EB Assist ADTF Toolboxes

Framework for Developing Automated Driving Features

Capture → Develop → Test → Validate

Test Vehicle

EB Assist ADTF Toolboxes

Elektrobit

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

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

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Standard EB Assist ADTF Toolboxes

ADTF Device Toolbox

Supports various hardware devices:

▸ Automotive buses (CAN, CANFD, Flexray, Ethernet)
▸ Device for Vector® 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

EB Assist ROS2Bridge available

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