

Unconfirmed Meeting Minutes: Meeting of the IEEE P802.3dg Long-Reach Single Pair Ethernet TF

February 07, 2024 Electronic Ad Hoc meeting

Prepared by Bob Voss

All times in EST

IEEE P802.3dg Task Force meeting was called to order at 2/07/2024 10:03 AM by the chair, George Zimmerman.

The meeting was held electronically via WebEx.

Attendance is listed in Appendix A.

All presentations referenced in these minutes are located on the Task Force Public web page (https://www.ieee802.org/3/dg/public/May_2022/index.htm)

The Chair displayed and proceeded to review the agenda in https://ieee802.org/3/dg/public/May_2022/agenda_3dg_01_020724.pdf.

The agenda was approved at 10:06AM by unanimous consent.

Bob Voss continues as recording secretary for the task force.

The minutes from January 25, 2024, plenary session were approved at 10:07AM EST by unanimous consent.

Members of the Press, at 10:08AM EST the chair asked for any press members to identify themselves. None heard.

Attendance, the Chair advised the group that the attendance would be taken from Webex.

At 10:09AM EST, the Chair resumed review of the agenda deck, including the following items – a review of the participation policy, a review of the IEEE copyright policy, a review of the IEEE policy on dominance, and a review of the IEEE Standards process. There were no questions.

IEEE Patent Policy, The Chair read aloud the patent slides, slides 0 through 4. The call for patents was made at 10:15AM EST and **none** responded.

The Chair resumed review of the agenda deck material after the call for patents.

At 10:17AM EST, the chair reviewed the IEEE SA Copyright policy, participant behavior, individual process, fair and equitable consideration, showing the requisite slides for each topic.

The chair said there are no liaisons or communications for the task force to consider at this time.

Presentations and Discussion:

At 10:23AM EST, the Chair moved on to the presentations.

Presentation: AWGN Noise Models for PHY Evaluation (01a)

(Presented by George Zimmerman, CME Consulting/various)

- https://iee802.org/3/dg/public/May_2022/zimmerman_3dgah_01a_01292024.pdf
- Presentation started at 10:25AM EST.
- Starting at 10:41AM EST, questions were asked and answered.
- Group decided to use both AWGN and 2-source modeling.
- Mr. Zimmerman will double-check and publish the 2-source model he proposed, along with a spreadsheet supporting the model, to the task force website.

Presentation: LT Spice RLCG Spice Models of Cabling

(Presented by Bob Voss, Panduit)

- https://iee802.org/3/dg/public/May_2022/LTSpice%20RLGC%20model%2018AWG.zip (zip file)
- https://iee802.org/3/dg/public/May_2022/voss_3dg_230118.pdf (presentation)
- Presentation started at 10:57AM EST.
- Starting at 11:04AM EST, questions were asked and answered.
- Attenuation/Insertion Loss information requested – Mr. Voss will share via reflector.
- Return Loss Data requested – Mr. Voss will share via reflector.

Presentation: 100BASE-T1L MDI Circuit Suggestions

(Presented by Steffen Graber, Pepperl+Fuchs, Michal Brychta, Analog Devices)

- https://iee802.org/3/dg/public/May_2022/graber_brychta_3dg_01_02022024.pdf
- Presentation started at 11:12AM EST.
- Starting at 11:29AM EST, questions were asked and answered.
- Use circuitry shown in slides 3, 4, and 5 in this presentation.
- Mr. Brychta recommends that the group focus on transformer topology.

Presentation: 18 AWG Cable S-Parameters (500m) (Excel)

(Presented by Francois Beauregard, Belden)

- https://iee802.org/3/dg/public/May_2022/Beauregard_3dg_02072024.01.pdf
- Mr. Beauregard introduced the contributed data 11:30AM EST.
- He stated that there was adequate correlation between this data and that provided by Mr. Voss.

Presentation: Coupling Attenuation & Burst Test on balanced cables and cabling systems

(Presented by Ralf Tillmanns, Weidmüller)

- https://iee802.org/3/dg/public/May_2022/Tillmanns_3dg_01_02072024.pdf
- Presentation started at 11:39AM EST.
- Starting at 11:55AM EST, questions were asked and answered.

Presentations and discussion concluded at 11:56AM EST.

Next meetings

- Electronic Interim Meeting on 28Feb2024 (interim, but NO FEE)
 - 7:00AM to 9:00AM PST, see <https://iee802.org/3/calendar.html> for details.
 - Focus on PHY proposals and evaluations.
- March 2024 IEEE 802 Plenary – Denver, CO USA
 - In Person with remote access
 - Registration & Fee required!
 - See <https://www.ieee802.org/3/interims/index.html> for information.
 - We need to get to decisions ...
- Follow on topics: Progress PHY baseline proposals/decisions, MII proposals/decision, move to Draft 1.0

Having exhausted the agenda, the meeting was adjourned at 12:00PM EST.

Appendix A: IEEE P802.3dg Long-Reach Single Pair Ethernet Task Force Attendance

Last Name	First Name	Affiliation
Baggett	Tim	Microchip
Beauregard	Francois	Belden
Brandt	David	Rockwell Automation
Brychta	Michal	ADI
Fischer,	Peter	BKS Kabel-Service AG
Han	Ruibo	CMCC
Haydt	Mary Sue	Microchip
Hess	Dave	Cord Data
Jones	Chad	Cisco
Lackner,	Hans	QoSCom
Maguire	Valerie	Copperopolis - affiliated with CME Consulting
Murray	Brian	Analog Devices
Paul	Michael	ADI
Potterf	Jason	Cisco
Riesco	Jacobo	ADI
Schicketanz,	Dieter	Reutlingen University
Schreiner	Stephan	Rosenberger
Steffen	Graber	Pepperl+Fuchs
Sun	jingcong	Motorcomm
Tillmanns	Ralf	Weidmuller
Voss	Bob	Panduit
Wu,	Peter	Marvell
Xu	Dayin	Rockwell Automation
Zhang	Tingting	Huawei
Zhuang	Yan	Huawei
Zimmerman	George	CME Consulting/APLGP, Cisco, Marvell, OnSemi, Sony, SenTekSe