New Switch Fabric Module Boosts Data Center Processing Capability for Aerospace and Defense Applications

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OpenVPX PCIe technology mirrors composable data center architecture to accelerate processing-intensive applications at the tactical edge

ANDOVER, Mass., Jan. 23, 2020 (GLOBE NEWSWIRE) -- Mercury Systems, Inc. (NASDAQ: MRCY, www.mrcy.com), a leader in trusted, secure mission-critical technologies for aerospace and defense, today announced the EnsembleSeries ™ SFM6126 OpenVPX ™ PCI Express (PCIe) gen 3 switch with innovative capabilities for creating a true composable data center edge processing architecture for aerospace and defense applications. This represents a critical data distribution building block for Mercury's comprehensive embedded data center compute architecture, ensuring availability in space-constrained, harsh environments. The rugged 6U modules are unique in their ability to switch both the control and expansion planes to support the inter-module data distribution architecture required by high-performance OpenVPX high-performance embedded edge computing (HPEEC) subsystems.

"One of the latest trends in commercial data centers is to use a composable infrastructure which allows the computing, storage, and switch fabric resources to be individually changed – aggregated, disaggregated, and composed – based on an application's precise needs, giving system architects much greater flexibility in deploying and reconfiguring resources as needed," said Joe Plunkett, Mercury's Vice President and General Manager for Sensor Processing Solutions. "We have applied that approach with our new EnsembleSeries SFM6126 switch, using PCIe switching to embed a composable data center 'I/O distribution architecture' in size, weight and power (SWaP)-constrained harsh environments. This fundamental capability enables our customers to equip our military with the smarter, more capable platforms and systems they need to detect and defeat emerging threats from adversaries, and once again showcases the power of Mercury to make commercial technology profoundly more accessible to aerospace and defense."

Why they matter:
Artificial intelligence (AI), autonomous platforms, cognitive electronic warfare (EW) and sensor fusion demand huge processing resources that can be well served by leveraging a composable data center architecture. The hardware challenge for deploying these applications at the tactical edge pivots around making data center technology sufficiently small, lightweight and power-efficient. Additionally, these processing resources should be rugged for survivability and run cool for reliability. An embedded composable architecture is ideally suited to demanding processing-intensive applications, giving warfighters greater situational awareness to counter sophisticated threats.

What they deliver:
EnsembleSeries SFM6126 switches are a key component of a truly composable HPEEC solution, which include EnsembleSeries HDS6605 server blades and streaming IOM-400 I/O modules. Collectively, these modules leverage and scale the latest data center processing technologies to accelerate demanding workloads in the harshest, most SWaP-constrained environments.

Customer benefits include the ability to:

- **Get data center-level performance without the data center** – Deploy next-generation autonomous platforms, cognitive electronic warfare (EW) systems, compute-intensive electro-optical/infrared (EO/IR), active electronically scanned array (AESA) Radar, artificial intelligence (AI) and sensor fusion applications that require data center-class capabilities closer to the source of data origin – at the edge.
- **Increase data throughput** – Process and distribute massive amounts of streaming sensor I/O data over a distributed heterogeneous PCIe-enabled architecture.
- **Scale and leverage data center IP** from the cloud to the edge with a seamless and common compute architecture that integrates the latest commercial capabilities for affordability and low program risk.
- **Deliver more processing power** by pre-integrating other EnsembleSeries HPEEC building blocks including server-class processing blades (EnsembleSeries HDS6605), FPGA and NVIDIA® GPU co-processing engines with a wideband, low-latency and universal PCIe HPEEC architecture.

EnsembleSeries HPEEC Solutions – Embedding the Data Center Anywhere
EnsembleSeries OpenVPX modules and related pre-integrated subsystems are protected with Mercury's proven fifth generation of advanced packaging, cooling and interconnects. Collectively, these technologies shield electronics from the harshest environments, keeping them cool for long, reliable service lives while enabling consistent switch fabric performance across a broad temperature range. For extreme environmental protection, optional modified-off-the-shelf (MOTS)+ technologies are available. These technologies leverage enhanced commercial components, board fabrication rules, and subsystem design techniques for extra durability and the ability to withstand extreme temperature cycles and mechanical excitation better than other rugged designs.

Availability
Designed, manufactured, coded and supported in the USA from DMEA-certified facilities, EnsembleSeries SFM6126 switches are expected to be available in the first quarter of CY2020 in conduction-cooled, Air Flow-By ™ and Liquid Flow Through options.

Mercury is accelerating innovation for our customers as we bridge the gap between commercial technology and defense applications to meet the industry's current and emerging needs. For more information, visit www.mrcy.com/SFM6126 or contact Mercury at (866) 627-6951 or info@mrcy.com.

Mercury Systems – Innovation That Matters®
Mercury Systems is the leader in making trusted, secure mission-critical technologies profoundly more accessible to the aerospace and defense industries. Optimized for customer and mission success, our innovative solutions power more than 300 critical aerospace and defense programs. Headquartered in Andover, Mass., and with manufacturing and design facilities around the world, Mercury specializes in engineering, adapting and manufacturing new solutions purpose-built to meet the industry's current and emerging high-tech needs. Our employees are committed to Innovation that Matters®. To learn more, visit mrcy.com, or follow us on Twitter.

Forward-Looking Safe Harbor Statement

This press release contains certain forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, including those relating to the products and services described herein and to fiscal 2020 business performance and beyond and the Company's plans for growth and improvement in profitability and cash flow. You can identify these statements by the use of the words "may," "will," "could," "should," "would," "plans," "expects," "anticipates," "continue," "estimate," "project," "intend," "likely," "forecast," "probable," "potential," and similar expressions. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. Such risks and uncertainties include, but are not limited to, continued funding of defense programs, the timing and amounts of such funding, general economic and business conditions, including unforeseen weakness in the Company's markets, effects of any U.S. Federal government shutdown or extended continuing resolution, effects of continued geopolitical unrest and regional conflicts, competition, changes in technology and methods of marketing, delays in completing engineering and manufacturing programs, changes in customer order patterns, changes in product mix, continued success in technological advances and delivering technological innovations, changes in, or in the U.S. Government's interpretation of, federal export control or procurement rules and regulations, market acceptance of the Company's products, shortages in components, production delays or unanticipated expenses due to performance quality issues with outsourced components, inability to fully realize the expected benefits from acquisitions and restructurings, or delays in realizing such benefits, challenges in integrating acquired businesses and achieving anticipated synergies, increases in interest rates, changes to cyber-security regulations and requirements, changes in tax rates or tax regulations, changes to interest rate swaps or other cash flow hedging arrangements, changes to generally accepted accounting principles, difficulties in retaining key employees and customers, unanticipated costs under fixed-price service and system integration engagements, and various other factors beyond our control. These risks and uncertainties also include such additional risk factors as are discussed in the Company's filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended June 30, 2019. The Company cautions readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. The Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made.

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A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/ef4fd7b3-ab87-416e-be99-265f8bc766d9.