



## EMCORE Introduces New TAC-440 MEMS Inertial Measurement Unit

September 11, 2023

ALHAMBRA, CA, Sept. 11, 2023 (GLOBE NEWSWIRE) -- EMCORE Corporation (Nasdaq: EMKR), the world's largest independent provider of inertial navigation solutions to the aerospace and defense industry, announced today the introduction of the TAC-440 MEMS Inertial Measurement Unit (IMU), the world's smallest 1°/hour IMU. Featuring an ultra-compact package of less than 5 cubic inches, the TAC-440 is a higher-performance, form, fit, and function compatible replacement for the Honeywell 1930 and 4930 IMUs.

The breakthrough performance of the TAC-440 IMU is based on EMCORE's proven quartz MEMS inertial sensor technology. EMCORE's quartz technology enables repeatable, high-volume production of precisely machined sensor structures combined with the inherent large signal output and thermal stability of quartz materials. The TAC-440 features 1°/hour gyro bias and 1 mg accelerometer bias stability with very low 0.05°/hour Angle Random Walk (ARW) over a wide temperature range. It delivers outstanding performance over temperature, shock, and vibration environments with a Velocity Random Walk (VRW) rating of 32 µg/√Hz ( $\tau=1/2$ ).

The TAC-440 IMU is designed for demanding, mission-critical, rugged environments in a wide variety of defense, commercial, industrial, and marine applications. The solid-state quartz sensors and hermetically sealed IMU construction provide reliable MTBF and storage life. Continuous Built-in Test (BIT), configurable communications protocols, electromagnetic interference (EMI) protection make the TAC-440 IMU easy to use in a wide range of higher-order integrated system applications.

"We are excited to announce the introduction of the TAC-440 as a critical addition to our IMU product suite," said Matthew Vargas, EMCORE's Vice President of Sales. "We feel it fills an important role in extreme shock and vibrate conditions providing a more compact yet equally performing complement to our highly successful SDI500 IMU, and we anticipate successful qualification supporting key customer's program needs."

The TAC-440 supports four data message synchronization methods with either input synchronization pulse capability or an output time of validity capability. The user can choose whether the synchronization pulse is internally generated and output as a Time of Validity (TOV) of the output data or whether the TAC-440 software will identify the synchronization pulse input and synchronize the output data to the input pulse.

We would welcome a deeper engagement with technical teams around the world to explore how the TAC-440 IMU can be the solution for your guidance, navigation, and control requirements. For further discussion on specifications and availability, call +1 866-234-4976; e-mail [navigation-sales@emcore.com](mailto:navigation-sales@emcore.com); or visit us on the web: [www.emcore.com](http://www.emcore.com).

### About EMCORE

EMCORE Corporation is a leading provider of inertial navigation products for the aerospace and defense markets. We leverage industry-leading Photonic Integrated Chip (PIC), Quartz MEMS, and Lithium Niobate 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 all maintain ISO 9001 quality management certification, and we are AS9100 aerospace quality certified at our facilities in Alhambra, 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, goals and business prospects; the terms and conditions of the proposed transaction, the timing of the execution of definitive transaction documents, the expectation that the proposed transaction will occur, and our expected revenue pursuant to last time buys. 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) the rapidly evolving markets for our products and uncertainty regarding the development of these markets; (b) our historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) the effect of component shortages and uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (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) actions by competitors; and (g) 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, 2022, 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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