

Greater than 10 Mb/s Long-Reach Single-Pair Ethernet (GT10MSPE) Study Group Opening Report

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Electronic Plenary
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IEEE 802.3 SPEP2P Study Group

Study Group information

Study Group Organization

George Zimmerman, IEEE 802.3 GT10MSPE Study Group Chair

Steve Carlson, IEEE 802.3 GT10MSPE Study Group Secretary

Study Group charter

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Greater than 10 Mb/s long-reach point-to-point Single-Pair Ethernet PHYs and Associated Powering

Study Group web and reflector information

Reflector information: <https://www.ieee802.org/3/GT10MSPE/reflector.html>

Home page: <https://www.ieee802.org/3/GT10MSPE/index.html>

(No private area)

IEEE 802.3 SPEP2P Study Group

Activities since July 2021 plenary

First (electronic) meeting September 29, 2021

Subsequent meetings October 13 and 27, 2021

Major items discussed, decisions made and actions

- Working draft PAR, CSDs, and Objectives for new long reach SPE PHYs

- Discussed extending power for these PHYs

- Discussed need for low latency in application space, and technical feasibility for 100 Mb/s

- Discussed need for technical feasibility work on 1000 Mb/s PHYs if we are to have them

Current status

- Documented use cases, discussion of reach & speed objectives (from prior study group)

- Consensus on 100 Mb/s PHY, Building consensus on reach (values from 300m to 500m)

- Built consensus on need and feasibility for $\leq 1.5\mu\text{s}$ latency over constrained link segments

- Built consensus on support for power over data, EEE (may still be wordsmithing objectives)

Need to build consensus/technical feasibility/reach if we are to include 1000 Mb/s PHY

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Meeting week plan

Goals for the meeting

- Continue discussion on speeds, reaches

- Straw polls/to determine reach objective

- Reach 'ready to go' state for 100 Mb/s PHY project with PAR & CSDs

- Ask for first rechartering of study group

Big ticket items

- Reach of 100 Mb/s PHY

- Do we have feasibility and broad market potential for 1000 Mb/s PHY as well?

 - And at what reach / latency – to give distinct identity

Meets Wed. Nov 10, 2021 7-9AM Pacific Time (1500 UTC)

Questions?

Thank you!