

Interest of 10Mbps @ 15Mbps Multidrop

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Observations

- Some Sensors/ECUS don't need 100Mbps data rates
 - 10 Mbps is enough → why paying for bandwidth not used?
- Necessity to fill the gap between
 - Low speed sensors working @ data rates < 2Mbps (CAN-FD)
 - High-speed sensors working @ data rates < 100Mbps (100BASE-T1)

Requirements for 10SPE

- Between 5-8 nodes @ 15m topology
- Seamless integration of 10SPE Sensors & Ethernet switched & IP network
 - CAN to Ethernet GW are complex and expensive
- Automotive Ethernet Scalability
 - Completing the PHY ecosystem from 10Mbps to Multi-Gigabit
- Cost-Effective PoDL
- Support of Sleep Management
- Lower power consumption
- Compatibility with AVB/TSN
 - List of standards to be defined