

# QDCAN10 - CAN over Battery Power Lines

## GENERAL

The QDCAN10 is a VLSI device for data communication over noisy DC power lines to eliminate complex harness and enables quick and simple installation for after-market options, saving the installation of excessive wires and connectors. The device uses CAN bus protocol as its data input and output from commercially available CAN bus controllers. If required, the device can operate on a single wire bus. It is a complete transceiver solution to multiplex commands and data between wide range of modules in a vehicle such as Climate Control and Temperature sensor, Security detectors and Immobilizers, Car Audio components, Remote operation buttons on the steering wheel, etc.

The QDCAN10 is based on the DC-BUS technology. It contains a Modem, Channel Coder/decoder (ECC), Communication Controller to overcome the hostile environment on vehicle battery lines and a CAN bus interface module which translates the CAN message into DC-BUS message and vice versa. A Sleep mode reduces the power consumption when instructed by a CAN controller. In the Sleep mode, the device monitors the DC line for activity on the DC lines to wakeup its CAN bus controller.

## Applications

- Body electronics
- Car Audio control
- Climate control
- After-market options

## Features

- Noise Robust, 10Kbps Communication over battery Power Line (PLC)
- Multiplex network, Up to 16 Devices, CAN bus compatible message
- Low Cost, Flexible, Eliminates Complex harness, Saves installation
- Sleep Mode for Low Power Consumption
- Opens New Dimensions for Car Electronics Design

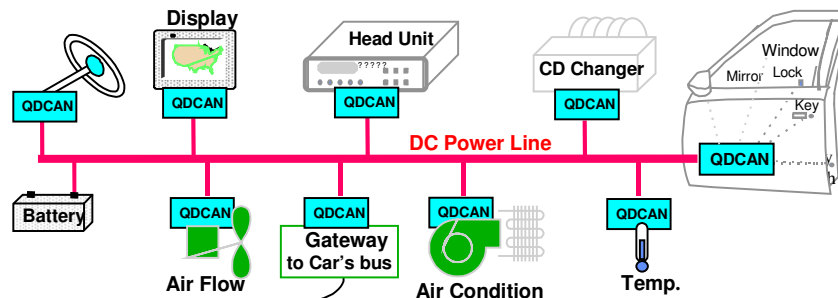


Figure 1 - Typical CAN bus network

## Host Interface Ports

Two lines are used by the QDCAN10 device to receive and send data to the CAN controller according to CAN bus specification 2.0 part A. Two lines are used to enter and exit the Sleep mode.

## Characteristics

<b>Packet data:</b>	10Kbps
<b>Modulation method:</b>	ASK
<b>Error correction codes:</b>	Built in
<b>Power save mode:</b>	Built in
<b>Packet size:</b>	2-16 bytes
<b>Package:</b>	18 pin SOIC

