



Elektrobit

EB Assist ADTF

Framework for Developing Automated Driving Features

Capture

Develop

Test

Validate



www.elektrobit.com

EB Assist ADF and Toolboxes / Solutions

Development and test environment for driver assistance and highly automated driving software. Offers Flexible and extendable set of modules for various needs and use cases. Core components include the standard ADF toolboxes, Logger Toolbox and HiL Toolbox tailored to meet demands such as in-car data logging, HiL replay, Simulation, Rapid prototyping, Analysis/ Post processing.

Standard EB Assist ADF Toolboxes:

ADF Device Toolbox

Supports various hardware devices:

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

ADF Display Toolbox

Offers various visualization modules:

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

ADF Calibration Toolbox

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

CAN, CANFD, 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

Need help?

We are ready for development of any ADF project or consultancy service is possible. HW solutions are also available.

Ready to use EB Assist Toolboxes:

EB Assist Logger Toolbox

Available as a license

The EB Assist logger toolbox consists of a set of ADF filters and services to enable flexible and performant data logging.

It includes:

- System time synchronization over all interfaces
- High precision time stamped capture of data (ns)
- Data monitoring and visualization
- Data storage local/remote in various formats (PCAPNG, MDF4)
- System configuration interface
- Remote control

It supports:

- various automotive interfaces (CAN (FD), (Automotive-) Ethernet, Flexray, LVDS)
- Event-triggered capture of data
- Drive scene tagging

EB Assist Hardware in the Loop (HiL) Toolbox

Available as a license

The EB Assist HiL toolbox consists of a set of ADF filters and services to accommodate the typical SiL/HiL use-case to replay previously recorded input data "identically" to the DuT and record the DuT behavior and output data for further evaluation.

It includes:

- System time synchronization over all interfaces (e.g. gPTP)
- Rest Bus simulation (RBS)
- High precision time-synchronized replay of input data (ns)
- High precision time-stamped capture of output data (ns)
- Data manipulation, monitoring and visualization (e.g. for error injection)
- Input/output data storage local/remote in various formats (PCAPNG, MDF4)
- System configuration interface
- Remote control

It supports:

- Various automotive interfaces (CAN (FD), (Automotive-) Ethernet, Flexray, LVDS)
- Various AUTOSAR communication services (COM, SOME/IP, XCP, DoIP, ...)
- Open and closed-loop approach
- Security protocols ((D-)TLS, SecOC, E2E)
- Controlled DuT initialization and shutdown

EB Assist Control

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

EB Assist ROS2Bridge available