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Microchip Technology Unveils Newest Member of General-Purpose, Small PIC(R) Microcontroller Family

Lowest-Cost Member of PIC16F88X Family Offers High Performance and Ease of Migration

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

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the PIC16F882--the lowest-cost member of Microchip's 28- and 40/44-pin PIC18F88X family of microcontrollers, for use in a wide range of applications. The PIC16F882 provides design engineers with the option to migrate to a lower-cost family member, as their code development stabilizes. In turn, all five members of the PIC16F88X family maintain compatibility with other 28/40-pin PIC(R) Microcontrollers for easy migration, while providing a host of new features designed to save users time and money--both during and after their design cycle. The enhancements include dual internal oscillators with clock switching and fail-safe clock mode; more (up to 14) ADC channels; an advanced comparator module featuring two comparators and a Set/Reset Latch to allow emulation of many analog circuits; and low-power enhancements that extend battery life.

During the later stages of their product cycles, designers begin to look for ways to reduce costs in order to extend a product's life span. Quite often, migrating to a microcontroller that more appropriately fits their code footprint is an easy way to achieve this goal. The PIC16F88X family provides a consistent peripheral set and multiple memory-size options, making the change a simple one that requires minimal migration effort. The PIC16F88X family is also complemented by a vast portfolio of pin- and code-compatible PIC microcontrollers that enable customers to quickly move to the right part for their chosen application, without having to write all new code.

"With the introduction of each new product and innovative service, such as our low-cost online production-programming center, Microchip continues to demonstrate its commitment to our customers at every phase of their development cycles," said Steve Drehobl, vice president of Microchip's Security, Microcontroller and Technology Development Division. "By adding the new PIC16F882, we make it easy for customers to downsize their PIC16F88X-based designs with minimal effort."

Microchip's broad portfolio of low pin count 8-bit PIC microcontrollers targets a wide range of general-purpose, horizontal applications, and the PIC16F88X family is no exception. Specific application examples include battery-operated systems and battery management, space-constrained and small form factor applications, analog-intensive applications (due to the rich on-chip analog peripheral set), and mechatronics.

Additional key features of the PIC16F882 microcontroller include:

- 3.5 Kbytes of Self-write Program Flash memory and low-voltage programming to enable field programmability
- 128 bytes of Data EEPROM for variable data storage
- Onboard In-Circuit Debug module for simpler system troubleshooting
- Advanced Analog Peripherals
 - Enhanced analog comparator module, featuring 2 comparators with Set/Reset Latch mode
 - 11 10-bit ADC channels
 - 0.6V reference voltage for comparators and ADC
- Low-Power Features
 - Ultra Low-Power Wake Up
 - Enhanced Low-Current Watchdog Timer
 - Low-Power Timer 1 Oscillator
- Serial Communication Interfaces
 - UART/SCI connectivity via EUSART module
 - Master Mode SPI and I2C(TM) with Address Mask option
- More General Purpose I/O, with up to 36 pins that can be used for I/O, and Interrupt-on-change capability for each I/O pin
- Available in industrial and automotive temperature versions

Development Tool Support

The five-member PIC16F88X family is supported by the full suite of Microchip's development tools, including the PICKit(TM) 2 Development Programmer (PG164120), \$34.99, the free MPLAB(R) IDE integrated development environment and the low-cost MPLAB ICD 2 in-circuit debugger. Additionally, a processor module for the MPLAB ICE 2000 emulator is expected to be available in March, which would complete Microchip's tool-chain support for the PIC16F88X family.

Availability and Pricing

The PIC16F883, PIC16F884, PIC16F886 and PIC16F887 microcontrollers are in production now, and are available for general sampling at <http://sample.microchip.com> and volume production shipments at www.microchipdirect.com. Production volumes of the PIC16F882 microcontroller are expected to be available in April. Pricing for this five-member family starts at \$1.27 each in 10,000 unit quantities. The PIC16F882, PIC16F883 and PIC16F886 come in 28-pin PDIP, SOIC, SSOP and QFN packages, while the PIC16F884 and PIC16F887 are available in 40-pin PDIP, and 44-pin QFN and TQFP package options. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at www.microchip.com/pic16f88x.

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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