

VN1530/VN1531

High Performance for CAN (FD) and LIN via PCIe

What is VN1530/VN1531?

The CAN/LIN network interfaces VN1530 and VN1531 are ideally suited for accessing CAN and LIN networks via the PCIe interface. Due to its various channel combinations for the bus connections to CAN(FD), LIN, K-Line and SENT VN1530 and VN1531 are optimal interfaces for test benches, test PCs and rack use.

Application Areas

- > Analysis, simulation and test of ECUs, sensors, actuators and gateways
- > High performance remaining bus simulations
- > Measurement and calibration of ECUs via XCP
- > End of line testing and flashing
- > Precise timing analysis of communication data
- > Setups with a high number of CAN and/or LIN channels
- > Customer-specific applications

Overview of Advantages

- > 4 onboard channels (VN1530: 4xCAN (FD), VN1531: 4xLIN)
- > 2 additional, flexibly useable channels via Piggybacks*
- > Advanced LIN stress e.g. for LIN 2.1 conformance tests
- > Synchronization of multiple devices and other bus systems like CAN (FD), LIN, FlexRay, MOST, Ethernet
- > Optimal performance for CANoe, CANalyzer, CANape or customer applications:
 - > 100% bus load on all channels supported
 - > Minimal latency times
 - > Low host CPU load

* Please find a list of compatible Piggybacks on the Vector Homepage: <https://kb.vector.com/entry/219/>



VN1530/VN1531 - CAN/LIN bus connection via PCIe board

Functions

CAN and CAN FD support

- > CAN: up to 2 Mbit/s
- > CAN FD: up to 8 Mbit/s
- > Fast CAN Flashing / CAN Transport Protocol acceleration

LIN support

- > Support for LIN 2.1 conformance tests with CANoe
- > Stress functionality, e.g. disturbance of dominant and recessive bits
- > LIN Flash Mode support up to 300 kbit/s

General

- > K-Line support
- > SENT support (starting with CANoe/CANalyzer V12)
- > Up to 16 x VN1530 and 16 x VN1531 in one PC
- > Hardware and software time synchronization
- > Support of customer applications via free XL-Driver Library (XL-API)
- > Support of CANoe/CANalyzer starting with Version 11.0 SP3

More information:

www.vector.com/vn153x

Technical Data

	VN1530	VN1531
Max. channels	6	
Onboard channels	4 x CAN (FD) - NXP TJA1057G - electrically decoupled	4 x LIN - TLE7269 - electrically decoupled
Variable channels	2	
CAN channels	Max. 2 configurable via Piggybacks	
LIN channels	Max. 2 configurable via Piggybacks	
K-Line channels	Max. 1 at channel 6 (with LINpiggy 7269mag)	Max. 1 at channel 5 (with onboard LIN transceiver TLE7269)
SENT channels	Max. 1 at channel 3/6 (with SENSORpiggy SENT)	Max. 1 at channel 6 (with SENSORpiggy SENT)
Baudrates	CAN: up to 2 Mbit/s CAN FD: up to 8 Mbit/s LIN: up to 300 kbit/s	
Time stamps	Resolution: 8 ns Accuracy (within one device): 1 µs Accuracy software sync: typ. 10 µs Accuracy hardware sync: typ. 1 µs	
Connectors	- DSUB 15 HD (automotive bus systems) - Binder type 711 (synchronisation)	
Power consumption	4.5 W	
Temperature range operating: shipping and storage:	-40 °C...+65 °C -40 °C...+85 °C	
Relative humidity of ambient air	15 %...95 %, non-condensing	
Dimensions (LxWxD)	Approx. 132 mm x 127 mm x 22 mm (with mounted Piggybacks)	
Weight	Approx. 105 g (without Piggybacks)	Approx. 108 g (without Piggybacks)
Operating systems	Windows 10 64 bit, Windows 7/8.1 (32 and 64 bit)	