**MERCURY**
S Y S T E M S ™

June 23, 2009

# Mercury Computer Systems Enhances Power, Flexibility and Expands Family of Ultra-Compact Rugged Computers for ISR Applications

Company adds new SoC, FPGA, GPU and storage modules to Ensemble 1000 Series designed with the award-winning PowerBlock 50 chassis

WASHINGTON, June 23 /PRNewswire-FirstCall/ -- Mercury Computer Systems, Inc. (NASDAQ: MRCY), a leading provider of high-performance, embedded computing solutions for image, sensor, and signal processing applications, announced availability of four new modules for the Ensemble™ 1000 Series family of computing systems, at the UAS Payloads East Conference in the Washington, DC area. The new modules can be configured within the ultra-compact, rugged PowerBlock™ 50 chassis, supporting a range of flexible configurations for applications in mission computing, radar signal processing, wireless communications, and video processing and fusion.

Powerful new processing options include the Intel EP80579 SoC (system-on-chip) device, running at clock speeds up to 1.20 GHz; the Xilinx® Virtex™-5 LX Series FPGA (Field-Programmable Gate Array); and the AMD M96 GPU (Graphics Processing Unit), all supported by new SATA hard-disk and solid-state storage drives. These modules enhance Ensemble 1000 Series configurations which already include Freescale PowerQUICC™ processors and Xilinx Virtex-4 FPGAs, and provide a choice of solutions to accelerate customer applications.

"The innovative Ensemble 1000 systems address customer needs for advanced levels of embedded, real-time computing power in small, environmentally constrained platforms," said Randy Dean, Vice President, Integrated Solutions at Mercury. "Our expanded module offering, available in the palm-sized, rugged PowerBlock 50 chassis, is ideally suited for air and ground vehicle platforms that are key to today's intelligence, surveillance, and reconnaissance missions."

The architecture of the Ensemble 1000 Series allows flexible configurations of heterogeneous multiprocessor arrays, high-performance I/O, and local storage to meet application-specific requirements. Optimized for real-time processing, the Ensemble 1000 Series systems balance processing power with high-bandwidth interprocessor communications and external I/O bandwidth. A high-performance, any-to-any PCI Express switch fabric delivers high-throughput, non-blocking, serial switching among processing and I/O nodes. External I/O can be customized to accommodate virtually any type of digital or analog I/O.

The Ensemble 1000 Series systems are available now. For more information, visit Mercury at the UAS Payloads East Conference, June 23-24, at the Holiday Inn Hotel & Suites in the Alexandria Historic District in Alexandria, Virginia; visit www.mc.com/ES1000; or contact Mercury at (866) 627-6951 or info@mc.com.

Mercury Computer Systems, Inc. - Where Challenges Drive Innovation™

Mercury Computer Systems (www.mc.com, NASDAQ: MRCY) provides embedded computing systems and software that combine image, signal, and sensor processing with information management for data-intensive applications. With deep expertise in optimizing algorithms and software and in leveraging industry-standard technologies, we work closely with customers to architect comprehensive, purpose-built solutions that capture, process, and present data for defense electronics, homeland security, and other computationally challenging commercial markets. Our dedication to performance excellence and collaborative innovation continues a 25-year history in enabling customers to gain the competitive advantage they need to stay at the forefront of the markets they serve.

Mercury is based in Chelmsford, Massachusetts, and serves customers worldwide through a broad network of direct sales offices, subsidiaries, and distributors.

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 Ensemble 1000 Series products described herein. You can identify these statements by our use of the words "may," "will," "should," "plans," "expects," "anticipates," "continue," "estimate," "project," "intend," 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, general economic and business conditions, including unforeseen weakness in the Company's markets, effects of continued geo-political 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, continued funding of defense programs, the timing of such funding, 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 or delays in realizing such benefits, challenges in integrating acquired businesses and achieving anticipated synergies, and difficulties in retaining key customers. These risks and uncertainties also include such additional risk factors as are discussed in the Company's recent filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended June 30, 2008. 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.

Contact :
Kathleen Sniezek, Public Relations Manager
Mercury Computer Systems, Inc.
978-967-1126 /ksniezek@mc.com

Challenges Drive Innovation, Ensemble, and PowerBlock are trademarks of
Mercury Computer Systems, Inc. Other products
may be trademarks or registered trademarks of their respective holders.

SOURCE Mercury Computer Systems, Inc.