



## **EMCORE Advances Photonic Integrated Chip (PIC) Technology Integrating PIC Into All Open-Loop Fiber Optic Gyro (FOG)-based Products**

October 9, 2023

### **PIC technology allows for repeatable production with flexible capacity increases**

ALHAMBRA, CA, Oct. 09, 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 advancement of Photonic Integrated Chip (PIC) technology and integration into all of the Company's open-loop FOG-based products.

PIC technology resulted from three years of development and began integration into EMCORE's previous generation open-loop designs in late 2021 through 2022, culminating with the launch of the TAC-450 Inertial Measurement Unit (IMU), EMCORE's first IMU series with PIC Inside™, and the new TAC-450 single- and multi-axis FOGs.

The PIC enables significantly improved reliability, unit-to-unit repeatability, durability, outstanding shock/vibration tolerance, and easier integration for exceptional navigation capability and environmental robustness in challenging applications. The technology is based on the groundbreaking integrated optical chip that replaces individual fiber optic components with a silicon waveguide system that results in improved optical performance by simplifying the handmade optical couplers, polarizers, and two splices incorporated within a gyro assembly.

"Our PIC-based products are transforming EMCORE's inertial sensor tactical product platform with more products sharing common software, electronics, and circuit boards," said Matthew Vargas, Vice President of Sales for EMCORE. "We've seen broad acceptance in the market with the greater flexibility to tailor these precision PIC-based FOGs and IMUs to our customer's needs," added Mr. Vargas.

EMCORE is now introducing a program for customers of previous-generation open-loop FOG, IMU, and INS products to upgrade to a PIC-based unit. This includes the DSP-3000 series, DSP-17xx products, and GEO-FOG INS. The replaced optical circuit will then carry a new 1-year warranty.

EMCORE will be exhibiting at the Association of the United States Army (AUSA) Annual Meeting & Exposition October 9-11 in Washington, DC, booth #2715. For further discussion and specifications, 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, 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) 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.

#### **Contact:**

##### **EMCORE Corporation**

Matthew Vargas  
Vice President of Sales  
(401) 408-4096  
[matthew\\_vargas@emcore.com](mailto:matthew_vargas@emcore.com)

##### **Investor**

Tom Minichiello  
Chief Financial Officer  
(626) 293-3400  
[investor@emcore.com](mailto:investor@emcore.com)

**Media**

Joel Counter

Director, Corporate & Marketing Communications

(626) 999-7017

[media@emcore.com](mailto:media@emcore.com)

Source: EMCORE Corporation