



# Proposal for 2.5G Objective

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## Basis for 2.5G Objective

- ▶ 10G feasibility on single shielded balanced cabling presented in January
  - [http://ieee802.org/3/NGAUTO/public/jan17/zimmerman\\_3NGAUTO\\_02a\\_0117.pdf](http://ieee802.org/3/NGAUTO/public/jan17/zimmerman_3NGAUTO_02a_0117.pdf)
  - [http://ieee802.org/3/NGAUTO/public/jan17/dalmia\\_3NGAUTO\\_01a\\_0117.pdf](http://ieee802.org/3/NGAUTO/public/jan17/dalmia_3NGAUTO_01a_0117.pdf)
  - 2.5G STP feasibility follows from 10G, with possibility of UTP feasibility
- ▶ Broad market potential for a 2.5G presented in ad hoc
  - [http://ieee802.org/3/NGAUTO/public/adhoc/zinner\\_NGAUTO\\_01a\\_0217.pdf](http://ieee802.org/3/NGAUTO/public/adhoc/zinner_NGAUTO_01a_0217.pdf)
  - [http://ieee802.org/3/NGAUTO/public/adhoc/grau\\_NGAUTO\\_01a\\_0217.pdf](http://ieee802.org/3/NGAUTO/public/adhoc/grau_NGAUTO_01a_0217.pdf)
- ▶ Power dissipation of 2.5G more likely to meet automotive requirements
  - [http://ieee802.org/3/NGAUTO/public/adhoc/grau\\_NGAUTO\\_01a\\_0217.pdf](http://ieee802.org/3/NGAUTO/public/adhoc/grau_NGAUTO_01a_0217.pdf)
  - [http://ieee802.org/3/NGAUTO/public/adhoc/Leung\\_NGAUTO\\_01\\_0217.pdf](http://ieee802.org/3/NGAUTO/public/adhoc/Leung_NGAUTO_01_0217.pdf)
- ▶ Lower complexity and much faster time to market
  - [http://ieee802.org/3/NGAUTO/public/adhoc/Leung\\_NGAUTO\\_01\\_0217.pdf](http://ieee802.org/3/NGAUTO/public/adhoc/Leung_NGAUTO_01_0217.pdf)

# Proposal

## ▶ Adopt 2.5G Speed as Objective:

- Support data rates of 2.5 Gb/s at the MAC/PLS service interface.
- Define the performance characteristics of an automotive link segment and a PHY to support 2.5 Gb/s point-to-point operation over this link segment supporting up to four inline connectors for at least 15m on at least one type of automotive cabling (e.g., UTP, STQ, STP, SPP, Coax, or Twinax).