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Microchip Expands Family of Low-Cost, Small-Package 32-bit PIC32 Microcontrollers

Feature-Packed 32-bit Microcontrollers Include I^{2}S Interface for Audio Playback Applications; Plus Capacitive Touch, USB OTG and Digital Pin Remapping

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 series of low pin count 32-bit PIC32 microcontrollers (MCUs) that provide 61 DMIPS of performance in packages as small as 5 mm x 5 mm, for space-constrained and cost-sensitive designs. The **PIC32 "MX1" and "MX2" MCUs** are the smallest and lowest-cost PIC32 microcontrollers, and are the first PIC32 MCUs to feature dedicated **audio** and **capacitive-sensing** peripherals. These latest devices also feature USB On-the-Go (OTG) capabilities, making them ideal for developing audio accessories and other applications in the **consumer**, **industrial**, **medical** and **automotive** markets.

To view a brief presentation on these products, visit: **http://www.microchip.com/get/6LTX**

Rated for operation up to 105°C, the PIC32 MX1 and MX2 MCUs include up to 128 KB of Flash and 32 KB of RAM, two I^{2}S interfaces for audio processing, an integrated hardware peripheral for adding **mTouch™** capacitive touch buttons or advanced sensors, and an 8-bit Parallel Master Port (PMP) interface for graphics or external memory. Additionally, the new devices feature an on-chip 10-bit, 1 Msps, 13-channel Analog-to-Digital Converter (ADC), and serial-communications peripherals, with the PIC32 MX2 MCUs adding USB OTG. The MCUs are offered in packages from 28- to 44-pins, with sizes down to 5 mm x 5 mm, and a 0.5 mm pitch. Further easing the design effort is Microchip's Peripheral Pin Select feature, which allows developers to "remap" most of the chip's digital-function pins, making layout and design modifications significantly simpler. The PIC32 MX1 and MX2 devices are compatible with Microchip's 16-bit PIC24F product line for easy migration, and are supported by the **MPLAB$^®$ X IDE**—the single development environment for all of Microchip's 8-, 16- and 32-bit MCUs.

"Expanding our PIC32 MX1 and MX2 family gives our customers more options to seamlessly migrate their ever-changing designs," said Sumit Mitra, vice president of Microchip's High-Performance Microcontroller Division. "With 128K Flash, 32K Ram, the highest DMIPs per MHZ performance of any 32-bit MCU, and small packages down to 28 pins, the PIC32 MX1 and MX2 MCUs enable designers to differentiate their products in the marketplace, while keeping design size and costs low."

Development Tool Support

To start development with these new MCUs, designers can use Microchip's **MPLAB Starter Kit for PIC32MX1XX/2XX MCUs** (part # DM320013, $109.99). The USB-powered kit features a PIC32MX250F128D MCU with 128 KB of Flash and 32 KB RAM, as well as a 2" color TFT display (220 x 176 pixel), capacitive-touch slider and buttons, SD-card storage and 24-bit audio playback. Additionally, the **Microstick II** (part # DM330013-2, $34.95) tool is available, as is the **PIC32MX250F128D Plug-In Module** (part # MA320011, $24.95) for the Explorer 16 Development Board. All of these tools can be purchased today, at **microchipDIRECT** (**http://www.microchip.com/get/2W7K**).

Packaging, Pricing & Availability

These new PIC32 MX1 and MX2 MCUs are available in 28-pin SOIC, SPDIP and SSOP packages; a 36-pin VTLA package; and 44-pin QFN, TQFP and VTLA packages. Pricing starts at $2.14 each, in 10,000-unit quantities. **Samples** can be ordered today, at **http://www.microchip.com/get/L7HC**. Volume-production quantities of the MCUs can be purchased today, at **http://www.microchip.com/get/2W7K**.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at **http://www.microchip.com/get/S79W**. To purchase products mentioned in this press release, go to **microchipDIRECT** or contact one of Microchip's authorized distribution partners.

About Microchip Technology

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