Proposal for 50 Gbps per lane Backplane and Direct attached Cable objectives

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50 Gb/s Ethernet over a Single Lane, Next Generation 100 Gbps and 200 Gbps Ethernet Study Group.

IEEE 802.3

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Proposal

Modify the currently adopted objectives for copper twin-ax and backplane PHYs as below:

Define single-lane 50 Gb/s PHYs for operation over

Copper twin-axial cables with lengths up to at least 3m

Printed circuit board backplane with a total channel insertion loss of <= 30dB at 13.28125 GHz.

Define a four-lane 200 Gb/s PHYs for operation over:

Copper twin-axial cables with lengths up to at least 3m.

Printed circuit board backplane with a total channel insertion loss of <= 30dB at 13.28125 GHz.

Define a two-lane 100 Gb/s PHY for operation over:

copper twin-axial cables with lengths up to at least 3m.

printed circuit board backplane with a total channel insertion loss of <= 30dB at 13.28125 GHz.

Thank you.