

PRESS RELEASE

Höhenkirchen-Siegertsbrunn

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TRACE32 Provides JTAG Debug Support for RISC-V Linux



Lauterbach, a Silver Member of the RISC-V Foundation, is proud to announce full JTAG debug support for Linux running on systems based on the RISC-V Open Source ISA. The Linux kernel awareness integrates with the TRACE32 debugger providing users with a seamless debug experience across the entire system life cycle, from board bring up to task level debugging. This allows for a single tool to be used in all phases of system development and can reduce training and development times and costs for engineers who are already under time pressures to deliver top quality embedded devices.

The Linux Kernel Awareness adaptation for the TRACE32 debugger is MMU aware. This allows symbols to be loaded for each process, kernel module or shared library in the target system and assigns them to the correct memory partition. This approach gives developers the ability to view and control all components of a target system from within the TRACE32 environment: kernel, kernel modules, device drivers, interrupt service routines, processes, threads and shared libraries.

In addition to all standard JTAG features, some unique special extensions are provided, such as process aware breakpoints that can be set to trigger when a piece of shared code is executed by a particular thread or process, ability to read the kernel logs and to inspect the /proc and /sys filesystems and all mountpoints. The system is also fully SMP aware and supports multi-core designs where the kernel is able to schedule processes dynamically across a number of processor cores, providing users with complete system visibility in a system which is self-managing according to real-world demands.

Norbert Weiss, International Sales Manager, remarked that “This extension of our debugger is a big step in helping companies to be more cost effective in their open source projects. Anything that can help to make embedded software safer, more secure and more robust is good for the electronics industry as a whole.” This feature is immediately available and is provided with the standard software delivery of TRACE32.

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®. 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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