

Microchip Technology Adds Flash Data Memory to the Baseline PIC(R) Microcontroller Architecture

8- and 14-pin Baseline PIC Microcontrollers Now Feature Non-Volatile Flash Data Memory

CHANDLER, Ariz .-- (BUSINESS WIRE) ---

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the first two Baseline 8-bit Flash PIC(R) microcontrollers with non-volatile Flash Data Memory (FDM) in 8- and 14-pin packages. These additions supplement the variety of integrated low pin count microcontrollers in the Baseline PIC microcontroller family. With the availability of 64 bytes of data memory-combined with an 8 MHz internal oscillator, a Device Reset Timer (DRT), up to three channels of 8-bit Analog-to-Digital Conversion (ADC), and up to two comparators--engineers now have a diverse feature set to select from when integrating digital intelligence in low-cost applications.

Design engineers are constantly looking for cost-effective ways to increase functionality, without having to add complexity to their designs. Through the integration of FDM and analog functionality onto its Baseline 8- and 14-pin microcontrollers, Microchip's PIC12F519 (8-pin) and PIC16F526 (14-pin) provide a cost-effective option for many design engineers to store configuration and calibration data, counters or small look-up tables without external non-volatile memory. Additionally, designers can replace discrete analog components with the digital intelligence and reprogrammability of a microcontroller.

"The Baseline Family of PIC microcontrollers remain the most cost-effective and easiest to use solution for embedded-control functions and systems," said Steve Drehobl, vice president of the Security, Microcontroller and Technology Development Division. "The addition of the industry's highest-endurance Flash Data Memory further reduces the total system cost for many entry-level applications."

Other significant features of the PIC12F519 and PIC16F526 include:

- -- 64 bytes of non-volatile Flash Data Memory
- -- 1K instructions (x12-bit program words) of Flash program memory
- -- 41 bytes to 67 bytes of data RAM memory
- -- Up to two comparators
- -- Up to 3 channels of 8-bit ADC

- -- 1.125 ms DRT
- -- Precision internal oscillator, operating at up to 8 MHz
- -- 25 mA source/sink current IO
- -- Low power (100 nA) sleep current
- -- Wide operating voltage range from 2 to 5.5 volts
- -- One 8-bit timer, and one watchdog timer
- In Circuit Serial Programming(TM) (ICSP(TM)) technology for programming after placement on a board
- -- Package sizes as small as 2x3 mm DFN

The new Baseline PIC microcontrollers form the basic building blocks for a wide variety of systems across a broad range of markets. Their integrated memory and analog functionality makes these microcontrollers well suited for applications such as battery-operated products, power supplies, and identification tags. Additional example applications for the Baseline PIC microcontroller family include: Consumer Electronics (standby power control, power-sequencing infrared receivers, handheld products, device authentication); Mechatronics (includes smart switches, mode selectors, remote I/Os, electric pumps, compressors); Home Automation (light switching and dimming, thermostats, security systems); and Small Home Appliances (blenders, toasters, coffee machines and electric toothbrushes).

Availability, Pricing and Tools

Both devices are available today in the package options listed below for general sampling and volume production. Microchip's world-class suite of MPLAB(R) development tools supports these microcontrollers, including the PICkit(TM) 2 series of starter kits. In 10,000-unit quantities, the PIC12F519 is \$0.56 each, and the PIC16F526 is \$0.64 each. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at www.microchip.com/startnow.

- -- PIC12F519: 8-pin PDIP, MSOP, SOIC and 2x3 mm DFN package options
- -- PIC16F526: 14-pin PDIP, SOIC and TSSOP package options

Microchip Customer Support

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About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and

faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.

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