



PRODUCT DATA SHEET

VERSION: **2023.2**
AS OF **JULY 2023**

ECU-TEST MAKES AUTOMATION EASY

With ECU-TEST you can intuitively create test cases for automotive software in every development phase and run them automatically – even without any prior knowledge of test automation and programming. We have designed the tool in such a way that the test quality is kept exceptionally high at all levels, although the effort it takes to use it is extremely low.



KEY FEATURES AT A GLANCE

- Supports a broad range of test tools and test environments (MiL/SiL/PiL/HiL/vehicle)
- Uniform and effective automation of the entire test environment
- Smooth collaboration through Diff and SCM integration (GIT, SVN)
- Automation of distributed test environments
- Intuitive graphical user interface
- Generic test-case description
- Test execution under Linux and in container environments (e.g. Docker)



INTEGRATED TRACE ANALYSIS MODULE

- Easy analysis specification via
 - triggered analyses
 - timing diagrams
 - Python interface
- Support for all common recording formats
- High reusability of analyses
- Clear presentation of results
 - transition to the interactive Auto-SPY signal viewer
 - plots enriched with result data



INTERFACES AND EXPANDABILITY

- ECU-TEST can be readily integrated into existing tool chains:
- COM-API for remote control
 - REST-API for execution control under Windows and Linux
 - Object API (for Python, Java und .NET) for generating and manipulating all artifacts (test cases, configurations, etc.)
 - Report generators for different output formats
 - APIs for different test-case generators
 - Jenkins plug-in
 - Easy integration of existing libraries (Python, C/C++, .NET)
 - User-specific tool connections and test steps

SUPPORTED FORMATS

AND STANDARDS

Standards:

- ASAM ACI 1.4
- ASAM iLinkRT 3
- ASAM XiL API version 2.0.1 and 2.1.0 (MA, EES, ECUC/M Port)
- ASAM ATX
- AUTOSAR Classic & Adaptive
- AUTOSAR SOME/IP
- AUTOSAR Time Synchronization (PTP)
- FMI 1.0/2.0
- IEEE802.1AE (MACsec)
- IEEE802.1X (MKA)
- IEEE1722 ACF (for CAN)
- OpenSCENARIO
- OSI (Open Simulation Interface) 3.5.0
- PLP (Probe Logger Protocol)
- ReqIF 1.2
- RFC4302 (IPsec AH)
- RFC7296 (IKEv2)
- SAE J2534 PassThru

Bus description:

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

ECU description:

- ASAP2 Database (A2L)
- Executable and Linkable Format (ELF) with DWARF (Version 2-5)
- Intel HEX
- Motorola S19

SUPPORTED

TRACE FORMATS

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)

Buslogging:

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

Ethernet:

- BLF (Vector)
- DLT (TraceTronic, GENIVI DLT-Viewer)
- 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.

SUPPORTED

HARD- AND SOFTWARE

- A&D: iTest
- AKKA: Gigabox
- ASAM: ACI
- ASAM: iLinkRT
- ASAM: XIL
- ASAP: STEP
- ATI: VISION
- AVL: LYNX
- AVL: PUMA
- AVSimulation: SCANeR
- Beckhoff: TwinCAT
- CARLA Team: CARLA
- Digitalwerk: ADTF
- Digiteq: MGB
- dSPACE: AURELION
- dSPACE: ControlDesk
- dSPACE: ModelDesk
- dSPACE: MotionDesk
- dSPACE: RTMaps
- EA: UTA 12
- ESI: SimulationX
- ETAS: BOA
- ETAS: COSYM SIL
- ETAS: INCA
- ETAS: LABCAR
- ETAS: LABCAR-PINCONTROL
- FEP
- FEP3
- FEV: Morphée
- froglogic: Squish
- Google: ADB
- Göpel: Video Dragon
- HORIBA FuelCon: TestWork
- HMS: ACT - Restbussimulation
- HMS: Bus interfaces
- IDS: uEye
- IPG: CarMaker
- JS Foundation: Appium
- KS Engineers: Tornado
- Lauterbach: TRACE32
- MAGNA: BluePiraT
- Mathworks: MATLAB/Simulink
- Mechanical Simulation Corporation: CarSim
- MicroNova: NovaCarts
- Modelica Association: FMI
- NI: LabVIEW
- NI: VeriStand
- NI: VISA
- Opal-RT: RT-LAB
- PEAK: PCAN
- PLS: UDE

- QUANCOM: QLIB
- RA Consulting: DiagRA D
- ROS2
- SAE: PassThru
- Scienlab: CDS
- Scienlab: ESD
- SFC: Selenium
- Softing: CAN L2 API
- Softing: DTS
- Softing: EDIABAS
- Speedgoat: Simulink RT
- Synopsys: Silver
- Synopsys: SilverXIL
- Synopsys: Virtualizer
- Technica: BTS
- The GNU Project: GDB
- TraceTronic: Ethernet
- TraceTronic: Multimedia
- TraceTronic: RemoteCommand
- TraceTronic: Serial interface
- TraceTronic: SSH MultiConnect
- TTTech: TTXConnexion
- Typhoon HIL: Typhoon HIL Control Center
- Vector: CANalyzer
- Vector: CANape
- Vector: CANoe
- Vector: DYNA4
- Vector: SIL-Kit
- Vector: XL API
- ViGEM: CCA
- Vires: VTD
- VW: ODIS
- X2E: Xoraya

Test management tools:

- Broadcom Rally Software
- IBM ETM (formerly RQM)
- Micro Focus ALM/HP Quality Center
- Micro Focus Octane
- PTC Integrity LifeCycle Manager
- SIEMENS Polarion ALM

Source code management tools:

- Apache Subversion
- Git

On request we will gladly realize the linkage of your specific hardware or software.

SYSTEM REQUIREMENTS

- OS: Windows 10, 64 bit
- OS for test execution under Linux: Ubuntu Linux 20.04 LTS AMD64 with Python 3.10
- CPU: at least 4 cores
- Free hard disk capacity: at least 3 GB
- RAM: at least 4 GB, recommended 8 GB
- 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>)