


Market-Leading J-Trace PRO Now Enables Live Profiling & Code Coverage

Hilden, Germany – Sept 16th, 2016

SEGGER has made enhancements to its J-Trace PRO and Ozone debugger products. The new functionality incorporated will enable continuous trace, endless streaming and live analysis of application trace data for ARM Cortex-M projects. This updated solution presents engineering professionals with the most effective tool for code coverage and code profiling to be found on the market, as the analysis data is taken from firmware running on the intended target hardware.

Function	Source Coverage	Inst. Coverage	Load
CRYPTO_ECC_ModMul	71.4% (5/7)	72.1% (31/43)	51.27%
CRYPTO_ECC_ModSquare	71.4% (5/7)	70.7% (29/41)	28.66%
CRYPTO_EC_KillPoint	100.0% (6/6)	100.0% (23/23)	0.41%
CRYPTO_EC_InitPoint	100.0% (6/6)	100.0% (28/28)	0.37%
CRYPTO_RSA_InitPublicKey	100.0% (4/4)	100.0% (18/18)	0.21%
CRYPTO_ECC...	35 986	242	int CRYPTO_ECC_ModMul(CRYPTO_MPI
	35 689	243	if (pCurve->pfReduce) {
	35 689	244	CRYPTO_CHECK(CRYPTO_MPI_Mul (i
	35 689		0002EFB8 683A LDR
	35 689		0002EFBA 68B9 LDR
	35 689		0002EFBC 68F8 LDR
	35 689		0002EFBE FDAB BL
	35 688		LDR
	35 986		CMP
	0		BLT
	35 986	245	CRYPTO... (Reduce
	246		} else {
	0	247	CRYPTO...
	248		}



Code coverage is a must-have for complex embedded systems using stacks such as Ethernet or USB. The continuous stream of trace data provided by J-Trace PRO permits complete code coverage analysis over unlimited periods of time. This is highly suitable for capturing even the most intermittent application failures, whether they occur within hours or over the span of many days. The live trace is a non-intrusive data collection method that utilizes ARM's Embedded Trace Macrocell (ETM). The inclusion of code instrumentation is not required.

The new real-time trace and analysis capabilities of J-Trace PRO can be easily visualized using Ozone, SEGGER's intuitive debugger. Execution counters are displayed in line with the code and can be tracked down to the instruction level. The counters are updated live in real-time. Code coverage is also shown within Ozone indicating code sections, that may never execute.

Developers benefit from J-Trace PRO while debugging and verifying multi-tasking code behavior. The trace can shed light on hidden code issues and inefficiencies to identify parts of the code which may benefit most from performance optimizations.

The entire system is designed for ease of use - just a few clicks and a full visualization of what the application is doing and where most of the time is spent is rapidly made available. The Ozone debugger can also export gathered trace information, which enables offsite analysis and as evidence with code certification.

J-Trace PRO offers developers a fast and efficient means to identify and resolve real-time system application code defects, ensuring higher productivity and also lowering development risks and costs.

To access more information on the J-Trace PRO endless live trace go to: www.segger.com/jtrace-pro-streaming-trace.html

Full product specifications are available at: <https://www.segger.com/jtrace-pro-cortex-m.html>

About J-Link / J-Trace

The SEGGER J-Link / J-Trace is the most popular debug probe family on the market. It is tool chain independent and works with free GDB - based tool chains as well as commercial IDEs. J-Trace PRO works with all currently available Cortex-M devices up to a 300MHz maximum trace clock. It supports tracing on Cortex-M0/M0+/M1/M3/M4/M7 targets. J-Trace PRO also provides all the features of J-Link technology for Cortex-M, such as unlimited flash breakpoints and Monitor Mode Debugging.

With the J-Link family, investments in the debug probe are preserved when changing compiler or even CPU architecture. J-Link supports multiple CPU families; there is no need to buy a new J-Link or new license when switching to a different yet supported CPU family or toolchain. All J-Links are fully compatible to each other, so an upgrade from a lower-end model to a higher-end model is a matter of a simple plug-and-play.

Full product specifications are available at:

<http://segger.com/jlink.html>

The J-Link - Software is available at:

www.segger.com/download_jlink.html

About SEGGER

SEGGER Microcontroller develops and distributes hardware and software development tools as well as software components for embedded systems.

An "embedded system" is one in which a microprocessor and associated components are incorporated into a device helping to accomplish difficult and complex tasks in products such as cell phones, medical instruments, instrument clusters, measurement instruments, satellite radios, digital cameras etc.

SEGGER was founded in 1997, is privately held, and is growing steadily. Based in Hilden with distributors in all continents and a local office in Massachusetts, SEGGER offers its full product range worldwide.

SEGGER software products include: embOS (RTOS), emWin (GUI), emFile (File System), emUSB (USB host and device stack) and embOS/IP (TCP/IP stack). With emSecure, a unique software to generate and verify digital signatures, and the TLS-solution emSSL, SEGGER is also offering software for the growing field of data and product security.

With the experience in programming efficiently on embedded systems, SEGGER created highly integrated, cost-effective programming and



development tools, such as the Flasher (stand-alone flash programmer) and the industry leading J-Link/J-Trace emulator.

SEGGER cuts software development time for embedded applications by offering affordable, high quality, flexible and easy-to-use tools and software components allowing developers to focus on their applications. Find out more at www.segger.com

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