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Microchip Updates MPLAB® Device Blocks for Simulink® with Multi-Rate and Interrupt Capabilities; Makes Sophisticated Algorithm Design Easy

Device Blocks Provide Complete, Model-Based Control of Most dsPIC® DSC On-Chip Peripherals for Applications Like Motor Control; Unlimited Free Version for 7 Pins or Less

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced Version 3.30 of its **MPLAB® Device Blocks for Simulink®**, which make it easy to develop complex designs using Microchip's **dsPIC30 and dsPIC33 digital signal controllers** (DSCs). This software provides a set of user interfaces to MathWorks' Simulink graphical environment for simulation and model-based design, where code for the application is generated, compiled and loaded onto a target dsPIC® DSC in a single, one-click step. Updates to this version include multi-rate and interrupt-capable device blocks, as well as a Free edition for up to seven I/O ports that eliminates the compile wait time found on prior Free editions. Existing users can upgrade to the new PRO edition for free.

The need for energy efficiency is driving complex motor-control designs that utilize sensorless control technology and closed-loop algorithms. These sophisticated signal-processing applications require both high-level math abstraction and low-level programming knowledge. The ability to easily design complex algorithms using tools such as Simulink, instead of hand coding, speeds time to market. Microchip's MPLAB Device Blocks for Simulink enable designers to go back and forth from simulation to real hardware test quickly, without the burden of low-level programming tasks.

"With motor-control applications becoming more and more complicated, the use of model-based design is a must," said Derek Carlson, Microchip's vice president of development tools. "The updated MPLAB Device Blocks for Simulink bring our dsPIC DSCs to the forefront of this technology."

Microchip's Device Blocks provide complete, model-based control of most dsPIC DSC on-chip peripherals for greater flexibility and higher utilization, including digital I/Os, ADCs, PWMs, change notifications, output compares, input captures, quadrature encoder interfaces, interrupts and resets, as well as communication interfaces such as I^2C™, SPI and UARTs. Additionally, designers can monitor, tune and log their algorithms and applications in real time, via a GUI.

The Device Blocks are also simple to set up and one configuration can be used across all dsPIC DSCs, which enables easy in-process design changes and seamless migration. Target configuration blocks include Master Block, Simulink Reset Config, Compiler Option

and Data Sheet. The Device Blocks' facility to invoke dsPIC3X dedicated functions written in C, via a C function-call block, allows designers to write less code by utilizing many of Microchip's numerous application, algorithm and operation libraries directly from a Simulink model.

Pricing and Availability

The PRO and Free editions of Microchip's MPLAB Device Blocks for Simulink Version 3.30 are available for download today, from **http://www.microchip.com/get/W15M**. The PRO edition (part # SW007023) costs $1495, and existing users can upgrade for free.

For additional information, contact any Microchip sales representative or authorized worldwide distributor. To purchase products mentioned in this press release, go to **microchipDIRECT (http://www.microchip.com/get/NUX2)** or contact one of Microchip's authorized distribution partners.

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