

CANduit

Overview

The CANduit is a CAN vehicle bus transceiver system that provides convenient accessibility to the vehicle's CAN B and C buses in the passenger compartment when only the diagnostic lines are available. Standard data loggers and bus monitor tools can be attached to this device for various data monitoring and capture applications.

Operation

The CANduit consists of two transceiver modules. One module is located underhood and connected to the CAN Central Gateway module (e.g. FCM) and the vehicle diagnostics harness. The other module is located in the vehicle interior (or trunk) and connects to the J1962 diagnostic connector or similar wiring. These two modules form a CAN bus conduit (hence the name CANduit) from the engine compartment to the passenger compartment. CAN B and C bus messages are passively received by the underhood CANduit module and sent to the interior CANduit module which recreates the CAN messages, preserving message sequence. CAN D diagnostic communications is still functional between the CAN Central Gateway and diagnostic tools in the passenger compartment.

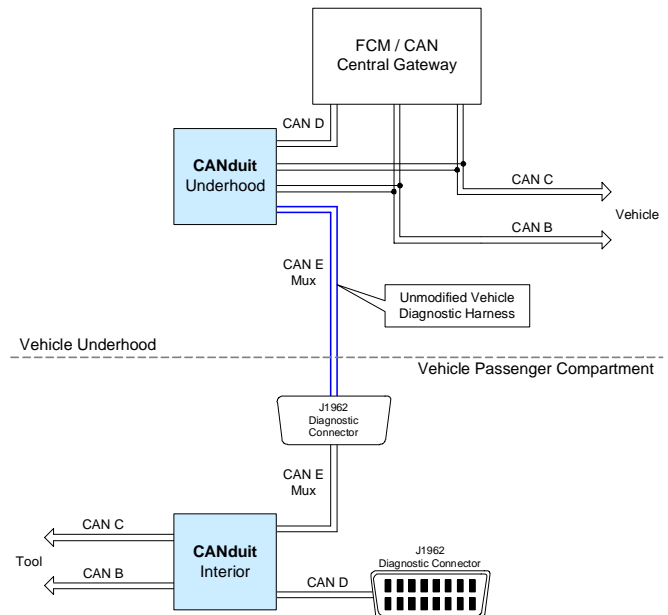
The CANduit modules can be reprogrammed via RS-232 for software updates supplied by DGE. Both modules are designed to be left in the vehicle as long as necessary.

Benefits

The CANduit provides convenient CAN bus data capturing for development, debugging, and fast-feedback purposes. Instead of modifying vehicle harnesses, drilling holes through the firewall, or bringing wires into the passenger compartment from the outside, the CANduit uses existing vehicle diagnostic harnesses without any modifications. Also, the CAN B and C buses are not extended which avoids adversely affecting the bus integrity. Installation is quick and avoids compromising modifications to the vehicle harnesses.

Support

Upon request, DGE can provide all necessary interface harnesses and modules for the passenger compartment and the connection to the CAN Central Gateway module underhood. Contact DGE for further details.



Standard Features

- Extension of 500 Kbps CAN C bus from underhood to vehicle interior
- Extension of 83.3 Kbps CAN B bus from underhood to vehicle interior
- CAN D
- Module wake-up configurable to either IGN or BATT
- Module will go to sleep two minutes (configurable) after IGN OFF
- RS-232 interface for flash re-programmability

Possible Expansion

- Mounting options
- DGE Data Logging or Bus Monitoring tool to connect to passenger compartment module
- Smaller size enclosure for both CANduit modules
- 125 Kbps High Speed CAN B

Specifications

- -40°C to +125°C operation (underhood module)
- 9V to 16V operation
- 100mA per module typical in run mode
- Less than 1mA per module in sleep mode
- Approximate size: 4.5" x 3.3" x 1.1"

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