LAUTERBACH
DEVELOPMENT TOOLS

RZ Ecosystem Partner Solution
TRACE32® Debug- and Trace-Tools

Solution Summary

Lauterbach TRACE32® tools are a suite of leading-edge hardware and software components that enables you to analyze, optimize and certify all kinds of embedded systems. The globally renowned debug and trace solutions for embedded systems and SoCs are the perfect solution for all development phases from early pre-silicon development up to product certification and troubleshooting in the field. The intuitive modular design provides the highest available performance for the RZ family of MPUs.

Features/Benefits

- Providing the most extensive feature set and performance in the embedded industry including full OS-, RTOS- and Hypervisor-debug-support.

- Modular approach allows easy migration to popular microcontrollers, such as Renesas RH850, RA and RX families.

- World-class support providing fast response times, deep processor expertise, and lifetime coverage.

- Covering the entire life-cycle of a design: Simulation, virtual platforms, real-life hardware, automated test regression and continuous integration.

- Tool Qualification Support Kit (TQSK) for safety-related projects is simplifying path to certification.

Diagrams/Graphics

HW Debugger Solutions
for more than 150 microprocessor architectures and 10.000++ chips

Feature-Rich Debugger SW Suite
complements our hw solutions but acts also a standalone SW-only debugger solution

High-Speed Trace Extensions
for every available trace protocol

Target Markets and Applications

- HMI
- Industrial
- Smart Homes
- Automotive
- Medical
- Consumer Electronics

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PowerDebug X50: Upgradeable Debug Solution for Renesas RZ Microprocessors

PowerDebug is a powerful, modular, flexible debug system that adapts and grows with you as you move from project to project and chip to chip. It provides the broadest coverage of supported chips and core architectures in the embedded industry.

Start with the universal PowerDebug X50 module and debug probe IDC20 for Renesas RZ. Extend your debug system with trace and logic analyzer modules for run-time analysis, code coverage, or in-depth troubleshooting.

PowerTrace III: High-Performance Parallel Trace Extension for Renesas RZ Microprocessors

Our high-performance PowerTrace III trace module is the best trace tool available for Renesas RZ, letting you get the maximum data throughput out of your device.

With its high speed and large memory buffer, you are able to record system behavior in real time without influencing the system operation. Migration to a new architecture requires minimal change due to the modular design of preprocessors and connectors.

Instruction Set Simulator: Complete Debug Experience without Real Targets

The TRACE32® Instruction Set Simulator (ISS) is used to develop or test application code for Renesas RZ microcontroller without the need of a target hardware. It is freely available to all owners of a TRACE32® debug module and also as trial version for evaluation.

The ISS provides the same look and feel as a real debugger connected to a real target.

TRACE32® Tool Qualification Support-Kit (TSQK) for Functional Safety

Functional safety is a key requirement for safety-critical embedded systems. Qualification also includes the development tools used and their integration into the project environment.

Our certified Tool Qualification Support Kits (TQSK) provide everything you need to qualify our TRACE32® solutions. Different TQSK variants prove the suitability of code coverage, debugging, and instruction set simulator for use in avionics, medical, automotive, railroad, or general industrial projects.