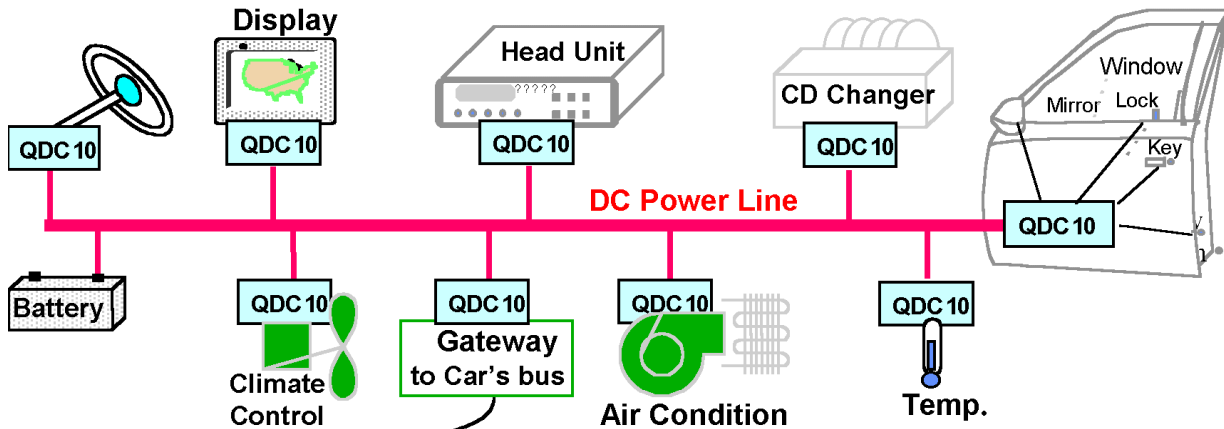


QDC10 - Multiplex Data Over Battery Power Lines

Description

The QDC10 is a VLSI device for data communication over noisy DC power lines, which therefore eliminates complex wiring and provide quick and simple installation. If required, the device can operate on a single wire bus. It is a complete solution for a multiplex network of commands and data between a wide range of modules in a vehicle such as climate control and temperature sensor, security detectors and immobilizers, audio components, remote operation buttons on the steering wheel, etc.

The QDC10 is based on the DC-BUS technology. It comprises a modem, channel coder/decoder (ECC), communication controller to overcome the hostile environment on vehicle battery power lines. A sleep mode reduces the power consumption when there is no activity over the unique multiplexed network.



Typical QDC10 multiplex network applications

Applications

- Automotive electronics
- Security systems
- Car audio control
- Climate control
- Navigation systems

Features

- Noise robust, 10Kbps communication over a battery power line.
- Peer to Peer, up to 16 devices, 2-16 bytes packet message.
- Low cost, flexible, eliminates complex cabling, saves Installation.
- Sleep mode enables low power consumption.
- Opens new dimensions for car electronics design.
- Data bandwidth can be dynamically shared between active devices.

Characteristics

- Packet data: 10Kbps
- Modulation method: ASK
- Communication Protocol: CSMA-CR
- Error correction codes: Built in
- Power save mode: Built in
- Packet size: 2-16 bytes
- Package: 18 pin SOIC

1	Res1	Res6	18
2	RxEnable	RxData	17
3	Res2	OscIn	16
4	~Reset	OscOut	15
5	Vss	Vdd	14
6			13
7	DataIn	DataOut	12
8	TxData	ClockIn	11
9	TxEnable	Res5	10
	Res3	Res4	

QDC10 pin-out