What is CANoe?
CANoe is the comprehensive software tool for development, test, and analysis of individual ECUs and entire ECU networks. It supports network designers, development and test engineers at OEMs and suppliers throughout the entire development process – from planning to system-level test. Versatile variants and functions provide the appropriate project support. Therefore, its versatile functions and configuration options are used worldwide by OEMs and suppliers.

Overview of Advantages
> Only one tool for all development and testing tasks
> Easy automated testing
> Simulate and test ECU diagnostics
> Detect and correct error situations early in the development process
> User-friendly graphic and text-based evaluation of results
This means savings in time and effort while enhancing the quality of ECU development at the same time.
Testing
CANoe represents the state-of-the-art test environment. It is the ideal testing tool as well for the entire system as for individual ECU testing:
> ECU tests
> Module tests
> Integration tests
> Conformance tests
> Regression tests
> Testing of ECU prototypes
With increased real time requirements, you may also operate CANoe as a HIL (Hardware-in-the-Loop) system.

Stimulation
CANoe offers many different ways to stimulate ECUs in the network: the bandwidth ranges from predefined user interfaces to different programming options.

Diagnostics/Diagnostic Tester
The Diagnostic Feature Set included with CANoe supports you in analyzing diagnostic communication via the KWP2000 and UDS standards. CANoe may be used both as a diagnostic tester and to simulate ECU diagnostics. In addition a complete OBD-II Tester is integrated.

CANoe Variants
CANoe pro
The full range of functional features. Simulation models are created with CAPL; test cases are easy to model with the Test Feature Set. This variant is intended for users who want to use CANoe’s full functionality.

CANoe run
As a ‘Runtime’ variant with unchangeable configurations, full analysis functions and simple connection and disconnection of network nodes. This variant is intended for users who need to test their ECU quickly and easily in interaction with a prescribed remaining bus simulation.

CANoe pex
As a ‘Project Execution’ variant with an exclusively graphic user interface. Simulation, test cases and results are easy to control without requiring special evaluation of the underlying messages.

Supported Network Systems, Protocols and Options
> Network systems:
  - CAN, CAN FD, LIN, MOST, FlexRay, Ethernet, WLAN,
  - Car2x ITS G5, DIN 70121, ISO/IEC 15118, GB/T 27930,
  - J1708, AFDX® and ARINC 429
> Protocols:
  - TCP/IP, SOME/IP, CANopen, J1939, ISO 11783, J1587,
  - GMLAN, K-Line and ARINC 825. Others upon request.
> CANoe Options:
  - AMD/XCP, DiVa, For EtherCAT®, Scope, Sensor and SmartCharging

More information: www.vector.com/canoe

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