

Multi-Gig Automotive PHY

TECHNICAL FEASIBILITY Challenges for
10G over Shielded Twisted Pair

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Tech. Feasibility Challenges

► **Observation I:** Automotive EMC Requirements can be met

The transition from a non Automotive grade 10G per lane over 30m CAT8 with two inline connectors, to an Automotive grade, 10G per lane over 15m CAT8 with four inline connectors is not clear and need feasibility explanation.

Specifically, a major requirement of the automotive environment - EMC requires feasibility explanation and persuasion:

- Sharing the results of simulations (with their EMC impairments modeling/assumptions), testing and validation activities (like emission and immunity tests/measurements) that support the above mentioned explanation is needed

Tech. Feasibility Challenges

- ▶ **Observation II: CAT8 Applicability for Automotive Environment**

CAT8 applicability for the Automotive environment (insulation, shielding) should be presented and explained.

- ▶ **Observation III: Commercial Feasibility**

Relative comparison of STP vs. Fiber and vs. UTP. Market demand is greatly effected by related cost issues. We need to verify that this solution is commercially feasible for the market.



Thank You
