

Improve Response Time to Critical System Events on CAN Networks with New 8-Bit MCU with Core Independent Peripherals

The PIC18 K83 family makes CAN-based designs simpler and more cost effective

CHANDLER, Ariz., Nov. 13, 2017 (GLOBE NEWSWIRE) -- Microchip's PIC18 product line has been expanded to include a new line of 8-bit microcontrollers (MCUs) that combine a Controller Area Network (CAN) bus with an extensive array of Core Independent Peripherals (CIPs). The CIPs increase system capabilities while making it easier for designers to create CAN-based applications without the complexity of added software. For more information on the two new PIC18 K83 devices available from Microchip Technology Inc. (NASDAQ:MCHP), visit: www.microchip.com/k83.

A key advantage of using a K83 MCU in CAN-based systems is that the CIPs provide deterministic response to real time events, shorten design time and can be easily configured through the MPLAB® Code Configurator (MCC) tool. The new family is ideal for applications using CAN in the medical, industrial and automotive markets, such as motorized surgical tables, asset tracking, ultrasound machines, automated conveyors and automotive accessories. System designers can benefit greatly by saving time, as it is significantly easier to configure a hardware-based peripheral, as opposed to writing and validating an entire software routine, to accomplish a task.

"Being able to configure an MCU with a few clicks within MCC will change the way you design with CAN," said Steve Drehobl, vice president of Microchip's 8-bit MCU business unit. "The CIPs in the K83 family make it easier to use communications, intelligent analog and low-power features with the same tool set as with other PIC® microcontrollers."

The PIC18 K83 devices contain 15 time-saving CIPs including: Cyclic Redundancy Check (CRC) with memory scan for ensuring the integrity of non-volatile memory; Direct Memory Access (DMA) enabling data transfers between memory and peripherals without CPU involvement; Windowed Watchdog Timer (WWDT) for triggering system resets; 12-bit Analog-to-Digital Converter with Computation (ADC²) for automating analog signal analysis for real-time system response; and Complementary Waveform Generator (CWG) enabling high-efficiency synchronous switching for motor control. To learn more about these and other CIPs visit our [8-bit MCU design center](#).

Development Support

The new products are supported by MPLAB Code Configurator (MCC), a free software plug-in that provides a graphical interface to configure peripherals and functions specific to your application. MCC is incorporated into Microchip's downloadable MPLAB X Integrated

Development Environment (IDE) and the cloud-based MPLAB Xpress IDE. The family is also supported by the Curiosity High Pin Count (HPC) Development Board (part #DM162136).

Pricing and Availability

The PIC18F25K83 with 32 KB of Flash memory is available today for sampling and in volume production starting at \$1.35 each in 10,000 unit quantities. The PIC18F26K83 with 64 KB of Flash memory is available today for sampling and in volume production starting at \$1.44 each in 10,000 unit quantities. Each of these parts is available in 28-pin SPDIP, SOIC, SSOP, UQFN and QFN packages.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's website. To purchase products mentioned in this press release, to Microchip's easy-to-use online sales channel [microchipDIRECT](#) or contact one of Microchip's authorized distribution partners.

Resources

High-res images available through Flickr or editorial contact (feel free to publish):

- PR graphic: www.flickr.com/photos/microchiptechnology/23945890218/sizes/l
- Chip image: www.flickr.com/photos/microchiptechnology/37088982634/sizes/l

About Microchip Technology

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