



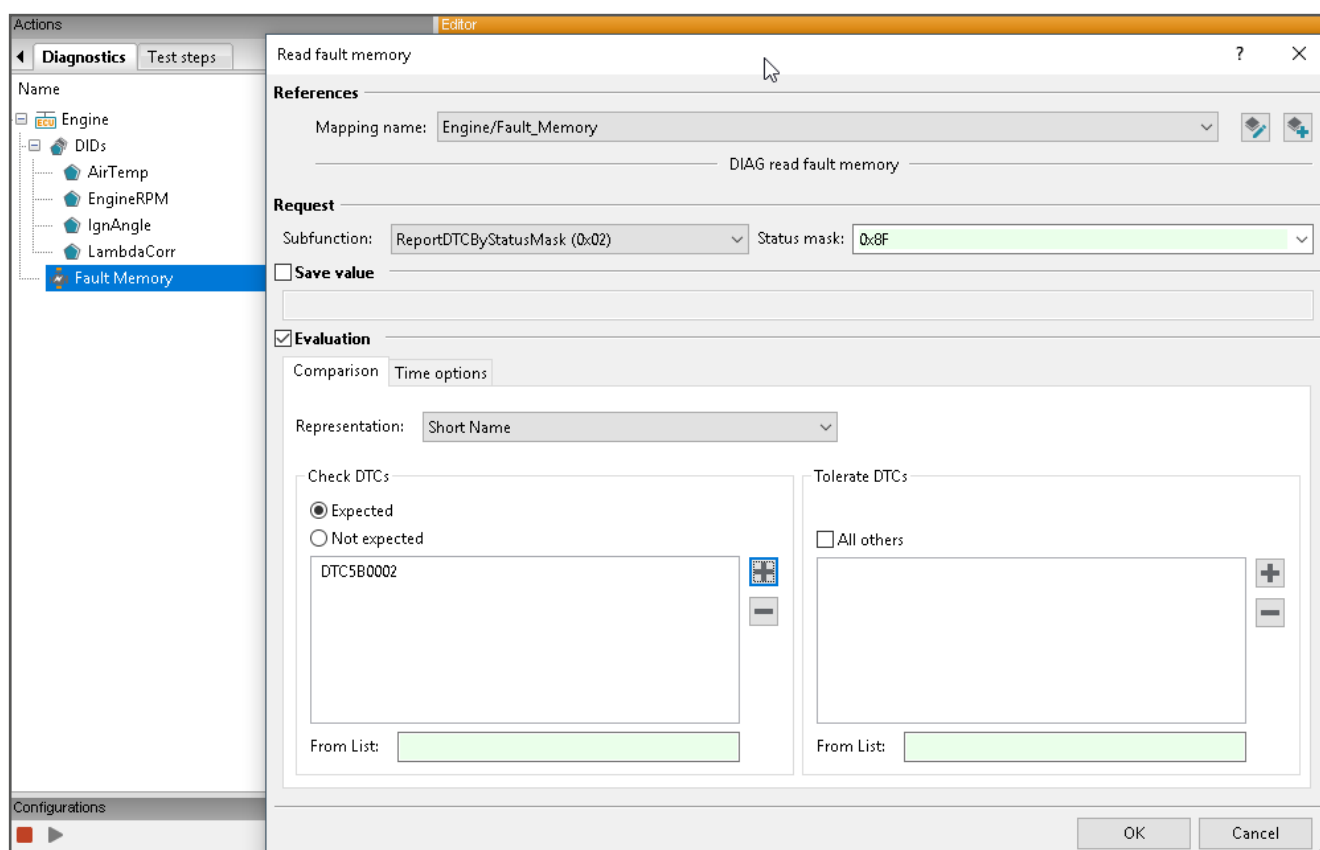
## DATA SHEET



### ECU-TEST diagnostics add-on

With the diagnostics add-on for ECU-TEST it is possible to use symbolic vehicle diagnostic functions automatically without additional software. Deeper protocol knowledge is not required. ECU-TEST executes the diagnostic session handling automatically. The diagnostic access is realized based on the ECU-TEST support for hardware-related bus connections for CAN(-FD) e.g. Vector, PassThru-API (SAE J2534), ETAS-BOA, Peak, Gigabox, Xoraya, etc.

If you are interested in the add-on, please contact [sales@tracetronic.de](mailto:sales@tracetronic.de).



### Key features at a glance

#### Symbolic access

##### Read fault memory entries

- Is performed using an intuitively usable test step
- Allows a simple formulation of the expectation for Diagnostic Trouble Codes (DTCs)

- DTCs Diagnostic Trouble Codes can be specified via different representations:
  - OBD DTC Definitions (PCBU-Code)
  - DTC Name / Description
  - DTC Number



- Clear presentation of DTC information in the test report
- Supported subfunctions:
  - ReportDTCByStatusMask (\$02)
  - ReportSupportedDTCs (\$0A)
  - ReportFirstTestFailedDTC (\$0B)
  - ReportFirstConfirmedDTC (\$0C)
  - ReportMostRecentTestFailedDTC (\$0D)
  - ReportMostRecentConfirmedDTC (\$0E)
  - ReportMirrorMemoryDTCByStatusMask (\$0F)
  - ReportEmissionsOBDDTCByStatusMask (\$13)
  - ReportDTCWithPermanentStatus (\$15)

#### Read and write Data Identifier (DID)

- Clear presentation of DIDs in the diagnostic tab
- Simple status change/query via mapping test steps

#### Calling of routines (Routine Control)

- Starting, stopping and querying diagnostic routines
- Support for parameterization and expected value specification of routine calls

#### Job access for additional UDS functions

##### Diagnostic and Communications Management

- Diagnostic Session Control (\$10)
- ECU Reset (\$11)
- Security Access (\$27)
- Tester Present (\$3E)

##### Data Transmission

- Read Data By Identifier (\$22)
- Read Memory By Address (\$23)
- Write Data By Identifier (\$2E)
- Write Memory By Address (\$3D)

##### Stored Data Transmission

- Clear Diagnostic Information (\$14)
- Read DTC Information (\$19)

##### Remote Activation of Routine

- Routine Control (\$31)

##### Other

- Negative Response (\$7F)

#### J1939

##### Communication jobs with transport protocol

- Send
- Receive
- StandardPGNRequestResponse

##### Diagnostic jobs

- DTCRequest (DM1 and DM2)
- ClearDTC (DM3)
- MemoryAccess (DM14, DM15, DM16)

Support for the analysis of J1939 ASC bus recordings

#### Supported formats and standards

##### Standards:

- UDS (ISO 14229-1)
- KWP2000 (ISO 14230)
- ISO-TP (ISO 15765-2:2016) for CAN and CAN-FD
- DoCAN (ISO 15765-3)
- OBD DTC Definitions (ISO 15031-6 / SAE J2012)
- SAE J1939

##### Diagnostic descriptions:

- Open Diagnostic Data Exchange Format 2.2.0 (ODX)
- Global Diagnostic Data Export 4.1 (GDx)

#### Coming soon

- DoIP (ISO 13400-2)
- OBD (ISO 15031-5 / SAE J1979)

