

VN7610

Performance, Versatility and Full Flexibility for FlexRay

What is the FlexRay Interface VN7610?

The FlexRay network interface VN7610 is ideally suited for the development, simulation or testing of FlexRay networks. The connection possibilities via USB makes it universally applicable (for example in the laboratory or during a test drive). Due to its very compact design the VN7610 is particularly suitable for mobile applications.

In addition, the interface provides access to CAN respectively also to CAN FD bus systems.

Typical application areas:

- > Flexible analysis of FlexRay networks and ECUs,
- > Precise time analysis of communication data
- > Analysis and test of ECUs and gateway applications

Additionally, customer-specific applications can be created by using FlexRay-specific libraries.

Overview of Advantages

- > Simulation of extensive networks due to 2 MB send memory (parallel configuration of more than 1000 messages for transmission)
- > Cold start of the FlexRay cluster without needing to add a network node
- > Analysis of the network startup via an independent monitoring unit
- > 1 FlexRay channel (A and B)
- > Ideal for CANoe/CANape/CANalyzer applications with CAN, CAN FD as well as FlexRay bus access
- > Updating of functional range by FPGA update possible
- > Minimal space requirements due to its compact and small design

More information: www.vector.com/vn7610



VN7610: Compact network interface for access to FlexRay and CAN/CAN FD bus systems

Functions

FlexRay:

- > Dynamic reconfiguration of the CC buffers
- > Transmission and reception of data and null frames
- > Detection of invalid frames
- > Cycle multiplexing
- > In-cycle response
- > Hardware-based incrementing of a payload area
- > Support of PDUs
- > FlexRay gateway (channel A)
- > Startup + asynchronous monitoring allows detection of FlexRay frames and symbols, even before the communication controller has synchronized itself to the bus.

General:

- > Synchronization with several devices and other bus systems (e.g. CAN/ CAN FD)
- > Support of CAN FD up to 8 MBit
- > Fast CAN flashing through hardware-based flash sequence support
- > CAPL-on-Board for CAN and FlexRay

Technical Data

		VN7610
Channels		1 x FlexRay 1 x CAN(FD)
Transceiver		FlexRay: TJA1082 / CAN, CAN FD: TJA1051
FR Comm. Controller	Analysis Startup	Bosch E-Ray (FPGA) Bosch E-Ray (FPGA)
Send memory		2 MB
FlexRay Cluster (A+B)		1
PC interface		USB 2.0
Connectors		1 x D-SUB9 (dual channel ¹⁾)
External power supply		via USB
Power consumption		2 W
Operating systems		Windows 10 (64 bit) / Windows 11 (64 bit)
Driver Library		XL Driver Library
Temperature range, operating:		-40..+50 °C
storage:		-40..+85 °C
Dimensions (LxWxD)		42 x 20 x 65 mm

¹⁾ Cable with D-SUB9 dual channel assignment to two separate D-SUB9 connectors with single channel assignment available as accessory