

FL3X Config SDK



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FL3X Config SDK is a .NET library for the easy access of automotive bus/network systems in your own windows applications. The library supports a wide range of automotive database formats like AUTOSAR (*.arxml), FIBEX (*.xml), CANdb (*.dbc) and LDF (*.ldf).

FL3X Config SDK can be used in combination with the products of the FL3X Device family and the FL3X Interface family.

For the customers it is very easy to expand his own application for logging, test benches or HIL (Hardware in the Loop) systems with the complete functionality regarding automotive bus/network systems. With a wide range of supported devices it is possible to create very cost effective and perfectly tailored solutions for the special usecase.

The following functionality is supported by FL3X Config SDK:

- Reading and interpretation of a wide range of automotive network description files - AUTOSAR (*.arxml), FIBEX (*.xml), CANdb (*.dbc) and LDF (*.ldf)
- Supports wide range of devices from the FL3X Device or FL3X Interface family as a bus/network interface to the automotive bus system*
- automatic configuration (plug'n'play) of the connected devices
- automatic conversion of the received raw values into physical values based on the loaded automotive network description file
- the .NET library provides a simple internal interface to the received and interpreted bus/network data
- Sending of CAN-FD/HS and LIN messages

*device must be purchased separately

BENEFITS

- Nearly all available automotive network description formats are supported e.g. AUTOSAR (*.arxml), FIBEX (*.xml) and CANdb (*.dbc)
- Easy integration of the FL3X Config SDK .NET library in your own applications
- Direct physical interpretation of the bus signals is done by the .NET library
- IEEE 802.AS-2011 support, for timestamp synchronisation over PTP

TECHNICAL FEATURES

Features:

- device enumeration functionality
- simple device configuration via database file
- bus/network support for CAN-FD/HS, Ethernet, FlexRay* and LIN
- receive functionality for CAN-FD/HS, Ethernet, FlexRay and LIN
- send functionality for CAN-FD/HS and LIN
- interpretation functionality for PDU and signals
- support for SOME/IP
- support multiplexed PDUs and PDUs in container layout
- support Timing synchronization PTP for IEEE 802.1 AS-2011
- automated firmware update for FL3X Devices

*currently only reading of signals from the bus system is supported, writing follows soon.

ORDER INFORMATION FL3X CONFIG SDK

Product	Description	Order number
FL3X Config SDK	FL3X Config SDK main product	3-V0161K01-01
FL3X Config SDK Maintenance	Maintenance for one year	3-V0161L01-01

Supported network description files:

- CANdb (*.dbc)
- FIBEX (*.xml) Version:
2.0.0d, 2.01, 3.0.0, 3.1.0, 4.0.0, 4.1.1, 4.1.2, FIBEX+ 1.4
- AUTOSAR (*.arxml) Version:
3.0.2, 3.1.0, 3.1.4.DAI.2, 3.1.4.DAI.4, 3.2.2,
4.0.3, 4.1.1, 4.2.1, 4.2.2, 4.3.0, 4.3.1, 4.4.0, 4.6.0, 4.7.0
- LDF (*.ldf)

Supported devices:

- all actual FlexDevice/FL3X Device, FlexCard PCIe3, FlexCard PXle3,
FL3X System and FL3X Interface

Scope of delivery:

- .NET Library
- Usermanual
- Dongle

Minimal system requirements:

Windows 10*

*other operating systems on request