

MCU family expands to include intelligent analog and core-dependent peripherals



Microchip Technology Inc.

expanded its 8-bit PIC16F178X enhanced Mid-Range core microcontroller (MCU) family with increased Flash memory densities, intelligent analog and digital peripherals, such as on-chip 12-bit analog-to-digital converters (ADCs), 16-bit PWMs, 8-bit and 5-bit digital-to-analog converters (DACs), operational amplifiers, and high-speed comparators with 50 ns response time, along with EUSART (including LIN), I2C and SPI interface peripherals. The PIC16F178X are the first PIC MCUs to implement the new Programmable Switch Mode Controller (PSMC), which is an advanced 16-bit Pulse-Width Modulator (PWM) with 64 MHz operation and high-performance capabilities. This combination of features enables higher efficiency and performance, along with cost and space reductions. The new MCUs also feature eXtreme Low Power (XLP) Technology for active and sleep currents of 32 μ A/MHz and 50 nA, respectively, helping to extend battery life and reduce standby current consumption. Low power consumption in combination with advanced analog and digital integration make the PIC16F178X MCUs desirable for LED and other lighting applications, battery management, digital power supplies, motor control and general-purpose applications.

Microchip Technology Inc., www.microchip.com [1]

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