IEEE P802.3dj Joint Optics/Logic Track Ad Hoc Report

Mark Nowell, Cisco
Optics Track Ad Hoc Chair

Mark Gustlin, Cisco
Logic Track Ad Hoc Chair
Report

• 2 ad hoc calls since March 2023 meeting
  – 13 April, 27 April
  – 90+ attendees each time
  – 13 contributions

• Next meetings will occur between May and July TF meetings :
  – Will be announced over the track email reflector

• Minutes:
  – 13 April, 27 April
Presentations

April 27

• "oFEC-based 800GBASE-LR1/ER1 proposal with Synchronous Mapping" presented by Gary Nicholl, Cisco
• "Towards an 800G-LR4 IMDD Specification" presented by Roberto Rodes, Coherent
• "Delay, A History of Defining Maximum Latency (Optical Module Delay)" presented by Jeffery Maki, Juniper
• "Considerations on channel insertion loss for 10 km and 40 km 800G applications" presented by Peter Stassar, Huawei
• "SMF Dispersion Penalty Specification Proposal" presented by Chris Cole, Coherent
• "Probability of CD penalty higher than that predicted by TDECQ measurement at 1305 and 1319nm" presented by Xiang Liu, Huawei
• "Considerations on Reference Receiver for 200G/lane Optical PMD" presented by Guangcan Mi, Huawei
• "FEC_I Sublayer Architecture Proposal for Type 2 PHYs" presented by Xiang He, Huawei
• "25G & 100G PCSL processing for Concatenated FEC" presented by Lenin Patra, Marvell
• "4x RS Codeword Interleaving Proposal for 200 GbE and 400 GbE" presented by Xiang He, Huawei

April 13

• "MAC link latency considerations" presented by Matt Brown, Huawei
• "RS Codeword Interleaving Analysis for 200 GE and 400 GE", Xiang He, Huawei
• "SMF Channel Dispersion Penalty Specification Proposal" presented by Chris Cole, Coherent
Key Themes

• Baseline proposal updates:
  – 800GBASE-LR1 oFEC based proposal
  – 800GBASE-LR4

• Useful technical contributions to help with analysis of baselines
  – Optical baselines:
    • SMF channel considerations (loss, chromatic dispersion)
    • Reference receiver considerations
  – Analysis on next steps in FEC proposals
    • Latency considerations, codeword proposals, interleaving, architecture
  – Review of DELAY parameter usage
THANKS!