

Host interface boards

CAN XL interface device

Vector Informatik (Germany) has introduced the VN1641 device for next-generation auto-motive CAN XL networks. It meets can transmit and receive CAN XL, CAN FD, and CAN CC data frames. The product is intended to be connected to tools for remaining bus simulation, analysis, diagnostics, calibration, and flash-programming tasks.

The CAN XL interface is equipped with CAN SIC XL transceiver, enabling bit rates up to 20 Mbit/s. Error signaling-enabled and error signaling-disabled modes are supported. The implementation of a hardware-based flash-protocol support ensures fast flashing for CAN CC and CAN FD. With interchangeable piggy-backs, the VN1641 adapts to several CAN application, ensuring compatibility and flexibility. The integrated I/O (input/output) functionality enables synchronous acquisition of signals along with CAN / LIN messages and switch loads up to 500 mA via a digital output.

The portable interface device can be used in office, laboratory, test bench, and even in a vehicle. It can be connected to a host computer via USB 3.2 Gen1 or Ethernet 1000Base-T.



(Source: Vector)

PCIe interface boards

Moxa offers rugged CAN CC interface modules with features that include ESD surge protection and long-term driver support. These are CP-602E-I two-port CAN PCI Express boards, CP-602U-I two-port universal PCI boards, and CB-602I two-port CAN PC/104-Plus modules. The CP-602E-I and CP-602U-I provide two CAN ports with D-Sub 9-pin connectors, each. For CB-602I, optional D-Sub 9-pin and D-Sub 25-pin connection cables are available for connection to CAN. The interface boards implement the SJA1000 CAN controller and PCA82C251 transceiver by NXP. The possible operating temperature range of -40 °C to +85 °C and 2-kV isolation make the boards suitable for use in harsh industrial environments. The CAN interface supports 11-bit and 29-bit CAN-IDs as well as bit rates up to 1 Mbit/s. LEDs show the transmit/receive status on each port. DLL library and examples are included into delivery. A Windows driver is provided as well.

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Five CAN FD channels

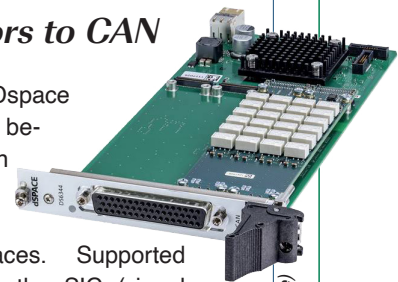
Kvaser (Sweden) offers the USBcan Pro 5xCAN dongle, connecting five CAN FD ports to one USB interface. The maximum CAN FD bit rate is 8 Mbit/s depending on the used network topology. The product is compatible with Kvaser's CANlib, designed for seamless multi-channel performance and analysis. It features high timestamp precision, automatic time synchronization, and it can run t-scripts. As a multi-channel device, it allows to simultaneously monitor multiple CAN networks via one USB port.



(Source: Kvaser)

Connecting simulators to CAN

The DS6344 board from Dspace (Germany) is the interface between the Scalexio simulation system and CAN CC as well as CAN FD systems. It provides four CAN interfaces. Supported interface functionality includes the SIC (signal improvement capability) technology and fault-tolerant CAN according to ISO 11898-3. The four CAN channels can be used for RCP (rapid control prototyping) and HIL (hardware-in-the-loop) applications. Network management functions such as wake-up and sleep are also included as a software-configurable, switchable termination circuit. The selectable transceivers include NXP TJA1145T/FD for CAN CC and CAN FD (up to 2 Mbit/s), NXP TJA1055 (fault-tolerant CAN up to 125 kbit/s), and NXP TJA1463AT supporting SIC functionality. With the latter, it is possible to achieve data rates up to 8 Mbit/s under laboratory conditions and with an optimized cable management, explains the manufacturer.



(Source: Dspace)