

**EMBARGOED UNTIL October 8, 2018**

## **Esterline CMC Electronics and Green Hills Software Join Forces at AUSA 2018**

### **Companies Demonstrate Green Hills INTEGRITY-178-tuMP Operating System Running on CMC's Next Generation Display**

Washington D.C., October 8, 2018 – Esterline is pleased to announce that its next generation CMC Electronics MFD-3068 smart display will be featured in the Green Hills Software booth no. 9053 at this year's AUSA show. The display will be operating with the Green Hills Software INTEGRITY®-178 tuMP™ Multicore operating system.

Esterline's third-generation MFD-3068 smart display is designed as an open architecture platform, featuring next-generation MOSArt™ (Modular Open System Architecture) middleware developed to non-proprietary industry standards for the partitioning of applications (ARINC 653) and for high assurance operating systems like the Green Hills INTEGRITY-178 tuMP Multicore operating system.

Esterline CMC Electronics' initial deployment of INTEGRITY-178 tuMP on the MFD-3068 was for Airbus Helicopters' CH-53GS/GE Sea Stallion Upgrade, Patria's Grob 115E Upgrade for the Finnish Air Force and with several undisclosed programs also under contract. INTEGRITY-178 tuMP has since become the first operating system certified as conforming to the FACE Technical Standard for Intel Multicore Processors.

"Today's multicore technology offers significant flexibility in meeting the processing throughput required for our advanced line of smart displays and mission computers," said Marc Bouliane, Product Director, Avionics Display Solutions, Esterline. "Our goal is to achieve the ideal Size, Weight, and Power reduction (SWaP) by leveraging modern multicore parts while simultaneously harnessing as much of their available capacity as possible. Green Hills is a supplier capable of meeting these SWaP and throughput goals without jeopardizing our safety certification requirements. After a very thorough and extensive trade study, Green Hills Software's INTEGRITY-178 tuMP was the only RTOS that met all of these requirements."

With an optical quality second to none, the MFD-3068 offers true 8-bit color rendition with optical performance stabilized over its design life-time and its extended operating temperature envelope (+70C continuous). Its next-generation Light Emitting Diode (LED) illumination system supports multi-mode operations day/night/NVIS) and provides up to 275 fL of illumination in day mode. This display solution with Green Hills INTEGRITY-178 tuMP and Esterline's MOSArt™ Middleware allows customers to host their own applications (Patria), host applications from Esterline (Airbus Helicopters) and 3<sup>rd</sup> parties, or any combination, providing significant flexibility in meeting customer needs.

Founded in 1982, Green Hills Software is the worldwide leader in embedded safety and security. In 2002, the Green Hills INTEGRITY-178 RTOS was the first commercially developed operating system to be certified as part of DO-178B Level A avionics equipment. In 2008, the Green Hills INTEGRITY-178 RTOS was the first and only operating system to be certified by NIAP (National Information Assurance Partnership comprised of NSA & NIST) to EAL 6+, High Robustness, the highest level of security ever achieved for any software product. Green Hills Software's open architecture, integrated development solutions address deeply embedded, safety/security and high reliability applications for the military/avionics, medical, industrial automotive, networking, consumer and other markets that demand industry-certified solutions. Green Hills Software is headquartered in Santa Barbara, California, with European headquarters in the United Kingdom.

### **About Esterline Corporation**

Esterline Corporation is a leading worldwide supplier to the aerospace and defense industry specializing in three core areas: Advanced Materials; Avionics & Controls; and Sensors & Systems. With annual sales of approximately \$2 billion, Esterline employs roughly 13,000 people worldwide.

Operations within the Advanced Materials segment focus on technologies including high-temperature-resistant materials and components used for a wide range of military and commercial aerospace purposes, and combustible ordnance and electronic warfare countermeasure products.

Operations within the Avionics and Controls segment focus on technology interface systems for commercial and military aircraft and similar devices for land- and sea-based military vehicles, cockpit displays and integration systems, flight training and simulation equipment, secure communications systems, specialized medical equipment, and other high-end industrial applications.

The Sensors and Systems segment includes operations that produce high-precision temperature and pressure sensors, specialized harsh-environment connectors, electrical power distribution equipment, and other related systems principally for aerospace and defense customers.

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