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

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DRAFT Objectives B10G AUTO

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

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

3. Support full duplex operation only

4. 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

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

6. Support optional Auto-Negotiation

7. Support symmetrical an asymmetrical maximum data rate operation

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

9. Do not preclude meeting FCC and CISPR EMC requirements.

DRAFT Objectives B10GAUTO

11. 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 XX inline connectors for at least XXm on at least one type of automotive cabling (e.g., UTP, STQ, STP, SPP, Coax, or Twinax).

13. Additional PHY types go here

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