

# CANister and CANister Configurator

## The Universal Control Panel for CAN and LIN

A network of vehicle electronics with CAN and LIN requires new tools for the production of automobiles. With the universal control panel CANister, Vector offers an easy-to-use tool for this purpose.

### Features and Advantages

CANister is a flexible and freely configurable CAN and LIN node for the production and testing environment. The hardware module is event oriented, and actions can be assigned to multiple events. The CANister is available in three variants: CANister HL (high-speed & low-speed) and CANister LinL (LIN & low-speed) with a variety of connectors for the fast usage as well as CANister AL (assembly line) with relay and for customized cord set.

CANister Configurator is an easy-to-use development interface that enables you to freely configure CANister. The applications are loaded into CANister via the RS232 interface and are stored in the flash memory. Alternatively, Vector offers programming as a service as well.

### Functions

CANister provides all the functions you need for a flexible CAN and LIN node, e.g.:

- > 2 CAN channels (11 bit and 29 bit identifier each) or
- > 1 LIN and 1 CAN channel
- > Customizable control and display elements (16 keys and 20 LEDs)
- > Control outputs (8 digital outputs, 2 PWM outputs or 1 relay)
- > Control inputs (8 digital inputs, 4 analog inputs and 2 hall inputs)

### Application Areas

CANister is an all-round tool for a number of different phases in the production cycle. For controlling and testing electronic control units in production and in development, CANister is highly versatile and easy-to-use. In test benches, CANister's many actuators and sensors have proven vital to successful projects.

### CANister Configurator Features

CANister Configurator offers the following features:

- > Generation of applications with up to 16 individual configurations
- > Parallel processing of applications with multi-window display
- > Connection to CANdb/CANdb++ database
- > Table-driven parameterization of actions
- > Graphical user interfaces for LEDs, digital outputs, keys
- > Network management with selection of the network node to be simulated
- > Parameterization of CAN and LIN
- > Extended functionality with modules written in C
- > Automatic generation of download files
- > Download of firmware and applications via RS232 interface
- > Download of firmware via Bootbox in bootstrap mode
- > CANister information via RS232
- > CANister terminal



### Included with Delivery

#### CANister HL or LinL:

- > CANister, shipped as standard with piggyback PCA80C251 and TJA1054 or TLE6259 opto (LIN) and TJA1054
- > Mains cable, approx. 1 m
- > D-SUB 44 connector with housing

#### CANister AL:

- > CANister AL, shipped as standard with piggyback PCA80C251 and TJA1054

#### Configuration Software:

- > CANister Configurator
- > CANdb editor
- > User manual
- > Serial connection cable
- > Bootbox
- > USB license dongle

**Training**

As part of our training program, we offer CANister workshops. For more information and the dates of our training courses, please visit our homepage on the internet at: [www.vector-informatik.com/canister/en](http://www.vector-informatik.com/canister/en)

**Events and Actions**

CANister operates event-oriented and can respond to events like: press key, change of a digital input, CAN/LIN message received/transmitted, user-defined events, timers, and serial command. Each event can trigger any number of actions. Examples are: set/delete LED, transmit CAN or LIN message, set message signals, set/delete timer, set digital or PWM output, etc.

**User-defined System Routines**

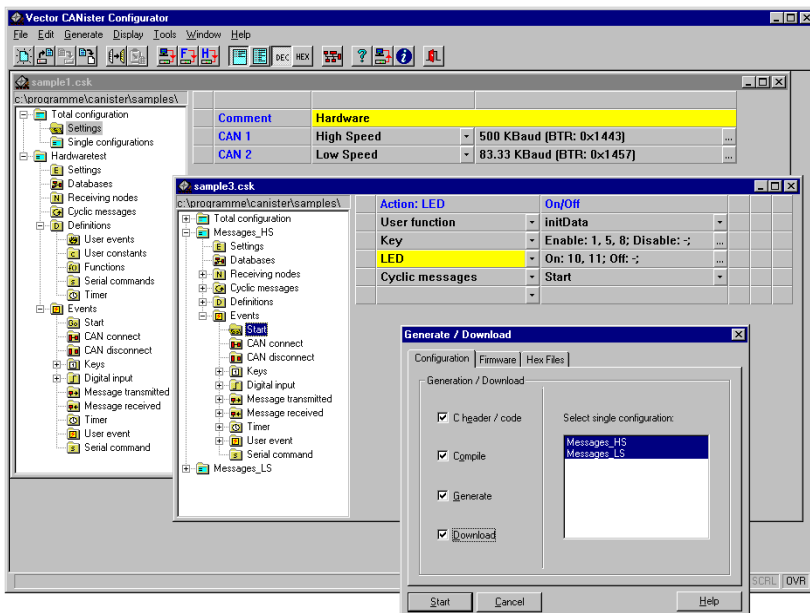
Extended functionality (e.g. interpretation of received CAN or LIN messages) can be added with modules written in C. At the same time, functions of the system software (readout of analog inputs, setting of LEDs etc.) are available. The C modules are translated using the classic C166 compiler from Tasking, which is also available from Vector.

**Use of CANdb**

When CANister is parameterized, different information like for example symbolic names for CAN and LIN messages and bus signals are used from the CANdb or CANdb++ database. With this connection to CANdb, CANister is fully integrated in the Vector tool chain. As soon as any information has been entered once, it is available for use from any point in the system, from development to production and testing environment.

**Technical data**

Microcontroller	Infineon 80C167 and 80C161
Channels	2
Transceiver	2 piggyback boards, supplied as standard with: PCA80C251 (high-speed) and TJA1054 (low-speed) or TLE6259opto (LIN) and TJA1054 (low-speed); optionally with AU5790 (single wire), TJA1041 (high-speed), B10011Sopto (Truck& Trailer)
Memory (master)	1 MByte Flash, 512 kByte RAM
Equipment	16 freely configurable keys 16 freely configurable green LEDs 4 freely configurable red LEDs
Control inputs	8 digital inputs (8 V...40 V, 12 V typ.) 4 analog inputs (0 V...20 V DC, max. 50 V) 2 inputs for Hall emitter (12 V typ.)
Control outputs	8 digital outputs (max. 50 V/400 mA) 2 PWM outputs (TTL, max. 50 mA) or 1 relay (max. 30 A) (CANister AL only)
Connectors	D-SUB 9 socket (RS232) CANister HL/LinL only: 2x D-SUB 9 connectors for CAN (CAN pin assignment according to CiA standard) or LIN, D-SUB 44 socket (ADIOX), connector for Vector power supply (12 V/1,25 A)
Voltage supply	8 V...40 V DC
Temperature range	-20 °C...+70 °C (at 8 V...16 V)
Dimension housing	CANister HL/LinL: 185 x 106 x 32 mm CANister AL: 185 x 106 x 42 mm
Weight	Approx. 480 g



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