IEEE P802.3dj Electrical Ad Hoc Report

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Report

- 1 ad hoc call since May 2023 meeting
 - 22 June 2023
 - 50+ attendees
 - 5 contributions, 1 straw poll
 - 1 additional channel contribution
- Next meeting TBD:
 - To be announced over the electrical track email reflector

Presentations (1/2)

 Meeting minutes and presentation materials: https://www.ieee802.org/3/dj/public/adhoc/electrical/index.html

22 June

- "212Gb/s Per Lane PAM4 KR Cabled Backplane Channels Room vs. High Temps", Jim Weaver
- "Nomenclature for electrical interfaces ("AUIs") within an xGMII Extender", Adee Ran
- "Towards a 200Gbps/Lane High Loss AUI Baseline Consensus Status Report", Tobey Li
- "Error budget allocation for 106.25 GBd AUI-C2C and AUI-C2M within a PHY", Adee Ran
- "Towards a Package Model Baseline Proposal", Liav Ben-Artsi

Straw Polls

• 22 June 2023

Straw Poll #1

I would support the package model (not parameters) proposed in ben-artsi_3dj_elec_01a_230622 slide 6

- Yes
- No
- NMI
- Abstain

Results: Y: 12, N: 8, NMI: 24, A: 10

Key Themes

- Loss increase with temperature impacts both packages & boards/channels and needs discussion
- Should the TF choose a different BER target for AUIs used in the xGMII Extender?
 - Is a different nomenclature needed?
- To progress AUIs towards baselines, the Task Force needs clarity on:
 - BER budget partitioning
 - Division of BER between C2M and C2C interfaces of a high-loss AUI
 - Loss target range for high-loss AUI: 32dB? 36dB?
 - What should be done about medium-loss AUI?
 - Supported channel agreement
 - Reference EQ, including MLSE
- More information needed on package model and model parameters... and make a decision

THANKS!