

16-bit Low Power MCUs Feature Capacitive Sensing That Works in Sleep



Microchip Technology Inc. announced it has expanded its low pin-count 16-bit eXtreme Low Power PIC MCUs by adding an on-chip 12-bit ADC, EEPROM, intelligent mTouch capacitive sensing, and the capability to run from a 5-V supply. Featuring low sleep currents down to 20 nA, the PIC24F32KA304 MCUs are suitable industrial, automotive, medical, utility metering, white goods and many other applications. The family expands upon the company's PIC24F16KA family by adding twice as much Flash program memory and 30 percent more RAM, which provides even more support for wireless-communication protocol stacks. Additionally, the numbers of timers and pulse-width modulators were tripled; the numbers of UART, I2C and SPI channels doubled; the ADC resolution quadrupled to 12-bits; and the pin count increased to 44-pins. The MCUs' intelligent touch sensing module includes a charge time measurement unit (CTMU) that performs automated scan in sleep mode, enabling extremely low-power capacitive sensing. This new CTMU is asserted to dramatically reduce current, thereby conserving even more battery power. Since many automotive and white-good applications require operation up to 5V, these MCUs eliminate the need for discrete voltage regulators.

Microchip Technology Inc.

888-678-6247, www.microchip.com [1]

Source URL (retrieved on 01/28/2015 - 11:59pm):

http://www.ecnmag.com/product-releases/2011/05/16-bit-low-power-mcus-feature-capacitive-sensing-works-sleep?qt-recent_content=0

Links:

[1] <http://www.microchip.com>