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New EX-423 Evacuated Miniature Crystal Oscillator for Critical Timing in Low- and Battery-Powered Applications

Ruggedized in an ultra-low vacuum for enhanced thermal insulation, the EX-423 delivers stability and RF performance

CHANDLER, Ariz., May 14, 2026 (GLOBE NEWSWIRE) -- Microchip Technology **(Nasdaq: MCHP)** today announced the **EX-423 Evacuated Miniature Crystal Oscillator (EMXO)**, a compact, low-power timing solution designed for applications that demand high stability, accuracy and long-term reliability. Building on the company's EX-421 portfolio, the EX-423 delivers high RF performance in a low-profile 13 mm x 13 mm package for space- and power-constrained designs.

Ruggedized for demanding environments, the EX-423 is sealed in an ultra-high vacuum designed to provide optimal thermal insulation and help improve frequency stability. Its quartz crystal uses a four-point mount to enhance shock survivability and reduce g-sensitivity, making it well suited for GPS/GNSS tracking, military radios, medical devices, Ocean Bottom Node (OBN) seismic systems, test and measurement equipment and satellite communications.

"When developing the EX-423, we focused on the key parameters designers use to evaluate high-performance reference oscillators," said Randy Brudzinski, corporate vice president of Microchip's frequency and time systems business unit. "Delivering this level of performance in a rugged, small footprint helps customers simplify designs without compromising timing accuracy."

The EX-423 combines ultra-low phase noise with tight temperature control, strong short-term stability (Allan deviation), fast warm-up, and long-term frequency stability. Operating over a standard 10–20 MHz frequency range, the device consumes 1W during warm-up and as little as 0.2W at +25 °C in steady state, helping extend battery life while maintaining a clean, stable reference under specified operating conditions.

Microchip offers an extensive portfolio of clock and timing systems from miniature component oscillators to small plug-in timing server cards to multi-rack time scale systems. Recognized as a contributor to the world's time, Microchip's timing solutions are trusted, reliable and resilient. For more information, visit **Microchip's Clock and Timing Systems web page**.

Pricing and Availability

The EX-423 EMXO is now available for purchase. For more information, technical or sales support please reach out to a Microchip Sales Representative or email: **VOP-**

Support@microchip.com.

Resources

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

- Application image:

https://www.flickr.com/photos/microchiptechnology/55251594248/sizes/l

About Microchip Technology:

Microchip Technology Inc. is a broadline supplier of semiconductors committed to making innovative design easier through total system solutions that address critical challenges at the intersection of emerging technologies and durable end markets. Its easy-to-use development tools and comprehensive product portfolio supports customers throughout the design process, from concept to completion. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support and delivers solutions across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. For more information, visit the Microchip website at www.microchip.com.

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