IAR Systems introduces 64-bit Arm core support in leading embedded development tools

Easy migration from 32-bit to 64-bit architectures paves the way for future-proof embedded development with the complete development toolchain IAR Embedded Workbench

Uppsala, Sweden—February 22, 2021—IAR Systems®, the future-proof supplier of software tools and services for embedded development, proudly presents that its C/C++ development toolchain IAR Embedded Workbench® for Arm® now supports 64-bit Arm cores including Arm Cortex®-A35, Cortex-A53 and Cortex-A55. Through IAR Embedded Workbench, IAR Systems provides its customers with the market's most diverse microcontroller support as well as adapted licensing options to fit different organizations' needs.

In the embedded industry, more and more applications are being based on 64-bit cores, specifically within low-power applications, deeply embedded and handheld devices. In these application areas, IAR Embedded Workbench has a strong foothold and is the toolchain of choice for many companies to reach maximum performance and energy efficiency. By supporting leading-edge designs needing the performance from 64-bit Arm cores, IAR Systems now enables its customers to make use of the toolchain's leading optimization technology also for 64-bit devices. In addition, integrated code analysis tools ensure code quality, and for simplified functional safety certification, a pre-certified version of the toolchain is available.

Complementing the highly optimizing build tools, IAR Embedded Workbench for Arm offers extensive debugging and analysis possibilities such as complex code and data breakpoints, runtime stack analysis, call stack visualization, code coverage analysis and integrated monitoring of power consumption. The company's I-jet debugging probes and the high-performance C-SPY Debugger 64-bit instruction set simulator offer further capabilities for seamless and flexible development workflows. The toolchain enables multicore debugging of combined Cortex-A (32/64-bit), Cortex-R (32-bit) and Cortex-M (32-bit) devices and System-On-Chips (SoCs). IAR Embedded Workbench for Arm also provides pre-integrated software solutions from leading real-time operating systems (RTOS) and middleware vendors.

– more –

"Starting in the 8-bit world, we have been following our customers into 32-bit, and we are now continuing the journey together into the 64-bit world," said Stefan Skarin, CEO, IAR Systems. "Our customers need to have access to integrated, flexible solutions that provide advanced functionality without compromising performance or quality, and we are working with a number of lead customers who are early adopters of 64-bit devices in order to make their technology switch as smooth and efficient as possible, and enable them to develop next-generation embedded applications. Through this extended offering, we are building a development tools platform for the future, enabling our customers to both maximize their already made investments as well as prepare for innovations yet to come."

The latest version of IAR Embedded Workbench for Arm delivers support for a number of different 64-bit processors, such as the NXP i.MX 8 series of application processors including the i.MX 8M, i.MX 8M Mini and i.MX 8M Nano products.

"The support of 64-bit in IAR Embedded Workbench for Arm is great news for developers wanting to implement real-time applications on higher performance embedded processors", said Robert Thompson, Director of i.MX Ecosystem, NXP® Semiconductors. "NXP's i.MX 8M applications processors provide cost-effective integration and affordable performance for smart, connected, power-efficient devices requiring graphics, vision, voice control, machine learning, intelligent sensing and general-purpose processing. IAR Systems and NXP's long history of collaboration in the embedded processing space enables our combined technologies to provide a powerful development platform for 64-bit embedded applications."

With version 9.10, the toolchain supports the Armv8-A execution model AArch64 and the Arm AArch-64 data models ILP32 and LP64, and is compatible with the Arm AEABI 64-bit and the C++ IA64 ABI and C++ IA64 exceptions ABI. For more information about IAR Embedded Workbench for Arm and the latest version, visit www.iar.com/extended or join the upcoming webinar "Explore the latest IAR Embedded Workbench for Arm with 64-bit support" on February 25, 2021. In addition, IAR Systems will be participating in embedded world digital, March 1-5, 2021, to showcase its latest technology.

Ends

Editor's Note: IAR Systems, IAR Embedded Workbench, Embedded Trust, C-Trust, C-SPY, C-RUN, C-STAT, IAR Visual State, IAR KickStart Kit, I-jet, I-jet Trace, I-scope, IAR Academy, IAR, and the logotype of IAR Systems are trademarks or registered trademarks owned by IAR Systems AB. All other product names are trademarks of their respective owners.

IAR Systems Contacts

AnnaMaria Tahlén, Media Relations & Content Manager, IAR Systems

Tel: +46 18 16 78 00   Email: annamaria.tahlen@iar.com

Tora Fridholm, Chief Marketing Officer, IAR Systems

Tel: +46 18 16 78 00   Email: tora.fridholm@iar.com

About IAR Systems

IAR Systems supplies future-proof software tools and services for embedded development, enabling companies worldwide to create the products of today and the innovations of tomorrow. Since 1983, IAR Systems' solutions have ensured quality, reliability and efficiency in the development of over one million embedded applications. The company is headquartered in Uppsala, Sweden and has sales and support offices all over the world. Since 2018, Secure Thingz, the global domain expert in device security, embedded systems, and lifecycle management, is part of IAR Systems Group AB. IAR Systems Group AB is listed on NASDAQ OMX Stockholm, Mid Cap. Learn more at www.iar.com.