EXCELLENT AT TESTING

areus

Testing

Tools and expertise

- Residual bus simulation via Vector CANoe, ET-Framework or alternative simulation environments
- areuBox, residual bus simulation plug-ins and data loggers
- Turbolab software for evaluation of measurement data
- Modular Test Bench (MTB), portable test case (MTB Mobile)
- Automatic Test Bench (ATB)
- Areus Test Cube (ATC)
- Coding of control units using Vector CANoe or DTS Monaco
- Automatic tests using test schedules created in-house (C++, php, Lua, python, c#, MyGuine)
- Tool-based documentation (Jira, Confluence, etc.)
- Component updates via specific tools
- Experience with all telematics control units for system integration (SI)

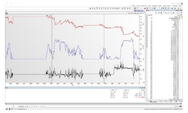
Testing redefined

Our MTBs provide a development environment in which various vehicle telematics components can be tested - suitable for any application.

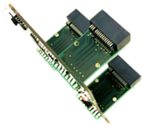
The Areus Test Cube (ATC) elevates software development and software testing of control units to a whole new level. The days of a jumble of cables and chaos at the desk are over, because ATC now offers an all-in-one solution in a compact housing including different automation options.

MTB Mobile: The portable solution for testing and certification. It can be used anywhere; all components are well protected in the robust case - also the perfect solution for test drives.

areuBox is a tool for residual bus simulation and data logging. areuBox enables testing tasks to be carried out both efficiently and cost-effectively.



TurboLab - our interactive software - excels at analyzing, calculating and documenting measurement data. Large volumes of data can be analyzed and visualized fast and efficiently.



Areus trace adapters enable access to internal control unit interfaces. For instance, debug data can be read out or individual software components can be flashed.

Data loggers for recording measurement data during testing, they feature a robust design for outdoor applications.

Please get in touch
for more information.

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Questions, requests, suggestions?
We're there for you!

THINKING ONE STEP AHEAD

The development of new hardware and software is a complex process in which testing plays a fundamental role. The requirements for testing are constantly growing—and there's nothing better than having an expert partner at your side who manages parts of the testing or the entire thing.

We support our customers in the development of new generations of control units backed by our expertise and commitment. In addition to preparing and executing functional tests, our experts develop complete test sequences to meet a wide range of specifications. A major advantage of our testing teams is that they view each project as a whole. This means that our customers benefit from customized test solutions and development services from a single source. Hardware and software can be tested both on test benches and directly in the vehicle. From converting vehicles to full planning of a test drive: Our highly motivated teams are here to help you in all areas. We have many years of experience in testing and know exactly what's required - we're always thinking one step ahead!

Excellent at testing

What makes us unique when it comes to testing? We always have your entire system in mind! We provide our customers with individual solutions and concepts precisely crafted for the hardware and software to be tested. What sets our testing team apart is its ability to grasp requirements and develop the optimal solution to meet them. Our customers benefit from our expertise and skills in the these areas:

- Diagnostics
- Augmented reality
- System integration
- Audio
- Test vehicle modification
- Testing and defect management
- Test automation
- Test drives

In addition, we offer our customers a skilled service team that provides support for the test benches and test vehicles, as well as for certification. This ensures that you'll always be well-prepared for future generations of control units.

OUR TESTING TEAMS

Diagnostics

- Verification of the diagnostic services and the diagnostic trouble codes (DTC) using automatic test benches (ATB)
- Verification of the implementation of the diagnostics feature in the control units as well as system cycle and response times using DiVa in automatic tests
- Simulation and testing of every situation that can occur in the vehicle, starting in the pre-development phase
- Fully automatic diagnostic tests including analysis (ATB)
- Verification of implementation of specification requirements
- Verification of compliance with communication standards (DiVA)
- Residual bus simulation via Vector CANoe, ET-Framework or using areuBox
- Coding of control units via diagnostics testers, e.g. Vector CANoe, ET-Framework or DTS Monaco
- Automatic tests using test schedules created in-house
- Documentation of the results based on tools
- Component update via various tools
- Creation and monitoring of tickets

Augmented reality

- Initial planning / implementation of augmented reality testing
- Creation of test cases
- Setup of the test environment as well as management, update and configuration of the telematics components
- Documentation of test and analysis results
- Database-supported error documentation
- Analysis and reproduction of errors to determine the cause of errors
- Identification of specification deviations
- Supplier and customer management
- Planning, execution and analysis of test drives

System integration

- Acceptance tests prior to software rollout
- Compatibility checks between hardware and software
- Fast feedback of software quality
- Verification of implementation of specification requirements
- Testing of correct control unit communication (MOST, CAN, Ethernet)
- Serious errors are detected ahead of the extensive field tests and can be rectified in advance.
- Testing during development

Audio

- Test scheduling based on the planned development status as well as creation of test reports
- Functional testing from system input to response
- Simulation of the vehicle environment using test bench and residual bus simulation
- Analysis of measured values
- Tests in the vehicle
- Electrical and acoustic measurements of amplifiers, loudspeakers and microphones

Service

- Setup of new testing systems
- Maintenance and support of running systems
- Adaptation of running test benches to new project statuses
- Coding, software updates and ECU commissioning in the vehicle
- Vehicle conversions and upgrades with CAN gateways, data loggers, etc.
- Individual and professional consultations for your project

Certification support

- Test benches
- Consulting for regulatory / non-regulatory certification
- Termination adapter
- Residual bus simulation
- Customized HMI for lab applications
- Support for certification authorities

Test vehicle modification

- Workshop for prototype vehicles
- Installation of test equipment
- Integration of a special wiring harness
- Prototype loudspeaker / ECU assembly
- Data logger and device configuration
- System testing
- Vehicle logistics