

CANcaseXL log

Two-in-One: Bus Interface and Data Logger for CAN, LIN, J1708 and CCP/XCP via USB 2.0

CANcaseXL log combines two products in one device:

- > a professional interface for CAN, LIN and J1708 with USB 2.0 interface,
- > a reliable and robust data logger for logging bus traffic during test drives or in the test laboratory.

Features and Advantages

CANcaseXL log equals technically CANcaseXL. Additionally equipped with a memory card interface for SD cards, CANcaseXL log can be operated independent of a PC and can save up to 2 GByte of data from CAN, LIN or J1708 systems. The data logger is configured via its own configuration tool. Measurement data are transferred to a PC by USB or by memory card. There they can be evaluated using CANalyzer, CANoe, CANape, or CANgraph. CANcaseXL log also offers export options to different file formats, like ASCII (as input for Excel).

When used as a interface for CAN, LIN or J1708 it has the same excellent features as the Vector CANcaseXL.

An Overview of its Characteristics:

- > Two-in-one solution for CAN, LIN and J1708: bus interface and data logger in one device
- > 32 bit microcontroller with 64 MHz
- > 2 independent channels
- > Robust metal housing, ideal for vehicle test drives

Interface Functions

- > Sending and receiving of Data and Remote Frames
- > Silent mode for listening on a CAN bus without influencing it
- > Detecting and generating of Error Frames
- > Time synchronization
- > Simultaneous operation of multiple devices

General Data Logger Functions

- > Easy to use graphic configuration tool
- > Logging of CAN, LIN and J1708 message data with memory capacity of up to 2 GByte on SD card
- > Measured values are read out over USB interface at approx. 300 kByte/sec or at approx. 3 MByte/sec using a standard SD card reader
- > Booting time: approx. 1 second
- > Logging speed can handle 100 % bus load at 500 kBit/sec with 2 channels (approx. 4000 messages/sec per channel)
- > File Manager for organizing and converting log files to MDF, BLF and ASCII formats
- > Fast conversion of logging data (about 3 min. for 1 GB)
- > Signaling by buzzer

Filter Functions

- > CAN/LIN identifier
- > CAN Error Frames
- > Symbolic messages (CANdb files)
- > Dynamic filters can be set separately per CAN ID to reduce data



Included with Delivery (Standard)

- > CANcaseXL log
- > Graphical configuration tool
- > Drivers for Windows 2000, XP, Vista
- > XL-Driver-Library (32 bit driver library for C++, C, .NET)
- > USB cable
- > Documentation
- > Fast 2 GByte SD memory card suitable for automotive use
- > Fix kit

Accessories

- > Various bus transceivers (for description see CANcaseXL)
- > Metal cover without SD card slot to block SD memory card access

Trigger Functions

- > Configurable triggers with separately configurable pre-trigger and post-trigger times. The pre-trigger is limited to 320 kByte for about 15 sec pre-trigger-time at 1000 messages/sec.
- > Ring buffer for the extended pre-trigger-time
- > Single-shot trigger, i.e. one-time triggering regardless of how often the event occurs
- > Trigger conditions can be logically combined (AND) across messages
- > Triggering on falling and rising edges
- > Support of the following trigger conditions:
 - CAN/LIN identifier, length, data contents
 - Signals (selected from CANdb files)
 - Symbolic messages (CANdb files)
 - LIN errors: CRC, RX, TX, Sync
 - CAN Error Frames

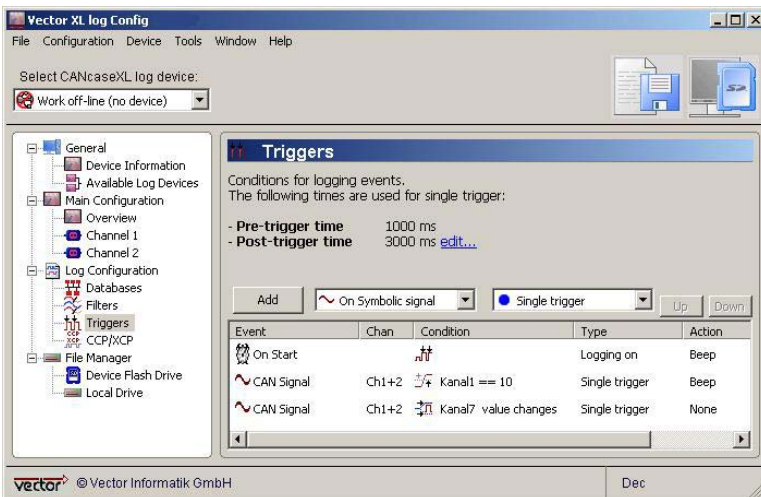
CCP/XCP Data Logger Functions

CANcaseXL log includes a logging functionality for internal ECU parameters via CCP/XCP:

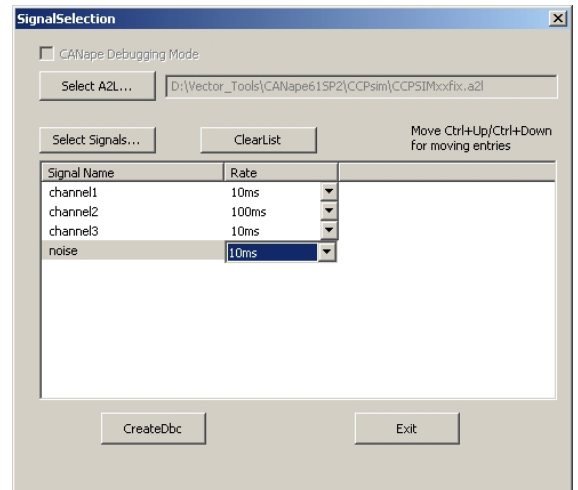
- > Support of CCP 1.x, CCP2.x, as well as XCP 1.x
- > Cyclic time-synchronous measurement via DAQ lists
- > Up to 400 signals may be logged simultaneously with CCP/XCP
- > The signal selection and parameterization of the CCP measurement is done directly in the configuration tool (CANape has to be installed)
- > XCP measurement will be configured in CANape

Technical Data

Area of application	Mobile, stationary
Microcontroller	ATMEL AT91 (ARM7 TDMI with 64 MHz)
CAN channels	Two independent channels (NXP SJA1000)
Identifier	11/29 bit
Transceiver (galvanic decoupling)	See CAN-, LIN-, J1708piggies in bus transceiver overview
PC interface	USB 2.0 highspeed (USB 1.1 compatible)
Temperature range	Operation: -20..+70 °C Storage: -40..+85 °C
Driver libraries for	C++, C, .NET (C#, Visual Basic, Delphi)
Operating system	Windows 2000, XP, Vista
Error Frame/Remote Frame	Detection & Generation
Dimensions approx.	105 x 85 x 32 mm
Power consumption (typ.)	1 W
External power supply (optional)	7 V..33 V
Time stamp accuracy	1 µs
Average latency time in interface operating mode	300 µs



Graphical configuration tool
Example: trigger settings



Graphical configuration tool
Example: CCP signal selection