GENERAL MICRO SYSTEMS, INC.
TRUSTED AND DEPLOYED SINCE 1979

# News Release

## U.S. Army Awards General Micro Systems Up to $88 Million Contract for Rugged Server and Display System, Putting Leading-Edge Technology on the Battlefield for the First Time

**RANCHO CUCAMONGA, Calif., October 9, 2017** – General Micro Systems Inc. (GMS) today announced that the U.S. Army will exclusively deploy powerful rugged server and display systems from GMS to run the multifunction video display (MVD) software within Type II medium mine protection vehicles (MMPV). The prime contract—composed of four electronic components and estimated at $88 million over three years—provides the Army a dense, ultra-small, rugged server using the same high-performing Intel® Xeon® E5 processors that Apple® is shipping in its latest "Pro" products.

"For the first time, the U.S. Army will have deployed military technology that is as leading-edge as the latest and best-available commercial technology in the consumer market," said Ben Sharfi, CEO and chief architect, GMS.

A program of record for the U.S. Army's Product Manager Mine Resistant Ambush Protected Vehicle Systems (PdM MRAP VS) and co-developed directly with the Army's Night Vision and Electronic Sensors Directorate (NVESD), the GMS rugged server and display system provides the MRAP mine-clearing vehicles a distributed platform with smart displays that run the Army's portable MVD software. The system's hardware and software enable the seamless distribution of full motion video and control in real time with low latency from all sensor systems mounted on the MMPV Type II trucks to each crew station.

"The MVD system uses the most powerful processing technology available to keep our soldiers safe," Sharfi said. "We worked closely with the Army to ensure the system was designed with the latest and highest performing server, networking, image processing, and storage capability. The result is unprecedented, and for the first time that we're aware, the Department of Defense is deploying the latest commercial-off-the shelf system based on the same processors used by one of the world's greatest technology companies, Apple."

***System Helps Drivers Collaborate "Heads Down"***

Compared to the traditional system used on the mine-clearing MRAP, the U.S. Army needed a combined hardware/software system that could provide full situational awareness at all times while also improving crew efficiencies. According to the contract synopsis from the Army Contracting Command - Warren (ACC-Warren), the "The Multifunction Video Display (MVD) system integrates full-motion video from all sources at all vehicle crew stations. The MVD system efficiently distributes images and sensor control to all crew stations within a vehicle,

resulting in a single touch-screen display for each crew station capable of viewing and controlling all vehicle enablers, and creating a seamless common interface across all enablers."

With the MVD system, each networked crew station operates independently such that one crew member can control one sensor system while another crew member simultaneously controls or views another. The ultra-low latency system enables warfighters to drive "head down" in the vehicle, using only cameras and sensors without inducing motion sickness. The MVD system is integrated with the truck's radio so that it too can be controlled from any crew station or set up during pre-mission checks. Because the system is designed to enable soldiers to navigate without direct sight, it can be used in other programs as well.

The key to the system's expected success is a combination of low-latency networked video and data processing coupled with NVSED-created modular software. The software presents a standardized view of sensor feedback that is common across all workstation consoles. This gives operators immediate familiarity with different sensors and enables cross-training and cross-operation should the need arise. Moreover, new sensors and counter-IED payload processing can be added while the user interface remains consistent. This pre-planned product improvement (P3I) helps to maximize the Army's investment and ensure that the MRAP platform evolves alongside the threat.

***The Power of GMS's Dense, High-Performing Technology***

"The MVD requires exceptionally high-performance signal processing, and General Micro Systems is the only vendor that can package such a powerful system in this dense, high-performance and rugged small form factor," Sharfi said. In addition, GMS's modular architecture and upgradable processor engine ensures that the Army can build on the Intel® Xeon® E5 and deploy the latest, advanced high-performance technologies available.

The GMS system comprises four components—two chassis and two displays. It also includes an enterprise-class, ultra-rugged, secure server with an intelligent 12-port 1/10 Gigabit Ethernet switch, a router, mass-media storage, CITV/DVR, video-over-IP, and two ultra-thin, rugged smart-panel PCs. When coupled with a video encoder, the system is a complete full motion video and control system with storage.

"Collectively, the system of video compression, conversion, video-over-IP networking, and serving/storage/display is something few vendors could create and successfully demonstrate, much less on a rugged vetronics platform," Sharfi said. "With our system, GMS does just that, replacing a surveillance rack's worth of equipment with a system that can also handle the rugged environment of the battlefield."

*GMS will showcase the new system at the Association of the United States Army (AUSA) annual meeting in Washington D.C., Oct. 9–11, 2017.*

*Come see us at AUSA booth #7249 upstairs in Halls D and E.*

**About General Micro Systems:**

General Micro Systems (GMS) is the industry expert in highest-density, modular, compute-intensive, and rugged small form-factor embedded computing systems, servers, and switches. These powerful systems are ideal for demanding C4ISR defense, aerospace, medical, industrial,

and energy exploration applications. GMS is an IEC, AS9100, NIST-800-171, and MIL-SPEC supplier with infrastructure and operations for long-life, spec-controlled, and configuration-managed programs. Designed from the ground up to provide the highest performance and functionality in the harshest environments on the planet, the company's highly customizable products include GMS RuggedDNA™ with patented RuggedCool™ cooling technology. GMS is also the leader in deployable high-end Intel® processors and a proud Intel® partner since 1986. For more information, visit www.gms4sbc.com