



## Product News

Date: February 17, 2016

# IAR Systems ensures code quality for developers working with Renesas Electronics' RH850 Family of automotive microcontrollers

### **Updated version 1.30 of IAR Embedded Workbench for RH850 adds static analysis as well as extended debugger functionality**

Uppsala, Sweden—February 17, 2016—IAR Systems® announces that its popular static code analysis tool C-STAT® is now available in the C/C++ compiler and debugger toolchain IAR Embedded Workbench® for Renesas Electronics' RH850 Family of automotive microcontrollers (MCUs). The tool will be showcased at embedded world 2016, February 23-25, Nuremberg, Germany, in IAR Systems' booth 4-216.

By using C-STAT, developers can ensure the quality of their code and find potential issues by doing an analysis on the source code level. Such issues include memory leaks, dead code, arithmetic errors and array and string overruns that can cause safety and security issues and affect the performance and quality of a product. C-STAT 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. It is a powerful static analysis tool that is completely integrated in IAR Embedded Workbench, with the settings and results provided directly in the IDE.

Renesas' RH850 Family offers high performance balanced with low-power consumption over a wide and scalable range of products supporting high reliability requirements. IAR Embedded Workbench for RH850 is a complete development toolchain including the highly optimizing IAR C/C++ Compiler™ and the comprehensive C-SPY® Debugger incorporated in a user-friendly integrated development environment.

In addition to C-STAT, the latest version of IAR Embedded Workbench for RH850 adds new debugging functionality including the possibility to connect an E1 or E20 emulator to a running system to inspect it without interrupting program execution. For the E1 and E20 emulators, the debugger now also supports using either 1-pin or 4-pin LPD (Low Pin Debug) communication with adjustable speed. Also introduced

– more –

is a new option to select the precision used by the compiler for representing the floating-point types double and long double. The compiler can use either 32-bit or 64-bit precision. In addition, support for the latest Renesas RH850 devices has been added.

Launched in February 2015, C-STAT is continuously being rolled out as an add-on tool in the IAR Embedded Workbench product family. For Renesas targets, the tool is currently available for an extensive lineup of MCUs including the RZ, RX, RL78 and RH850 Families. Learn more at [www.iar.com/cstat](http://www.iar.com/cstat).

### Ends

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

### **IAR Systems Contacts**

AnnaMaria Tahlén, Professional Communicator, Corporate Marketing, IAR Systems

Tel: +46 18 16 78 00      Email: [annamaria.tahlen@iar.com](mailto:annamaria.tahlen@iar.com)

Stefan Skarin, CEO, IAR Systems

Tel: +46 18 16 78 00      Email: [stefan.skarin@iar.com](mailto:stefan.skarin@iar.com)

### **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).