

Product News

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IAR Systems adds new functionality to development tool suite for Texas Instruments MSP430

Uppsala, Sweden—November 30, 2011—IAR Systems® today announced the availability of new functionality in IAR Embedded Workbench® for Texas Instruments' microprocessor family MSP430. The new version adds several new features, among which are Position-independent code and read-only data (ROPI), and Multithread support.

Most applications are designed to be placed at a fixed position in memory. However, it is sometimes useful to instead decide at runtime where to place the application. When using the added functionality of Position-independent code and read-only data (ROPI) the compiler will generate code that uses PC-relative references for addressing code and read-only data. Even though the linker places the code and read-only data at fixed locations, the application will still be executed correctly when the image is placed at a different address. This is very useful in systems where applications are loaded dynamically. ROPI replaces the previous PIC implementation in IAR Embedded Workbench for MSP430.

The addition of support for multithreading in the runtime library allows for multiple threads to exist in the same process and be executed in parallel. For many applications, thread-safety can be a critical factor. To achieve a thread-safe, multithreaded environment, all shared objects including the standard library objects must be treated according to whether they are global or local to a thread. To be able to protect the data from being overwritten by other threads, the runtime library in IAR Embedded Workbench for MSP430 now provides an interface that makes it possible for RTOS vendors, as well as other scheduling applications, to implement locking mechanisms and thereby achieve a truly thread-safe environment.

The new version of IAR Embedded Workbench for MSP430 also adds support for the newly released version 3 of the MSP debug stack msp430.dll.

IAR Embedded Workbench for MSP430 is a set of reliable and powerful C and C++ tools for building and debugging software for embedded systems based on the ultra-low-power 16-bit MSP430

– more –

microprocessor family from Texas Instruments. IAR Embedded Workbench provides a highly-optimizing C/C++ compiler and a user-friendly IDE including project manager, editor, build tools and debugger.

Information:

Evaluation versions of IAR Embedded Workbench for MSP430 v. 5.40 are available at

www.iar.com/downloads

For more information about IAR Embedded Workbench for MSP430 visit www.iar.com/ew430

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About IAR Systems

IAR Systems is the world's leading supplier of software tools for developing embedded systems applications. The software enables over 14 000 large and small companies to develop premium products based on 8-, 16-, and 32-bit microcontrollers, 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