

# IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group DRAFT Objectives

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# DRAFT Objectives B10G AUTO

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Preserve the IEEE 802.3/Ethernet frame format at the MAC client service interface

Preserve minimum and maximum frame size of the current IEEE 802.3 standard

Support full duplex operation only

Define optional startup procedure which enables the time from power\_on=FALSE to a state capable of transmitting and receiving valid data to be less than 100ms

Support a data rate of 25 Gb/s at the MAC/PLS service interface.

Support optional Auto-Negotiation

Support optional asymmetric operation (under discussion-not adopted)

Support operation in automotive environments (e.g., EMC, temperature)

Do not preclude meeting FCC and CISPR EMC requirements.

# DRAFT Objectives B10GAUTO

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Define the performance characteristics of an automotive link segment and an electrical PHY to support 25 Gb/s point-to-point operation over this link segment supporting up to 2 inline connectors for at least 11 m on at least one type of automotive cabling.

Additional PHY types go here

Support optional Clause 104 power over data lines on appropriate media.