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New 32-Bit MCU Features an Embedded Hardware Security Module to Safeguard Industrial and Consumer Applications

Highly configurable PIC32CZ CA devices are available with a 300 MHz Arm® Cortex®-M7 processor

CHANDLER, Ariz., Oct. 10, 2023 (GLOBE NEWSWIRE) -- Industrial and consumer application designers must consider implementing security functionality in their devices during the development process as security threats evolve and become more sophisticated. To allow designers to easily integrate security into their applications, Microchip Technology **(Nasdaq: MCHP)** today announces a new family of **PIC32CZ CA 32-bit microcontrollers** with a 300 MHz Arm Cortex-M7 processor, an integrated Hardware Security Module (HSM), and a wide range of connectivity and Flash memory options for added flexibility.

The new family of PIC32CZ CA devices includes the **PIC32CZ CA90** with a HSM or the **PIC32CZ CA80** without the integrated HSM. The HSM in the PIC32CZ CA90 is a monolithic solution that provides advanced security for industrial and consumer applications. The HSM operates as a secure subsystem with a separate MCU on board that runs the firmware and security features including hardware secure boot, key storage, cryptographic acceleration, true random number generator and more.

For products that require added security, factory provisioning is available on the PIC32CZ CA90 which, upon completion, provides customers with pre-provisioned devices ready to be deployed. Microchip's Trust Platform Development Suite is an in-house secure provisioning tool that enables a secure supply chain channel at scale or in low-volume production.

"The PIC32CZ CA microcontrollers make it easier for our customers to implement embedded security features into their design," said Rod Drake, corporate vice president of Microchip's MCU32 business unit. "These are extremely versatile MCUs with the option of factory provisioning at low-volume production and other customizable configurations such as connectivity and memory to fit many different requirements."

The PIC32CZ CA MCUs can be configured using a wide range of connectivity options including USART/UART, I^2C, SPI, CAN FD, High-Speed USB and Gigabit Ethernet. The Ethernet option includes Audio Video Bridging (AVB) and Precision Time Protocol (PTP) based on the IEEE 1588 standard.

These devices are scalable with 2, 4 or 8 MB of on-board Flash, 1 MB of SRAM and Error Correction Code (ECC) memory to mitigate data corruption.

The PIC32CZ CA devices are the latest 32-bit MCUs to join Microchip's broad portfolio of PIC32 and SAM families that provide high-performance, functional capabilities and many features to customize and create innovative products.

Development Tools
The devices are supported by the **PIC32CZ CA90 Curiosity Ultra Development Board**, the **PIC32CZ CA80 Curiosity Ultra Development Board** and **MPLAB® Harmony v3** to test, program and debug in the design phase.

Pricing and Availability

The PIC32CZ CA80 is available for $14.80 each in 10,000-unit quantities and the PIC32CZ CA90 is available for $15.54 each in 10,000-unit quantities in a BGA 208 package. For additional information and to purchase, contact a Microchip sales representative, authorized worldwide distributor or visit Microchip's Purchasing and Client Services website, **www.microchipdirect.com**.

Resources

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

- Application image: **www.flickr.com/photos/microchiptechnology/53216406684/sizes/l**

About Microchip Technology:
Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 125,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at **www.microchip.com**.

Editorial Contact:
Kim Dutton
480-792-4386
kim.dutton@microchip.com

Reader Inquiries:
1-888-624-7435

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