ASIL B Compliant Design For IEEE 1588 implementation for IR Camera Data over Ethernet

• Synchronization and Time stamping of Video data using IEEE 1588.v2
• Video data source is an IR camera - digital parallel video data feed
• Sensor and synchronized video data feed to ECU over Ethernet
• Automotive Grade product – ISO 26262 ASIL B Compliant Design
  • Safety components to meet ISO 26262 requirements
  • Safety Analysis – FMEA and FMEDA
  • ISO 26262 compliant development and validation process
• Responsible for Design and Validation of the FPGA
  • RTL Design – IEEE 1588 Support, Camera I/F and Ethernet Framer, Safety Logic
  • Software development on MICO32 CPU
    • LWIP TCP Stack
    • PTP Stack
• Unit, Integration and System Testing

*Lattice FPGA Dev Kit and Customer Product Board

Team Size

10

Market

Automotive

Business Benefit

Platform evaluation and performance benchmarking