

AKKA

PASSION FOR
TECHNOLOGIES



PROVEtech:RE **RUNTIME ENVIRONMENT**

THE COST-EFFICIENT TEST PLATFORM FOR ELECTRONIC CONTROL UNITS

Planning, integration and operation of test systems is a highly complex task, involving different professions and roles. Across several development phases, product specific structures and interfaces have to be set up and operated. For these reasons the coordination effort and the associated costs can quickly rise beyond measure. Therefore the goal of all parties is to minimize the one-time and regular efforts as they are essential for testing electronic control units (ECUs). This demand calls for a simple, user-friendly and cost-efficient solution for usage across several development phases. Furthermore the possibility to integrate any specific hardware and software is needed.

SIMULATION ENVIRONMENT FROM DEVELOPMENT UNTIL PRODUCTION

The runtime environment offers a compact and cost-efficient test platform for ECU verification in the entire product development process – from the development of electronic control units and their integration to vehicle tests, quality assurance, testing and validation of the series production. As an example PROVEtech:RE can run configurable restbus simulations and integrate behavior models on Microsoft Windows PC systems and generate signal waveforms. This allows the usage of off-the-shelf components and the re-usage of existing systems. So, the user can work in his familiar environment. Through the close coupling to the test automation tool PROVEtech:TA, the user gets a perfectly coordinated, high-quality software package that – by means of the common structure and origin – guarantees a short training period and services from a single source.

OUR ADDED VALUE

- Support of standardized automotive I/O and bus systems such as CAN, CAN FD, LIN, MOST, FlexRay, Ethernet, SOME/IP, Automotive Ethernet and Multi-I/O
- PROVEtech: μ HiL integration with the ASAM standard XCP on Ethernet
- Modular and extendable test system
- Every interface, each module and every function is dynamically loadable and configurable via XML
- Short integration and configuration times
- Less system costs due to the use of standard I/O hardware
- Transfer of synchronized signals and messages to the test automation software (e.g. PROVEtech:TA) via Ethernet or local on a single PC
- Integration of customer-specific hardware and software, as well as customer-specific bus protocols using generic interfaces
- Already integrated standard technologies such as Bluetooth® and WiFi
- Oscilloscope function
- Quick implementation of customer requirements on demand



Automotive



Aerospace



Railway



Energy



Life Sciences



Telecoms



Space



Services and
Informations Systems



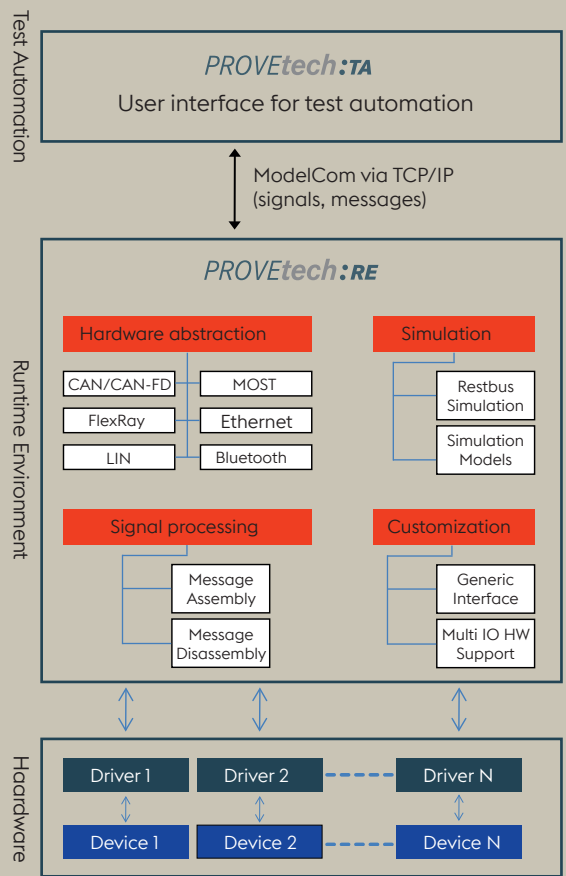
Defence



Oil and Gas



Consulting



THE FEATURES OF PROVetech:RE

SUSTAINABLE HARDWARE SUPPORT

- Complete integration of the compact PROVetech:RE HiL system and additional off-the-shelf components
- Reusability of existing hardware

USER-FRIENDLY CONFIGURATION CHANGES

- XML-based configuration guarantees a short integration time
- No need of additional compilation for configuration changes
- Flexible licensing for meeting your demands

COMPREHENSIVE POSSIBILITIES OF USE

- Test of single or several ECUs
- Closed- or open-loop testing
- Real (Hardware-in-the-Loop) or virtual (Software-in-the-Loop, Model-in-the-Loop) devices under test
- Usage at the desk, in the lab or in the vehicle

VERSATILE FUNCTIONS

- Simulation of CAN, CAN FD, LIN, FlexRay, Bluetooth® and Automotive Ethernet (including SOME/IP and Service Discovery)
- Support of different bus description formats: dbc, ldf and AUTOSAR-XML
- Integration of simulation models, for example Simulink by The MathWorks

OPEN ARCHITECTURE

- Cost-efficient through flexible modular structure
- Generic interfaces to integrate your own components and modules