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IAR Systems launches static code analysis for Texas Instruments' MSP430 microcontrollers

The company addresses growing need for proven code quality among MSP430[™] MCU customers with add-on product C-STAT

Uppsala, Sweden / Embedded World, Nuremberg, Germany—February 23, 2015—IAR Systems®, the leading vendor of embedded development tools, is proud to introduce its latest product innovation C-STAT®. C-STAT provides powerful static analysis and is now available fully integrated in the high-performance development toolchain IAR Embedded Workbench® for Texas Instruments' (TI) MSP430[™] MCUs.

Important concerns for embedded developers today include adherence to coding standards as well as increased application complexity that might interfere with code quality. Using a flexible static code analysis tool like C-STAT addresses both these issues by detecting potential code errors in complex



applications and by ensuring compliance with coding standards applicable for embedded applications in various segments.

C-STAT is a powerful static analysis tool that executes fast and provides analysis results directly in the IAR Embedded Workbench IDE. It checks compliance with rules as defined by coding standards including 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 CERT C/C++. Users can easily select which rule-set or which individual rules to check the code against. The tool detects potential code errors including for example memory leaks, access violations, arithmetic errors and array and string overruns. By finding such errors early, developers can take full control of their code and lower the risk of breaking the budget and deadline for a project.

"Code control and coding-standard compliance are very important in the embedded industry and we are seeing requests for such tools among our MSP430[™] MCU customers," says Thomas Mitnacht, MSP430 Development Tools Manager at TI. "With C-STAT, IAR Systems provides an easy-to-use solution for designers to find potential issues in their code. The tool is fast-performing, and companies can really benefit from its use within development teams."

IAR Embedded Workbench includes a highly-optimizing C/C++ compiler and the comprehensive C-SPY® Debugger in a user-friendly integrated development environment. C-STAT is available for IAR Embedded Workbench for MSP430 from version 6.30, as well as for IAR Embedded Workbench for ARM® with support for more than 3,000 ARM-based devices. All products are sold with access to IAR Systems' renowned technical support available in multiple time zones. Read more about C-STAT at <u>www.iar.com/cstat</u> and about IAR Embedded Workbench for MSP430 MCUs at <u>www.iar.com/ew430</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>

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Editor's Note: IAR Systems, IAR Embedded Workbench, C-SPY, C-RUN, C-STAT, visualSTATE, Focus on Your Code, 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.