



## NEWS RELEASE

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FOR IMMEDIATE RELEASE

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### **Curtiss-Wright, Green Hills Software, Harris Corporation and Richland Technologies Demonstrate FACE™ Aligned Digital Moving Map Solution for Airborne Defense Applications**

***Demo features Harris's FACE conformant FliteScene® Digital Moving Map Software and Pre-Validated Board-sets for Embedded Avionics Applications***

**ARMY AVIATION MISSION SOLUTIONS SUMMIT, NASHVILLE, Tenn. (Booth #349) – April 26, 2017** – Curtiss-Wright's Defense Solutions division, in collaboration with [Harris Corporation](#), [Green Hills Software](#), and [Richland Technologies](#), will demonstrate a rugged COTS-based Future Airborne Capability Environment (FACE™) aligned Airborne Digital Mapping Solution in its booth (#349) during the Army Aviation Mission Solutions Summit. The demonstration will show the Green Hills field-proven INTEGRITY-178 tuMP™ safety- and security-critical multicore real-time operating system (RTOS) running Harris's popular FliteScene® Digital Moving Map software. The application uses Richland Technologies RTGL OpenGL SC graphics libraries running on Curtiss-Wright's 4th Gen Intel Core i7 (Haswell) processor-based [VPX3-1258 single board computer \(SBC\)](#) and [VPX3-716 graphics display module](#). This solution eases and speeds the integration of situational awareness and high performance digital mapping functions into embedded commercial and military avionics systems. It enables system architects to statically define which core or cores shall deterministically execute the FliteScene application and when, resulting in optimal Intel core utilization and throughput. The combined INTEGRITY-178 tuMP and RTGL graphics libraries solution provides the aviation industry with the most reliable, deterministic and efficient use of all cores on the Curtiss Wright VPX3-1258.

FACE is a government-industry software standard and business strategy for acquisition of affordable software systems that promotes innovation and rapid integration of portable capabilities across global defense programs. CERTON, an affirmed FACE Verification Authority, recently completed all verification activities on the FliteScene software in accordance with the FACE Technical Standard and FACE Conformance Policy, resulting in Harris receiving FACE Conformance Certificate #2.

“We are very pleased, along with Harris, Green Hills, and Richland Technologies to deliver one of the industry’s first rugged digital mapping map solutions to feature the FACE conformant FliteScene software,” said Lynn Bamford, Senior Vice President and General Manager, Defense Solutions division. “Our fully integrated COTS subsystem eliminates the cost and design risk associated with deploying new digital map capabilities while delivering on the promise of the FACE open avionics standard to make software systems more robust, interoperable, portable and secure.”

### **About the VPX3-716 Graphics Module**

Curtiss-Wright’s VPX3-716 is a small form factor 3U VPX graphics display card, based on AMD’s Embedded Radeon E8860 high-performance GPU.. The card features four independent and simultaneous graphics outputs, 2 GB of dedicated video memory, video decoders, video compression encoder and an XMC site supporting both peripheral and processor mezzanines. Designed for high reliability and a long lifecycle, the VPX3-716 is especially well-suited to support embedded training, moving maps, Geographic Information Systems (GIS), 360 degree situational awareness, Diminished Vision Enhancement (DVE) and other graphics, video and compute intensive applications.

### **About the VPX3-1258 SBC**

Curtiss-Wright’s VPX3-1258 is a high performance SBC that features the 4th Gen Intel Core i7 (Haswell) processor. Pin-compatible with previous generations of Curtiss-Wright Intel SBCs, the VPX3-1258 offers the extremely high performance Intel processing in a 3U form factor. Its Intel Core i7 processor offers Quad-Core (8-thread) performance at 2.4 GHz. With up to 16 GB of dual-channel high-speed ECC-protected DDR3 memory, the SBC delivers up to 25.6 GBps memory throughput, maximizing the capabilities of the processor. The processor also features AVX and AVX2 SIMD extensions for accelerating math-intensive algorithms, such as those used by Richland’s DO-178C certifiable RTGL SoftPipe OpenGL rasterizer, enabling photo-realistic graphics without the need for a GPU.

### **About Harris FliteScene Digital Map**

The Harris FliteScene Digital Map open architecture system provides situational awareness for both civilian and military operations. It supports advanced terrain awareness and obstacle avoidance features and offers three-dimensional synthetic vision modes. It has been integrated with modern tactical networks such as Link 16 and ANW2 providing a full real-time common operating picture. FliteScene supports a standard OpenGL interface that can be integrated with commercial off-the-shelf (COTS) processors and graphic accelerators. This combat-proven, feature-rich digital mapping software solution enables system integrators to seamlessly integrate critical situational awareness capabilities into demanding commercial and military airborne platforms. It provides scalable and configurable 2D and 3D terrain images, street maps, map overlays, and mission planning capabilities required for demanding aerospace, defense, law enforcement, fire, and search and rescue applications. For more information about FliteScene, please visit [www.harris.com/solution/flitescene-digital-map](http://www.harris.com/solution/flitescene-digital-map).

**FliteScene Performance Features:**

- Capable of displaying raster maps in all relevant formats and scales
- 2D and 3D views for both cockpit and wingman, with extended scene and enhanced performance
- Map overlays for elevation, depth, vectors, targets, and other line-of-sight objects
- Multiple map underlay layers including terrain and bathymetry
- Multi-vehicle tracking and sensor footprint display
- Configuration via XML configuration files
- Multi-channel output with pan/zoom, and orientation capabilities

For more information about Curtiss-Wright's Defense Solutions division, please visit [www.curtisswrightds.com](http://www.curtisswrightds.com).

**About Curtiss-Wright Corporation**

Curtiss-Wright Corporation is a global innovative company that delivers highly engineered, critical function products and services to the commercial, industrial, defense and energy markets. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing reliable solutions through trusted customer relationships. The company employs approximately 8,000 people worldwide. For more information, visit [www.curtisswright.com](http://www.curtisswright.com).