

# Microchip Expands Arduino™ Compatible chipKIT™ Ecosystem with Wi-Fi® Development Board, IoT Cloud Software and Motor Control Shield

chipKIT WF32 Board Integrates Microchip's Agency-Certified Wi-Fi Module, 32-bit PIC32 MCU with Full-Speed USB, and microSD Card; Shield Supports Servo, Stepper and DC Motors

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the expansion of its **Arduino™ compatible chipKIT™ ecosystem**, with two new development tools from Digilent, Inc., and an embedded cloud software framework. Digilent's **chipKIT WF32 board** minimizes the need for users to purchase additional hardware or shields, by integrating Microchip's 32-bit PIC32MX695F512L MCU with Full Speed USB 2.0 Host/Device/OTG, its agency-certified MRF24WG0MA Wi-Fi<sup>®</sup> module and an energy-saving switch-mode power supply that employs Microchip's MCP16301 DC-DC converter, along with a microSD card—all while maintaining an Arduino hardware-compatible form factor. Digilent's **chipKIT Motor Control Shield** enables the development of applications using a wide variety of motor types, including Servos, Steppers and DCs, while allowing users to take advantage of the extra I/O pins found on many of the chipKIT development boards. This additional I/O provides added connectivity and more features than traditional, lower pin-count Arduino shields.

On the software side, an <a href="mailto:embedded cloud software framework">embedded cloud software framework</a> enables designers to easily create "Internet of Things" (IoT) applications with the chipKIT WF32. Additionally, Digilent facilitates the rapid development of wireless HTTP server applications, via its <a href="mailto:comprehensive sample application">comprehensive sample application</a> that supports static pages loaded from the chipKIT WF32's microSD card, as well as dynamically generated Web pages.

Hobbyists, makers, students and academics are looking for an easy way to add wireless connectivity to their Arduino projects, which is provided by the combination of Digilent's chipKIT WF32 base board and its HTTP server example application. This board also provides professional engineers with a rapid method for evaluating Wi-Fi in their embedded designs, and for creating embedded cloud computing services using **Exosite**. Additionally, as with all chipKIT base boards, the chipKIT WF32 can be connected to Microchip's PICkit™ 3 programmer/debugger, allowing users to seamlessly move into Microchip's professional MPLAB<sup>®</sup> X IDE and XC32 C and C++ compilers.

Robotics applications are particularly popular with hobbyists, makers, students and academics. And, their robots are driven by exactly the motor types that the chipKIT Motor Control Shield is designed to support.

"These new boards and software further demonstrate the flexibility and advanced capabilities of the growing chipKIT ecosystem," said Derek Carlson, Microchip's vice president of Development Tools. "Using Microchip's PIC32 MCUs enables a high level of integrated features and capabilities onto a single board, reducing development costs and complexity for hobbyists, academics and professional engineers, alike."

## **Pricing & Availability**

Digilent's chipKIT WF32 (part # TDGL021, \$69.99) and chipKIT Motor Shield (part # TDGL020, \$29.95) are both available today. They can be purchased from microchipDIRECT.

The chipKIT WF32-compatible embedded cloud computing framework, including source code and quick-start information, can be downloaded today from <a href="http://www.microchip.com/get/LS3W">http://www.microchip.com/get/LS3W</a>. Digilent's HTTP server example application can also be downloaded today from <a href="http://www.microchip.com/get/1V8L">http://www.microchip.com/get/1V8L</a>.

For more information on any of the above products, or for additional chipKIT resources, please visit the chipKIT Community Site at <a href="http://www.microchip.com/get/2T2W">http://www.microchip.com/get/2T2W</a>.

### Resources

High-res Photos Available Through Flickr or Editorial Contact (feel free to publish):

- chipKIT WF32 Photo: <a href="http://www.microchip.com/get/6T7C">http://www.microchip.com/get/6T7C</a>
- chipKIT Motor Control Shield Photo: <a href="http://www.microchip.com/get/HKA5">http://www.microchip.com/get/HKA5</a>

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<u>Tags / Keywords:</u> chipKIT, Arduino, Hobbyist, Academic, Maker, PIC32, MIPS, Arduino Kit, Arduino Project, Wi-Fi, Networking, Motor Control, Rapid Prototyping, Web Server, Cloud Computing, Internet of Things

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Source: Microchip Technology Inc.