



PRODUCT DATA SHEET

VERSION: 2023.2
AS OF JULY 2023



TRACE-CHECK ACCELERATES IN-DEPTH ANALYSES

TRACE-CHECK is a tool that automatically and thoroughly analyzes measurement data. It is specifically useful, wherever you need test results in the form of reports, which are easy to read and to interpret – no matter where the data comes from or into which tool chain you plan to integrate the tool.

KEY FEATURES AT A GLANCE

- Easy analysis specification via
 - Triggered analyses
 - Timing diagrams
 - Python interface
- Support for all common recording formats
- High reusability of analyses
- Intuitive graphical user interface
- Clear presentation of results
 - Transition to the interactive AutoSPY signal viewer
 - Plots enriched with result data

MEANS OF SPECIFICATION

Various means of specification are available for the user to formalize requirements in the form of analysis components:

Any logical expressions from signal names, package variables and internal functions can be used in **trigger blocks** and **calculation steps**.

With **timing diagrams** both simple and complex signal relationships can be clearly and at the same time formally described.

The **Python interface** allows the users to implement the analysis specifications themselves. In doing so, they can focus on the actual requirements, as many tasks – from processing traces via the interpolation of different time axes to generating report entries – are carried out automatically by TRACE-CHECK. For the efficient processing of the signal data the user is provided with all the functionalities of the program libraries NumPy and SciPy.

In addition, TRACE-CHECK provides various methods for synchronizing multiple recordings:

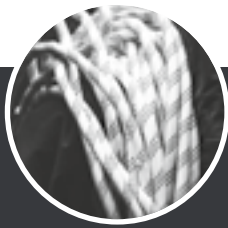
- AUTOSAR Time Synchronization/PTP
- EqualnessMatching
- ExpectationMatching
- LeastSquares
- Offset

INTERFACES

Automation interfaces (COM, REST) enable all TRACE-CHECK work steps to be controlled, say for a seamless and fully automatic operation in an existing tool chain. On request we can also provide an adapted version of the ECU-TEST Jenkins plug-in.

SYSTEM REQUIREMENTS

- OS: Windows 10, 64 bit
- CPU: at least 4 cores
- Free hard disk capacity: at least 3 GB
- RAM: at least 4GB recommended 8GB
- Screen resolution: at least Full HD (1920 x 1080)
- To use file paths longer than 256 characters on Windows, it is necessary to enable systemwide support for it (see: <https://learn.microsoft.com/en-us/windows/win32/fileio/maximum-file-path-limitation>)



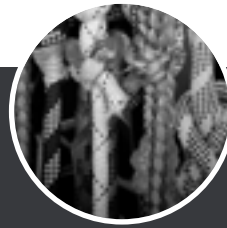
SUPPORTED FORMATS

Bus description:

- ARXML (Classic Platform) 4.1.1 to R21-11
- ARXML (Adaptive Platform) to R20-11
- DBC
- FIBEX bis 4.1.1
- FIBEX für Ethernet 4.1.2
- FIBEX for AUTOSAR Diagnostic Log and Trace (DLT):
Analyse non-verbose Mode
- LIN Description File (LDF)

ECU description:

- ASAP2 Database (A2L)
- Executable and Linkable Format (ELF)
- Intel HEX
- Motorola S19



Signal-based trace formats:

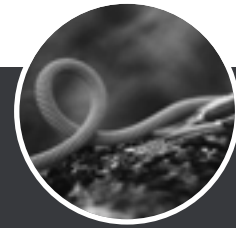
- ASTRACE, AS3TRACE (AutoSPY)
- CSV
- MAT (MATLAB/Simulink, ControlDesk)
- MDF 3.0, 3.1, 3.2, 3.3, 4.0, 4.1, 4.2
- PARQUET (Apache)
- STI, STZ 2.0.1, 2.1, 2.2 ASAM XiL-API
- TDMS (National Instruments)

Bus logging

- ASC (Vector)
- BLF (Vector)
- MDF 4.0, 4.1, 4.2
- TTL (TTTech)

Ethernet

- BLF (Vector)
- DLT
- PCAP, PCAPNG (TraceTronic, Wireshark)
- MDF 4.0, 4.1, 4.2(SOME/IP)



Middleware/Cosimulation

- ADTF2
- AS3TRACE (FEP)
- eCAL 5.0, 5.1
- ROSBAG2 (ROS2)

ADAS

- ERD (CarSim)
- ERG (CarMaker)
- OSI/TXT (ASAM OSI) 3.5.0
- RDB (VTD)

Multimedia

- Audio: FLAC, WAV, OGG, AIFF
- Video: AVI, MP4, MKV, MTS

Other formats supported on request.