



## Product News

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# IAR Systems extends industry-leading Renesas RX tools with static code analysis

**The high-performance development toolchain IAR Embedded Workbench for RX is now even more powerful thanks to complete integration of the static analysis tool C-STAT**

Uppsala, Sweden—July 7, 2015—IAR Systems presents version 2.80 of the complete C/C++ compiler and debugger toolchain IAR Embedded Workbench for RX. The new version adds integrated static code analysis through C-STAT, which makes it possible for RX developers to take full control of their code and enables companies to save valuable time and money in their development projects.

Static analysis finds potential issues in code by doing an analysis on the source code level. Such errors as memory leaks, access violations, arithmetic errors and array and string overruns can cause security issues and affect the performance and quality of a product. By using static analysis, developers can identify these errors early and minimize their impact on the finished product and the project timeline. In addition to raising the code quality, the analysis can aid alignment with industry coding standards.

C-STAT is a powerful static analysis tool that checks compliance with rules as defined by the coding standards MISRA C:2004, MISRA C++:2008 and MISRA C:2012, as well as hundreds of rules based on, for example, CWE (the Common Weakness Enumeration) and the CERT C/C++ Secure Coding Standards. Users can easily select which ruleset and which individual rules to check the code against, and the analysis results are provided directly in the IAR Embedded Workbench IDE.

“We are very excited that C-STAT is now supported in IAR Systems’ complete development toolchain IAR Embedded Workbench for RX,” says Semir Haddad, Director of Marketing, Microcontrollers and Microprocessors Solutions, Renesas Electronics America Inc. “Thanks to the complete integration into the toolchain, C-STAT serves RX developers with easy-to-use static analysis right at their fingertips. This not only helps the individual developer in the daily work; it also assists RX customers worldwide in getting their products to the market faster, more cost effectively and easier.”

With more than 4,000 supported Renesas devices, IAR Embedded Workbench supplies exceptional design flexibility for embedded developers working with the Renesas product portfolio. IAR Embedded Workbench for RX provides a complete development toolchain that includes the highly optimizing IAR

— more —

C/C++ Compiler™ with Renesas RX ABI compliance as well as the comprehensive C-SPY® Debugger with support for Renesas E1 and E20 emulators. Version 2.80 of the toolchain also adds support for the new on-chip debugging emulator E2 Lite from Renesas. More information about the tools is available at [www.iar.com/iar-embedded-workbench/renesas/rx/](http://www.iar.com/iar-embedded-workbench/renesas/rx/). C-STAT is available as an add-on product. To read more about C-STAT, go to [www.iar.com/cstat](http://www.iar.com/cstat).

#### **About MISRA C**

MISRA, The Motor Industry Software Reliability Association, is a collaboration between vehicle manufacturers, component suppliers and engineering consultancies which seeks to promote best practice in developing safety-related electronic systems in road vehicles and other embedded systems. MISRA C is a software development standard for the C programming language developed by MISRA. More information is available at [www.misra.org.uk](http://www.misra.org.uk)

### Ends

***Editor's Note:** IAR Systems, IAR Embedded Workbench, C-SPY, C-RUN, C-STAT, visualSTATE, IAR KickStart Kit, IAR Experiment!, 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 products names are trademarks of their respective owners.*

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#### **About IAR Systems**

IAR Systems provides developers of embedded systems with world-leading software tools for developing competitive products based on 8-, 16-, and 32-bit processors. Established in Sweden in 1983, the company has over 46,000 customers globally, 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](http://www.iar.com).