

CAN Newsletter Online

CAN-(FD)-TO-USB INTERFACE

Redesigned CAN interface for rugged applications

The Kvaser U100 CAN-(FD)-to-USB interface with reinforced galvanic isolation is designed for use in CANopen, J1939, NMEA 2000, and Devicenet networks.



U100 involves a ground-up redesign of the Leaf CAN-to-USB interface (Source: Kvaser)

resistance, galvanic isolation tested at 5000 V_{AC} RMS (root mean square) for 60 s, and an operating temperature of -40 °C to +85 °C are given.

PC- or CAN-side cable replacement can be carried out by an authorized Kvaser party without compromising the IP67 integrity. The introduced interface features a 9-pin D-Sub connector. Other members of the product line with J1939-13 Type II, M12, and OBD-II, connectors should be available soon. Windows and Linux (including SocketCAN) are supported. The device is compatible with applications written for other Kvaser CAN hardware using Kvaser CANlib SDK (software development kit).

The interface is suited for rugged applications in automotive, marine, industrial, heavy duty vehicles, and heavy industries. “The U100 involved a ground-up redesign of our popular rugged Leaf CAN-to-USB interface to respond to a wider incidence of higher voltage environments and new cost-of-ownership, and sustainability criteria from OEMs (original equipment manufacturers),” stated Ludvig Wallander, Director of Product Development at Kvaser.

Innovations include two LED bars showing the CAN traffic status including busload, error frames, and overrun. According to the company, the implemented ADM3055E Classical CAN and CAN FD transceiver supports bit-rates up to 8 Mbit/s. The interface enables a throughput of 20 000 messages per second time-stamped with a resolution of 100 µs. IP67 water and dust



Two LED bars show the CAN traffic status including busload, error frames, and overrun (Source: Kvaser)

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