

## Microchip Technology Adds 12-Bit ADC to High-Performance USB, LCD and General-Purpose 8-Bit PIC(R) Microcontroller Families

## 12 New PIC18 Microcontrollers Remove Cost and Complexity of External ADC in Advanced Sensor Designs That Require Higher-Resolution Analog-to-Digital Conversion

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

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced 12 new high-performance, 8-bit Flash microcontrollers (MCUs), including Microchip's first USB and LCD MCU families to include an on-chip, high-speed 12-bit Analog-to-Digital Converter (ADC) peripheral. The three new families join the general-purpose PIC18F4523 family to provide customers with 16 highperformance PIC18 microcontroller options with high-resolution, on-chip ADCs. The PIC18F8723 high-memory, general-purpose family offers a rich peripheral set and performance of up to 10 MIPS. The PIC18F4553 family adds an integrated full-speed USB transceiver and 12 MIPS performance. Finally, the PIC18F8493 LCD microcontroller family offers integrated LCD drive capability for low-power display applications.

These integrated ADC features provide the precision required for high-speed, high-resolution sensor measurements in applications such as medical, industrial and utility metering. Additionally, these microcontroller families include nanoWatt Technology features, which provide design engineers with multiple options for effectively managing power consumption and extending battery life.

"More embedded applications require higher-precision analog, along with greater connectivity and display options," said Mitch Obolsky, vice president of Microchip's Advanced Microcontroller Architecture Division. "Our new microcontroller families integrate these critical functions, helping to reduce board space and overall system cost."

All 12 of the new microcontrollers are well suited for a broad range of applications requiring precision measurement and control, including the following examples: Industrial (data logging, data conditioning, pressure transducer, temperature sensor, flow-rate sensor); Medical (blood gas analyzer, blood-pressure monitor, heart-rate monitor, blood glucose meter, sensors for home-based monitoring); Power (utility metering, power conversion, battery chargers); Appliances (touch-screen interface, remote diagnostics, temperature controller, humidity sensor, proximity sensor, RTD oven sensor).

**Development Tools** 

To reduce time-to-market, all three microcontroller families are supported by Microchip's standard, high-performance development systems, including: the free MPLAB(R) Integrated Development Environment (IDE) with Visual Device Initializer, the MPLAB C18 C Compiler, and the MPLAB ICD 2 In-Circuit Debugger. Additionally, the PIC18F8723 general-purpose family is supported by the \$59.99 PICDEM(TM) HPC Explorer (part # DM183022); code development is supported for the PIC18F4553 family using the \$59.99 PICDEM FS USB Demo Kit (part # DM163025); and the \$125 PICDEM LCD 2 Demo Board (part # DM163030) is available to ease development with the PIC18F8493 LCD family.

Memory/Package Options, Availability & Pricing

PIC18F4553 USB Family (Four Members):

- -- 28-pin SOIC and PDIP Packages
- -- 44-pin TQFP and PDIP Packages
- -- 24 to 32 Kbytes of Flash
- -- Samples and Volume Production Available Now

PIC18F8723 General-Purpose Family (Four Members):

- -- 64- and 80-pin TQFP Packages
- -- 96 to 128 Kbytes of Flash
- -- Samples and Volume Production Available Now

PIC18F8493 LCD Family (Four Members):

- -- 64- and 80-pin TQFP Packages
- -- 8 to 16 Kbytes of Flash
- -- Samples and Volume Production Expected in the Fourth Calendar Quarter of 2008

Pricing starts at \$2.81 each in 10,000-unit quantities. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <a href="http://www.microchip.com/12bit">www.microchip.com/12bit</a>.

## Microchip Customer Support

Microchip is committed to supporting its customers by helping design engineers develop products faster and more efficiently. Customers can access four main service areas at <u>www.microchip.com</u>. The Support area provides a fast way to get questions answered; the Sample area offers free evaluation samples of any Microchip device; microchipDIRECT provides 24-hour pricing, ordering, inventory and credit for convenient purchasing of all Microchip devices and development tools; finally, the Training area educates customers through webinars, sign-ups for local seminar and workshop courses, and information about the annual MASTERs events held throughout the world.

## 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 <u>www.microchip.com</u>.

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