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Microchip Technology Introduces World's Lowest Sleep Current, Smallest Packaged 16-bit MCUs with USB and Touch Sensing

Two New PIC24F Families for USB and General Purpose Applications, Featuring nanoWatt XLP Technology and mTouch(TM) Sensing

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced two new families of 16-bit PIC24F microcontrollers (MCUs)--one with USB functionality and one for general-purpose applications--both of which feature nanoWatt XLP extreme low power technology, small packages and mTouch(TM) capacitive touch sensing. The USB family provides for Peripheral, Embedded Host and On-the-Go (OTG) implementations. Microchip's nanoWatt XLP technology provides the world's lowest sleep currents, with current consumption down to 20 nA in Deep Sleep mode, resulting in the lowest power consumption of any MCU with USB OTG--10 times lower than USB MCUs from other ultra-low-power manufacturers.

"Microchip's latest USB PIC(R) microcontrollers enable the smallest footprint and lowest power consumption for applications such as thumb-drive interfaces, capacitive touch panels and many battery-powered applications," said Mitch Obolsky, vice president of Microchip's Advanced Microcontroller Architecture Division. "Microchip provides industry-leading USB software support, configuration tools, customer training and USB development boards to help designers get to market quickly."

The PIC24FJ64GA104 general-purpose family features nanoWatt XLP technology, 16 MIPS performance, 32 or 64 Kbytes of Flash, 8 Kbytes of RAM, a capacitive touch sensing peripheral, Real Time Clock and Calendar (RTCC), a 10-bit A/D, and the ability to reconfigure digital I/O pins via Peripheral Pin Select. The PIC24FJ64GB004 family builds on these features with the world's easiest-to-use and most complete Full-Speed USB 2.0 Peripheral, Embedded Host and OTG solution. Both families are available in 28-pin QFN, SOIC and PDIP packages, and 44-pin QFN and TQFP packages.

Applications

Example applications for the new PIC24FJ64GA104 and PIC24FJ64GB004 MCUs include: Battery-powered (remote controls, security systems, portable meters, irrigation timers), Consumer (thermostats, smoke detectors, business card scanners/printers), Industrial (utility metering, electronic locks, POS terminals), Automotive (remote keyless entry, audio and infotainment), and Medical (glucometers, blood pressure monitors, fitness monitors).

Development Tools and USB Support

Designers can purchase $25 plug-in modules (PIMs) for use with the Explorer 16 Development Board, for each of the new MCU families: PIC24FJ64GA104 PIM and PIC24FJ64GB004 PIM. Additionally, the $60 USB PICtail(TM) Plus Daughter Board is available to enable USB development with the PIC24FJ64GB004 family, using the Explorer 16. All PIC24F microcontrollers are supported by Microchip's world-class development tools, including the free MPLAB(R) IDE, the MPLAB REAL ICE(TM) emulation system, the MPLAB ICD 3 in-circuit debugger, the PICkit(TM) 3 low-cost debugger/programmer and Microchip's free C compilers. These tools are available today at http://www.microchip.com/get/401348787847222.

Microchip also provides extensive USB training courses, and complete software support with free USB class drivers and USB applications support. Developers can decrease the time to market for their USB designs by utilizing the free USB software framework and application notes that can be downloaded at http://www.microchip.com/get/401348798032407.

Availability & Pricing

All family members are available now for sampling and volume production. Prices start at $2.12 each in 10,000 unit quantities for the PIC24FJ64GA104 general-purpose family members, and $2.32 each in 10,000 unit quantities for the PIC24FJ64GB004 USB family members.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at http://www.microchip.com/get/40134862650463. Information on USB products, software and development tools can be found at http://www.microchip.com/get/401348798032407.

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 http://www.microchip.com/get/401348848958333.

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