# Unconfirmed Meeting Minutes: IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force General Ad Hoc

# October 10, 2024 Ad Hoc Meeting

### Prepared by Natalie Wienckowski

IEEE P802.3dm Ad Hoc meeting convened at 6:00 AM PDT, Thursday, October 10, 2024, by Max Turner, IEEE P802.3dm General Ad Hoc Chair.

### Attendance is listed in Appendix A

Presentation: agenda adhoc 3dm 01a 20241010.pdf

Presenter: Max Turner, Chair.

### Other IEEE Policies

Max Turner read aloud the slides on the IEEE SA copyright, Participant behavior (ethics), IEEE individual participation, and fair and equitable consideration policies. (6:01 am). There were no questions.

**IEEE SA Patent Policy**, Max Turner reviewed slides 0 through 4 of the IEEE SA Patent Policy and read aloud slides 1 through 4 of patent policy for Task Forces and made the call for patents (6:04 am).

There was no response to the call for patents at 6:05 PDT am.

Max Turner noted that there should be no recording or photography without permission.

Max Turner 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.

Max Turner then continued review of the presentation, reviewing decorum, information for the reflector, private area, and ground rules.

**Attendance**, the Chair advised the group that attendance would be taken from the WebEx log and IMAT. He then reminded attendees that they should show their employer & affiliation, and how to set these to make them correct. If anyone is unable

to change what is displayed for their name, they were requested to post their name and affiliation in the chat.

Max Turner turned to presentation <u>agenda\_adhoc\_3dm\_01a\_20241010.pdf</u> and reviewed the agenda for the meeting.

**Private Area:** The credentials for the private area were shared. Please contact Jon Lewis if you need these as there will not be included in the posted material.

**Approval of Agenda:** The chair asked whether there were additions or corrections to the agenda, and there were none. He announced that the agenda was approved.

## **PRESENTATIONS**

The Chair then moved to the presentations for the meeting. He announced that each presentation, including the questions and answers afterward, would be limited to 18 minutes. This would give a short time for switching between presenters and ensure that there would be time for all eight presentations.

(6:13AM)

Title/URL: Complexity and Timeline Considerations

**Presenter:** Steve Gorshe (Microchip)

**Discussion**: The presenter presented material why he thinks leveraging ASA is the fastest

path for P802.3dm.

Questions were asked and answered.

(6:33AM)

Title/URL: Proposed Training Sequence

**Presenter:** William Lo (Axonne)

**Discussion**: The presenter presented material reviewing a suggestion for how to do training in

a P802.3dm PHY, if based on 802.3ch.

Questions were asked and answered.

(6:56AM)

Title/URL: Measurements and Simulations on MDI Return Loss including PoC/PoDL

**Presenter:** Heiko Strohmeier (Robert Bosch GmBH)

**Discussion**: The presenter presented simulations on inductors for PoC, with a single inductor,

and compared the results to the 802.3ch MDI RL limit and the proposed limit in

On MDI Return Loss and Power Delivery.

Questions were asked and answered.

(7:16AM)

Title/URL: Converging on an ACT Modulation

**Presenter:** Ragnar Jonsson (Marvell)

**Discussion**: The presenter presented material describing similarities and differences between

the three presentations from July that proposed 802.3ch for the high speed direction and different modulation techniques for the low speed direction. He

suggested a path forward to come to convergence on a proposal.

Questions were asked and answered.

(7:36AM)

Title/URL: MDI RL Limit Text Proposal Ragnar Jonsson (Marvell)

**Discussion**: The presenter presented an MDI RL Limit proposal with text. He plans to

propose this as a baseline in November.

Questions were asked and answered.

7:56 The meeting took a short break

8:02 The meeting resumed with the next presentation, after a brief reminder to sign into IMAT.

(8:03 AM)

Title/URL: <u>IL and RL Limit Proposal for IEEE 802.3dm</u>
Presenter: Rich Boyer (Aptiv) & Rohit Sharma (Molex)

**Discussion**: The presenter presented proposals for link segment IL and RL for both SDP and

coax and listed the assumptions and reasons behind these proposals.

Questions were asked and answered.

(8:22 AM)

Title/URL: System Comparison

**Presenter:** Conrad Zerna (Aviva Links)

Discussion: The presenter presented material regarding camera speeds and usage to show

that 2.5G and 5G are the higher volumes and should be the focus of solutions. He also presented information on ASA Motion Link and how this supports this.

Questions were asked. Due to a shortage of time, it was requested that the presenter answer

questions on the reflector.

(8:43 AM)

Title/URL: Framing for Asymmetric Ethernet links

**Presenter:** Elvio Serrano, Alireza Razavi, Ragnar Jonsson (Marvell)

**Discussion**: The presenter presented a proposal for framing of high speed and low speed

frames for normal traffic and training.

No questions were asked.

9:50 The last presentation ended early and there were no questions. The queue was then opened for questions on <a href="System Comparison">System Comparison</a> which were then answered.

### **FUTURE MEETINGS**

There are no future ad hoc meetings scheduled.

The next scheduled meeting of P802.3dm is during the 802 Plenary in November.

Having exhausted the agenda, the meeting was adjourned at 9:00 AM PDT.

Appendix A: Attendees at the IEEE P802.3dm Asymmetrical Electrical Automotive General Ad Hoc Meeting, October 10, 2024

| Last Name      | First Name | Affiliation            |
|----------------|------------|------------------------|
|                |            |                        |
| Ahuja          | Ramanjit   | Onsemi                 |
| Aripirala      | Ravi       | Texas Instruments Inc. |
| Bergner        | Bert       | TE Connectivity        |
| Boyer          | Rich       | Aptiv                  |
| Chini          | Ahmad      | Broadcom               |
| Cordaro        | Jay        | Analog Devices Inc.    |
| Dalmia         | Kamal      | Aviva Links            |
| De Sousa       | Jonathan   | GG Group               |
| Estrakh        | Daniel     | Valens                 |
| Fuller         | Paul       | Marvell                |
| Ganesan        | Aravind    | Texas Instruments Inc. |
| Gauthier       | Claude     | NXP                    |
| Gerl           | Markus     | MD Elektronik          |
| Gorshe         | Steve      | Microchip              |
| Hopf           | Daniel     | Continental            |
| Hoshino        | Masayuki   | Continental            |
| Houck          | TJ         | Marvell                |
| Hu             | Mark       | Aptiv                  |
| Huang          | Yunteng    | Aeonsemi               |
| Hyakutake      | Yasuhiro   | Orbray Co., Ltd.       |
| Jonsson        | Ragnar     | Marvell                |
| Kikuta         | Tomohiro   | Orbray Co., Ltd.       |
| Kleinwaechter  | Mathias    | In-Tech GmbH           |
| Koeppendoerfer | Erwin      | Leoni Kabel GmbH       |
| Lasry          | Ariel      | Qualcomm               |
| Lo             | William    | Axonne                 |
| Lou            | Wei        | Broadcom               |
| McClellan      | Brett      | Marvell                |
| Mueller        | Thomas     | Rosenberger            |
| Muma           | Scott      | Microchip              |
| Nagib          | Michael    | Mixel Inc.             |
| Neulinger      | Christian  | MD Elektronik          |
| Niihara        | Yoshihiro  | Fujikura Ltd.          |
| Pandey         | Sujan      | Huawei                 |
| Razavi         | Alireza    | Marvell                |

| Reinhard     | Michael                    | SEI Automotive Europe GmbH                      |
|--------------|----------------------------|---|
| Ringel       | Haim                       | Consultant                                      |
| Sedarat      | Hossein                    | Ethernovia                                      |
| Serrano      | Elvio                      | Marvell   |
| Sharma       | Rohit                      | Molex LLC                                       |
| Strohmeier   | Heiko                      | Robert Bosch GmbH                               |
| Sugathan     | Nived                      | Daimler Truck                                   |
| Sun          | Jingcong                   | Motorcomm                                       |
| Tan          | Yuxuan                     | Motorcomm                                       |
| Tazebay      | Mehmet                     | Broadcom  |
| Torres       | Luisma                     | KD  |
| Turner       | Max                        | Ethernovia                                      |
| Veloso       | Gumersindo                 | BMW   |
| Wagenbrenner | Jochen-Klaus               | CARIAD SE                                       |
| Wan          | Lilian                     | Aptiv   |
| Wang         | Frank SS. (Shun-<br>Sheng) | Realtek   |
| Wienckowski  | Natalie                    | IVN Solutions/Ethernovia                        |
| Wu           | Peter                      | Marvell   |
| Zerna        | Conrad                     | Aviva Links                                     |
| Zhang        | Tingting                   | Huawei  |
| Zherebtsov   | Aleksei                    | Marvell   |
| Zimmerman    | George                     | CME Cnsltg(ADI#APLGp#Csco#MRVL#ONsm#Sntks#Sony) |
|              |                            | ny)   |