



Product News

Date: September 10, 2019

IAR Systems updates RISC-V development tools with custom extensions support and code speed optimizations

Uppsala, Sweden—September 10, 2019—IAR Systems®, the future-proof supplier of software tools and services for embedded development, announces that a new version of the toolchain IAR Embedded Workbench® for RISC-V is now available. Version 1.11 adds support for custom extensions as well as further enhanced optimizations for code execution speed.

One of the major benefits of using RISC-V is the flexibility the architecture provides, which enables OEMs as well as SoC vendors to design custom cores with the exact definitions needed for the application or product. By adding support for custom extensions, IAR Systems makes it possible for these companies to make full use of the capabilities of the leading embedded development toolchain for developing applications based on custom cores.

Through excellent optimization technology, IAR Embedded Workbench helps developers ensure the application fits the required needs and optimize the utilization of on-board memory. This also enables companies to aggregate value by adding functionality to an existing platform. Version 1.11 of IAR Embedded Workbench for RISC-V adds additional tweaks for code speed, resulting in significantly higher performance of the generated code. To ensure code quality, the toolchain includes C-STAT® for integrated static code analysis. C-STAT can help prove compliance with specific standards like MISRA C:2004, MISRA C++:2008 and MISRA C:2012, and also detect defects, bugs, and security vulnerabilities as defined by the Common Weakness Enumeration (CWE) and a subset of CERT C/C++.

“By using IAR Embedded Workbench for developing software for custom RISC-V cores, designers gain full flexibility for innovation and differentiation without compromising code quality or performance,” comments Anders Holmberg, Chief Strategy Officer, IAR Systems. *“Our current users of the toolchain report major performance improvements compared to other RISC-V tools. OEMs that are exploring using a RISC-V core for their next embedded project can feel confident that we are delivering best in class optimizations for size and speed, as well as the support they need to keep project deadlines,”* he concludes.

RISC-V is a free and open instruction set architecture (ISA) based on established Reduced Instruction Set Computing (RISC) principles. In May 2019, IAR Systems released the first version of IAR Embedded Workbench for RISC-V. Complementing its strong tools product offering, the company delivers renowned technical support from offices around the globe.

Learn more at www.iar.com/riscv and in the live technical webinar “Working with custom ISA extensions in RISC-V” on September 17

[10:00 AM CEST](#)

[2:00 PM EDT](#)

Ends

***Editor's Note:** IAR Systems, IAR Embedded Workbench, Embedded Trust, C-Trust, IAR Connect, 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.*

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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, a provider of advanced security solutions for embedded systems in the IoT, is part of IAR Systems. IAR Systems Group AB is listed on NASDAQ OMX Stockholm, Mid Cap. Learn more at www.iar.com.