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## **Core Avionics & Industrial Inc. Announces Safety Critical Graphics and Compute Support for NXP's i.MX 8 Application Processor Family to Enable Low Powered, Scalable Performance Capabilities to Mil/Aero and Automotive Integrators**

**Tampa, Florida, June 12, 2019:** Core Avionics & Industrial Inc. ("CoreAVI") announced today that it will provide graphics and compute driver support for NXP® Semiconductors' Arm® A53-based i.MX 8 applications processor with dual GPUs to enable next generation safety-critical avionics and automotive platforms. CoreAVI's newest VkCore™ SC Vulkan®-based graphics and compute driver portfolio, as well as its VkCoreGL™ SC1 OpenGL® SC 1.0.1 and VkCoreGL SC2 OpenGL SC 2.0 application libraries, enable implementation of a full safe software stack on the i.MX 8 application processor. Drivers for automotive applications are certified as Safety Elements out of Context (SEooC), while for avionics applications, drivers are available with DO-178C safety certification evidence. This will not only enable customers with the opportunity to facilitate state-of-the-art graphics and compute capabilities in the next generation of applications such as avionics vision enhancement, Safe Clusters, and Advanced Driver-Assistance Systems (ADAS), but also provide a simplified, low risk path to ISO 26262 as well as DO-178C safety certifications.

NXP's i.MX 8 applications processor's highly scalable design allows multiple platforms and operating systems to be combined into one, enables high performance vision processing and object recognition, and facilitates up to four 1080p displays with independent content. Targeted at automotive infotainment as well as advanced HMI interface and control applications, the i.MX 8 applications processor family revolutionizes multiple display automotive applications, industrial systems, vision, HMI and single board computers.

"CoreAVI is pleased to support NXP's i.MX 8 applications processor with a full safety certifiable software stack," said Lee Melatti, Executive Vice President of Business Development at CoreAVI. "Mandatory for years in the avionics industry, safety certifiability is quickly becoming a requirement in the automotive and industrial sectors, where our support for the i.MX 8 as well as our years of certification experience greatly reduce the burden customers typically face when certifying their platforms."

"Our i.MX 8 applications processor family is proving popular for critical safety applications such as pilot and flight controls in aircraft and driver control in automobiles," commented Ron Martino, vice president and general manager, i.MX applications processor line for NXP Semiconductors. "Our close collaboration with CoreAVI enables the bare-metal GPU support used for ISO 26262 and DO-178C safety certification of systems that run graphics and compute software on the powerful dual GPUs in the i.MX 8 family."



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#### **About Core Avionics & Industrial Inc.**

Core Avionics & Industrial Inc. (“CoreAVI”) is a pioneer in the military and aerospace sector with a proven track record in providing entire software and hardware IP platform solutions that enable safety critical applications. A global leader in architecting and supplying real-time and safety critical graphics, compute, and video drivers, “program ready” embedded graphics processors, and DO-254/ED-80 certifiable COTS hardware IP, CoreAVI’s suite of products enables the design and implementation of complete safety critical embedded solutions that achieve the highest levels of safety certification with long-term support. CoreAVI’s solutions are deployed in commercial and military avionics systems, and support rapidly emerging compute applications in the automotive, unmanned vehicle, and internet of things markets. CoreAVI’s products may be purchased with certification data kits for the most stringent levels of safety certification, including RTCA DO-254/DO-178C and EUROCAE ED-80/ED-12C. [www.coreavi.com](http://www.coreavi.com)