

*Höhenkirchen-Siegertsbrunn  
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## **TRACE32<sup>®</sup> extends embOS awareness to Renesas' RH850**

Lauterbach, the leading manufacturer of microprocessor development tools, has announced that it has extended the kernel awareness for the embOS Real-time Operating System (RTOS) from SEGGER Microcontroller to the RH850 Family of microprocessors (MPUs) from Renesas Electronics. TRACE32, the class leading debug tools from Lauterbach, already supports embOS on ARM, PowerPC, RX, SH and NIOS-II families and this tried and tested technology has now been extended to include RH850.

The embOS awareness plugin for TRACE32 allows the developer to visualise RTOS resources and objects such as task lists, mailboxes, timers and semaphores. Developers are free to investigate interrupt routines, drivers and application code all from within the familiar environment of TRACE32. When the awareness is configured, extra features become available, for instance the setting of task aware breakpoints.

All MPUs of the RH850 Family provide dedicated counter registers which can be accessed non-intrusively by the TRACE32 debugger. These can be configured to display minimum, maximum and mean runtimes for a user marked block of code or the runtimes of various tasks in the embOS system.

If the target provides off-chip trace capabilities, TRACE32 can record processor cycles and can be configured to collect data on task switches. Using this information, a detailed analysis of the program history, including task switches, can be viewed.

All features of the TRACE32 awareness for embOS do not require any additional target configuration or any hooks or patches within the RTOS itself. The philosophy of TRACE32 is for the application to behave exactly the same in the debug environment as on the final product; only this way can 100% certainty of testing be achieved.

“The powerful TRACE32 debug tool is now complemented by embOS for RH850, the best in class RTOS on the market. This will help the software engineers to code even more efficient applications as embOS has lowest latencies and extremely small footprint. It is another milestone of our partnership with Lauterbach”, says Til Stork, embOS Product Manager at SEGGER.

“Our continued partnership with embOS allows users of RH850 devices to take full advantage of class leading tools and RTOS to develop smarter and more efficient embedded systems. This can only be good for the embedded industry by enabling developers to choose the best combination of tools and RTOS for their projects” says Barry Lock, UK General Manager of Lauterbach.

## **Additional Data**

Full details of TRACE32 support for RH850 can be found [here](#); for full details of TRACE32 RH850 embOS support click [here](#).

## **About SEGGER**

SEGGER Microcontroller is a full-range supplier of software, hardware and development tools for embedded systems. The company offers support throughout the whole development process with affordable, high quality, flexible and easy-to-use tools and components. SEGGER offers solutions for secure communication as well as data and product security, meeting the needs of the rapidly evolving IoT. SEGGER was founded in 1992, is privately held, and is growing steadily. Headquartered in Germany with a US office in the Boston area and distributors in all continents, SEGGER offers its full product range worldwide. For additional information, visit: <https://www.segger.com>

## **About LAUTERBACH**

Lauterbach is the leading manufacturer of complete, modular and upgradeable microprocessor development tools worldwide with experience in the field of embedded designs since 1979. It is an international, well-established company with blue chip customers in every corner of the globe and has a close working relationship with all semiconductor manufacturers. At the headquarters in Höhenkirchen, near Munich, the engineering team develops and produces highly proficient and specialized Development Tools, which are utilized all over the world under the brand TRACE32<sup>®</sup>. Our branch offices exist in the United Kingdom, Italy, France, Tunisia, on the east and west coasts of the United States, Japan and China. Highly qualified sales and support engineers are also available in many other countries. For more information visit <http://www.lauterbach.com/>

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