VECTOR

Solutions for CAN / CAN FD

The Vector Solution for CAN Networks - Software, Hardware and Services

Classic CAN and improved CAN FD

> **CAN (Controller Area Network)** is a message oriented multi-master protocol for quick serial data exchange between electronic control units in automotive engineering and factory automation.

> **CAN FD (CAN with flexible data rate)** is an enhancement of the CAN protocol developed by Bosch company. The main differences to CAN are the extended payload from 8 up to 64 bytes, and the ability to send the payload with higher data rates. In this way, the requirements for higher bandwidth networks in the automotive industry are fulfilled, while profiting from the experiences in CAN development.

Overview of Advantages

> Practice-proven CAN products and competent services based on Vector's many years of experience in automotive networking

> Support of the improved CAN protocol CAN FD

> Universal tool chain makes it easy to integrate new technologies in existing vehicle architectures

Software

> **CANoe** – Simulation and testing of ECUs and entire networks with a single tool for CAN and CAN FD

> **CANalyzer** – Analyzing the entire vehicle communication across network boundaries for CAN and CAN FD

> **VT System** – Modular test environment for efficient ECU and functional tests. CANoe is the related test automation software.

> **CANoe/CANalyzer .Scope** – Integrated oscilloscope solution for CANoe and CANalyzer. Support of CAN, CAN FD and LIN.

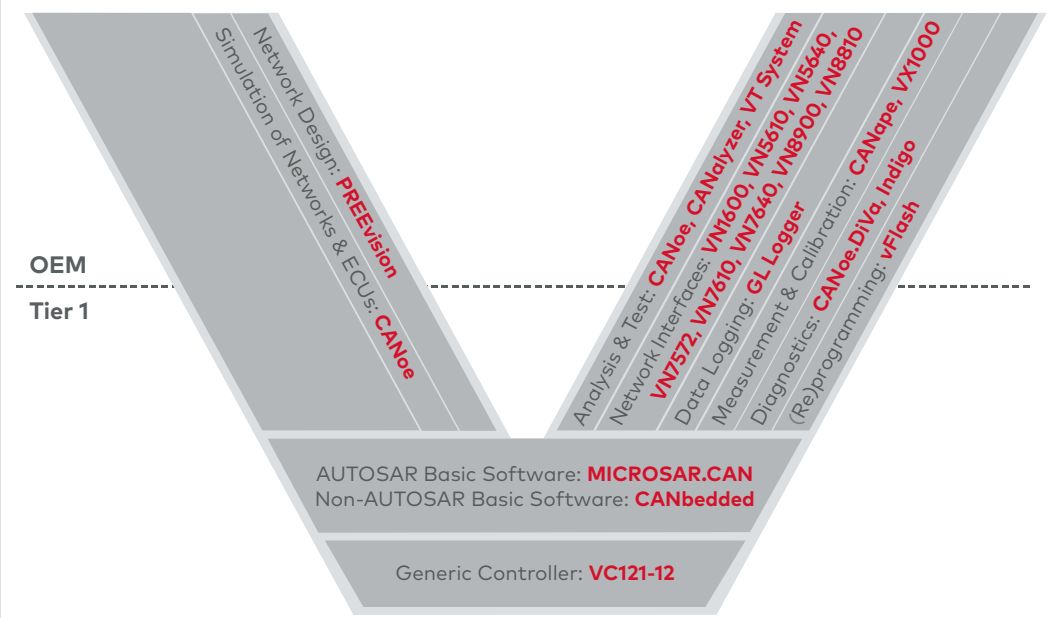
> **CANape** and **VX1000** – Measurement, calibration and flashing over XCP with high data throughput resulting in minimal runtime effects on the ECU

> **CANoe.DiVa** – Automated testing of diagnostic protocol implementation and integration in ECUs

> **Indigo** – Diagnostics quick and easy with DoIP and OBD support

> **vFlash** – Very easy to use tool for flashing one or more ECUs

> **PREEvision** – Tools for the design of network architectures



The CAN solution from Vector covers the entire development process for networks and ECUs.

Embedded Software

> **MICROSAR.CAN** – Contains basic software modules for CAN and CAN FD communication that are defined in the AUTOSAR architecture
> **CANbedded** – Configurable software components for CAN communication. Its used by numerous OEMs worldwide.
> **Flash Bootloader** – Used to reprogram ECUs quickly, efficiently and reliably

Universal ECU

VC121-12 – Universal ECU that can be used for gateways and I/O control functions. It is perfect for quickly developing prototypes and for use in small scale production runs. VC121-12 supports CAN, Ethernet (100BASE-T1; comparable to BroadR-Reach®), FlexRay and LIN.

Engineering Services

Vector offers you expert advice services:

> **Seminars and workshops**
> **Technical consultation**
> **Project support**

The knowledge of our experienced employees is your advantage for efficient and customer-specific CAN solutions.

More information: www.vector.com/can

Network Interfaces

Tool	PC connection	Network
VN1600 Interface Family	USB	CAN / CAN FD, J1708, LIN
VN5610 / VN5640	USB	CAN / CAN FD, Ethernet
VN7572	PCIe	CAN / CAN FD, FlexRay, J1708, LIN
VN7610	USB	CAN / CAN FD, FlexRay
VN7640	USB	CAN / CAN FD, FlexRay, Ethernet, LIN
VN8900 Family	USB (RT PC)	CAN / CAN FD, FlexRay, J1708, LIN
VN8810	USB, WiFi	CAN / CAN FD, K-Line, LIN, DoIP
Transceiver for CAN, CAN FD, FlexRay, J1708 and LIN available as piggyback		

Further Hardware Tools

Tool	Feature	Network
GL1000 Family	Mobile data loggers to record the bus communication of small networks	CAN, LIN
GL2000 Family	Mobile data loggers to record the bus communication of moderate-sized networks	CAN, LIN
GL3000 Family, GL4000 Family	Mobile data loggers to record the bus communication of extensive networks	CAN, FlexRay, LIN, MOST150
CANlog 3, CANlog 4	Data loggers with gateway functionality	CAN, LIN

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