



## EMCORE Introduces New LiDAR and Optical Sensing Products

September 22, 2020

ALHAMBRA, Calif., Sept. 22, 2020 (GLOBE NEWSWIRE) -- EMCORE Corporation (NASDAQ: EMKR), a leading provider of advanced mixed-signal products that serve the aerospace & defense and broadband communications markets, announced today the introduction of the Model 1790 1550 nm High-Power Laser Module for LiDAR (Light Detection and Ranging) and Optical Sensing. The 1790 laser module was developed for use as a CW (Continuous Wavelength) coherent optical source for next generation FMCW (Frequency Modulation Continuous Wavelength) LiDAR systems. A custom version of this product has already been adopted by a major provider of LiDAR systems for its anticipated use in autonomous vehicles.

The underlying technology for the Model 1790 has been in development for over 3 years and was designed to address demanding applications in industrial sensing and measurement. The 1790 achieves extremely narrow linewidths combined with a high-efficiency coupling scheme to enable high optical output power of 18 dBm, creating a compact, robust solution for FMCW sensing. Its monolithic design, combined with optimized coupling optics, makes it highly immune to the mode or optical frequency hopping typically found with single isolator, external cavity designs. EMCORE's LiDAR laser technology maintains optical frequency stability over temperature, suppressing false readings caused by the mode or frequency hopping which is typical in conventional designs.

"We are extremely excited about the development of our laser technology for LiDAR and optical sensing and see it supporting a broad array of industrial applications beyond autonomous vehicles including materials characterization, strain measurement, terahertz-spectroscopy, interferometry, position and interference measurement, and other applications," said Gyo Shinozaki, Vice President and General Manager of Broadband for EMCORE. "Our vertical integration allows for different wavelengths to be available for custom applications and form factors, including packaged component or micro-optical subassembly," added Mr. Shinozaki.

The Model 1790 laser module is DC-coupled with a built-in TEC (Thermo-Electric Cooler), thermistor and monitor photodiode. The device is packaged in a 14-pin, OC-48 pinout compatible hermetic butterfly form factor with double optical isolator mounted on the TEC. It has a wide operating temperature range from -10 °C to +65 °C and is Telcordia Technologies® GR-468 and RoHS compliant.

### About EMCORE

EMCORE Corporation is a leading provider of advanced mixed-signal products that serve the aerospace & defense and broadband communications markets. Our best-in-class components and systems support a broad array of applications including navigation and inertial sensing, defense optoelectronics, broadband transport, 5G wireless infrastructure, optical sensing, and cloud data centers. We leverage industry-leading 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 wafer fabrication facility in Alhambra, CA, and quartz MEMS manufacturing facility in Concord, CA. Our manufacturing facilities maintain ISO 9001 quality management certification, and we are AS9100 aerospace quality certified at our facility in Concord. 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) 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, 2019, 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

Gyo Shinozaki  
Vice President and General Manager, Broadband  
(626) 293-3616  
[gshinozaki@emcore.com](mailto:gshinozaki@emcore.com)

#### Media

Joel Counter  
Director, Corporate & Marketing Communications  
(626) 999-7017  
[media@emcore.com](mailto:media@emcore.com)

**Investor**

Tom Minichiello

Chief Financial Officer

(626) 293-3400

[investor\\_emkr@emcore.com](mailto:investor_emkr@emcore.com)

Source: EMCORE Corporation