



PRESS RELEASE  
For Immediate Release

## DiSTI and Microchip Technology Partner to Deliver Industry-Leading RAD-Tolerant Software Rendering Solution for Safety-Critical Displays

*GL Studio SC Software Renderer Eliminates GPU Dependency, Enabling Advanced Graphics on Resource-Constrained Safety-Critical Systems*

**Orlando, FL (June 10, 2026)** – The DiSTI Corporation announced a strategic partnership with Microchip Technology Inc., joining the company's Mi-V ecosystem, to deliver the GL Studio SC Software Renderer, a solution that enables advanced graphics in safety-critical applications without dedicated GPU hardware. Microchip's Mi-V partner network supports development on PolarFire® SoC FPGAs with a growing portfolio of open RISC-V®-based tools, IP and partner solutions, enabling differentiated capabilities for specialized applications such as safety-critical graphics.

DiSTI worked in collaboration with Honeywell Aerospace while developing this new technology demonstration.

### Transforming Safety-Critical Display Development

The GL Studio SC Software Renderer changes how safety-critical systems implement graphical displays. By removing the need for OpenGL-capable hardware, it expands options for aerospace, defense, medical, and automotive applications where hardware, certification, or cost constraints previously limited graphics.

"This partnership with Microchip reflects our commitment to overcoming challenges in safety-critical graphics development, especially in space-related graphical applications beyond Low Earth Orbit," said Christopher Giordano, DiSTI's VP of UX/UI Technology. "The GL Studio SC Software Renderer allows customers to deploy advanced 2D and 3D graphics on platforms not designed for graphics, while maintaining required safety standards. The port to the Microchips PolarFire SoC FPGA also gets GL Studio SC running in software on a 100kRAD capable SoC, which will certainly make some heads turn."

### Superior to Existing Market Options

The safety-critical graphics industry has long faced limitations that require trade-offs between capability, cost, and certification complexity. The GL Studio SC Software Renderer addresses these challenges:

- **Hardware Dependence:** Conventional OpenGL SC implementations require specialized GPU hardware, which limits Radiation Tolerance platform options and increases costs.
- **Limited Portability:** Existing solutions restrict developers to specific hardware ecosystems.
- **Certification Complexity:** Multiple hardware dependencies complicate DO-178C and other safety certification processes.
- **Performance Constraints:** Legacy rendering approaches often reduce visual quality or responsiveness.

The GL Studio SC Software Renderer addresses these limitations and delivers new capabilities for safety-critical graphics:

- **Hardware Independence:** Runs on any processor without requiring GPU or OpenGL support
- **Simplified Certification:** Reduces hardware dependencies in the certification chain
- **Cost Reduction:** Enables use of lower-cost processors without graphics acceleration

### **Innovation That Transforms Programs**

The GL Studio SC Software Renderer changes how organizations approach safety-critical display programs, providing value from initial architecture through deployment:

#### **For System Architects:**

- Freedom to select optimal processors based on computational needs rather than graphics requirements
- Reduced bill-of-materials costs by eliminating dedicated GPU hardware
- Greater flexibility for platform upgrades and technology updates.

#### **For Development Teams:**

- Accelerated development using GL Studio's visual design environment.
- Seamless workflow from prototyping to embedded deployment.
- Simplified integration due to reduced hardware dependencies.

#### **For Certification Programs:**

- Streamline DO-178C compliance with fewer hardware components.
- Proven safety-critical runtime with extensive operational history.

#### **For End Users:**

- Intuitive displays that enhance situational awareness.
- Consistent user experience across platforms.
- Improved reliability through reduced hardware complexity.

"As a valued Mi-V ecosystem partner, DiSTI builds on Microchip's industry-leading PolarFire SoC FPGA platform and further expands the capabilities available to developers," said Shakeel Peera, corporate vice president of Microchip's FPGA business unit. "Together, we're delivering a scalable, secure, power efficient RISC-V solution that helps customers bring sophisticated, graphics-rich and safety-critical applications to market faster."

### **Proven Technological Foundation**

The GL Studio SC Software Renderer is built on proven capabilities and field-tested deployments that demonstrate technical maturity and operational reliability:

- Decades of deployment in certified aerospace and defense systems
- DO-178C certification support and documentation
- Validated through successful platform ports, including the Microchip MPFS250 Video Kit.

### **Availability**

The GL Studio SC Software Renderer is now available for qualified safety-critical programs. DiSTI offers full support, including integration assistance, certification documentation, and training.

For more information about the GL Studio SC Software Renderer and DiSTI's partnership with Microchip, visit [www.disticom](http://www.disticom) or contact [sales@disticom](mailto:sales@disticom).

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### **About DiSTI Corporation**

The DiSTI Corporation is the world's leading graphical user interface software provider. Our flagship product, GL Studio, delivers advanced high-performance 3D user interfaces to the aerospace and automotive industries. Leading global manufacturers such as Jaguar Land Rover, Hyundai MOBIS, Garmin, Boeing, NASA, and Lockheed Martin choose GL Studio for its performance, fidelity, and reliability in interface development and deployment. Whether for avionics, instrument clusters, infotainment systems, or flight simulators, GL Studio exceeds the developer's workflow and runtime performance demands.

For more information, visit the DiSTI website at [www.disticom](http://www.disticom)

### **Contacts:**

The DiSTI Corporation

Dawn Haulter

Director of Marketing

[jhaalter@disticom](mailto:jhaalter@disticom)