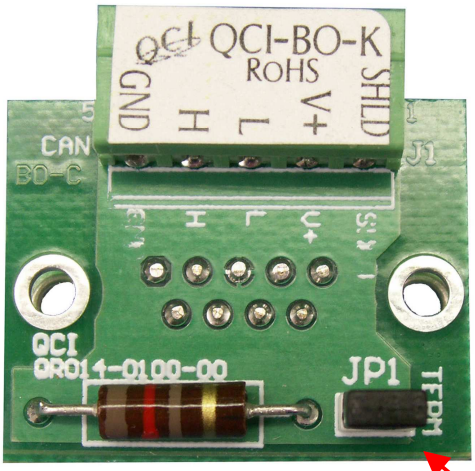
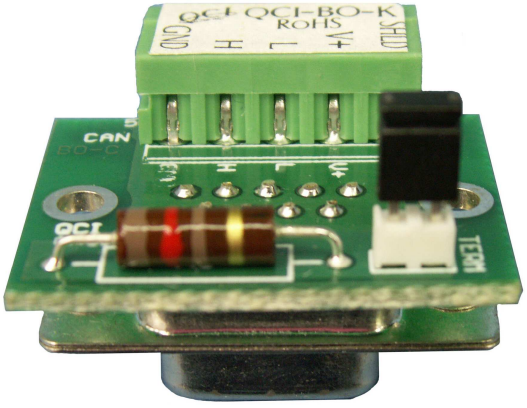
DB9 CAN Breakout Module - QCI-BO-K

QCI-BO-K



Termination Jumper



Product Overview

QCI-BO-K breakout board provides a means of connecting CAN signals to the DB-9 format CAN connector on the QCI-D2-IGK controller. For use with the QCI-D2-IG-K controller, only the CAN-H, CAN-L and CAN-GND signals need to be connected. The CAN-V+ and CAN-SHIELD connections are provided per standard CAN wiring for a DB9 as defined in CiA® (CAN in Automation) documentation, however, the QCI-D2-IGK does not implement these optional signals.

The provided screws lock the breakout to the DB9 CAN connector. There is a five (5) pin connector for landing the CAN communications and power signals, and a jumper to enable the termination resistor.

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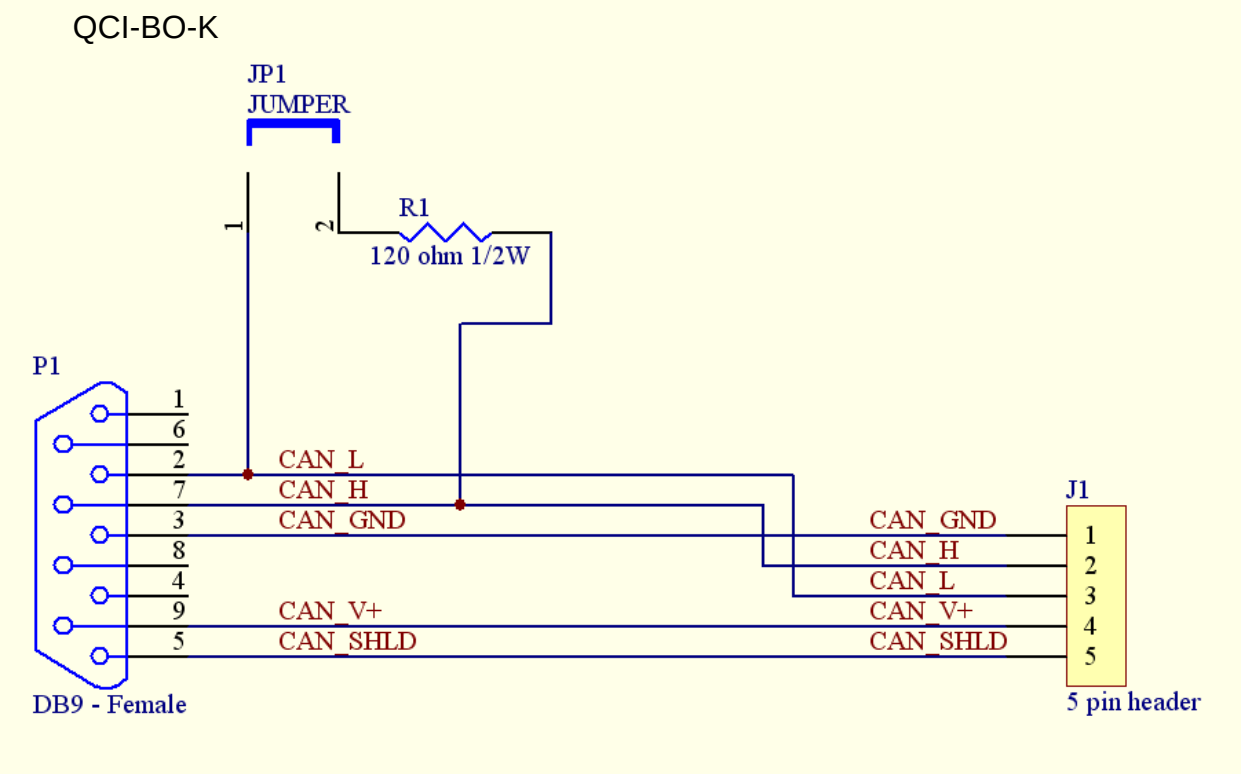
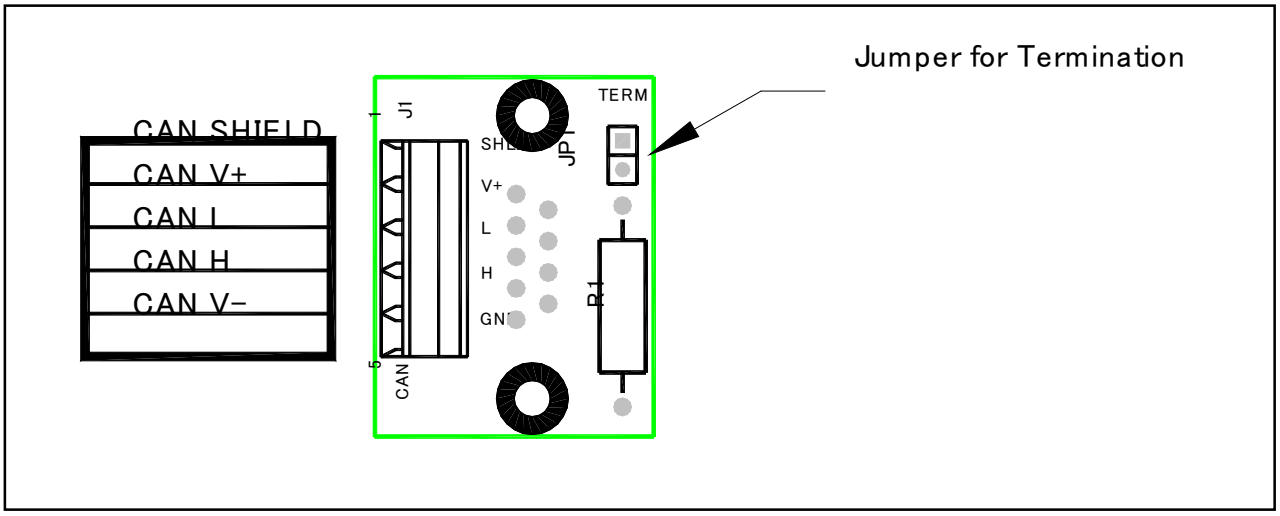
Pin-out Descriptions



QCI-BO-B1



How to Use

The QCI-BO-K interface board is used to land wires to the DB9 CAN connector on the top of the QCI-D2-IGK controller. The DB9 connectors follows standard CAN wiring convention, as does the 5 pin connector. The CAN driver circuit within the QCI-D2-IGK is not isolated, but does have protection up to +/-80 v within the driver. The CAN_H and CAN_L signals should be twisted pair, preferably shielded twisted pair. The shield should be connected to ground at only one point to prevent ground loops. The CAN_V- connection internally connects to the power V- connection of the QCI-D2-IGK driver; this connection is not required. CAN V+ and CAN SHIELD are not internally connected inside the QCI-D2-IGK controller and do not need to be connected on the QCI-BO-K connector.

CAN is designed to be wired as a bus configuration with the length taps leading to the bus kept as small as possible to prevent unwanted ringing in the network. Each end of the bus must be terminated in 120 ohms. Only the ends of the bus should be terminated.

NOTE: Do not wire a CAN network in a star network, as this may cause excessive ringing and loss of communications due to the mismatched impedance of multiple parallel branches connecting to the driven branch.