

## Automated application access

With **ecu.test calibration**, calibration access to ECUs can be automated without additional software. It enables the reading and writing of calibration and measurement quantities as well as the recording and downstream analysis of these as part of the trace analysis. Access is possible via Ethernet using a TCP/IP network connection and CAN/CAN FD. It can be used in conjunction with the following tool connections:

### Ethernet

- tracetrionic: Ethernet
- Vector: SIL-Kit
- Vector: XL API

### CAN

- ETAS: BOA
- HMS: Legacy Bus Interfaces (VCI V2)
- HMS: VCI V4

- PEAK: PCAN
- SAE: PassThru
- Technica: BTS
- Technica: CM
- TOSUN: libTSCAN API
- Vector: SIL-Kit
- Vector: XL API
- X2E: Xoraya

### CAN-FD

- HMS: VCI V4
- SAE: PassThru
- Technica: BTS
- Technica: CM
- TOSUN: libTSCAN API
- Vector: SIL-Kit
- Vector: XL API

For more information on **ecu.test calibration** or requests for extensions, please contact [sales@tracetrionic.de](mailto:sales@tracetrionic.de).

## Key features at a glance

### Calibration access

#### Read and write of calibration quantities

- Reading calibration quantities via upload
- Writing calibration quantities via download

### Measurement access

#### Reading and writing of a limited number of measured variables

- Read measured quantities cyclically via DAQ
- Querying measurements via polling
- Adjustable task per quantity
- Available measurement tasks are polled live by the ECU
- Support for static and dynamic measurement lists
- Write measured quantities via download

### Recording

#### Recording of calibration and

### measurement quantities

- Symbolically via the signal recording integrated in **ecu.test**
- ASAM MDF4 recording format
- Compatible with trace analysis
- Use of the slave timestamp, if supported

### General

- Page Switching (for Pages that support simultaneous Access of ECU and XCP)
- Security Access (Seed & Key)

## Supported formats and standards

### Standards:

- XCP on Ethernet (ASAM MCD-1)
  - UDP
  - TCP
- XCP on CAN
  - CAN
  - CAN FD

### Calibration descriptions:

- ASAM MCD-2 MC (A2L)
- Intel HEX (HEX)
- S-Record (S19)

## Coming soon

**ecu.test calibration** is continuously being developed. We intend to provide some functions in later versions:

### In general

- Address granularity WORD and DWORD

### Transport Layer

- Transport Layer Commands (Slave Detection, Clock Multicast)

### Measurement access (DAQ)

- ODT optimization
- Consideration of XETK special features
- Configuration Storing/Resume Mode
- Assigned CAN-IDs for Event Channels and DAQ Lists

### Stimulation (STIM)

### Recording

- Automatic synchronisation with the time stamps of a bus recording
- Non-linear conversion functions
- Sparse write operations