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## **Mercury Systems Announces New OpenVPX CPU Module Based on 4th Generation Intel(R) Core(TM) i7 Processor Providing One of the Embedded Computing Industry's First Fully Integrated Pathways to OpenCL and AVX2, PCI-e Gen 3 Capability**

- *Rugged data processing/graphics module features AVX2-optimized CPUs with cache-coherent shared memory to OpenCL-programmable GPUs*
- *Flexible built-in Serial RapidIO and 10 Gigabit Ethernet fabric compatibility*

**CHELMSFORD, Mass., June 4, 2013** (GLOBE NEWSWIRE) -- Mercury Systems, Inc. (Nasdaq:MRCY), a best-of-breed provider of commercially developed, open sensor and Big Data processing systems for critical commercial, defense and intelligence applications, has expanded its family of powerful system building blocks with the new rugged Ensemble<sup>®</sup> Series 6U OpenVPX<sup>™</sup> HDS6502 High Density Server (HDS) module based on 4th generation Intel<sup>®</sup> Core<sup>™</sup> i7 processors (formerly codenamed "Haswell").

Skillful integration of dual quad-core Intel Core i7-4700EQ processors with native Intel Advanced Vector Extensions 2.0 and PCIe Gen 3, an OpenCL<sup>™</sup> programmable GPU and up to 16GB of 1600MHz DDR3 SDRAM within a rugged OpenVPX module continues the company's tradition of performance-driven, highly-configurable, open-standard systems that leverage the organization's scalable system building blocks. The HDS6502 is designed for OpenCL deployment and, like all Mercury products, is configured with others to form subsystems to meet unique application-specific requirements.

"The HDS6502 is a natural and complementary evolution to our other HDS/LDS (High Density Server/Low Density Server) product solutions ideally suited to high performance, real-time embedded applications," said Gregg Ogden, Director of Solutions and Product Marketing, Mercury Systems. "But that is only half the story: this module is also a critical building block for our existing customers, enabling them to future-proof their legacy systems through targeted upgrades. Upgrades using the HDS6502 preserve their software, optimize SWaP (Size, Weight and Power) performance, and, true to Mercury tradition, more again can be achieved with less. And this is all done while enabling full OpenCL implementation. The whole concept of open systems is broadened by through the use of OpenCL programming support across multiple platforms."

The new HDS6502 is OpenVPX-compliant and facilitates a straightforward migration of existing Mercury modules. Initially, HDS6502 modules will support Serial RapidIO<sup>®</sup> Gen 2 and 10 Gigabit Ethernet via Mercury's next generation, low-latency POET<sup>™</sup> (Protocol Offload Engine Technology) with full backward compatibility with software protocols including ICS<sup>™</sup> (interprocessor communication system) and MPI/OFED (message passing interface/open fabrics enterprise distribution). The FPGA implementation of POET underscores another important future-proofing benefit of the HDS6502; its ability to upgrade to new fabrics types. In addition, implementing POET facilitates user customization and security features.

HDS6502 modules support various types of system I/O including PCIe Gen 3 to the expansion plane, eSATA, USB 3.0, Ethernet, serial ports and several graphic interfaces making these modules very comprehensive and allowing ease of configuration and deployment without the need for extra mezzanine modules.

Low I/O latency and reduced module power consumption is gained from the single die cache coherent memory architecture between the CPU and GPU resources. This is a required characteristic of multidimensional computing applications requiring high throughput, determinism and low latency, such as SIGINT, IMINT, RADAR, EO/IR and large data/graphics rendering with seamless display integration.

"The Intel Core i7-4700EQ with Intel Advanced Vector Extension 2.0 support and an on-die Intel HD Graphics 4600 GPU enables high volume graphic rendering and simultaneous data manipulation of real-time vector-based information which is characteristic of signal and image processing-intensive applications," said Marc Couture, Director of Product Management, Mercury Systems. "OpenCL support promotes a heterogeneous ecosystem which, packaged within a rugged module, is an ideal cornerstone for embedded system upgrades and new computing-intensive applications with stringent SWaP specifications. This is a significant adoption of commercial silicon integration, power and performance improvements applied into the defense marketplace."

"There is a real need for highly integrated CPU-GPU solutions offering higher performance and lower power. The 4th Generation Intel Core processor family delivers — providing game-changing integration of CPU and GPU technology on Intel's latest 22nm silicon manufacturing process," explains Sam Cravatta, Product Line Manager, Intel Intelligent Systems Group. "The OpenCL tools support allows the GPU functionality to be productively expanded into the high performance embedded

computing markets including real-time signal and image processing applications."

HDS6502 modules will be available in the fall of 2013 for deployment in air-cooled, Air Flow-By™ and conduction-cooled systems with Serial RapidIO Gen 2 and 10 Gigabit Ethernet data fabric support. Support for InfiniBand™ and 40 Gigabit Ethernet-based modules will follow.

For detailed specifications and general product information, visit [www.mrcy.com/HDS6502](http://www.mrcy.com/HDS6502) or contact Mercury at (866) 627-6951 or [info@mrcy.com](mailto:info@mrcy.com).

## **Mercury Systems — Innovation That Matters™**

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## **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. 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," 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 of such funding, general economic and business conditions, including unforeseen weakness in the Company's markets, 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 the U.S. Government's interpretation of federal procurement rules and regulations, market acceptance of the Company's products, shortages in components, production delays 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, changes to export regulations, increases in tax rates, 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, 2012. 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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CONTACT: Robert McGrail, Director of Corporate Communications

Mercury Systems

+1 978-967-1366 / [rmcgrail@mrcy.com](mailto:rmcgrail@mrcy.com)