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Microchip Technology Introduces Its First Trust&GO Wi-Fi® 32-bit MCU Module with Advanced Peripheral Options

Pre-provisioned for market-leading cloud platforms, the all-in-one WFI32E01PC Trust&GO solution delivers powerful MCU functionality and verifiable identity

CHANDLER, Ariz., Oct. 13, 2020 (GLOBE NEWSWIRE) -- As the Internet of Things (IoT) expands beyond home automation and drives deeper into home control – including Heating, Ventilation and Air Conditioning (HVAC), garage doors and fans – and grows in building and industrial automation, the need for highly integrated, reliable and secured Industrial IoT (IIoT) connectivity is greater than ever. Microchip Technology **(Nasdaq: MCHP)** today announced the first-ever Wi-Fi microcontroller (MCU) module with Microchip's Trust&GO-enabled unique, verifiable identity.

For developers designing secure IIoT systems, Microchip's highly integrated **WFI32E01PC** is a Trust&GO secured platform-enabled Wi-Fi MCU module that is pre-provisioned for cloud platforms. The WFI32E01PC is compliant to Wi-Fi Alliance (WFA) specification and fully certified with the following world regulatory agencies: Federal Communications Commission (FCC), Industry Canada (IC) and European Radio Equipment Directive (RED). Microchip's Trust&GO platform inside the WFI32E01PC streamlines the process of network authentication using secure element technology, which is preconfigured and pre-provisioned for cloud authentication.

Unlike existing devices, Microchip's new technology includes a premium PIC32 MCU core, rich peripherals and a proven hardware security platform – enabling it not only to provide Wi-Fi but also to serve as a powerful MCU core for the entire IIoT system.

"With increasing attacks, traditional software data encryption is no longer sufficient to protect transmitted data. Devices need a hardcoded, verifiable, trustable identity to securely connect to the cloud," said Steve Caldwell, vice president of Microchip's Wireless Service Group business unit. "This is the first secure, pre-provisioned MCU with Wi-Fi that is shipped factory direct or through distribution."

Unlike module-based designs, discrete designs can be difficult due to the need to develop drivers and circuits for multiple chips, especially when the chips are from different vendors. Often it is difficult to receive system-level support from vendors as their expertise is only in products they produce. Embedded designers need a highly integrated module solution providing industrial-grade MCU functionality, robust Wi-Fi connection and hardware security and authentication. The WFI32E01PC provides these capabilities and more in an all-in-one module, improving Radio Frequency (RF) power and providing a higher level of security.

In addition to industrial applications, the WFI32E01PC is designed for home automation devices, computing and consumer devices.

As a total system solution provider, Microchip offers a broad portfolio that simplifies IoT and IIoT systems when pairing the WFI32E01 module with other Microchip market-leading components, such as the **KSZ8081** family of Ethernet PHYs, **MCP2542WFD** family of CAN transceivers, sensors and radio technologies including Bluetooth® Low Energy (BLE), Long Range (LoRa®) and IEEE® 802.15.4. Microchip's system solution approach provides ready-to-use software drivers and hardware reference designs, significantly reducing project risk and time-to-market.

Development Tools
Microchip's WFI32E01PC includes the PIC32MZW1 Curiosity Board. Microchip offers several options for software and hardware support. Software support includes Microchip's MPLAB® X Integrated Development Environment (IDE) and MPLAB Harmony v3 embedded software development framework. Supporting tools include the on-board debugger and in-circuit serial programming header for MPLAB Snap, MPLAB PICkit™ 4 or MPLAB ICD 4 external programmer/debuggers.

The curiosity board is qualified with AWS IoT Core and listed in the **Amazon Web Services (AWS) Partner Device Catalog**. It contains an out-of-box demo featuring registration and communication with AWS IoT Core and interaction with the onboard sensors using Alexa Voice Service (AVS). Included with the AWS IoT Core qualification are code samples, WLAN software and network stack, which can be found in MPLAB Harmony v3.

Pricing and Availability
The WFI32E01PC-I (54-pin SMD 24.5 x 20.5 x 2.5 mm) device is available in volume production in 10,000-unit quantities starting at $8.14. Also available are module options with external antenna, and without the Trust&GO security feature. For additional information, contact a Microchip sales representative, authorized worldwide distributor or visit Microchip's website. To purchase products mentioned here visit our **purchasing portal** or contact a Microchip authorized distributor.

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

- Application image: **www.flickr.com/photos/microchiptechnology/50346724766/**
- Product image: **www.flickr.com/photos/microchiptechnology/50346889012/**

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 120,000 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**.

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