IAR Systems adds multicore debugging and automatic NEON vectorization to world-leading development tools for ARM

Version 7.10 of IAR Embedded Workbench for ARM that is released today gains multicore debugging functionality, and automatic NEON vectorization to support development on ARM Cortex-A

Embedded World, Nuremberg, Germany—February 25, 2014—Today, IAR Systems® releases a major enhanced version of its complete and high-performance development toolchain IAR Embedded Workbench® for ARM®. Highlights are multicore debugging functionality and support for automatic NEON™ vectorization which significantly strengthens development of complex applications.

Multicore applications often interact in complex ways and are therefore challenging to debug. With support for multicore debugging in the comprehensive C-SPY® Debugger in IAR Embedded Workbench for ARM, developers are able to simultaneously debug two or more identical cores, symmetric multicore processing (SMP), or two cores with different architectures, asymmetric multicore processing (AMP), in one single development environment. This makes it considerably easier to find program errors during development.

For developers working with applications based on ARM Cortex®-A processors, especially with multimedia and signal processing applications, the support for NEON vectorization is crucial for top performance. ARM NEON is a Single Instruction Multiple Data (SIMD) architecture extension developed by ARM and is implemented as part of the ARM processor, but has its own execution pipelines and a register bank that is distinct from the ARM register bank. With the possibility to automatically vectorize the code, developers are able to achieve faster application response time, improve application battery lifetime and further meet the market demands for low cost and low power.

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"The interest in and the availability of embedded multicore processors are on the rise and adding multicore debugging technology brings even higher value to our customers who already benefit from our full-featured C-SPY Debugger with breakthrough technologies like high-resolution power debugging and advanced trace" says Anders Lundgren, Product Manager, IAR Systems. "Complementing this with automatic code generation for the NEON vector engine also shows our strong commitment to increased code productivity on the compiler side."

"The demand for complex applications is one of the strongest market drivers today," says Stefan Skarin, CEO, IAR Systems. "Thanks to our close cooperation we are leading the way with ARM, and maintain our position as the dominating supplier of world-leading development tools for ARM."

IAR Embedded Workbench for ARM is a complete development toolchain including the highly-optimizing IAR C/C++ Compiler™ and the feature-rich C-SPY Debugger incorporated in a user-friendly integrated development environment. Support for the latest devices is added to version 7.10 of IAR Embedded Workbench for ARM which further expands the tools' leading support for all ARM cores. Read more and download evaluation licenses at www.iar.com/ewarm.

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About IAR Systems

IAR Systems is the world's leading supplier of software tools for developing embedded systems applications. The software enables over 19,000 large and small companies to develop premium products based on 8-, 16-, and 32-bit microcontrollers, mainly in the areas of industrial automation, medical devices, consumer electronics, telecommunication, and automotive products. IAR Systems has an extensive network of partners and cooperates with the world's leading semiconductor vendors. IAR Systems Group AB is listed on NASDAQ OMX Stockholm. For more information, please visit www.iar.com