IEEE 802.3 NEA Ad hoc Meeting – IEEE 802.3 “Ethernet for AI” Assessment
29 May 2025 Electronic Meeting

Unapproved Meeting Minutes, prepared by John D’Ambrosia and Kent Lusted
Session called to order at 9:01 am EDT (all times EDT), 29 May 2025

Meeting called to order by John D’Ambrosia, Chair - IEEE 802.3 NEA “Ethernet for AI” Assessment

Chair gave the meeting introduction.

Chair reminded everyone to sign into IMAT, which would be used for tracking attendance

Presentation #1	**Agenda and General Information**
Presenter	John D’Ambrosia
URL	https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0529/agenda_e4ai_a_250529.pdf

Agenda – chair asked if there were any comments on the agenda. There were none. Chair asked if there were any objections to the agenda, there were none, and the agenda was considered approved by unanimous consent.

Minutes – 30 Apr 2025 IEEE 802.3 NEA – Ethernet for AI Assessment Electronic Meeting
https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0430/minutes_e4ai_250430_unapproved.pdf

Chair asked if there were any modifications of the minutes needed. No one responded.
Chair asked if there were any objections to the approval of the minutes. There were none, and the minutes were approved by unanimous consent.

Chair reviewed IEEE SA Pre-PAR Patent Policy. See Slide #14.

Chair noted from Slide #16 and 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 reviewed Slide #18 - Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

Chair noted from Slide #19 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 then you shall immediately cease any participation.

Chair reviewed IEEE 802.3 NEA “Ethernet for AI” Assessment Information on Slide #5.

Chair reviewed Different Interconnect Requirements identified for the assessment on Slide #6.

Chair reviewed Meeting Decorum, Ground Rules, and Important Bylaws, Rules, and References. See Slides #7-9.
Chair noted background on NEA can be found in Appendix.

Chair reviewed future meetings for all NEA activities. See Slide #10.

Chair reminded participants about the NEA ICAID Status Report.

Presentation #2	**448G/Lane Modulation & FEC**
Presenters	Halil Cirit / Sanjeev Gupta
URL	https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0529/cirit_e4ai_01a_250529.pdf

Discussion
There were questions of clarification and discussion on the presentation. There was a request to update the channel model slide #3 to note that it is a box to box connection, not a cabled backplane.

The chair provided an IMAT reminder.

Presentation #3 **High performance OSFP interconnect channel study with advanced equalization at NEA data-rates**
Presenters John Calvin
URL https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0529/calvin_e4ai_01a_250529.pdf

An error was noted on slide 7 with the log scale and the author would provide an updated version 01a.

Discussion
There were questions of clarification and discussion on the presentation.

Break at 10:40 a.m. Resumed at 10:45 a.m.

Presentation #4 **A Modulation method to improve link margin at 448G**
Presenters Peter Graumann
URL https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0529/graumann_e4ai_01a_250529.pdf

It was noted during the presentation that there was a pdf issue on Slide #15, and an update would be sent. The chair also requested that page numbers be added to the slides.

Discussion
There were questions of clarification and discussion on the presentation.

Prior to the presentation it was indicated that an update to the channel data provided by Brandon Gore would be provided, where the fmax had been increased from 120 GHz to 150 GHz. THe supporting presentation noted below has been updated pointing to both sets of channel data.

Presentation #5 **400 Gb/s per lane C2C channel files**
Presenters Brandon Gore
URL https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0529/gore_e4ai_01a_250529.pdf

Discussion
There were questions of clarification and discussions on the presentation.

Prior to the presentation it was indicated that editorial changes were made to the presentation (updates to legends) and the update had already been sent to the chair for uploading.

Presentation #6 **425-448 Gb/s Electrical Feasibility for C2C and C2M Using COM**
Presenters Behzad Dehlaghi
URL https://www.ieee802.org/3/ad_hoc/E4AI/public/25_0529/carusone_e4ai_01a_250529.pdf

Discussion
There were questions of clarification and discussions on the presentation.

Meeting adjourned at 12:02 pm.

IMAT Attendance

Name	Employer	Affiliation
Beauregard, Francois	Belden Canada ULC	belden
Brown, Matthew	Alphawave	Alphawave Semi
Bruckman, Leon	NVIDIA	NVIDIA
Calvin, John	Keysight Technologies	Keysight Technologies
Castro, Jose	Panduit	Panduit
Chan, Anthony Carusone	Alphawave Semi	Alphawae Semi
Cicalini, Alberto		Qualcomm Incorporated; Qualcomm Technologies, Inc
D'Ambrosia, John	Futurewei Technologies, U.S. Subsidiary of Huawei	Futurewei Technologies, U.S. Subsidiary of Huawei
Dawe, Piers J G	NVIDIA	Nvidia
Denton, Scott		Cisco Systems, Inc.
Dsilva, Hansel		Amphenol Corporation
Dudek, Michael	Marvell	Marvell
Ferretti, Vincent	Corning Incorporated	Corning Incorporated
Galan, Jose	MaxLinear, Inc.	MaxLinear, Inc.
Ghiasi, Ali	Ghiasi Quantum LLC	Ghiasi Quantum LLC
Gore, Brandon	Samtec, Inc.	Samtec, Inc.
He, Xiang	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Healey, Adam	Broadcom Inc.	Broadcom Inc.
Heck, Howard	TE Connectivity	Intel Corporation
Hon, Kam Yan		Cisco Systems, Inc.
Huber, Thomas	Nokia	Nokia
Hutchins, Jeff	Ranovus	Ranovus
Johnson, John	Broadcom Corporation	Broadcom
Kabra, Lokesh	Synopsys, Inc.	Synopsys, Inc.
Kareti, Upen	Cisco Systems, Inc.	Cisco Systems, Inc.
Kaygusuz, Ahmet	Adhoc Teknoloji	Adhoc Teknoloji
Kim, Do Kyun		LG ELECTRONICS
Klempa, Michael	Alphawave Semi	Alphawave Semi
Kocsis, Sam	Amphenol Corporation	Amphenol Corporation
Kugel, Valery		Juniper Networks, Inc.
Lambert, Angela	Corning Incorporated	Corning Incorporated
Landry, Gary	Texas Instruments Inc.	Texas Instruments
Lapierre, Dominic		EXFO
Lessard, Stephane		Ericsson AB
Li, Pei-Rong	MediaTek Inc.	MediaTek Inc.
Lim, Jane	Cisco Systems, Inc.	Cisco Systems, Inc.
Little, Terrance	Foxconn Electronics Inc.	Foxconn Electronics Inc.
Liu, Cathy	Broadcom Corporation	Broadcom
Liu, Hai-Feng	HG Genuine	HG Genuine
Liu, Karen	Nubis Communications	Nubis Communications
Lusted, Kent	Synopsys, Inc.	Synopsys, Inc.
Marshall, John		Advanced Micro Devices (AMD)
Mascitto Marco		Nokia
Mazzini, Marco	Cisco Systems, Inc.	Cisco Systems, Inc.
Moorwood, Charles	Keysight Technologies	Keysight Technologies
Muhigana, Ernest	Lumentum LLC	Lumentum

Muth, Karlheinz	Broadcom Corporation	Broadcom Corporation
Nicholl, Shawn	Advanced Micro Devices (AMD)	Xilinx
Pak, Tim		Foxconn Electronics Inc.
Palkert, Thomas		Samtec, Inc., Macom
Parsons, Earl	CommScope, Inc.	CommScope, Inc.
Perez, De Aranda Alonso Ruben	Knowledge Development for POF SL	Cisco Systems, Inc.
Phadke, Rohan		Arista Networks
Rabinovich, Rick	Keysight Technologies	Keysight Technologies
Ramesh, Sridhar	MaxLinear	Maxlinear Inc
Ran, Adee	Cisco Systems, Inc.	Cisco Systems, Inc.
Ren, Hao	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Sakai, Toshiaki	Socionext Inc.	Socionext
Simms, William	NVIDIA Corporation	NVIDIA Corporation
Sommers, Scott	Molex LLC	Molex Incorporated
Tian, yuchi		CMCC
Torres, Luisma	Knowledge Development for POF SL	KDPOF
Tracy, Nathan	TE Connectivity	TE Connectivity
Venkataraman, Srinivas		Facebook
Wang, Haojie	China Mobile Communications Corporation (CMCC)	China Mobile
WANG, Xuebo		Huawei Technologies Co., Ltd
Weaver, James	Arista Networks	Arista Networks
Welch, Brian	Cisco Systems, Inc.	Cisco Systems, Inc.
Xu, Yu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
Yildiz, Mucahit		Adhoc Teknoloji
Yin, Shuang		Google