

SEGGER introduces Ozone-Sim for high-speed embedded software simulation

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With [Ozone-Sim](#), SEGGER introduces a high-performance instruction set simulator designed to accelerate embedded software development, debugging, testing, and analysis.

The simulator provides instruction tracing capabilities that include live execution counters for every instruction and enable SEGGER's debugger [Ozone](#) to display real-time code coverage and profiling information, just as it does when debugging on actual hardware with [J-Trace](#). Ozone can export this information to automatically identify deviations in both functionality and performance.

Supporting RISC-V and Arm, Ozone-Sim executes embedded applications on a PC at speeds of hundreds of millions of instructions per second, enabling software validation, regression testing, and automated build verification without requiring target hardware.

"Software development often starts long before production hardware is available, yet development teams need fast and reliable ways to test and analyze their code," says Johannes Lask, Product Manager at SEGGER. "By enabling software execution in a simulated environment, Ozone-Sim helps teams start development earlier, automate testing, and gain insight into application behavior throughout the development process."

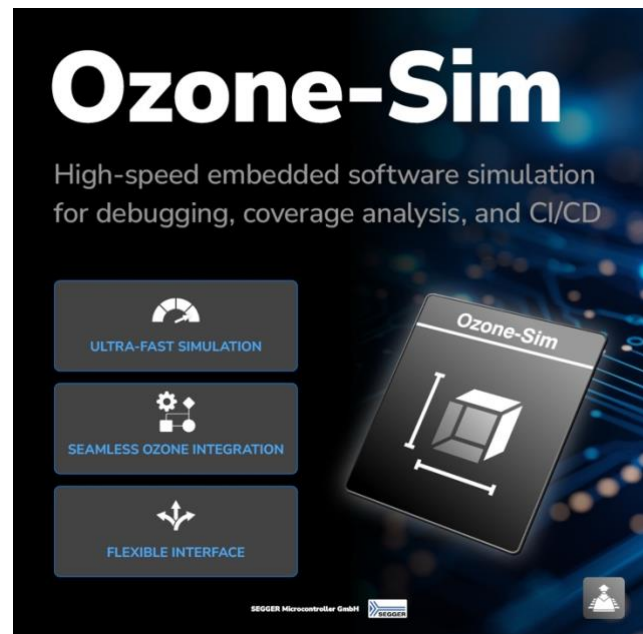
[Flexible workflows for development and testing](#)

When used together with Ozone, Ozone-Sim provides advanced debugging and analysis capabilities, including source-level debugging, backtracing, timeline analysis, and execution statistics. Developers can move easily between simulation and hardware-based testing as projects progress.

Ozone-Sim can also operate as a standalone command-line simulator for automated testing and continuous integration workflows. An integrated GDB server interface enables the simulator to be used with a wide range of third-party debuggers and development environments.

For more information, visit the [Ozone-Sim](#) page at www.segger.com.

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About SEGGER

Founded in 1992, SEGGER Microcontroller GmbH has over three decades of experience in embedded systems, producing cutting-edge [RTOS and software libraries](#), J-Link and J-Trace [debug and trace probes](#), a line of [Flasher ISPs](#), and [software development tools](#).

SEGGER's all-in-one solution [emPower OS](#) provides an RTOS and a complete spectrum of software libraries for, among other things, communication, security, data compression and storage, user-interface software, and more. emPower OS gives developers a head start, allowing them to benefit from decades of experience in the embedded industry.

SEGGER's professional embedded-development software and tools are simple in design, optimized for embedded systems, and support the entire embedded-system development process with their affordability, high quality, flexibility, and ease of use.

SEGGER, with headquarters in Monheim am Rhein, Germany, also has an office in Boston, Massachusetts, United States, and branch operations in Silicon Valley, California, United States; Shanghai, China; and the United Kingdom. With distributors on most continents, SEGGER's full product range is available worldwide.

For more information on SEGGER, visit www.segger.com.

Why SEGGER?

In short, SEGGER has a full set of tools for embedded systems, offers support throughout the entire development process, and has decades of experience. We are The Embedded Experts.

Furthermore, SEGGER software has no open-source or attribution licenses, and it can be integrated into any commercial or proprietary product — with no obligation to disclose the combined source. SEGGER offers stability in an often-volatile industry, making it a highly reliable partner for long-term business relationships.

For additional information, visit www.segger.com.

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