

Microchip Technology Extends PIC(R) Microcontroller Line to 32 Bits with New PIC32 Family

Only MCU Vendor to Offer an 8-, 16-, & 32-bit Product Line Supported by a Singular Development Environment

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

Microchip Technology Inc. (NASDAQ:MCHP), a leading provider of microcontroller and analog semiconductors, today announced the PIC32 family of 32-bit microcontrollers (MCUs). The PIC32 family adds more performance and more memory while maintaining pin, peripheral and software compatibility with Microchip's 16-bit MCU/DSC families. To further ease migration and protect tool investments, the PIC32 family is fully supported by Microchip's free MPLAB(R) Integrated Development Environment (IDE). The MPLAB IDE offers unprecedented compatibility by supporting Microchip's complete portfolio of 8-, 16-and 32-bit devices.

"As a world leader in embedded-control solutions, Microchip is introducing the PIC32 family to build on the success of our vast 8- and 16-bit portfolio and offer customers a seamless migration path that bridges product families," said Ganesh Moorthy, executive vice president of Microchip. "We provide designers with the most compatible environment in the industry for developing systems with 8-, 16-, and 32-bit MCUs!"

Consumers' desire for ever-more engaging end products is driving system requirements for increased memory capacity, performance and functionality. Launching with seven general-purpose members, the PIC32 family operates at up to 72 MHz and offers ample code- and data-space capabilities with up to 512 KB Flash and 32 KB RAM. The PIC32 family also includes a rich set of integrated peripherals, significantly reducing total design complexity and cost. Examples include a variety of communication peripherals, a 16-bit Parallel Master Port supporting additional memory and displays, as well as a single-supply on-chip voltage regulator.

"Microchip brings a new perspective to the ever-growing 32-bit microcontroller market, born of their tremendous success in the 8-bit market," said Tom Starnes, processor analyst at semiconductor market research firm Objective Analysis. "The peripheral-compatible PIC32 family should bring comfort to Microchip's customers, knowing that the headroom is available as their applications evolve."

The PIC32 family is based on the industry-standard MIPS32(R) architecture, with its leading combination of high performance, low power consumption, fast interrupt response and extensive industry tool support. The high-performance MIPS32 M4K(R) core can achieve best-in-class 1.5 DMIPS/MHz operation, due to its efficient instruction-set architecture, 5-stage pipeline, hardware multiply/accumulate unit and up to 8 sets of 32 core registers. To

reduce system cost, the PIC32 supports MIPS16e(TM) 16 bit ISA--enabling code-size reductions of up to 40%.

"In the hands of the architects at Microchip, the MIPS architecture will do well in 32-bit MCUs," said Max Baron, principal analyst at In-Stat. "Microchip gets a great architecture, while MIPS gets to be part of a series of MCUs from a company that is very successful in the MCU market. It's a win-win for both companies."

Development Tool Support

All PIC32 products are supported by Microchip's world-class development tools, including the MPLAB IDE, the MPLAB C32 C compiler, the MPLAB REAL ICE(TM) emulation system, the MPLAB ICD 2 in-circuit debugger and the Explorer 16 development board.

The PIC32 is launching with broad tool support throughout the industry. Complete tool chains are available from Ashling, Green Hills and Hi-Tech--including C and C++ compilers, IDEs and debuggers. RTOS support is available from CMX, Express Logic, FreeRTOS, Micrium, Segger and Pumpkin. Graphics tools providers include EasyGUI, Segger, RamTeX and Micrium. A full list of third-party support for the PIC32 family can be found at www.microchip.com/PIC32.

Starter Kit

The PIC32 Starter Kit comes complete with everything that developers need to get started, including the USB-powered MCU board, the MPLAB IDE and MPLAB C32 C complier, documentation, sample projects with tutorials, schematics, and 16-bit compatible peripheral libraries. Application expansion boards are also being made available, which plug into the expansion slot on the bottom of the MCU board. The PIC32 Starter Kit (part # DM320001) is available now at www.microchipdirect.com, for only \$49.99.

"PIC MCUs have a strong heritage of ease of use and migration compatibility," said Patrick Johnson, director of Microchip's High Performance Microcontroller Division. "PIC32 builds on this heritage, and offers new levels of performance and system capabilities to embedded application designers."

Pricing and Availability

The first seven members of the PIC32 family come in 64- or 100-pin TQFP packages. Prices start at \$2.95 each, in 10,000-unit quantities, for the PIC32MX300F032H--which has 32 KB Flash and 8KB RAM in a 64-pin TQFP. The PIC32MX360F512L, with 512 KB Flash and 32 KB RAM in a 100-pin TQFP, is priced at \$5.30 each in 10,000-unit quantities. The PIC32 family has been sampling into early adopter designs, and is now available for general sampling. Volume production for all seven members is expected in Q2 2008. For sample availability or additional information, contact any Microchip sales representative or visit www.microchip.com/PIC32.

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 www.microchip.com. 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 www.microchip.com.

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