

Product News Date: June 14, 2016

# IAR Systems offers enhanced code speed optimizations in tools for Atmel 8-bit AVR MCUs

## Boosted performance optimization technology is now available in IAR Embedded Workbench for Atmel 8-bit AVR microcontrollers

Uppsala, Sweden—June 14, 2016—IAR Systems® announces an updated version of its development tools IAR Embedded Workbench® for Atmel 8-bit AVR microcontrollers. Included in the new version are enhanced code speed optimizations which make it possible for developers to gain better performance in low-power AVR-based applications. In addition, version 6.80 of IAR Embedded Workbench for AVR extends the static analysis functionality within the add-on tool C-STAT®.

IAR Embedded Workbench for Atmel AVR incorporates the IAR C/C++ Compiler<sup>™</sup>, which is known for strong code optimizations. The optimizations for code speed have been further strengthened in this version to ensure that IAR Embedded Workbench always performs on top of competition. The compiler supports different levels of optimizations and it is possible to fine-tune the optimizations for either size or speed. Developers can use the available settings to enable the right balance between code size and code speed for their specific applications.

The static analysis functionality within the add-on tool C-STAT offers improved possibilities for code quality control. The new version adds approximately 150 new checks to the existing wide range of checks in C-STAT, including 90 new MISRA C:2012 checks and two new packages of checks. Several new options are also available, for example the possibility to enable or disable the false-positives elimination phase of the analysis, as well as to exclude files from the analysis. C-STAT is fully integrated in the IAR Embedded Workbench IDE and aids developers in ensuring the code quality early in the development cycle. It detects defects, bugs, and security vulnerabilities as defined by CERT C/C++ and the Common Weakness Enumeration (CWE), as well as helps keeping code compliant to the coding standards MISRA C:2004, MISRA C++:2008 and MISRA C:2012.

IAR Embedded Workbench for AVR is a complete set of powerful C/C++ development tools with support for devices in all AVR families. Along with enhanced static analysis and code optimizations, version 6.80

delivers support for Atmel Power Debugger and Atmel Tiny Programming Interface (TPI). To learn more about the tools, visit <u>www.iar.com/iar-embedded-workbench/tools-for-avr/</u>.

### 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 <u>www.misra.org.uk</u>.

## About CERT C/C++

The CERT C/C++ Secure Coding Standards are standards published by the Computer Emergency Response Team (CERT) providing rules and recommendations for secure coding in the C/C++ programming languages. More information is available at <u>www.cert.org</u>.

### 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, Media Relations, IAR Systems Tel: +46 18 16 78 00 Email: <u>annamaria.tahlen@iar.com</u>

Stefan Skarin, CEO and President, IAR Systems Tel: +46 18 16 78 00 Email: <u>stefan.skarin@iar.com</u>

### **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 <u>www.iar.com</u>.