



DGE Inc.

## DGE GatewayTK

### *End-User Configurable Gateway Module*

#### Features and Benefits

- Fully end user configurable via PC based GUI
- Low power/sleep support to reduce battery drain
- Proven hardware design
- Extensive vehicle integration testing
- Wireless field updates

#### Specifications

- 2 x High speed CAN channels
- 1 x Single wire CAN channel
- 1 x LIN channel
- -40 °C to +85 °C operation
- 9V to 18V operation
- 4.3" x 3.3" x 1.2" plastic housing

The DGE GatewayTK is a cost effective, user configurable device for low volume prototype situations. The GatewayTK differs from other DGE Gateway products by providing a means for the end user to configure functionality reducing 3<sup>rd</sup> party engineering costs.

The GatewayTK provides multiple CAN interfaces (2 x HS CAN, 1 x SW CAN), a single LIN interface, and a Bluetooth interface.

The GatewayTK draws upon DGE's extensive experience in designing network gateway modules and vehicle bus interfaces for development applications as a Tier 1 automotive supplier. The GatewayTK is a custom module based upon DGE's Gateway Family of Development Modules that utilize the industry standard CAN and LIN networking protocols and is available to third party suppliers who wish to access and utilize OEM network data.



DGE has developed the GatewayTK with production in mind. Like all DGE Gateway Modules DGE has selected automotive qualified components easing the transition from prototype to production.

GatewayTK use cases:

1. Stand alone bus gateway
  - a. Gate messages between any combination of busses
    - i. Highspeed CAN & Single Wire CAN
    - ii. LIN
    - iii. Bluetooth
2. Bus tool
  - a. "Soft" switch bank
  - b. Data logging
  - c. Event notification
3. Combination mode
  - a. Configure autonomous functionality (use case #1) while offloading pertinent logic (use case #2) to an external device

Please visit our website for ordering info: <http://www.dgeinc.com/inquiry.htm>





# Solutions for Vehicle Electronics

## DGE Inc.

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

### 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.

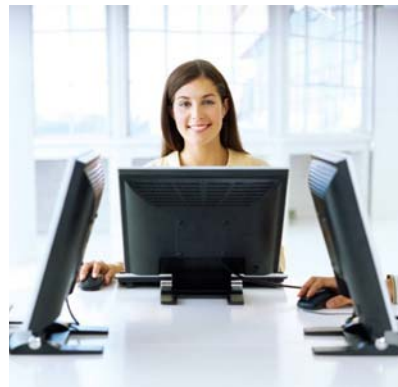
### Consulting

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



### 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**



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