Car2x Module

OBE Overview

DGE’s Car2x Module is a flexible, open controller (OBE platform) for DSRC applications. Different DSRC radios can be connected and used for various applications and testing. Car2x functions include emergency vehicle signal interrupt, traffic flow optimization, traffic and hazard notification, active safety management, etc.

The DGE platform is designed to interface with existing vehicles’ data-bus using OBD-II and is ideal for interoperability testing.

Modular hardware and software system design allows for upgrades and functionality additions.

Applications

- Interoperability testing
- OEM Demonstrations
- Public sector usage
- Field Deployment
- DSRC radio testing
- Vehicle safety
- Retrofit
- Car2x communication and application development

Features

- DSRC radio
- GPS
- Bluetooth
- WiFi
- Separate application processor
- OBD-II vehicle data-bus access
- Large and configurable touch-screen with soft buttons
- Buzzer for warnings
- Small size 6”x4”x2”
- 12V power adapter supplied

Benefits

- Flexible Car2x development platform
- Simple installation
- Will work with any DSRC radio
- Will work with existing vehicles

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DGE Inc.

Providing electrical engineering design and consulting services to the automotive OEMs, Tier and Aftermarket Suppliers.

Products
- Automotive Network Gateways
  - CAN / GM-LAN/ Ford FNOS
  - Ethernet
  - LIN
- Vehicle Bus Interfaces
  - ECU subsystem for seamless access to OEM vehicle network
  - OEM-Safe Aftermarket Gateway
- Custom Automotive Development Tools
  - Engine Simulator
  - Transmission Simulator
  - Telematics HIL Vehicle Drive Simulator
  - High Speed Data Acquisition System
  - Load Boxes (design or build to print)
- Custom Automotive Designs
  - Body Control Modules
  - Telematics / Infotainment Control Modules
  - Motor Control Modules
  - Hybrid/BEV Battery Control Modules
- Telematics Designs
  - GPS
  - GSM/CDMA
  - Bluetooth, WiFi
  - DSRC / Car2x
  - On-Board Equipment

Services
- Hardware Design
  - Embedded Circuit Design (MCU, ASIC, FPGA, CPLD, Power, and RF Technologies)
  - Prototype and Production Vehicle Module Design
  - ECU Test, Validation, and Simulation Equipment Design
- Software Development
  - Embedded Solutions
  - PC Solutions
  - C, C++, and Assembly Language
  - Real Time Operating Systems Application Design (Linux, OSEK, and Others)
  - National Instrument LabVIEW (Real Time, PDA, FPGA)
- Testing and Validation
  - Vehicle Bus Software and Hardware Design Validation
  - Vehicle-Level Bus Validation
  - ECU Diagnostics Validation
  - End-to-End System Integration and Validation
- CAD and Lab Services
  - Schematics and PCB Layout
  - Electronic Packaging Design – Solid Modeling
  - Complete Electronic Box Builds
  - Prototype Vehicle Modifications
- Project Management
  - Coordination / Management of Entire Customer Projects
- Vehicle Electronics Troubleshooting and Consulting

Integration
With our experience and expertise, we assist our partners in integrating their products into the OEM vehicle. We focus on the entire vehicle system.

Consulting
We collaborate with OEMs and Tier suppliers to develop and validate electronic designs. We support your EE activities by providing prototype design and consulting services. We speed the process by advising regarding the OEM product development cycles and provide project management and coordination.

Design
Areas of expertise include:
- Embedded Software and Hardware
- Telematics
- Vehicle Networks
- Testers and Simulators
- Communication Gateways
- ECU/Subsystem Hardware
- System Integration and Validation

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