



EMCORE Introduces New TAC-450 IMUs Integrated with PIC Technology, Tactical-grade Gyros, and Inertial-grade Accelerometers

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TAC-450 Inertial Measurement Units (IMUs) feature a compact design, robust performance, and survivability to meet the needs of commercial and military platforms

ALHAMBRA, CA, Dec. 06, 2022 (GLOBE NEWSWIRE) -- EMCORE Corporation (Nasdaq: EMKR), a leading provider of advanced mixed-signal products that serve the aerospace & defense, communications, and sensing markets, announced today the introduction of the TAC-450 line of Inertial Measurement Units (IMUs), which includes three high-performance IMUs with tactical-grade photonic Fiber Optic Gyros (FOGs), and features EMCORE's patented Photonic Integrated Chip (PIC) technology.

The EMCORE TAC-450 line of IMUs are offered in a compact housing resulting in a smaller, lighter package that expands the types of potential autonomous applications that can use EMCORE's new IMU technology. The PIC Inside™ design with lower power electronics also delivers exceptional product life and reliability with outstanding shock/vibration tolerance. Each TAC-450 IMU offers dynamic and precise sensor performance providing exceptional navigation capability and environmental robustness for challenging applications.

The TAC-450 IMUs, which include the TAC-450-360, -340, and -320, are designed with high bandwidth, low-noise, photonic gyros and are available in a variety of performance levels with inertial-grade accelerometers and magnetometer options. Accelerometers used in the TAC-450 IMUs offer significant sensitivity and accuracy in their dynamic ranges. This means EMCORE TAC-450 IMUs are designed to deliver excellent drift (bias stability) and noise (velocity random walk) performance. TAC-450 IMUs also feature easy integration with flexible power and communications interfaces, robust performance and survivability, and increased product life due to the PIC technology. Faster gyro response and measurements for highly dynamic applications are available in the TAC-450-320 and -340. Backward compatibility to popular IMUs with exportable, dual-use technology makes all new TAC-450 IMUs easy to integrate with a flexible interface and programmable message outputs.

"The TAC-450 products represent the future of EMCORE's inertial sensor tactical product platform with the products sharing common software, electronics, and circuit boards," noted Matthew Vargas, Director, Business Development/Sales for EMCORE. "This commonality makes it easier to offer a wide range of performance by varying optical fiber length and coil size, creating greater flexibility to tailor these precision FOGs and FOG-based inertial systems to our customer's needs," added Mr. Vargas.

EMCORE TAC-450 IMUs are designed for the most challenging applications, including autonomous trucks and people movers, drones, AUVs, ROVs, and platform stabilization. The industries that leverage these applications include transportation, military, agriculture, construction, and mining. With the new TAC-450-360, TAC-450-340, and TAC-450-320 IMUs, EMCORE provides multiple options for engineers seeking improved performance and a choice of low-noise, high-performance inertial-grade MEMS accelerometers supporting up to 100g at a more favorable price than comparable offerings.

For further discussion and specifications, call +1 866-234-4976; e-mail navigation-sales@emcore.com; or visit us on the web: www.emcore.com/nav.

About EMCORE

EMCORE Corporation is a leading provider of advanced mixed-signal products that serve the aerospace & defense, communications, and sensing markets. Our best-in-class components and systems support a broad array of applications including navigation and inertial sensing, defense optoelectronics, broadband communications, optical sensing, and specialty chips for telecom and data center. We leverage industry-leading Photonic Integrated Chip (PIC), Quartz MEMS, Lithium Niobate, and Indium Phosphide chip-level technology to deliver state-of-the-art component and system-level products across our end-market applications. EMCORE has vertically-integrated manufacturing capability at its facilities in Alhambra, CA, Budd Lake, NJ, Concord, CA, and Tinley Park, IL. Our manufacturing facilities maintain ISO 9001 quality management certification, and we are AS9100 aerospace quality certified at our facilities in Budd Lake and Concord. For further information about EMCORE, please visit <https://www.emcore.com>.

Forward-looking statements:

The information provided herein may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements include statements regarding EMCORE's plans, strategies, business prospects, growth opportunities, changes, and trends in our business and expansion into new markets. These forward-looking statements are based on management's current expectations, estimates, forecasts, and projections about EMCORE and are subject to risks and uncertainties that could cause actual results and events to differ materially from those stated in the forward-looking statements, including without limitation, the following: (a) uncertainties regarding the effects of the COVID-19 pandemic and the impact of measures intended to reduce its spread on our business and operations, which is evolving and beyond our control; (b) the rapidly evolving markets for EMCORE's products and uncertainty regarding the development of these markets; (c) EMCORE's historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (d) delays and other difficulties in commercializing new products; (e) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (f) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (g) actions by competitors; and (h) other risks and uncertainties discussed under Item 1A - Risk Factors in our Annual Report on Form 10-K for the fiscal year ended September 30, 2021, as updated by our subsequent periodic reports. Forward-looking statements contained in this press release are made only as of the date hereof, and EMCORE undertakes no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

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