

# ANDi ETHERNET TEST SUITE

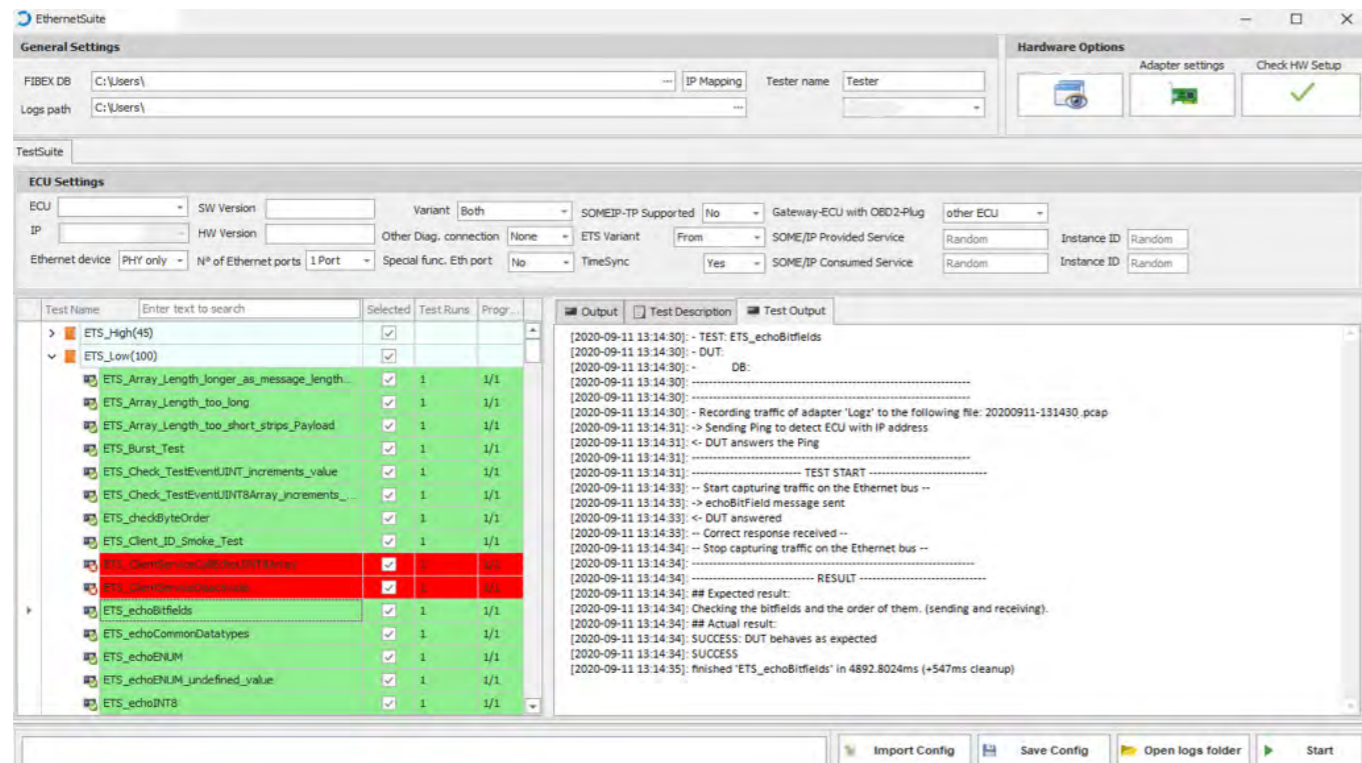
## CONTACT

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## APPLICATION

The most advanced tool for Automotive  
Ethernet ECUs testing and validation  
(focus in SOME/IP)

# ANDi ETHERNET TEST SUITE



## DESCRIPTION

The ANDi Ethernet Test Suite developed by Technica Engineering is a testing tool that includes OEM specific Ethernet Tests: TCP/IP Stack, SOME/IP Stack, Stress tests, Diagnostic Jobs test, and more testcases depending on the OEMs specifications. It covers the testing need after successful “compliance” testing and before “system integration” and “system function” test.

SOME/IP and SOME/IP-SD are client-server-based communication protocols. For this reason, testing requires simulation of corresponding client and server entities depending on the ECU under test. ANDi Ethernet Test Suite licenses are provided on an ECU-basis. The test cases are configured according to the customer network interface description and provide appropriate client-server simulations to execute all available test cases.

Technica’s capacity to adapt the existing test cases to new OEMs is based on the original test specification for BMW and Audi / VW Group and yearlong consulting with major European OEMs in the introduction of SOME/IP, SOME/IP-SD to modern E/E architectures.

ANDi Ethernet Test Suite provides flexibility to select the desired test cases. The most important test categories are: Enhanced Testability Service, Protocol check tests, integration tests, negative tests and stress tests. A test report is created after every execution including the original and complete traffic generated during the execution in PCAP format.

Customers (OEM or Tier 1) receive Technica’s support in the interpretation and analysis of the test case results and guidance towards solution of failed test cases. Moreover, whenever the test specification of the OEM changes, Technica keeps the ANDi Ethernet Test Suite accordingly up-to-date!

ANDi Ethernet Test Suite provides Tier 1 providers and OEM with a comprehensive and time-tested component test solution, which speeds up the time-to-market dramatically by allowing repeated and automatic validation of the protocol implementation of ECUs.

Contact us for more information

## FEATURES

- ✓ Reflects the official protocol tests specified by the OEM (if necessary, Technica can develop the test specification itself)
- ✓ Test Setup provided by Technica Engineering using OEM components
- ✓ Support for testcase result interpretation and analysis
- ✓ Continuous updating of the ANDi Ethernet Test Suite based on OEM requirements
- ✓ Easy to use GUI to run the testcases, including filters and options that are specified for each ECU
- ✓ Ability to run the testcases using command line for automation purposes
- ✓ Summary file with the results of all the testcases and detailed report for each testcase including traces (PCAPs) and logs in Excel format

The ANDi Ethernet Test Suite is an OEM tailored test automation tool, which runs on any customer PC via ANDi Tool. A test setup consisting of the OEMs OBD Gateway and a MediaGateway from Technica, alongside a Windows PC and the ANDi Ethernet Test Suite License are all that’s needed for automated text execution.

ECUs with both 100BASE-T1 and 1000BASE-T1 interfaces can be tested, even when CAN, FlexRay or LIN are part of their peripheral interfaces. Whenever diagnostics, the start-up & shut-down procedures or Network Management are part of the necessary test sequence, either the OBD Gateway or the Test Suite itself provides all required communication. Protocols covered include: basic TCP/IP stack (IPv4 or IPv6), UDP-NM, DoIP, AVB, full coverage of SOME/IP, SOME/IP-SD, SOME/IP-TP including the “Enhanced Testability Service”.

