May 16, 2017

Air Flow-By Cooling Technology From Mercury Systems Achieves TRL-8

Mature Technology Gets New Zero-Cost Licensing

ANDOVER, Mass., May 16, 2017 (GLOBE NEWSWIRE) -- Mercury Systems, Inc. (NASDAQ:MRCY) (www.mrcy.com) announced that systems using ANSI/VITA 48.7 Air Flow-By™ standard cooling technology have passed flight tests in multiple manned and unmanned airborne platforms, some in their final mission configuration, thereby achieving technology readiness level 8 (TRL-8). Mercury holds a patent on one implementation approach of that standard, and has revised the licensing fees under the patent to be zero cost.

Mercury Systems developed Air Flow-By cooling technology as an improvement to its finely managed air cooling, the original air flow-through (AFT) technology it developed back in 2003. Air Flow-By cooling technology is the most efficient solution on the market to achieve a sealed environment that tolerates cooling with air that may contain contaminants. Unlike today's AFT technology that merely adds an airflow heat exchanger to the primary side surface of a printed wiring board (PWB), Air Flow-By solutions cool both sides of the PWB by encapsulating the PWB in a heat exchanger shell such that air flows across both sides of the module for maximum cooling efficiency. The heat exchanger shell creates a sealed environment that protects against airborne contaminants, electromagnetic interference (EMI), electrostatic discharge (ESD), and provides an extra layer of physical security. Even with the increased protection and cooling capacity, Air Flow-By solutions maintain the standard 1.0-inch pitch to avoid a 33% reduction in board count found in AFT implementations that may require the module width to grow to 1.5-inch pitch. Now, Air Flow-by technology also has a cost advantage with its zero-cost licensing.

"Air Flow-By technology has proven to be more effective at cooling mission electronics than competing technology such as air-flow through," said Richard Jaenicke, Director of Strategic Alliances at Mercury Systems. "With the achievement of TRL-8, we want to remove any barriers to the adoption of Air Flow-By technology by all industry participants and have reduced the license fees to zero cost."

Air Flow-By cooling also compares extremely favorably to conduction cooling, which is the legacy rugged cooling technology. For example, on power-hungry processor modules, Air Flow-By cooling enables both increased processor frequency and mean time between failures (MTBF) while decreasing overall weight. Typical improvements seen include:

- 25% reduction in processor temperature for dual Intel® Xeon® processors
- 33% increase in processor frequency at that reduced temperature
- 5 times increase in MTBF
- 25% reduction in weight of the processor module

Mercury's US patent 9,389,653 B2 for Air Flow-By Cooling Technology and Air Flow-By Circuit Board Modules has always been available to be licensed to all VITA members under standard Fair, Reasonable, and Non-Discriminatory (FRAND) licensing terms as part of the normal VITA standards process. Today's announcement reduces the patent licensing fees to zero cost under Mercury's patent licensing terms that allow licensees to use claims under this patent that may be essential to create an implementation compliant with the ANSI/VITA 48.7 standard, and it extends those terms beyond VITA members to all industry participants. Licensees just need to sign Mercury's patent license agreement to use the claims under this patent.

For more information about Air Flow-By cooling technology, visit www.mrcy.com/cool or contact Mercury at (866) 627-6951 or info@mrcy.com.

Mercury Systems — Innovation That Matters™

Mercury Systems (NASDAQ:MRCY) is a leading commercial provider of secure sensor and mission processing subsystems. Optimized for customer and mission success, Mercury's solutions power a wide variety of critical defense and intelligence programs. Headquartered in Andover, Mass., Mercury is pioneering a next-generation defense electronics business model specifically designed to meet the industry's current and emerging technology needs. To learn more, visit www.mrcy.com.

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," "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 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 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, 2016. 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:
Robert McGrail, Director of Corporate Communications
Mercury Systems, Inc.
+1 978-967-1366 / rmcgrail@mrcy.com