IAR sets the standard with class-leading support for Renesas' first general-purpose RISC-V MCUs

Uppsala, Sweden, March 27, 2024 - IAR, the leader in software solutions and services for embedded development, is proud to announce enhancements to its premier development environment to support the first general-purpose 32-bit RISC-V MCUs with Renesas' internally developed CPU core. This enhanced offering includes advanced debugging capabilities and sophisticated compiler optimizations fully integrated with the Renesas Smart Configurator toolkit, design examples, rich documentation, and support for the Renesas fast prototyping board (FPB).

As the adoption of RISC-V architecture continues to grow within the commercial sector, the need for robust, reliable, and comprehensive development tools has become increasingly apparent. IAR meets this demand with an advanced toolchain that not only boosts developer productivity but also integrates critical aspects of functional safety and automated workflows, essential for modern development practices. The IAR solution for RISC-V is engineered for diverse applications across various markets, such as consumer electronics, medical devices, small appliances, and industrial systems.

"IAR is a long-standing and valuable partner within the Renesas tools ecosystem, providing outstanding support for our various MCU architectures with the IAR Embedded Workbench," said Daryl Khoo, Vice President of Embedded Processing 1st Business Division at Renesas. "Thus, we were very happy to collaborate in the early stages to ensure IAR's popular and complete development solution was in place for users of our new R9A02G021 MCU, the first MCU using Renesas' own developed RISC-V core."

Transformative benefits for RISC-V adopters:

- Enhanced productivity: IAR optimizes the development process for RISC-V-based applications with full support for Renesas 32-bit RISC-V MCUs. It integrates seamlessly with the Renesas Smart Configurator code generation toolkit and fast prototyping board to expedite development and shorten time to market. The advanced debugging features enabled by the IAR I-jet probe ensure precise control and in-depth analysis, enabling faster, more efficient delivery of high-quality products.
- Functional safety: Adhering to stringent safety standards, the solution is certified by TÜV SÜD and designed to facilitate the development of safety-critical applications.
- CI/CD pipeline automation: the IAR development solutions fully support automated workflows and Continuous Integration (CI) pipelines on Linux or Windows, enabling continuous development, testing, and deployment processes.

"In an era where the complexity and demands of embedded software development are constantly evolving, our comprehensive development solution for RISC-V is more than just a toolset; it's a commitment to innovation and excellence," said Anders Holmberg, CTO at IAR. "IAR released the first RISC-V tools supporting the opensource instruction set architecture (ISA) already in 2019, and we've

tailored our solution to meet the specific needs of Renesas' first general-purpose 32-bit RISC-V MCUs, ensuring that every RISC-V commercial project benefits from the highest levels of efficiency, safety, and quality. This initiative reflects our dedication to empowering developers and advancing the embedded RISC-V industry as a whole."

In tandem with the launch, IAR introduces a comprehensive eBook aimed at equipping embedded developers worldwide to quickly improve their skills. Titled "The Ultimate Hands-On Guide: Getting Started with RISC-V by IAR," this resource offers a structured approach to mastering RISC-V development using the IAR Embedded Workbench. It also includes references to our Static Analysis tool, IAR C-STAT for RISC-V to enhance code quality and efficiency.

To download "The Ultimate Hands-On eBook: Getting Started with RISC-V by IAR, click here.

For additional information on IAR's RISC-V Solutions, please visit https://www.iar.com/products /architectures/risc-v/iar-embedded-workbench-for-risc-v/

Contacts
Hanna Laurentz, Head of Corporate Communications, IAR
Tel: +46 18 16 78 00 E-mail: hanna.laurentz@iar.com

About IAR

IAR provides world-leading software and services for embedded development, enabling companies worldwide to create secure and innovative products for today and tomorrow. Since 1983, IAR's solutions have ensured quality, security, reliability, and efficiency in developing over one million embedded applications for companies across industries such as industrial automation, IoT, automotive and medical. IAR supports 15,000 devices from over 70 semiconductor partners. The company is headquartered in Uppsala, Sweden, and has sales and support offices worldwide. IAR is owned by I.A.R. Systems Group AB, listed on NASDAQ OMX Stockholm, Mid Cap (ticker symbol: IAR B). To learn more, visit www.iar.com.

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

Image Attachments
IAR RISC-V eBook

Attachments
IAR sets the standard with class-leading support for Renesas' first general-purpose RISC-V MCUs