LAUTERBACH
DEVELOPMENT TOOLS

RX Ecosystem Partner Solution
TRACE32® Debug-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 RX family of MCUs.

Features/Benefits

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

- Modular approach allows easy migration to other processors and microcontrollers, such as Renesas RH850, RZ and RA 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
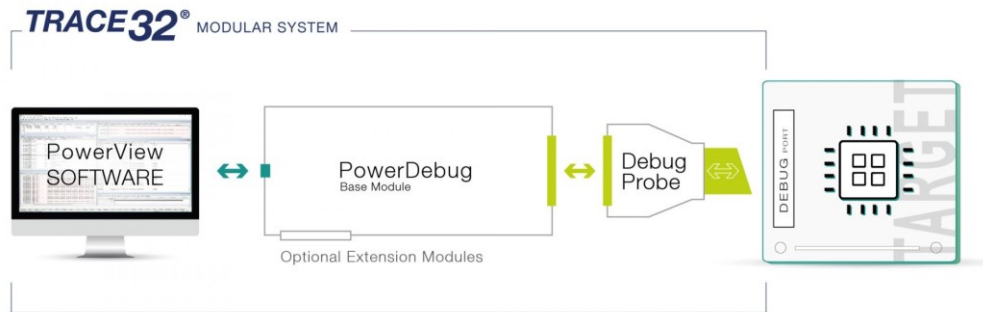
High-Speed Trace Extensions
for every available trace protocol

Target Markets and Applications

- Connectivity
- Industrial
- HMIs
- Metering & Measurement
- Safety & Security
- Motor Control

www.lauterbach.com/chips

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PowerDebug System: Modular, flexible Debug System for Renesas RX Microcontroller

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.

PowerDebug X50: High Performance Debug Solution for Renesas RX Microcontroller

PowerDebug X50 is our high-performance, modular, and future-proof debug controller. You can connect it to your PC via USB 3 or Gigabit Ethernet, making it the perfect solution for both on-site and remote debugging.

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

PowerDebug E40: Powerful Standard Debug Solution for Renesas RX Microcontroller

The PowerDebug E40 along with the debug probe for Renesas RX is our essential-line debug controller, offering you the performance to help you power through simple and complex debug tasks. It supports USB3 high speed connection to the host, and can be extended with logic analyzer modules. The energy-efficient design allows a fanless operation for silent debugging.

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.