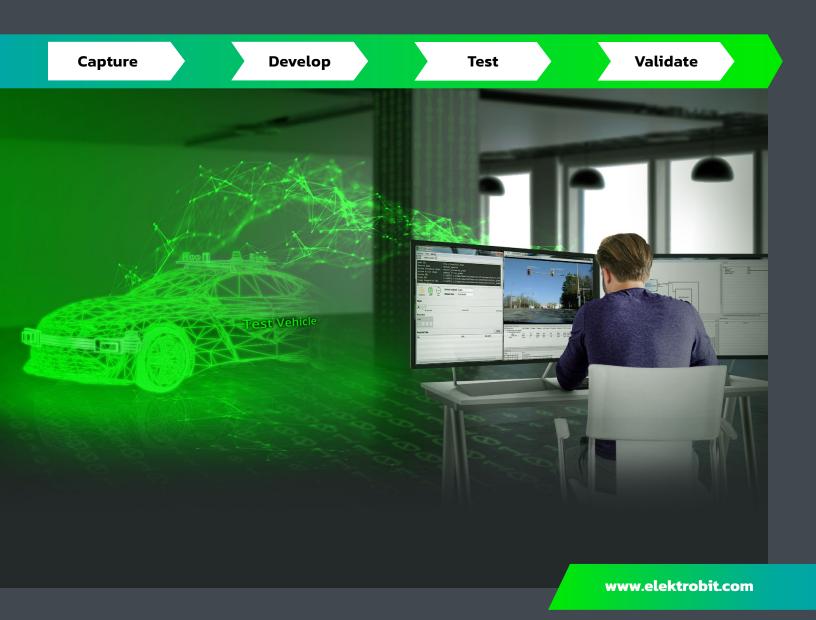


# **EB Assist ADTF Toolboxes**

### Framework for Developing Automated Driving Features



## **EB Assist ADTF Toolboxes**



#### Development and test environment for driver assistance and highly automated driving software

Flexible and extendeble set of modules for various needs and use cases

#### Standard EB Assist ADTF Toolboxes

#### **ADTF Device Toolbox**

Supports various hardware devices:

- Automotive buses (CAN, CANFD, Flexray, Ethernet)
- Device for Vector<sup>®</sup> Driver Library
- Webcam
- Signal processing and visualization

#### **ADTF Display Toolbox**

Offers various visualization modules:

- 3D scene graph display
- 2D display
- Signal view plugins
- Additional demo plugins (object lists, point cloud, etc.)

#### **ADTF Calibration Toolbox**

Supports XCP communication with an ECU via multiple filters for communication via

CAN, FlexRay or Ethernet

- XCP Master Filter
- XCP Decode Filter
- XCP Encode Filter
- XCP Emulator Filter
- XCP On CAN Filter
- XCP On CAN FD Filter
- XCP On FlexRay Filter
- XCP On Ethernet Transmitter
- XCP On Ethernet Receiver

#### **Ready to use EB Assist Toolboxes**

#### **EB Assist Logger Toolbox** Available as a license

The EB robinos Provider for EB Assist ADTF makes an ADASIS v2 / v3 stream available within EB Assist ADTF. In addition to live or recorded GPS data, a route simulation mode is supported.

- Supports various automotive interfaces (CAN, CANFD, (Automotive-)Ethernet, LVDS)
- High precision time stamping (nano seconds range)
- Synchronized time over all capture ports
- Capture date based on event triggers
- Supports drive scene tagging
- Visualization on signal-level
- API to control logger via remote
- Control and visualization on external devices (Android, iOS, Windows)

#### **EB Assist Hardware in the Loop (HiL) Toolbox** Available as a license

The EB Assist Reconstructor consists of a set of EB Assist ADTF filers. These filters support the development, test and verification of Electronic Horizon based advanced driver assistance systems. It includes:

- High precision time triggered replay based on frames and PDUs
- Configurable recapturing of bus communication
- Signal visualization and manipulation
- gPTP time synchronization to network
- > Tools to validate precision and correctness of HiL solution
- API to automate and control from single various(forms) HiLs via remote

It supports:

- Various automotive interfaces (CAN, CANFD, (Automotive-) Ethernet, LVDS)
- Open and closed-loop approach
- Security protocols ((D-)TLS, SecOC, E2E)
- Customizable initialization of ECU by various protocols

#### **EB Assist Control**

- Interface for remote access to HiL
- Allows centralized operation for more than one HiL

#### EB Assist Precision and Correctness Toolbox

Validation of HiL functionaliy

**EB Assist ROS2Bridge available**