

**ROBERT BOSCH ENGINEERING  
AND BUSINESS SOLUTIONS**

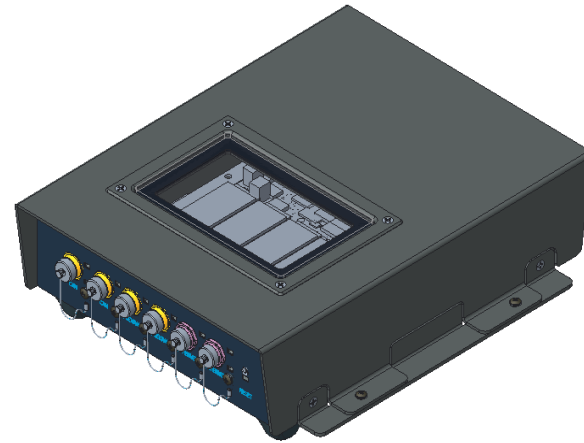
**RAPID PROTOTYPING FOR  
VEHICLE COMPUTER**

# Rapid Prototyping for Vehicle Computer Solution

The Multi-IO series is an advanced multifunctional bus control unit supporting current and upcoming vehicular bus systems and has numerous interfaces, thus covering most of the application fields where real-time bus access is required for rapid prototyping in the vehicle computer space.



Gen1



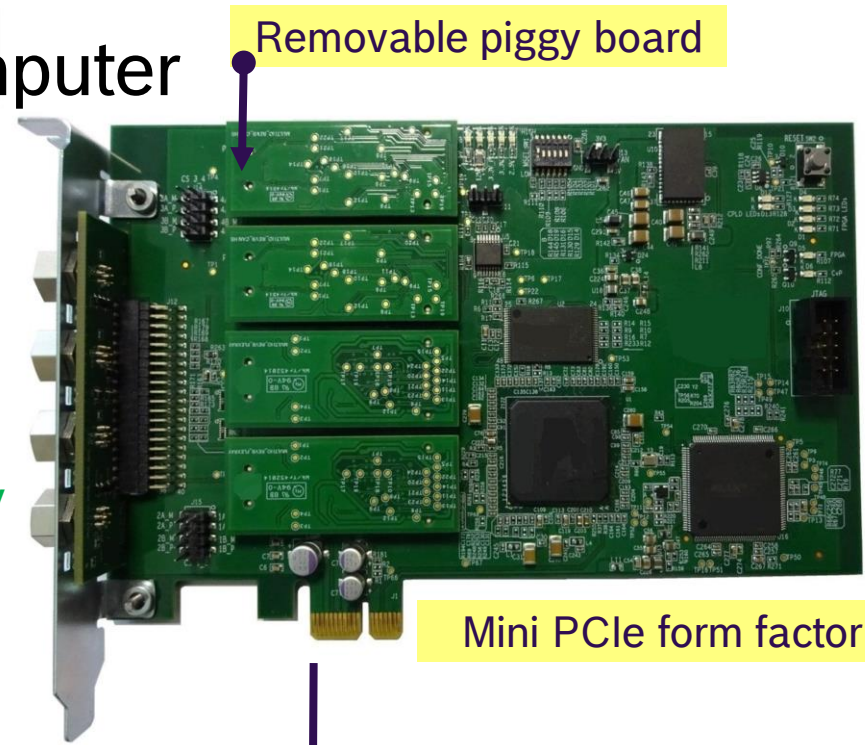
Gen2

# Rapid Prototyping for Vehicle Computer Gen1

- Real-time access to vehicular bus
  - Monitor & Control
- Intuitive, multi-functional front LEDs
  - Easy diagnostic
- Accessible to app. SW via POSIX I/f
- Multi-core scalable
- Supports wake-up/sleep modes
- Startup in < 200 ms
- Custom tool to upgrade FPGA firmware



- 8x CAN
- 4x FlexRay



Mini PCIe form factor



- Driver SW available for Linux OS
- Can be provided on demand for other OS

Image source: Internet

# Rapid Prototyping for Vehicle Computer Deployment setup

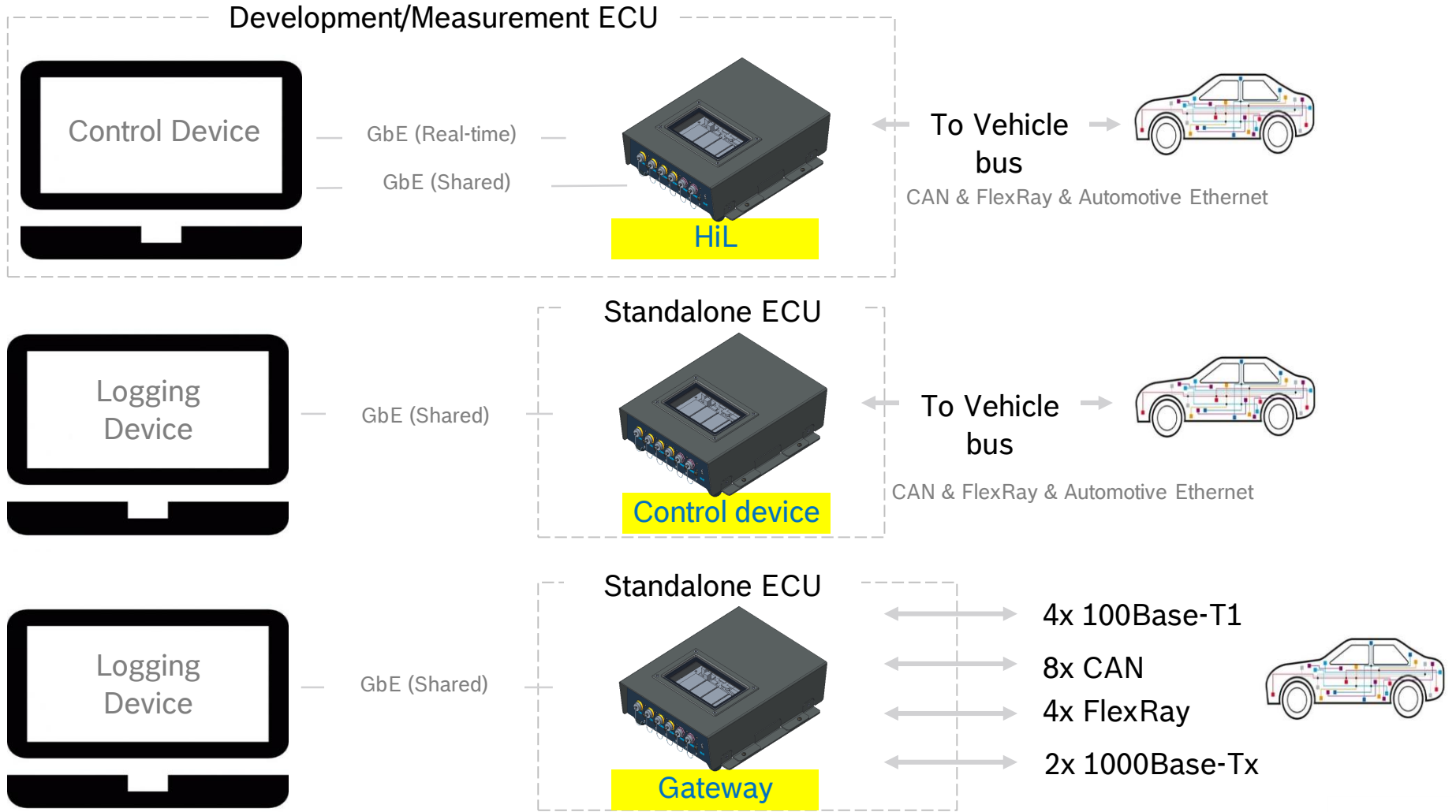


2014 AUDI Autonomous Driving Technology zFAS Explained

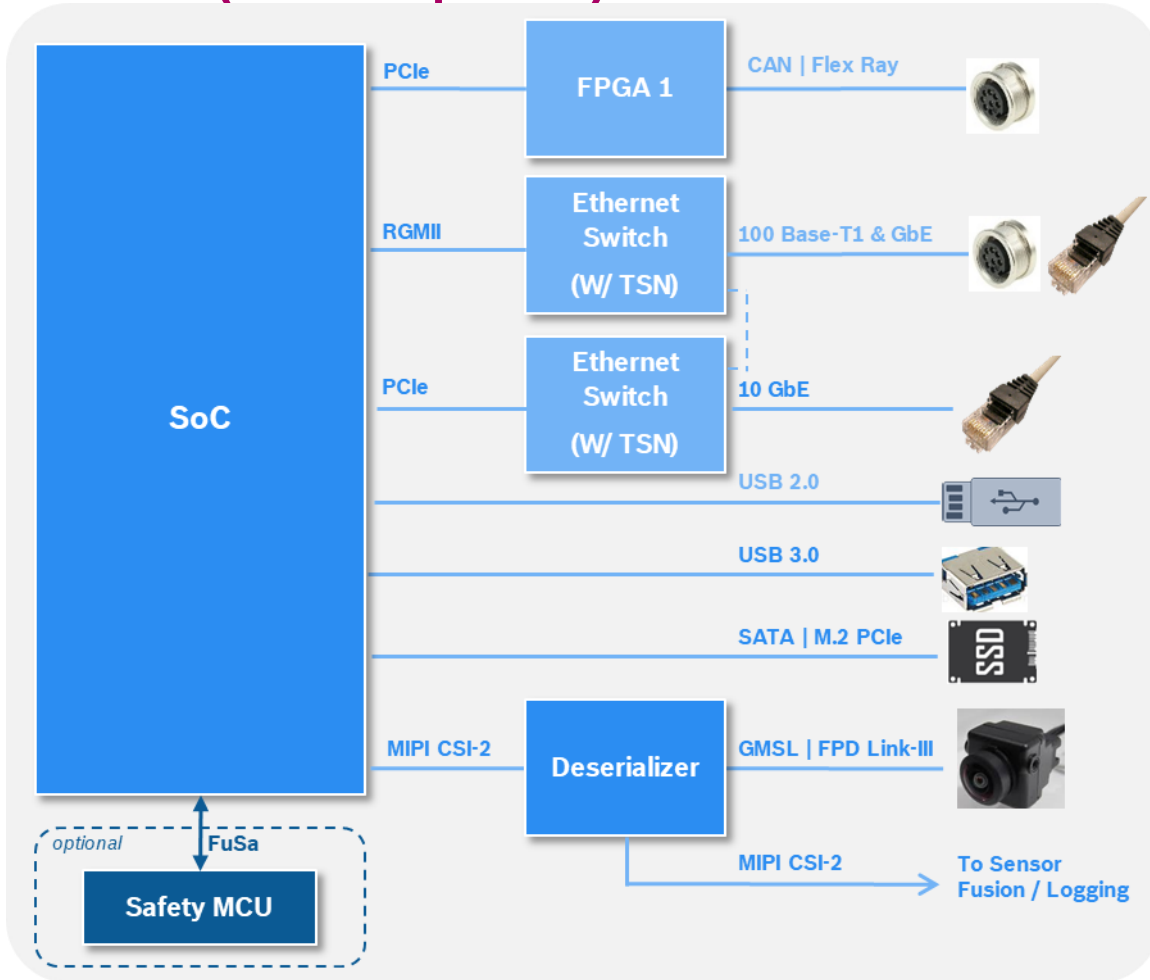
Image source: Internet

# Rapid Prototyping for Vehicle Computer

## Usecase



# Rapid Prototyping for Vehicle Computer Gen3 (on request)



- 5x 100 Base-T1
- 2x 1 GbE
- 8x CAN FD | CAN HS
- 4x Flex Ray
- 2x 10 GbE
- Storage Interface for SSD
- 3x MIPI CSI-2
- Up to 12 Cameras
- USB 2.0 & 3.0 I/F

# THANK YOU