Xiang	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	1	1
Healey, Adam	Broadcom Inc.	Broadcom Inc.	1	1	0
Heck, Howard	Intel Corporation	Intel Corporation	1	1	0
Hidaka, Yasuo	Credo Semiconductor	Credo Semiconductor	1	1	0
Huang, Kechao		Huawei Technologies Co., Ltd	1	1	1
HUANG, QINHUI	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	1	0
Huber, Thomas	Nokia	Nokia	1	1	1
Hutchins, Jeff	Ranovus	Ranovus	1	1	1
Isono, Hideki	Fujitsu Optical Components Limited	Fujitsu Optical Components Limited	1	0	1
Issenhuth, Tom	Issenhuth Consulting, LLC	Huawei Technologies Co., Ltd	1	1	1
Jackson, Kenneth	Sumitomo Electric Device Innovations, USA	Sumitomo Electric Industries, LTD	1	1	1
Jimenez, Andrew	Anixter Inc.	Anixter Inc.	0	1	0
Johnson, John	Broadcom Corporation	Broadcom Corporation	1	1	0
Kamino, John	OFS	OFS	0	1	0

Kao, Chienping	Intel Corporation	Cornelis Networks	0	1	1
Kareti, Upen	Cisco Systems, Inc.	Cisco Systems, Inc.	1	0	0
Kim, Kihong/Joshua	Hirose Electric (USA), Inc.	Hirose Electric (USA), Inc.	1	1	0
Kim, Yongbum	Tenstorrent	Tenstorrent	0	1	0
Kimber, Eric	Semtech Ltd	Semtech Ltd	1	0	0
Klempa, Michael	University of New Hampshire InterOperability Laboratory (UNH-IOL)	Amphenol Corporation	1	0	1
Klingensmith, William	U.S. Federal Government	DoD	1	0	1
Kocsis, Sam	Amphenol Corporation	Amphenol Corporation	1	1	0
Koehler, Daniel	MorethanIP	MorethanIP	0	0	1
Kuschnerov, Maxim	Huawei Technologies Duesseldorf GmbH	Huawei Technologies Duesseldorf GmbH	1	0	0
Lackner, Hans	QoSCom GmbH	QoSCom - Quality in Communications - GmbH	0	0	1
Law, David	Hewlett Packard Enterprise	Hewlett Packard Enterprise	1	1	0
Lawson, Matthew	Cisco Systems, Inc.	Cisco Systems, Inc.	1	0	0
Le Cheminant, Greg	Keysight Technologies	Keysight Technologies	1	1	0
Levin, Itamar		Intel Corporation	0	1	0
Li, Mike-Peng	Intel Corporation	Intel Corporation	0	1	0
Lin, Youxi		Huawei Technologies Co., Ltd	1	0	0
Lingle, Robert	OFS	OFS	0	0	1
Liu, Karen	Nubis Communications	Nubis Communications	0	1	1
Lusted, Kent	Intel Corporation	Intel Corporation	1	1	0
Maguire, Valerie	The Siemon Company	The Siemon Company	0	0	1
Mak, Gary	Inphi Corporation	inphi	0	1	0
Maki, Jeffery	Juniper Networks, Inc.	Juniper Networks, Inc.	1	1	1
Malicoat, David	Malicoat Networking Solutions	Malicoat Networking Solutions; SENKO	1	1	0
Maniloff, Eric	Ciena Corporation	Advanced Components Ciena Corporation	1	1	0
Marques, Flavio	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC	1	1	0
Mellitz, Richard	Samtec, Inc.	Samtec, Inc.	1	1	0
mi, guangcan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	0	1	1
Milicevic, Mario	MaxLinear	MaxLinear	0	0	1
Moorwood, Charles	Keysight Technologies	Keysight Technologies	1	1	1
Mu, Jianwei	l l l l l l l l l l l l l l l l l l l	Hisense	1	1	0
Muller, Shimon	Enfabrica Corp.	Enfabrica Corp.	1	1	1
Nakamoto, Edward	Spirent Communications	Spirent Communications	0	0	1
Nering, Raymond	Cisco Systems, Inc.	Cisco Systems, Inc.	0	1	1
Nicholl, Gary	Cisco Systems, Inc.	Cisco Systems, Inc.	1	0	0
Nicholl, Shawn	Xilinx	Xilinx	0	0	1
Nowell, Mark	Cisco Systems, Inc.	Cisco Systems, Inc.	1	1	1
Ofelt, David	Juniper Networks, Inc.	Juniper Networks, Inc.	1	1	0
Omori, Kumi	NEC Corporation	NEC Corporation	1	1	1
Opsasnick, Eugene	Broadcom Inc.	Broadcom Corporation	1	1	0
Palkert, Thomas	Macom, Samtec	Samtec-Macom	0	1	0
PARK, CHUL SOO	Juniper Networks Inc.	Juniper Networks, Inc.	1	1	1
Parsons, Earl	CommScope, Inc.	CommScope, Inc.	1	0	0
peng, semmy		Huawei Technologies Co., Ltd	1	1	1
Piehler, David	Dell Technologies	Dell	0	0	1
Pimpinella, Rick	Panduit Corp.	Panduit Corp.	0	1	0
Pittala, Fabio	Huawei Technologies Duesseldorf GmbH	Huawei Technologies Duesseldorf GmbH	1	1	0

Powell, William	INDEPENDENT	INDEPENDENT	0	0	1
Rabinovich, Rick	Keysight Technologies	Keysight Technologies	1	1	0
Rahn, Jeffrey	Infinera Corporation	Facebook	1	1	0
Ran, Adee	Cisco Systems, Inc.	Cisco systems	1	1	0
Rechtman, Zvi	Mellanox Technologies	NVIDIA Corporation	1	0	0
Ren, Hao	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	1	1
Rodes, Roberto	II-VI	II-VI	1	0	0
Sakai, Toshiaki	Socionext Inc.	socionext	1	1	0
Sambasivan, Sam	AT&T	AT&T	0	0	1
Savi, Olindo	Hubbell Incorporated	Hubbell Incorporated	0	1	1
SAWANO, Hiroshi	OITDA (Optoelectronics Industry and Technology Development Association)	OITDA	0	0	1
Shahramian, Shayan		Alphawave	1	0	0
She, Qingya	Fujitsu Network Communications	Fujitsu Network Communications	0	1	1
Simms, William	NVIDIA Corporation	NVIDIA Corporation	1	0	1
Sommers, Scott	Molex LLC	Molex Incorporated	1	1	0
Son, Yung Sung	Optomind Inc	Optomind Inc	1	1	1
Sone, Yoshiaki	NTT	Nippon Telegraph and Telephone Corporation (NTT)	0	1	0
Sorbara, Massimo	GLOBALFOUNDRIES	GLOBALFOUNDIRES	1	0	1
Sprague, Edward	Infinera Corporation	Infinera Corporation	1	1	1
Stassar, Peter	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	1	1
Sun, Yi		OFS	0	0	1
TAKAHARA, TOMOO	FUJITSU LABORATORIES LIMITED	FUJITSU LIMITED	0	1	1
Takayama, Kazuya	Nitto Denko Corporation	Nitto Denko Corporation	0	0	1
Terada, Masaru	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC	1	1	0
Theodoras, James	HG Genuine	HG Genuine	1	1	1
tomofuji, hiroaki		FUJITSU	1	1	1
Tooyserkani, Pirooz	Cisco Systems, Inc.	Cisco Systems, Inc.	1	1	0
Tracy, Nathan	TE Connectivity	TE Connectivity	1	1	0
Tran, Viet	Keysight Technologies	Keysight Technologies	1	1	1
Trowbridge, Stephen	Nokia	Nokia	1	1	1
Ulrichs, Ed	Intel Corporation	Intel Corporation	0	0	1
Villares, Gustavo		Lumiphase	1	0	0
Wang, Haojie	China Mobile Communications Corporation (CMCC)	China Mobile Communications Corporation (CMCC)	1	1	1
Wang, Ruoxu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	0	1	0
Wang, Xinyuan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	0	0	1
Weaver, James	Arista Networks	Arista Networks	1	1	0
Welch, Brian	Cisco Systems, Inc.	Luxtera	1	0	0
Williams, Tom	Cisco Systems, Inc.	Cisco Systems, Inc.	0	1	0
Wu, Mau-Lin	MediaTek Inc.	MediaTek Inc.	1	1	0
Young, James	CommScope, Inc.	CommScope	1	0	0
Yurtin, John	Aptiv	APTIV	0	0	1
Zhang, Bo	Marvell Technology, Inc	Marvell Technology, Inc	1	1	1