Unconfirmed Meeting Minutes: IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force

May 14-16, 2025
IEEE 802.3 Interim, New Orleans, LA USA

Prepared by George Zimmerman

IEEE P802.3dm Task Force meeting convened at **1:16 PM CDT, Wednesday, May 14, 2025**, by Jon Lewis, IEEE P802.3dm Task Force Chair.

Attendance is listed in Appendix A
Motion Roll Call Records are listed in Appendix B
Straw Poll Roll Call Records are listed in Appendix C

Presentation: https://www.ieee802.org/3/dm/public/0525/agenda_3dm_01c_051425.pdf
Presenter: Jon Lewis, Chair.

Mr. Lewis turned to presentation agenda_3dm_01c_051425.pdf and reviewed the agenda for the meeting.

Approval of Agenda: The chair asked whether there were additions or corrections to the agenda, and there were none. He then asked whether there was any objection to approve the agenda as shown.

There were no objections. He announced that the agenda was approved as posted. **(1:17)**

Mr. Lewis then resumed the review agenda_3dm_01c_051425.pdf.

Previous Meeting Minutes: The chair announced that the minutes from the Task Force meeting from the electronic interims held 4/17/2025 and 5/1/2025 had been posted and asked the group to consider any additions or corrections to them.

There were none.

The chair then asked whether there was any objection to approving the minutes posted at
https://www.ieee802.org/3/dm/public/041725/Unconfirmed_minutes_3dm_041725.pdf
https://www.ieee802.org/3/dm/public/050125/Unconfirmed_minutes_3dm_050125.pdf

There were no objections. He announced the minutes were approved as posted.
(1:18 PM)

Mr. Lewis then resumed the review of agenda_3dm_01c_051425.pdf.

Mr. Lewis noted that there should be no recording or photography without permission.

- Mr. Lewis asked if anyone was attending from the press including those who would run a public blog on this meeting – there were no indications from the group.

The chair continued review of the meeting reviewing task force decorum.

The chair then discussed the use of polling features for straw polls in the web conference tool, and that due to the number of motions and straw polls, motions and straw polls would be taken during the presentation times rather than only at the end, as had been the case in prior meetings.

He additionally discussed the expected flow and use of the meeting time, and that the meeting was expected to continue Thursday (5/15) & Friday AM (5/16).

He announced that the meeting was being conducted as part of the IEEE 802 plenary meeting series and that registration, including payment of meeting fees, was required for attendees. He further announced that attendance without properly registering is subject to penalties under IEEE 802 rules.

Mr. Lewis then continued review of the presentation, reviewing information for the reflector, website, and ground rules.

During review of ground rules, the chair announced that as this meeting was an electronic Task Force meeting, under 802.3 rules, only working group voters may vote on motions.

Attendance

The chair reminded the group that attendance credit would be taken from IMAT, and that as announced by the 802.3 Working Group Chair, IMAT registration would be for individual slots (AM1, AM2, PM1, and PM2) through the day's meeting.

The chair reminded the group that meeting participants can only claim IMAT attendance credit if they attend 75% of a meeting slot's duration, and that officers may remove IMAT attendance if a participant is found to attend less than 75% of a slot's duration. He further reminded the group of the rules for gaining and maintaining voting rights.

The Chair advised the group that while attendance would be taken from IMAT, that zoom attendance would be used to reconcile the attendance, but IMAT was the official record. He then reminded attendees that they should show their employer & affiliation, and how to set these to make them correct.

IEEE Structure, Policies

Mr. Lewis continued review of the IEEE SA structure, where to find the rules, and asked whether anyone in the room or online had not seen the various policy slides this week. There were no responses. He therefore announced that he would show the slides and summarize.

IEEE SA Patent Policy, Mr. Lewis reviewed slides 0 through 4 of the IEEE SA Patent Policy (slides 12 – 16 in the agenda deck), showed and read aloud slides 1 and 2 of the IEEE SA patent policy from the agenda deck, and made the call for patents on the slide labeled "Ways to Inform IEEE" **(1:29 pm)**.

There was no response to the call for patents at **1:30 pm**.
He then showed and read aloud slide 3 of the patent policy, and showed slide 4 of the patent policy.

Other IEEE Policies

Mr. Lewis showed and read aloud the slides on the IEEE SA copyright, Participant behavior (ethics), IEEE individual participation, and fair and equitable consideration policies as shown in the agenda deck. **(1:34 PM)**.

There were no questions.

The chair noted that there were no new liaisons received. He noted that the Automotive SERDES Alliance had liaised specifications, which were available in the private area.

Mr. Lewis reviewed the standards development process for IEEE and where this Task Force is in the process.

The chair then showed the order of presentations and also announced guidelines for the use of meeting times. He indicated that the times shown were approximate. He indicated that as the group was considering baseline text at this stage that he would be more lenient regarding time limits this time to ensure full and complete discussion.

The chair also recommended that he had received a presentation late for posting (The Joint Link Synchronization and Training for the Camera Links) and that the request had been received on time. He asked if there was any objection to hearing the presentation – there was no objection.

The chair then showed the credentials for the private area and indicated that those who needed it may contact himself or the vice chair, Natalie Wienckowski for information.

STRAW POLLS AS ROLL CALL

The chair asked whether there was any objection to recording straw poll results as roll calls in the minutes, starting for today, and back-dating including the March 2025 plenary, in the interest of aiding consensus building (he explained, to mimic the 'in the room' knowledge of seeing raised hands).

Hearing no objection, the Chair indicated that he would publish the roll calls from March 2025, and starting with this meeting, all straw polls will be recorded.

PRESENTATIONS

(1:47PM) The Chair then moved to the presentations for the meeting.

Title: Crystal-less operation of a TDD PHY
URL: https://www.ieee802.org/3/dm/public/0525/Ng_3dm_01_05122025.pdf
Presenter: Hiok Tiaq Ng [Aviva Links Inc] (presenter), Kamal Dalmia [Aviva Links Inc]
Discussion: The presenter addressed the topic of practicality and technical feasibility of crystal less operation for TDD PHYs. The presenter noted that he was open to comments as to whether the rates of change of frequency (see slide 5 of the presentation) were too fast or too slow.
Questions were asked and answered, including suggestions for other rates of change, as well as suggestions of how frequency drifts may be accommodated.

The Chair reminded the group to log attendance in IMAT.
(2:30 – 2:34) Due to an issue with the web conference tool, the chair needed to pause the meeting for approximately 5 minutes to restart the tool.

The meeting resumed at 2:35PM with the next presentation.

Title: Emission profiles of a FDD and TDD PHYs
URL: https://www.ieee802.org/3/dm/public/0525/Ng_3dm_02_05122025.pdf
Presenter: Hiok Tiaq Ng [Aviva Links Inc]
Discussion: The presenter discussed an analysis of RF emission profiles of FDD and TDD PHYs and a comparison of the two techniques.
Questions were asked and answered.
(2:56PM)

Title: Electromagnetic immunity test results of a TDD PHY (01a)

URL:https://www.ieee802.org/3/dm/public/0525/Zerna_3dm_01a_150512_EMC_Coax.pdf

Presenter: Conrad Zerna - Aviva Links (presenter), Kamal Dalmia – Aviva Links, Tiaq Ng – Aviva Links
Discussion: The presenter discussed some test results of RF immunity testing of TDD PHY. Questions were asked and answered.

At 3:15PM the chair called the afternoon break until 3:45PM
The meeting resumed at 3:45PM

Title: Proposed text for RL & IL limits (v3)
URL: https://www.ieee802.org/3/dm/public/0525/boyer_sharma-3dm_xx_05-14-25_3.pdf
Presenter: Rich Boyer (Aptiv) (presenter) and Rohit Sharma (Molex)
Discussion: The presenter proposed limits for link segment insertion loss and return loss. Questions were asked and answered.

Title: Understanding Propagation Delay in IEEE 802.3dm: System Implications and Trade-offs
Presenter: TJ Houck (Marvell)
(the above scheduled presentation was halted on the first slide when a participant noticed a copyright notice on the slides – the presentations skipped on to the next scheduled presentation while the presenter fixed the issue. The original presentation was removed from the website.)
(4:10 PM)

Title: Updated Maximum Link Segment Delay Considerations
URL: https://www.ieee802.org/3/dm/public/0525/gorshe_3dm_01_2505.pdf
Presenter: Steve Gorshe (Microchip)
Discussion: The presenter provided an update to gorshe_3dm_01a_250501.pdf. He provided additional data and addressed comments received since the previous presentation.
Questions were asked and answered.
(4:32 PM)
The presentations then went back to the previously scheduled presentation, which was now fixed.

Title: Understanding Propagation Delay in IEEE 802.3dm: System Implications and Trade-offs (v2)
Presenter: TJ Houck (Marvell)
URL:https://www.ieee802.org/3/dm/public/0525/Link%20Propagation%20Delay%20in%20IEEE%20802.3dm%20-%20System%20Implications%20and%20Tradeoffs%20v2.pdf

Discussion: The presenter discussed issues related to how propagation delay is fundamental in high-speed link design, particularly for deterministic applications such as automotive networking. In the context of IEEE 802.3dm, different PHY architectures approach delay handling notably differently. He examined the necessity and implications of propagation delay. He highlighted scenarios where propagation delay must be explicitly managed—such as in time-division duplexing architecture and contrasted with approaches that inherently avoid the need for delay calibration.

(During discussion, the chair reminded participants to log into IMAT) **(4:40PM)**
(4:55 PM)

The meeting paused for 5 minutes while the chair asked individuals requesting potential straw polls and motions on the prior presentations to formulate their questions.

(5:02 PM)

STRAW POLL #1

Regarding the V1 coaxial link segment delay, I would support:

A The V1 limit text per gorshe_3dm_01_2505 slide 8 (i.e., 80 ns for 15 m)
B The V1 limit text per gorshe_3dm_01_2505 slide 8 with 4 ns additional margin (i.e., 84 ns for 15m)
C Need more information

A: 9 B: 18 C: 20 47 responded, 72 potential respondents.

There was discussion of a second straw poll which was deferred.

STRAW POLL #2

I support a maximum propagation delay of 84 nS
Y:28 N:25 53 responded, 72 potential respondents.

STRAW POLL #3

I support removing the maximum link segment propagation delay requirement from P802.3dm
Y: 19 N:27 A: 14 60 responded, 72 potential respondents.

The chair asked whether there were any additional straw polls for the day – there were none.

The chair then displayed a motion he had received a request for a motion, which would be considered in the morning. He asked individuals to consider it for potential moving in the AM1 session.

PREVIEW OF MOTION #1

Move to request the 802.3 working group adopt the following objective for 802.3dm:
-Do not preclude the use of the remote clock source for the high-data rate transmitter.

Discussion then resulted in a reformulated motion:

Move to not preclude the use of the remote clock source for the high-data rate transmitter.

The discussion ended with the chair requesting individuals to consider the proposed motions overnight.

The meeting recessed for the day at 5:49PM, to resume at 8:00AM CDT 5/15/2025.

The meeting resumed at 8:01 AM CDT, 5/15/2025

MORNING BUSINESS

Jon Lewis, 802.3dm Task Force Chair, reconvened the meeting at 8:02 AM 5/15/2025. He then briefly reviewed the agenda deck (agenda_3dm_01c_051425.pdf).

The chair then advised the group that attendance is recorded in IMAT and how to do that.

The chair then showed the IEEE Patent Policy slides from the agenda deck and gave the call for patents.
There were no responses **(8:03AM)**
The chair then showed the IEEE copyright policy, participant behavior (codes of ethics and conduct), individual process, and fair and equitable consideration slides from agenda_3dm_01c_051425.pdf.
There were no questions. **(8:04AM)**
The chair reviewed the planned presentation schedule for day 2.

Discussion then resumed on the straw polls from the previous day. There were no additional straw polls

Discussion then resumed on the subject of the motion from the previous day:

MOTION #1

Add an objective to IEEE P802.3dm that states: "Do not preclude using the low data rate signal to extract the timing reference for the high-data rate transmitter."

M: TJ Houck
S: Alireza Razavi
Technical (>=75%)
Y: 37 N: 11 A: 7 MOTION PASSES (8:26AM)

Presentations then resumed in the order previously announced.

Title: Evolution of 802.3dm: From GMSLE to ACT and Beyond (v3)
URL:https://www.ieee802.org/3/dm/public/0525/IEEE%20802.3dm%20PHY%20evolution%20Comparative%20Analysis%20for%20GMSLE,%20ACT,%20and%20TDD%20approaches%20v4.pdf
Presenter: TJ Houck (Marvell) (co-presenter) and Jay Cordaro (ADI) (co-presenter)
Discussion: The presenter discussed how the IEEE 802.3dm standard is shaping the future of high-speed automotive Ethernet, with competing PHY technologies and architectural proposals. This presentation explores the evolution of 802.3dm, comparing ~~Asymmetric Concurrent Transmission (ACT), GMSL Ethernet (GMSLE), and~~ the various ~~time-division duplexing (TDD)~~ proposals made to date.

Questions were asked regarding the use of trademarks in presentations and clarification was provided.
In discussion, the presenter amended the presentation to remove the text questioned.
Other questions were asked and answered.

(9:07)
Title: Receiver Design Targets for an Asymmetric Camera PHY Link
URL: https://www.ieee802.org/3/dm/public/0525/Chini_3dm_01a_0525.pdf
Presenter: Ahmad Chini (Broadcom) (presenter) and Mehmet Tazebay (Broadcom)
Discussion: This presenter provided two different examples of receiver design for TDD based PHY where one focuses on performance and the other targets lowest complexity.
Questions were asked and answered.

(9:35)
Title: Complexity and Performance Comparison of 802.3dm Architecture Proposals
URL: https://www.ieee802.org/3/dm/public/0525/Chini_3dm_02a_0525.pdf
Presenter: Ahmad Chini (Broadcom) and Mehmet Tazebay (Broadcom)
Discussion: The presenter discussed a comparison of complexity and performance of some presented receiver designs for multiple proposals to 802.3dm for asymmetric PHY in IEEE P802.3dm.

At **10:00AM**, the presentation had concluded and the group recessed for the morning break.
At **10:25AM**, the meeting resumed, and questions were asked and answered.

(10:56 AM)
Title: Summary of PCS/PMA Logic for ACT/GMSLE Transceiver
URL: https://www.ieee802.org/3/dm/public/0525/Lo_3dm_01_051425.pdf
Presenter: William Lo (Axonne)
Discussion: The presenter discussed aggregating all the consensus points of ACT transceiver to date in one place to help people gain a full picture of the current state of the PCS/PMA logic in the ~~ACT/GMSLE~~proposed transceiver specification.
Questions were asked and answered.

(11:14 AM)

Title: ACT/GMSLE Training Frame
URL: https://www.ieee802.org/3/dm/public/0525/Razavi_3dm_02_May_15_2025.pdf
Presenter: Alireza Razavi (Marvell)
Discussion: The presenter addressed the goal collaboration with other contributors to the May 1st meeting to create a more detailed and cohesive joint presentation on training frames for the ~~ACT/GMSLE~~ proposal.
There were no questions.

(11:22 AM)
Title: Transmit Power in ACT/GMSLE
URL: https://www.ieee802.org/3/dm/public/0525/sedarat_3dm_202505a.pdf
Presenter: Hossein Sedarat (Ethernovia)
Discussion: The presenter proposed transmit power numbers for all data rates in both upstream and downstream direction for the ~~ACT/GMSLE~~ proposal. A proposal for PSD masks is also included.
Questions were asked and answered.

(11:55 AM)

At 11:56 AM, the chair thanked the group for the morning presentations and the group recessed for lunch, to reconvene at 1:15 PM.

The meeting reconvened at 1:16PM.

The chair indicated that he had received a request for a motion:
Motion #2
Move to replace the adopted MDI RL with the corrected MDI RL found on Slide 4 of Jonsson_3dm_01_03_24_25.pdf
M: Ragnar Jonsson
S: Ahmad Chini
Technical (>= 75%)
MOTION PASSES BY UNANIMOUS CONSENT

Presentations then resumed **(1:20PM)**

Title: The Joint Link Synchronization and Training for the Camera Links
URL:https://www.ieee802.org/3/dm/public/0525/Razavi_3dm_02_May_15_2025_linkSync.pdf
Presenter: Alireza Razavi (Marvell)
Discussion: The presenter proposed a link synchronization scheme keeping the signal framing constant for link synchronization, training, and data modes.
Questions were asked and answered.
(1:36PM)

Title: Baseline Text Proposal for TDD-Based 802.3dm PHY
URL: https://www.ieee802.org/3/dm/public/0525/Baseline_Text_TDD_051125.pdf
Presenter: Wei Lou (Broadcom), Ahmad Chini (Broadcom), Mehmet Tazebay (Broadcom)
Discussion: The presenter gave a highlight of the initial proposal of text and block diagrams to 802.3dm Service Primitive, PCS and PMA Clauses/Subclauses, based on TDD operation. The text of the proposal is in https://www.ieee802.org/3/dm/public/0525/Baseline_Text_for_TDD_PHY_V1_050925.pdf

(2:34PM)

The chair then considered allowing an extended break for consensus building and recessed the group early for afternoon break, to reconvene at 3:30.

The meeting resumed at 3:31PM with the next scheduled presentation.

Title: Updated ACT/GMSLE draft text Proposal
URL: https://www.ieee802.org/3/dm/public/0525/jonsson_etal_3dm_01a_05_12_25.pdf
Presenter: Ragnar Jonsson (Marvell), Jay Cordaro (ADI), Hossein Sedarat (Ethernovia), William Lo (Axonne)
Discussion: The presenter discussed updates to the ~~ACT/GMSLE~~ draft text offered for this duplexing proposal. The intent is that this ~~draft~~ text will become the baseline for ~~the ACT/GMSLE~~this proposal, should it be accepted~~based text~~. He asked for constructive comments and criticism, and invited additional collaborators. Text of the proposal can be found at:
https://www.ieee802.org/3/dm/public/0525/jonsson_etal_3dm_01_05_12_25_text.pdf

Questions were asked and answered.
(3:56 PM)

The chair indicated that he had received an additional late presentation based on consensus formed at the meeting. He asked if there was any objection to hearing the presentation next, prior to the final scheduled presentation. There was no objection.

Title: Proposed baseline text
URL: https://www.ieee802.org/3/dm/public/0525/jonsson_chini_3dm_01_05_15_25.pdf
Presenter: Ahmad Chini (Broadcom) and Ragnar Jonsson (Marvell) (presenter)
Discussion: The presenter reviewed updates to what was presented on April 17th, including commonality found with the presentations of Mr. Chini, to adopt some baseline text common to the two proposals.

The chair previewed the following motion related to the presentation, expected to be heard the following morning, urging participants to review the document.

PREVIEW MOTION (#3)
Move to adopt as baseline text the text on slides 2 through 5 of Jonsson_chini_3dm_01_05_15_25.pdf with editorial license.

(4:03PM)
The meeting resumed with the final presentation.

Title: Modulation Independent Baseline Text
URL: https://www.ieee802.org/3/dm/public/0525/jonsson_3dm_01_05_12_25.pdf
Presenter: Ragnar Jonsson (Marvell)
Discussion: The presenter advised that the previously previewed text was no longer applicable, and was superseded by the.combined text of the previous (late) presentation.

Day Two Closing Business

The chair advised that having completed the presentations the task force would start at 9am the next day and run to completion.

Straw poll #4:

For both link segments I support:

a) The propagation delay of a link segment shall not exceed 84 ns at all frequencies between 2 MHz and Fmax MHz

b) The propagation delay of a link segment shall be >= 160 ns at all frequencies between 2 MHz and Fmax MHz.

During discussion, the requestor asked individuals not to respond if they did not support either proposal.
A: 25 B:26 Total in conference tool: 69 potential voters (18 did not respond)

At this point the chair announced that he had addressed all the straw polls he had received. He requested that if anyone had additional straw polls or motions they should send them to him via email.

The meeting recessed for the day at 4:31 PM, to resume at 9:00AM CDT 5/16/2025.

The meeting resumed at 9:02 AM CDT, 5/16/2025

Jon Lewis, 802.3dm Task Force Chair, reconvened the meeting at 8:02 AM 5/15/2025. He then briefly reviewed the agenda (agenda_3dm_01c_051425.pdf). He stated that the scheduled presentations had been reviewed and that he had received a request for an additional late presentation.

The chair advised the group that the meeting was being conducted as part of the 802.3 interim meeting, that payment of a fee was required, and how to find information on paying the fee.

The chair then advised the group that attendance is recorded in IMAT and how to do that.

The chair then asked whether any participants had not seen the IEEE Patent Policy, there were no responses. He then showed the IEEE Patent Policy slides from the agenda deck and gave the call for patents. There were no responses **(9:06AM)**
The chair then showed the IEEE copyright policy, participant behavior (codes of ethics and conduct), individual process, and fair and equitable consideration slides from agenda_3dm_01c_051425.pdf. There were no questions. **(9:08AM)**

The chair then reviewed the straw polls and motions from the prior two days and moved to discussion of the motion that had been previewed the prior day.

Title: Proposed baseline text
URL: https://www.ieee802.org/3/dm/public/0525/jonsson_chini_3dm_01_05_15_25.pdf
Presenter: Ahmad Chini (Broadcom) and Ragnar Jonsson (Marvell) (presenter)
Discussion: The briefly reviewed the text in the presentation that would relate to the motion.

MOTION #3
Move to adopt as baseline text the text on slides 2 through 5 of jonsson_chini_3dm_01_05_15_25.pdf with editorial license.
M: Ragnar Jonsson S: Ahmad Chini
Technical (>= 75%)
The chair took the motion via direct vote live, and verbally confirmed that participants in the room and online were able to access direct vote live, before calling for the vote.
Y: 46 N: 2 A: 2 (MOTION PASSES)
(Note – on request of the voter, an affirmative (Y) vote for Max Turner was manually added to the direct vote live tally)
(9:23 AM)

The chair announced that he had received no further requests for motions or straw polls. There were no responses from the floor.

LATE PRESENTATION
The chair then asked whether there was any objection to hearing a late presentation, which had been received and posted.

Title: Proposal for comparison process Next steps
URL:
https://www.ieee802.org/3/dm/public/0525/veloso_matheus_dm_01_comparison_20250515_v01.pdf
Presenter: Gumersindo Veloso, BMW Group (presenter) and Kirsten Matheus, BMW Group
Discussion: The presenter discussed his proposal for comparing the proposals and the criteria for adopting.

The chair indicated that he was not chartering an official ad hoc at this time due to time and leadership constraints..

Questions were asked and answered. During questions, there were concerns, confusion, and conflicting opinions on how the proposed discussion related to open individual participation in the Task Force. During discussion, the working group chair reminded the group of the individual participation policy and that contributions were from individuals.
There was substantial discussion regarding the proposed activity.

The discussion was paused for the morning break at **9:59AM.**
Discussion resumed at **10:31AM and concluded at 10:41AM.**

At the conclusion of discussion, the chair reminded the group of the process to follow if any individual has a reasonable suspicion of dominance and showed slide 19 of the agenda deck with the text of the policy, emphasizing that he was not making allegations of dominance – only providing the policy.

The meeting resumed at **10:32 AM.**

FUTURE MEETINGS
The chair discussed with the group holding an interim electronic task force meeting between now and the July plenary. There was no objection. He indicated that he would be circulating a poll to determine a date for the interim, which would then be announced.

The chair indicated he did not intend to ask the 802.3 working group to make a decision at the July plenary for the path forward due to the progress on consensus building.

Mr. Lewis reminded the group that the next scheduled face-to-face meeting would be during the IEEE 802 plenary from July 27 to August 1 in Madrid, Spain. A registration fee is required. There was discussion and a tentative agreement among the chairs of related projects that 802.3dm would meet Tuesday afternoon through Thursday morning.

A participant asked about the process for maintaining two proposed drafts. The chair responded that he wanted to move the proposed drafts forward by consensus within their support groups, rather than formal motions. He outlined ~~a process~~that he intended to create to facilitate discussion with an exchange of comments on the proposed text for each ~~draft~~proposal, in the process of building consensus for drafts that could be adopted once the duplexing method was chosen..

The Chair indicated that the agenda had been exhausted.

Mr. Lewis adjourned the meeting at **10:57AM CDT.**

Appendix A: Attendees at the IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force Meeting, May 14-16, 2025

Name	Employer	Affiliation	5/14 IMAT	5/14 Zoom	5/15 IMAT	5/15 Zoom	5/16 IMAT	5/16 Zoom
Agarwal, Uttam	Texas Instruments Inc.	Texas Instruments Inc.	2	X	4	X	2	X
Ahuja, Ramanjit	ON Semiconductor	ON Semiconductor	2	X	4	X	1	X
Arroyo, Hector		Analog Devices Inc.			1	X	2	X
Baggett, Tim	Microchip Technology, Inc.	Microchip Technology, Inc.	2	X	3	X		
Bar-Niv, Amir	Aquantia Corp	Marvell	1	X	4	X	2	X
Benyamin, Saied	Ethernovia	Ethernovia	2	X	4	X	2	X
Boyer, Rich	Aptiv - Signal and Power Solutions	Aptiv Signal and Power Solutions	2	X	4	X	2	X
Brandt, David	Rockwell Automation	Rockwell Automation	1	X				
Brooks, Paul	Viavi solutions GmbH	Viavi Solutions			2	X		
Brychta, Michal	Analog Devices Inc.	Analog Devices Inc.			4	X	2	X
Castro, Jose	Panduit Corp.					X		
Chimento, Nicholas		Analog Devices Inc.	2	X	4	X	2	X
Chini, Ahmad	Broadcom Corporation	Broadcom Corporation	2	X	4	X	2	X
Cordaro, Jay	Analog Devices	Analog Devices			4	X	2	X
Dalmia, Kamal	Aviva Links Inc	Aviva Links Inc	2	X	4	X	2	X
de Koos, Andras	Microchip Technology Inc	Microchip Technology Inc	2	X	4	X	1	X
Dodds, Michael	Leviton							X
Donahue, Curtis	Rohde & Schwarz	Rohde & Schwarz	1	X	4	X	1	X
Estrakh, Daniel	Valens Semiconductor	Valens Semiconductor	2	X	4	X	2	X
Ferretti, Vincent	Corning Incorporated	Corning Incorporated	1	X	1	X		
Fuller, Paul		Marvell	2	X	3	X	1	X
Gauthier, Claude	NXP Semiconductors	NXP Semiconductors	2	X	4	X	2	X
Geng, Limin	Huawei					X		
GHARBA, Ahmed	Volvo Cars							X
Goel, Sachin	Aviva Links Inc	Aviva Links Inc	2	X	4	X	2	X
Gorshe, Steven Scott	Microchip Technology, Inc.	Microchip Technology, Inc.	2	X	4	X	1	X
Graba, James	Broadcom Corporation	Broadcom Corporation	1	X	4	X	2	X
Graber, Steffen	Pepperl+Fuchs SE	Pepperl+Fuchs SE	2	X	3	X		
Gubow, Martin	Keysight Technologies	Keysight Technologies	2	X	3	X	2	X
Gupta, Ajeya		General Motors Company	1	X	4	X	2	X
Haasz, Jodi	IEEE SA			X		X		
Houck, TJ	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.	2	X	3	X	1	X
Hu, Mark	Aptiv					X		

Hutchison, Guy	Aviva Links	Aviva Links Inc; Aviva Links Inc.	2	X	4	X	1	X
HYAKUTAKE, YASUHIRO	Orbray Co., Ltd.	Orbray Co., Ltd.	2	X	4	X	2	X
Jones, Chad	Cisco Systems, Inc.	Cisco Systems, Inc.	2	X	4	X	1	X
Jones, Peter	Cisco Systems, Inc.	Cisco Systems, Inc.	2	X	2	X		
Jonsson, Ragnar	Marvell Semiconductor, Inc.	Marvell	2	X	4	X	2	X
Kandarpa, Venkata	Chelsio Communications	Chelsio Communications	2	X	4	X	2	X
Kapoor, Samay	Aviva Links	Aviva Links Inc.	2	X	3	X	2	X
Kim, Do Kyun		LG ELECTRONICS	1	X	3	X	2	X
Kim, Jay	Enphase					X		
Kim, Minji		LG ELECTRONICS	1	X	4	X	2	X
Kleinwaechter, Mathias	in-tech GmbH	in-tech GmbH	2	X	4	X	2	X
Kock, Joerg	NXP Semiconductors	NXP Semiconductors	2	X	4	X	2	X
Kocot, Chris		Coherent			1			
Lambert, Angela	Corning Incorporated	Corning Incorporated			2	X	2	X
Lasry, Ariel	Qualcomm Technologies, Inc	Qualcomm Technologies, Inc	2	X	4	X	2	X
Law, David	Hewlett Packard Enterprise	Hewlett Packard Enterprise			2		2	
Lee, Ching-Yen		Realtek Semiconductor Corp.	2	X	4	X	1	X
Lewis, Jon	Dell Technologies	Dell Technologies		X		X		X
LI, ERGE	Huawei Technologies Co., Ltd	Huawei					1	X
Lim, Hoei		Aviva Links Inc; Aviva Links Inc.	2	X	4	X	2	X
Lin, YK		Realtek Semiconductor Corp.	2	X	4	X	1	X
Lo, William	Axonne Inc.	Axonne Inc.	2	X	4	X	2	X
Long, Richard		TE Connectivity	1	X	4	X	1	X
Lou, Wei		Broadcom Corporation	2	X	4	X	1	X
Luo, Yuanqiu	Futurewei Technologies	Futurewei Technologies					1	X
Maguire, Valerie	Copperopolis	Copperopolis, affiliated with CME Consulting and Cisco			4	X	2	X
Mark, Simon	Wurth Electronik Group	Wurth Electronik Group	2	X	3	X		
Mash, Chris	Nupero Ltd	Ethernovia Inc	2	X	4	X	2	X
McClellan, Brett	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.	1	X	4	X	2	X

mi, guangcan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd					2	X
Miskho, Michael		Analog Devices Inc.	2	X	4	X	2	X
Murray, Brian	Analog Devices Inc.	Analog Devices Inc.	2	X	4	X	2	X
Neulinger, Christian	MD Elektronik	MD Elektronik	2	X		X		X
Ng, Hiok Tiaq	Aviva Links Inc.	Aviva Links Inc; Aviva Links Inc.	2	X	4	X	2	X
Nicholl, Gary	Cisco Systems, Inc.	Cisco Systems, Inc.					1	X
Omori, Kumi	NEC					X		
Paul, Michael	Analog Devices Inc.	Analog Devices	2	X	3	X		
Pineda, Luis	LP Tech Advisors, LLC	LP Tech Advisors, LLC; Samsung, Ethernovia	2	X	4	X	2	X
Pischl, Neven	Broadcom Corporation	Broadcom Corporation	2	X	4	X	2	X
Quan, Yu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd					2	X
Razavi, Alireza	Marvell	Marvell	2	X	4	X	2	X
Rodes, Roberto	II-VI	II-VI			1			
Sedarat, Hossein	Ethernovia	Ethernovia	2	X	4	X	2	X
Sharma, Rohit		Molex Incorporated	2	X	4	X	2	X
shirani, ramin	Ethernovia	Aquantia	2	X	4	X	2	X
Shrikhande, Kapil	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.					2	X
Srivastava, Atul	NEL							X
Stencel, Leonard		TDK Corporation of America	2	X	3	X	2	X
Strohmeier, Heiko	Robert Bosch GmbH	Robert Bosch GmbH	2	X	3	X	2	X
Sun, jingcong	Motorcomm Electronic Technology Co	Motorcomm Electronic Technology Co	2	X	4	X	2	X
Sun, Yi	OFS	Lightera	2	X	2	X		
Tan, Yuxuan	Motorcomm	Motorcomm	2	X	4	X	2	X
Tanc, Ahmet		NXP Semiconductors; NXP Semiconductors	2	X	4	X	2	X
TAZEBAY, MEHMET	Broadcom Corporation	Broadcom Corporation	2	X	2	X	2	X
Thompson, Geoffrey	GraCaSI S.A.	INDEPENDENT	2	X	4	X		
Torres, Luisma	Knowledge Development for POF SL	Knowledge Development for Plastic Optical Fiber	2	X	4	X	2	X
Tu, Mike	Broadcom Corporation	Broadcom Corporation	2	X	3	X	1	X
Turner, Max	Ethernovia	Ethernovia	2	X	4	X	2	X
Vakilian, Kambiz	Broadcom Corporation	Broadcom Corporation	2	X	4	X	2	X
Veloso Cauce, Gumersindo	BMW Group	BMW AG; BMW Group	2	X	4	X	2	X
Venkataraman, Srinivas	Meta							X

Voss, Robert	Panduit Corp.	Panduit Corp.	2	X	4	X		
Wang, Frank, S.S.	Realtek Semiconductor Corp.	Realtek Semiconductor Corp.	2	X	4	X	2	X
Wang, Haojie	China Mobile Communications Corporation (CMCC)	China Mobile Communications Corporation (CMCC)					2	X
Wienckowski, Natalie	IVN Solutions LLC	IVN Solutions LLC; Ethernovia	2	X	4	X	2	X
Wingrove, Michael	Ciena Corporation	Ciena Corporation					2	X
Withey, James	Fluke Corporation	Fluke Corporation	2	X	3	X		
Wu, Peter	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.	2	X	4	X	1	X
Zerna, Conrad	Aviva Links Inc	Aviva Links Inc	2	X	4	X	1	X
Zhang, Tingting	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd			1	X		
Zhuang, Yan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	1	X	1	X		
Zimmerman, George	CME Consulting, Inc.	CME Consulting/Analog Devices, APL Group, Cisco, Marvell, OnSemi, Sony	2	X	4	X	2	X

Appendix B: Motion Roll Call Records

MOTION #1: Add an objective to IEEE P802.3dm that states: “Do not preclude using the low data rate signal to extract the timing reference for the high-data rate transmitter.”

M: TJ Houck
S: Alireza Razavi
Technical (>=75%)
Y: 37 N: 11 A: 7 MOTION PASSES (8:26AM)

Attendee	Vote
Ahmad Chini	Yes
Alireza Razavi	Yes
Amir Bar-Niv	Yes
Andras De Koos	Abstain
Angela Lambert	Abstain
Ariel Lasry	Yes
Brett Mcclellan	Yes
Brian Murray	Yes
Chris Mash	Yes
Claude Gauthier	No
Conrad Zerna	No
Curtis Donahue	Yes
Daniel Estrakh	Abstain
Geoffrey Thompson	Yes
George Zimmerman	Yes
Gumersindo Veloso Cauce	No
Heiko Strohmeier	Yes
Hiok Tiaq Ng	No
Hossein Sedarat	Yes
James Withey	Yes
Jay Cordaro	Yes
Joerg Kock	No
Jose Castro	Abstain
Kamal Dalmia	Abstain
Leonard Stencel	Yes
Luis Pineda	Yes
Martin Gubow	Yes
Mathias Kleinwaechter	No
Max Turner	Yes
Mehmet Tazebay	No
Michael Paul	Yes
Michal Brychta	Yes
Natalie Wienckowski	Yes
Neven Pischl	Yes

Attendee	Vote
Paul Fuller	Yes
Peter Wu	Yes
Ragnar Jonsson	Yes
Ramanjit Ahuja	No
Ramin Shirani	Yes
Rich Boyer	Yes
Robert Voss	Yes
Rohit Sharma	Yes
Sachin Goel	No
Saied Benyamin	Yes
Samay Kapoor	No
Shun-Sheng Wang	Yes
Steffen Graber	Yes
Steven Scott Gorshe	Yes
Tim Baggett	Yes
Tj Houck	Yes
Valerie Maguire	Abstain
Wei Lou	No
William Lo	Yes
Yasuhiro Hyakutake	Yes
Yuxuan Tan	Abstain

MOTION#2 (for completeness, no roll call required):

Motion #2

Move to replace the adopted MDI RL with the corrected MDI RL found on Slide 4 of Jonsson_3dm_01_03_24_25.pdf

M: Ragnar Jonsson

S: Ahmad Chini

Technical (>= 75%)

MOTION PASSES BY UNANIMOUS CONSENT

MOTION #3:

MOTION #3

Move to adopt as baseline text the text on slides 2 through 5 of jonsson_chini_3dm_01_05_15_25.pdf with editorial license.

M: Ragnar Jonsson S: Ahmad Chini

Technical (>= 75%)

The chair took the motion via direct vote live, and verbally confirmed that participants in the room and online were able to access direct vote live, before calling for the vote.

Y: 46 N: 2 A: 2 (MOTION PASSES)

(Note – on request of the voter, an affirmative (Y) vote for Max Turner was manually added to the direct vote live tally)

Attendee	Vote
Ahmad Chini	Yes
Alireza Razavi	Yes
Amir Bar-Niv	Yes
Andras De Koos	Yes
Angela Lambert	Yes
Ariel Lasry	Yes
Brett Mcclellan	Yes
Brian Murray	Yes
Chad Jones	Yes
Chris Mash	Yes
Claude Gauthier	Yes
Conrad Zerna	Yes
Daniel Estrakh	Yes
George Zimmerman	Yes
Gumersindo Veloso Cauce	Yes
Heiko Strohmeier	Yes
Hossein Sedarat	Yes
James Graba	Yes
Jay Cordaro	Yes
Jingcong Sun	Yes
Joerg Kock	Yes
Kamal Dalmia	Abstain
Leonard Stencel	Yes
Luis Pineda	Yes
Luisma Torres	Yes
Martin Gubow	Yes
Mathias Kleinwaechter	Yes
Mehmet Tazebay	Yes
Michal Brychta	Yes

Attendee	Vote
Mike Tu	Yes
Natalie Wienckowski	Yes
Neven Pischl	Yes
Peter Wu	Yes
Ragnar Jonsson	Yes
Ramanjit Ahuja	Yes
Ramin Shirani	Yes
Rich Boyer	Yes
Rohit Sharma	Yes
Sachin Goel	No
Saied Benyamin	Yes
Samay Kapoor	No
Shun-Sheng Wang	Yes
Steven Scott Gorshe	Yes
Tj Houck	Yes
Valerie Maguire	Abstain
Wei Lou	Yes
William Lo	Yes
Yasuhiro Hyakutake	Yes
Yuxuan Tan	Yes

Appendix C Straw Poll Records

Straw Polls 5/14:

Launched Polls

#	Poll Name	Responses
1	Straw Poll #1 (for the record)	47
2	Straw Poll #2 (for the record)	53
3	Straw Poll #3	60

Straw Poll #1 (for the record): I support:

A The V1 limit text per gorshe_3dm_01_2505 slide 8 (i.e., 80 ns for 15 m)

B The V1 limit text per gorshe_3dm_01_2505 slide 8 with 4 ns additional margin (i.e., 84 ns for 15 m)

C Need more information

A: 9 B: 18 C: 20 .

47 responded, 72 potential respondents

#	User Name	Response
5	[LGE] Minji Kim	B
28	Ahmad Chini- Broadcom	B
20	Ahmet Korhan Tanc (NXP)	C
42	Andras de Koos (Microchip)	B
45	Ching-Yen Lee (Realtek)	A
29	Claude Gauthier NXP	B
4	Conrad Zerna, Aviva Links Inc.	A
12	Curtis Donahue [Rohde & Schwarz]	C
23	Daniel Estrakh (Valens)	A
1	Do Kyun Kim [LGE]	B
32	Frank, S.-S., Wang (Realtek)	B
39	Geoff Thompson [GraCaSI S.A. - Independent	B
27	Guy Hutchison (Aviva Links)	B
25	Heiko Strohmeier [Bosch]	C
18	Hoei Lim - Aviva Links	A
9	James Withey (Fluke)	C
47	Jim Graba, Broadcom	B
16	jingcong Sun [motorcomm]	C
10	Jörg Kock (NXP Semiconductors)	B
33	Kamal Dalmia - Aviva Links	A
35	Kambiz Vakilian -Broadcom (Kambiz Vakilian)	B
8	Len Stencel - TDK	C
21	Luis Pineda, LP Tech Advisors, LLC	C
19	Mehmet Tazebay - Broadcom	B
2	Michael Paul (Analog Devices)	C
34	Mike Tu (Broadcom)	B
40	Neven Pischl# Broadcom (Neven)	B

15	Nick Chimento (Analog Devices)	C
41	Paul Fuller [Marvell]	C
7	Ragnar Jonsson - Marvell (Ragnar Jonsson)	C
26	Ramanjit Ahuja - Onsemi	B
31	Ramin Shirani (Ethernovia)	C
46	rich boyer - Aptiv	C
38	Rohit Sharma -[Molex]	C
3	Sachin Goel (Aviva Links)	C
37	Samay Kapoor (Aviva Links)	A
44	Simon Mark [Wuerth Elektronik] (Silon Mark [Wuerth Elektronik])	A
11	Steffen Graber (Pepperl+Fuchs)	B
24	Steve Gorshe (Microchip)	B
6	Tiaq Ng [Aviva Links]	C
13	Tim Baggett [Microchip]	C
43	TJ Houck (marvell) (TJ Houck)	C
14	Uttam Agarwal - Texas Instruments	B
22	Venkata Kandarpa - Aviva Links	C
17	Wei Lou(Broadcom)	A
36	William Lo (Axonne)	C
30	YK Lin (Realtek)	A

Straw Poll #2 (for the record): I support a maximum propagation delay of 84 nS
Y:28 N:25 53 responded, 72 potential respondents

#	User Name	Response
5	[LGE] Minji Kim	Yes
20	Ahmet Korhan Tanc (NXP)	Yes
25	Ajeya Gupta (GM)	No
41	Alireza Razavi_marvell (Alireza Razavi)	No
49	Amir Bar-Niv - Marvell (Amir Bar-Niv)	No
48	Andras de Koos (Microchip)	Yes
12	Ariel Lasry (Qualcomm)	No
35	Brett McClellan	No
32	Brian Murray - Analog Devices	No
51	Ching-Yen Lee (Realtek)	Yes
30	Claude Gauthier NXP	Yes
3	Conrad Zerna, Aviva Links Inc.	Yes
24	Daniel Estrakh (Valens)	Yes
1	Do Kyun Kim [LGE]	Yes
37	Frank, S.-S., Wang (Realtek)	Yes
45	Geoff Thompson [GraCaSI S.A. - Independent	Yes
4	George Zimmerman, CME Consulting/ADI, APLgp,CSCO,MRVL,Onsmi, Sony	No
29	Guy Hutchison (Aviva Links)	Yes
27	Heiko Strohmeier [Bosch]	No
18	Hoei Lim - Aviva Links	Yes
21	Hossein Sedarat [Ethernovia]	No
53	Jim Graba, Broadcom	No
10	Jörg Kock (NXP Semiconductors)	No
38	Kamal Dalmia - Aviva Links	Yes
40	Kambiz Vakilian -Broadcom (Kambiz Vakilian)	Yes
22	Luis Pineda, LP Tech Advisors, LLC	No
7	Luisma Torres (KD)	Yes
44	Max Turner [Ethernovia]	Yes
19	Mehmet Tazebay - Broadcom	Yes
36	Michael Miskho (ADI)	No
9	Michael Paul (Analog Devices)	No
39	Mike Tu (Broadcom)	Yes
46	Neven Pischl# Broadcom (Neven)	Yes
15	Nick Chimento (Analog Devices)	No
47	Paul Fuller [Marvell]	No
34	Peter Wu,Marvell	No
8	Ragnar Jonsson - Marvell (Ragnar Jonsson)	No
28	Ramanjit Ahuja - Onsemi	Yes

33	Ramin Shirani (Ethernovia)	No
52	rich boyer - Aptiv	No
2	Sachin Goel (Aviva Links)	Yes
31	Saied Benyamin (Ethernovia)	No
43	Samay Kapoor (Aviva Links)	Yes
11	Steffen Graber (Pepperl+Fuchs)	Yes
26	Steve Gorshe (Microchip)	Yes
6	Tiaq Ng [Aviva Links]	Yes
13	Tim Baggett [Microchip]	No
50	TJ Houck (marvell) (TJ Houck)	No
#	User Name	Response
14	Uttam Agarwal - Texas Instruments	No
23	Venkata Kandarpa - Aviva Links	Yes
17	Wei Lou(Broadcom)	Yes
42	William Lo (Axonne)	No
16	Yi Sun - Lightera	Yes

Straw Poll #3: I support removing the maximum link segment propagation delay requirement from P802.3dm

Y: 19 N:27 A: 14 60 responded, 72 potential respondents.

#	User Name	Response
4	[LGE] Minji Kim	No
33	Ahmad Chini- Broadcom	Yes
24	Ahmet Korhan Tanc (NXP)	No
46	Alireza Razavi_marvell (Alireza Razavi)	Yes
56	Amir Bar-Niv - Marvell (Amir Bar-Niv)	No
55	Andras de Koos (Microchip)	Abstain
12	Ariel Lasry (Qualcomm)	No
40	Brett McClellan	Yes
38	Brian Murray - Analog Devices	No
58	Ching-Yen Lee (Realtek)	Abstain
34	Claude Gauthier NXP	No
3	Conrad Zerna, Aviva Links Inc.	No
13	Curtis Donahue [Rohde & Schwarz]	Abstain
29	Daniel Estrakh (Valens)	Abstain
1	Do Kyun Kim [LGE]	No
42	Frank, S.-S., Wang (Realtek)	Yes
52	Geoff Thompson [GraCaSI S.A. - Independent	No
37	George Zimmerman, CME Consulting/APLgp,ADI,CSCO,MRVL,Onsmi,Sony	No
32	Guy Hutchison (Aviva Links)	No
22	Hoei Lim - Aviva Links	No
25	Hossein Sedarat [Ethernovia]	Yes
10	James Withey (Fluke)	No
60	Jim Graba, Broadcom	No
18	jingcong Sun [motorcomm]	Abstain
11	Jörg Kock (NXP Semiconductors)	No
43	Kamal Dalmia - Aviva Links	Abstain
45	Kambiz Vakilian -Broadcom (Kambiz Vakilian)	No
8	Len Stencel - TDK	Yes
27	Luis Pineda, LP Tech Advisors, LLC	Yes
6	Luisma Torres (KD)	No
26	Marty Gubow - Keysight	Abstain
14	Mathias Kleinwaechter [in-tech]	No
51	Max Turner [Ethernovia]	Yes
23	Mehmet Tazebay - Broadcom	Abstain
41	Michael Miskho (ADI)	Yes
9	Michael Paul (Analog Devices)	Yes

44	Mike Tu (Broadcom)	No
53	Neven Pischl# Broadcom (Neven)	No
17	Nick Chimento (Analog Devices)	Yes
54	Paul Fuller [Marvell]	Abstain
47	Peter Jones (Cisco)	Abstain
7	Ragnar Jonsson - Marvell (Ragnar Jonsson)	Abstain
31	Ramanjit Ahuja - Onsemi	No
39	Ramin Shirani (Ethernovia)	Yes
59	rich boyer - Aptiv	Yes
50	Rohit Sharma -[Molex]	Yes
2	Sachin Goel (Aviva Links)	No
35	Saied Benyamin (Ethernovia)	Yes
49	Samay Kapoor (Aviva Links)	No
30	Steve Gorshe (Microchip)	Yes
5	Tiaq Ng [Aviva Links]	No
15	Tim Baggett [Microchip]	Yes
57	TJ Houck (marvell) (TJ Houck)	Yes
#	User Name	Response
16	Uttam Agarwal - Texas Instruments	No
28	Venkata Kandarpa - Aviva Links	No
21	Wei Lou(Broadcom)	No
48	William Lo (Axonne)	Yes
20	Yasuhiro Hyakutake (Orbray)	Abstain
19	Yi Sun - Lightera	Abstain
36	YK Lin (Realtek)	Abstain

Straw Polls 5/15

#	Poll Name	Responses
1	Straw Poll #4	51

Straw Poll #4: For both link segments I support:

a	The propagation delay of a link segment shall not exceed 84 ns at all frequencies between 2 MHz and Fmax MHz
b	The propagation delay of a link segment shall be >= 160 ns at all frequencies between 2 MHz and Fmax MHz

#	User Name	Response
16	[LGE] Minji Kim	b
20	Ahmad Chini- Broadcom	a
29	Ahmet Korhan Tanc (NXP)	a
47	Amir Bar-Niv - Marvell (Amir Bar-Niv)	b
1	Ariel Lasry (Qualcomm)	b
31	Brett McClellan-Marvell	b
17	Brian Murray - Analog Devices	b
43	Ching-Yen Lee (Realtek)	a
14	Christian Neulinger - MD Elektronik	b
21	Claude Gauthier NXP (Claude Gauthier)	a
49	Conrad Zerna, Aviva Links Inc.	a
22	Do Kyun Kim [LGE]	b
13	Frank, S.-S., Wang (Realtek)	a
3	Gumersindo Veloso (BMW)	a
4	Guy Hutchison (Aviva Links)	a
45	Heiko Strohmeier [Bosch]	b
44	Hoei Lim - Aviva Links	a
6	Hossein Sedarat [Ethernovia]	b
51	Jay Cordaro [Analog Devices]	b
50	Jim Graba, Broadcom	a
12	Jörg Kock (NXP Semiconductors)	a
40	Kamal Dalmia - Aviva Links	a
35	Kambiz Vakilian - Broadcom (Kambiz Vakilian)	a
33	Luisma Torres (KD)	b
23	Marty Gubow - Keysight	b
25	Mathias Kleinwaechter [in-tech]	a
2	Max Turner [Ethernovia]	b
19	Mehmet Tazebay - Broadcom	a
36	Michael Miskho (ADI)	b
8	Michael Paul - ADI	b
34	Michal Brychta - Analog Devices	b
42	Neven Pischl# Broadcom (Neven)	a

41	Nick Chimento (Analog Devices)	b
28	Peter Wu# Marvell (Peter Wu)	b
7	Ragnar Jonsson - Marvell (Ragnar Jonsson)	b
39	Ramanjit Ahuja - Onsemi	a
37	ramin shirani (Ethernovia) (ramin shirani)	b
15	rich boyer - Aptiv	b
11	Rich Long (TE Connectivity)	b
38	Sachin Goel (Aviva Links)	a
32	Saied Benyamin (Ethernovia) (Saied Benyamin)	b
18	Samay Kapoor (Aviva Links)	a
10	Steve Gorshe (Microchip)	a
5	Tiaq Ng [Aviva Links]	a
48	TJ Houck - Marvell (TJ Houck)	b
30	Uttam Agarwal - Texas Instruments	b
46	Venkata Kandarpa - Aviva Links	a
26	Wei Lou(Broadcom)	a
27	William Lo (Axonne)	b
24	Yasuhiro Hyakutake (Orbray)	a
9	YK Lin (Realtek)	a