INTRODUCING

GEMnet
MULTI-GIGABIT DIFFERENTIAL CONNECTOR SYSTEM

- **Enabling 15 GHz and up to 56 Gbps and used for Multi-gigabit Ethernet and SerDes applications**

Automotive manufacturers are increasingly utilizing multi-gigabit (10Gbps+) data links to design applications and architectures. Designed to meet these requirements, TE Connectivity's (TE) GEMnet connector family supports Multigigabit Ethernet and SerDes applications; provides bandwidth up to 15 GHz and able to support data transmission up to 56 Gbps. The GEMnet connector system offers the flexibility to support a wide range of Ethernet applications and industry protocols including 4K displays, radar/lidar, high-resolution camera and safety critical applications.

KEY FEATURES AND BENEFITS

- High performance
  - Up to 15 GHz, capable of supporting 56 Gbps
- Automotive Robustness (LV214 and USCAR qualified)
  - Including, Class 1 vibration stability, primary and secondary locking, anti-stubbing, scoop proof and optional connector position assurance (CPA), and high cable retention force
- High EMI performance
  - From multiple contact points
- Protocols supported
  - Ethernet: 100BASE-T1, 1000BASE-T1, 2.5/5/10/25GBASE-T1
  - SerDes APIX®, FPD-Link, GMSL™, MIPI® A-PHY℠, PCIe®, USB,GVIF, HDBase-T™, ASA Motion Link
- Extensive portfolio
  - Based on 90° and 180° terminals, TE offers sealed/unsealed 1,2,4,6 port connectors and headers

APPLICATIONS

- Automotive Ethernet: 100BASE-T1, 1000BASE-T1, 2.5/5/10GBASE-T1
- 4K Camera systems
- 8K/High-resolution displays
- Lidar/Radar applications
- Autonomous driving
- Rear seat entertainment

LEARN MORE

- GEMnet Connector System Brochure
- GEMnet Connector System Video
- GEMnet Connector System Landing Page