EMCORE Expands EMCORE-Orion™ Series of Micro Inertial Navigation Systems with Introduction of EN-2000 at the Paris Air Show

June 19, 2019

ALHAMBRA, Calif., June 19, 2019 (GLOBE NEWSWIRE) -- EMCORE Corporation (NASDAQ: EMKR), a leading provider of advanced *Mixed-Signal Optics* products that provide the foundation for today's leading-edge defense systems and high-speed communication network infrastructures, announced today the addition of the EN-2000 to the EMCORE-Orion™ series of Micro Inertial Navigation (MINAV) systems. The new EN-2000 will represent the pinnacle of performance in EMCORE navigation systems and realizes the Company's vision of a closed-loop, solid-state design that will deliver higher performance at lower cost than traditional RLG (Ring Laser Gyroscope) navigation systems.

The EN-2000 expands EMCORE's navigation systems line that also includes the EN-1000 introduced in 2017. The EMCORE-Orion™ series of Inertial Navigation Systems (INS) are ideal for use in a broad range of defense, aviation and aeronautics applications. The unit is being introduced at the Paris Air Show, June 17-20 at the Parc des Expositions Paris-le Bourget. Le Bourget, France, Hall 6, Stand #C65.

Today, there is an ever-increasing premium being placed on modern navigation systems for improved Size, Weight and Power (SWaP). Traditional RLG navigation systems placed a premium on accuracy and performance, but not SWaP. Typical RLG and FOG systems are large and heavy, ranging in volume from 330 in^3 to 540 in^3, weighing 13 to 22 pounds with power requirements of 25 to 38 watts. Many modern weapon systems are now remotely operated, unmanned or man-portable and may need to operate where GPS is unavailable or denied. The compact EN-2000 is ideal for these applications. It puts a premium on accuracy and performance, but also on smaller size, less weight and lower power consumption.

The new EMCORE-Orion™ EN-2000 MINAV is a three-axis design utilizing the Company's proprietary, next-generation solid-state optical transceiver with advanced integrated optics, combined with all new Field Programmable Gate Array (FPGA) electronics to deliver stand-alone aircraft grade navigator performance at 1/3 SWaP of legacy or competing systems. The EN-2000 model comes in two standard versions, an IMU version and a standalone INS configuration. The INS version can gyrocompass to less than 0.7 milliradians and maintain near GPS level positional accuracy without the use of a GPS receiver. This makes it ideal for use in GPS denied environments. To provide customers with additional flexibility, the unit is also capable of being aided by an external GPS for applications where needed.

The EMCORE-Orion™ EN-2000 is very compact and lightweight, weighing less than 7 pounds, with very low power consumption of 10 watts. It can deliver twice the performance of the EN-1000, with the same form factor. The low SWaP of the EN-2000 makes it an ideal inertial navigation system for Unmanned Aerial Vehicles (UAVs), Unmanned Underwater Vehicles (UUVs), Unmanned Ground Vehicles (UGVs), manned aircraft, rotorcraft and dismounted soldier applications.

"With the introduction of the EN-2000, EMCORE can now offer class-leading performance at a fraction of the size, weight and power of competing systems with increased reliability," said David Faulkner, EMCORE's Vice President and General Manager of Aerospace & Defense. "EMCORE's goal of a true full navigation system that can replace older technology navigation systems in UAVs, UUVs, UGVs, manned aircraft and rotorcraft is fully realized with the introduction of the EN-2000."

"Our EMCORE-Orion™ series micro navigators improve dramatically on the size and cost of navigation and azimuth sensing equipment by utilizing affordable lightweight sensors that reduce overall system weight and increase accuracy," added Dr. K.K. Wong, Sr. Director of Fiber Optic Gyro Products for EMCORE. "The digital interface is also fully programmable at EMCORE's factory enabling it to directly replace competing units."

EMCORE's new EN-2000 MINAV and the Company's complete line of Fiber Optic Gyro and Inertial Navigation products are being showcased at the Paris Air Show, June 17-20 at the Parc des Expositions Paris-le Bourget. Le Bourget, France, Hall 6, Stand #C65. To find out more or schedule a meeting with EMCORE at the show, please contact navigation-sales@emcore.com.

About EMCORE

EMCORE Corporation is a leading provider of advanced *Mixed-Signal Optics* products that provide the foundation for today's leading-edge defense systems and high-speed communication network infrastructures. Our optical chips, components, subsystems and systems enable broadband and wireless providers to continually enhance their network capacity, speed and coverage to advance the free flow of information that empowers the lives of millions of people daily. The *Mixed-Signal Optics* technology at the heart of our broadband transmission products is shared with our fiber optic gyros and military communications links to provide the aerospace and defense markets state-of-the-art systems that keep us safe in an increasingly unpredictable world. EMCORE's performance-leading optical components and systems serve a broad array of applications including cable television, fiber-to-the-premise networks, telecommunications, data centers, wireless infrastructure, satellite RF fiber links, navigation systems and military communications. EMCORE has fully vertically-integrated manufacturing capability through its world-class Indium Phosphide (InP) wafer fabrication facility at our headquarters in Alhambra, California, and is ISO 9001 certified in Alhambra and at our facility in Beijing, China. For further information about EMCORE, please visit http://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) the rapidly evolving markets for EMCORE's products and uncertainty regarding the development of these markets; (b) EMCORE's historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) 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; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (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, 2018, 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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Source: EMCORE Corporation