

## PRESS RELEASE For Immediate Release

## Innovative Safety-Critical Solution Revolutionizes Embedded Systems

The DiSTI Corporation, CoreAVI, NXP Semiconductors, and SYSGO have collaborated to develop a cutting-edge Safety-Critical deployment for both the Aerospace and Automotive markets.

Orlando, FL (April 3, 2024) – Today marks a significant milestone in the aerospace and automotive industries by introducing a groundbreaking Safety-Critical deployment solution. This cutting-edge deployment stack integrates DiSTI's GL Studio SC HMI software, SYSGO's PikeOS, NXP® Semiconductors' i.MX 8 applications processor, and CoreAVI's VkCore® SC graphics and compute software suite and promises to redefine safety, reliability, and efficiency standards across the board. This deployment stack utilizes the latest technology designed against the most up-to-date safety standards in the industry.

"We are thrilled to collaborate with industry leaders to introduce this groundbreaking Safety-Critical Deployment Solution," said Chris Giordano, VP of UI/UX Technology at DiSTI. "With safety at the forefront of our priorities, this solution represents a significant step forward in addressing the evolving needs of the aerospace and automotive industries. The avionics market benefits from the UX/UI design and HMI workflow capabilities for rapid iteration and target deployment, while the automotive market gains from the software development rigors which create air worthy embedded software and graphics."

"Our partnership will enable the automotive and avionics industries to build innovative and robust systems. We are proud to take the next step and offer great solutions to our customers," says Franz Walkembach VP Marketing & Alliances at SYSGO.

From advanced HMIs to secure real-time operating systems, powerful processors, and optimized graphics drivers, every element is meticulously designed to deliver the most advanced results on the market. It is engineered to allow organizations to accelerate their innovation, enhance safety, and stay ahead in today's competitive landscape.



"We are committed to technology partnerships that bring to market integrated tools and deployable solutions that drive efficiency and performance for our customers" said Dan Joncas, Deputy CEO at CoreAVI. "We strive to provide our partners and customers with the tools, libraries and software

infrastructure that facilitates the development of state-of-the-art safe GPU acceleration applications. This joint safety critical deployment enables avionics and automotive integrators to harness the most advanced GPUs capabilities."

Safety is paramount in both aerospace and automotive sectors, where every decision and innovation must adhere to stringent safety protocols. With the collaborative efforts of industry leaders, this new deployment solution addresses these critical needs by offering unmatched levels of reliability, performance, and compliance.

"Delivering an enhanced graphics experience in safety critical deployment solutions is essential," said Dan Loop, Vice President and General Manager of Automotive Edge Processing at NXP. "NXP continues to advance safe automotive solutions with our widely adopted i.MX applications processors featuring high-performance and low-power capabilities that are scalable, safe and secure. Together, NXP and DiSTI will provide a strong solution for multimedia and display applications in automotive and aerospace with i.MX SoCs and GL Studio."

Key Features of the Safety-Critical Deployment Solution include:

- 1. **DiSTI's GL Studio SC HMI software:** Offering state-of-the-art graphical interface development tools, GL Studio SC empowers developers to create immersive and intuitive user interfaces while meeting the highest safety standards.
- SYSGO's PikeOS: As the leading hypervisor and real-time operating system, PikeOS ensures
  deterministic behavior of embedded systems and their security, enabling seamless integration
  of critical and non-critical applications by strict partitioning. It is certified to the highest levels
  of industrial safety standards.
- 3. **NXP's i.MX 8 applications processor:** This powerful and versatile hardware platform provides the performance and scalability required for complex safety-critical applications, ensuring optimal execution of tasks in demanding environments.
- 4. CoreAVI's VkCore SC suite of tools and libraries that enable the development and runtime deployment of accelerated GPU compute and graphics applications: Engineered to deliver maximum performance and reliability, CoreAVI's VkCore SC product suite enables the scalability of safe compute capabilities, and advanced graphics rendering with seamless integration of OpenGL SC1 and OpenGL SC2 and Vulkan SC graphics APIs, ensuring smooth and consistent graphical rendering in safety-critical environments.

Attendees at the Embedded World conference in Nuremberg, Germany, and Aerospace Tech Week in Munich, Germany, this April will be among the first to experience first-hand demonstrations of this Safety-Critical deployment.

For individuals seeking to learn more about GL Studio and the HMI software development solutions provided by DiSTI, please reach out to <a href="mailto:sales@disti.com">sales@disti.com</a>

## **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.

Visit <a href="https://disti.com/">https://disti.com/</a> to learn more.

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