

Microchip Introduces General-Purpose 8bit PIC® Microcontrollers with Next-Generation Digital and Analog Peripherals

MCUs Feature On-Chip Complementary Output Generator (COG) Peripheral and 5-bit DAC; Increase Overall System Capabilities While Reducing Costs

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, analog and Flash-IP solutions, today announced from the Embedded World Conference in Germany a new family of 8-bit microcontrollers (MCUs) featuring next-generation analog and digital peripherals, making them ideal for **general-purpose** applications, as well as **battery charging**, **LED lighting**, **ballast-control**, **power-conversion** and system-control applications. The **PIC12F(HV)752 MCUs** feature an integrated Complementary Output Generator (COG) peripheral that provides non-overlapping, complementary waveforms for inputs such as comparators and Pulse Width Modulation (PWM) peripherals, while enabling dead-band control, auto shutdown, auto reset, phase control and blanking control. Additionally, the new MCUs feature 1.75 KB of self read-write program memory, 64B of RAM, an on-chip 10-bit ADC, Capture-Compare PWM modules, high-performance comparators (down to 40 ns response), and two 50 mA-capable I/O's, enabling engineers to increase overall system capabilities and reduce costs.

To view a brief presentation on these products, visit: http://www.microchip.com/get/G1S6

Engineers are constantly challenged to increase system performance and efficiency while reducing system costs, especially for newer LED-lighting and battery-charging applications. With their numerous on-chip, general-purpose and specialized peripherals, including the integrated COG, high performance comparators, 50 mA outputs for direct FET drive, the PIC12F(HV)752 MCUs meet these needs. The high-voltage variant in the family—the PIC12HV752 MCU—incorporates a shunt regulator that allows operation from 2V to an unspecified user-defined maximum voltage level, with less than 2 mA operation current. This high-voltage variant is ideal for cost-sensitive applications with high-voltage power rails. Additionally, the 4-channel, 10-bit ADC can be used to implement various sensors and mTouch™ sensing applications, including capacitive touch.

"With numerous peripheral enhancements, including the new COG and 50 mA drive capabilities, PIC12F(HV)752 MCUs enable efficient power supply conversion for applications such as LED lighting and battery charging," said Steve Drehobl, vice president of Microchip's Security, Microcontroller and Technology Development Division. "While still remaining a general purpose product family, the PIC12F(HV)752 MCUs provide a versatile platform to incorporate intelligence into numerous applications. Whether they're used in lighting, power supply or home-appliance applications, these MCUs provide increased efficiencies, reduced costs and an improved user experience."

The PIC12F(HV)752 MCUs are supported by Microchip's standard suite of world-class development tools, including the MPLAB® Integrated Development Environment (IDE), the PICkit™ 3 (part # PG164130, \$44.95), MPLAB REAL ICE™ (part # DV244005, \$499.98), and MPLAB ICD 3 (part # DV164035, \$189.99) debuggers/programmers. Engineers can also use Microchip's HI-TECH C® Compiler for PIC10/12/16 MCUs (part #s SW500010 and SW500005). All of these tools can be purchased today, at microchipDIRECT (http://www.microchip.com/get/6VRS).

Packaging, Pricing & Availability

The PIC12F752 MCU is available in a 8-pin 3 mm x 3 mm DFN package, as well as 8-pin PDIP and SOIC packages, for \$0.56 each, in 10,000-unit quantities. The PIC12FHV752 is available in the same package options, for \$0.60 each, in 10,000-unit quantities.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at http://www.microchip.com/get/37J4.

To purchase products mentioned in this press release, go to <u>microchipDIRECT</u> or contact one of Microchip's authorized distribution partners. For more information on Microchip's lighting solutions, visit its online lighting design center at http://www.microchip.com/get/7A2B. To view a demo of the PIC12F752 MCUs in a LED Flashlight application, visit http://www.microchip.com/get/MJDP.

About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, analog and Flash-IP solutions, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip Web site (http://www.microchip.com/get/KN8Q).

Note: The Microchip name and logo, HI-TECH C, MPLAB and PIC are registered trademarks of Microchip Technology Incorporated in the U.S.A., and other countries. mTouch, PICkit and REAL ICE are trademarks of Microchip Technology Incorporated in the U.S.A., and other countries. All other trademarks mentioned herein are the property of their respective companies.

High-res Photos and Block Diagram available through editorial contact or Flickr (feel free to publish):

Photo http://www.microchip.com/get/R5HT
Block Diagram http://www.microchip.com/get/R5HT

Presentation available at Microchip's Web site or via editorial contact: http://www.microchip.com/get/G1S6

Tags / Keywords: Microchip, MCHP, PIC, microcontroller, MCU, 8-bit, battery charging, LED lighting, ballast-control, power-conversion

RSS Feed for Microchip Product News: http://www.microchip.com/get/V0U7

Microchip Technology Inc. **Editorial Contact:** Michelle Miley, 480-792-4111

michelle.miley@microchip.com
Reader Inquiries:

1-888-624-7435

http://www.microchip.com/get/37J4

Source: Microchip Technology Inc.