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NASA Has Selected CoreAVI to Provide Safety Critical Vulkan® API Capabilities on the X-59 QueSST Low-Boom Flight Aircraft

Tampa, Florida, Sept. 12, 2018: Core Avionics & Industrial Inc. ("CoreAVI") announced today that it has been selected by NASA to provide their safety critical Vulkan driver – VkCore SC – for deployment into NASA's X-59 Quiet SuperSonic Technology (QueSST) aircraft. VkCore SC is designed for DO-178C/ ED-12C DAL A certification and is available with complete certification evidence. It offers both flexible and powerful graphics and compute capabilities in one driver and will incorporate CoreAVI's TrueCore™ 2.0 Safety Monitor to ensure the health and integrity of the system's GPU and support the GPU's certification to the highest DAL levels. VkCore SC will be deployed on Wind River® VxWorks® 7 RTOS.

VkCore SC will be used by NASA to help develop and deploy NASA's "windowless cockpit display system" eXternal Vision System (XVS), which replaces the pilot's front window view with leading-edge sensor display technology. This includes utilizing Vulkan capabilities to enable advanced synthetic vision, object detection and various sensor fusion capabilities. The X-59, an experimental aircraft, and part of NASA's Low-Boom Flight Demonstration mission, will achieve supersonic speeds and significantly reduce the noise generated by a sonic boom. The X-59 is being built by NASA's contractor Lockheed Martin.

"The X-59 QueSST will represent state-of-the-art technology in supersonic aircraft," said Trey Arthur, Aerospace Engineer at NASA. "Working with CoreAVI gives us an opportunity to build the latest in safety-critical graphics and computing technologies into the X-59."

"VkCore SC is the future of safety critical graphics," said Dan Joncas, Executive Vice President of Sales and Marketing at CoreAVI. "CoreAVI is excited to provide NASA and Lockheed Martin with all the graphics and compute tools to enable their eXternal Vision System in this innovative and revolutionary platform."

For more information, please contact Sales@coreavi.com.

About Core Avionics & Industrial Inc.

Core Avionics & Industrial Inc. ("CoreAVI"), a Channel One company, is a global leader in providing products and services designed to enable complete solutions for safety critical applications. A supplier of real-time and safety-critical graphics and video drivers, compute drivers, "program ready" embedded graphics processors, and DO-254/ED-80 certifiable COTS hardware IP, CoreAVI's suite of products enables commercial GPUs, SoC components, and COTS hardware designs to meet the requirements of long-term high-reliability and safety-critical embedded systems with long-term support. CoreAVI's products may be purchased with certification data kits for the most stringent levels of RTCA DO-254/DO-178C and EUROCAE ED-80/ED-12C. www.coreavi.com