CETITEC

CETIBOX H3
BASE LEVEL SDK

CETIBOX H3

AUTOMOTIVE CONNECTED SYSTEM DEVELOPMENT

CETIBox is a comprehensive tool for Automotive Connected Systems Development, offering connectivity to all automotive field bus and networking systems in one device, be it LIN, CAN, CAN-FD, FlexRay, MOST® or Ethernet AVB. Advanced A/V features make CETIBox an ideal platform for emulation, stimulation, monitoring and script-based controlling of any IEEE 1722-2011 or 1733 (RTP) based system. Universal Gateway (UGW) and EveryIP Service Oriented Middleware, allow for RPC communications, easily configurable, time-aligned activities on all field buses, mathematical functions for routing rules and Information regrouping on different domains.

State of the art processing performance

Thanks to the RH850/F1K D8 (available option) and the R-CAR H3, the CETIBox offers all required performance for your application development with room to grow.

ORDERING OPTIONS

A

CETIBOX BASE LEVEL

Base Level is available to all CETiBox customers and extends the Renesas R-CAR Starter Kit BSP. Develop prototypes and evaluate features in a robust and resilient hardware platform, with state of the art in vehicle network interfaces.

B

CETIBOX SDK

Enabling the quick and efficient implementation of distributed applications and services. CETiBox SDK includes the necessary middleware and driver components to speed up your application development.

Complete access to services and signals inside the device and over the network(s), with toolchain supported development workflow.

CETiBox SDK is available with CETITEC Software components pre-integrated to suit your application case:

- **Universal Gateway**
- **EveryIP - Service oriented middleware with code generation straight from interface definition.**
- **Network Drivers for automotive networks (e.g CAN-FD,**

USE CASES

CETiBox allows you to:

- **Connect newly developed devices to an existing car platform for initial in-car tests**
- **Easily migrate your products into new bus technologies by connecting your 1st devices to an existing car platform**
- **Develop your own application code with middleware and networking drivers support***
- **Easily exchange signals between field bus messages and your own applications***

PART LIST

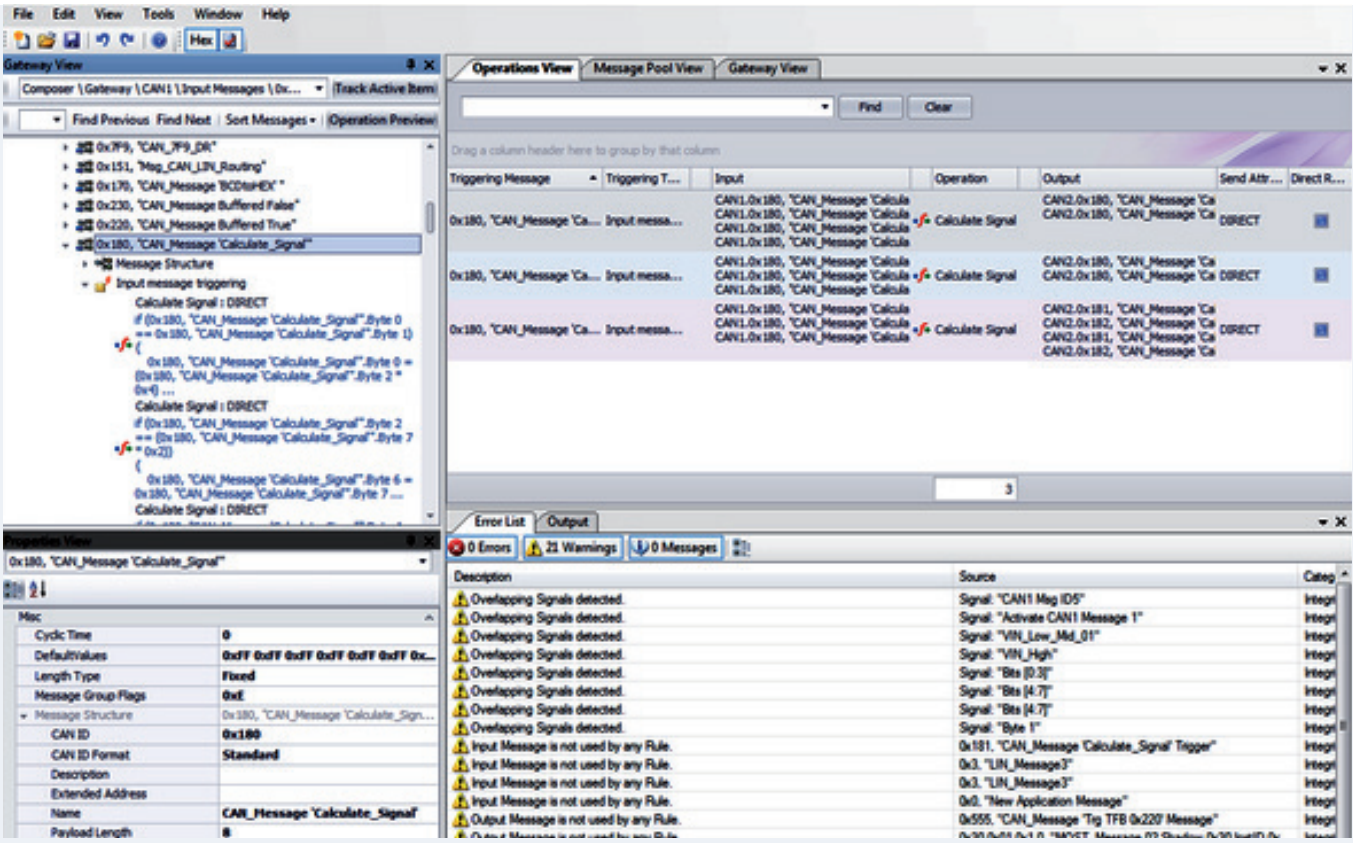
- **CETiBox H3 compact hardware**
- **Quick start guide**
- **Online user manual**
- **Composer (additional license required)**
- **Integra (additional license required)**
- **Automotive Connectors**

PRODUCT HIGHLIGHTS

- **IEEE 1722-2011**
- **IEEE 1733 (RTP)**
- **Audio-Listeners and Talkers**
- **Video-Listeners and Talkers**
- **IEEE 802.1AS (gPTP), Grand-Master, Slave and Bridge**
- **100Base-T1 (BroadRReach) and Standard 1000BASE-T Eth. Support**
- **6 Port AVB Switch with up to 5 100 Base-T1 interfaces**
- **Scripting support (Automation) HTTP interface**
- **Automotive Networks: CAN, CAN-FD, Ethernet, MOST**

NEXT STEPS

Request for Quotation: sales@cetitec.com
Further Information: +49 (7231) 95688-62



COMPOSER – CONVERSION RULE CONFIGURATION TOOL

With the CETITEC Composer application (PC) you can configure all aspects of the Automotive Bus Converter to convert data between the most important automotive bus-systems such as CAN, Ethernet, MOST, FlexRay* and LIN* as well as the signal interchange with PC-applications*.

CETITEC COMPOSER USER INTERFACE

Editing or Importing of Message Catalogues and Routing Configuration Data

Composer is used to create definitions of messages and signals on different buses manually or to simply import existing message catalogues from standard formats. Based on the message and signal information the routing configuration (gateway table) could be easily defined. The Composer can also be extended* with import filters for OEM or customer specific data formats (messages and signals) as well as translation rules.

DYNAMIC SIGNAL EXCHANGE BETWEEN NETWORKS*

The Universal Gateway (UGW) option on the CETi-Box supports an easy transformation of information (based on telegram or signal level) between different automotive bus systems in terms of:

- **bus systems on different speeds or different physical layers**
- **different transport protocols***
- **adaptation of bus specific features like notification mechanisms**
- **different message timing on source and target bus**
- **different transmission timing for outgoing messages (e.g. cyclically or follow-up style)**
- **modification of transmission types (e.g. fro cyclic transmission to an event driven ‘send-on-change’ manner or vice versa)**
- **1:n or n:1 message to signal translations**
- **powerful signal and message management for initial, void and default values***

* OEM specific customization, adaption or add-on modules required