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## **SYSGO and CoreAVI Collaborate to Support Arm's Cortex-A72-based CPU for Next Generation Safety Critical Compute and Graphics Systems**

**Tampa, Florida, March 18, 2020.** Core Avionics & Industrial Inc. ("CoreAVI") and SYSGO announced today their collaboration to support Arm's Cortex-A72-based CPU for next gen safety critical graphics and compute applications. CoreAVI and SYSGO will work together to ensure the interoperability of CoreAVI's new COTS-D 3U VPX NXP® LX2160-based SBC0003 Single Board Computer hardware design IP with SYSGO's safety critical PikeOS® RTOS. In addition, CoreAVI will facilitate the support of its AMD E9171 COTS-D GPU hardware IP modules, and VkCore® SC Vulkan® graphics and compute driver portfolio to function in conjunction with PikeOS RTOS. The high performance combination of Arm's Cortex A-72 processing power with the latest AMD E9171 GPU lowers customers' costs and risk, as well as shortens the lead times, allowing mil/aero systems to achieve rapid time to production while attaining the highest levels of safety certification.

SYSGO and CoreAVI have a long standing, trusted partnership within the aerospace industry. The two companies' products are deployed and certified together in a number of avionics subsystems. The objective of their R&D and marketing collaborations to support Arm's Cortex-A72-based CPU is to continue to attain the highest performance compute and graphics applications while giving customers the peace of mind of total safety, security, and reliability throughout their systems.

PikeOS is a real-time operating system including a hypervisor-based kernel designed for the highest levels of safety and security. The PikeOS technology has been certified on a wide range of projects by various certification standards including DO-178B/C, IEC 61508, EN 50128, IEC 62304 and ISO 26262. It combines a modular, flexible and future-proof architecture with a large variety of certification standards. With this full solution, customers benefit with reduction of cost, risk and full system certification lead times for both the hardware and software they require.

"Our collaboration with SYSGO and our joint support for Arm's Cortex-A72 architecture addresses a range of power and performance requirements in Europe and the world," said Dan Joncas, Chief Sales and Marketing Officer at CoreAVI. "Our previous experience with Arm-based safety certification in the avionics industry, as well as our knowledge of safety critical software and hardware, make our COTS-D solutions, in partnership with SYSGO's safety critical PikeOS, a winning combination for any customer in the safety critical embedded space."

"We're excited to support Arm's Cortex-A72 architecture on CoreAVI's new SBC0003 with PikeOS," said Franz Walkembach, VP Marketing & Alliances at SYSGO. "We look forward to providing our customers with all the unique benefits of a complete safety critical graphics and compute stack, as well as the wealth of knowledge both our companies possess after years of experience fulfilling the requirements of safety critical systems."



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For more information, please contact CoreAVI.

### **Media Inquiries**

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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 for aerospace, automotive, and industrial applications 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, EUROCAE ED-80/ED-12C, and ISO 26262. [www.coreavi.com](http://www.coreavi.com)

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### **About SYSGO**

SYSGO is the leading European manufacturer of embedded operating systems, supporting safety and security-critical applications in the aerospace, automotive, railway and IIoT industries for more than 25 years. The company develops and maintains PikeOS, the world's first SIL 4 certified real-time operating system with multi-core support. The hypervisor (Type 1), which runs directly on the hardware, is certified according to the strictest safety standards such as IEC 61508, EN 50128 and ISO 26262. In terms of security, PikeOS is currently the only separation kernel certified to Common Criteria (EAL3+). In addition, PikeOS offers a fully certified programming interface and thus enables application development according to the "Safe & Secure by Design" principle. For less critical systems, SYSGO also offers ELinOS, an industrial grade Linux distribution with real-time extensions for embedded systems.



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SYSGO works closely with customers throughout the product life cycle and supports clients such as Samsung, Airbus, Thales, Continental, etc. in the formal certification of software according to international standards for functional safety and IT security. Headquartered in Klein-Winternheim near Frankfurt, Germany, SYSGO has subsidiaries in France, the Czech Republic and the UK and maintains a world-wide distribution network. The company is part of the European Thales Group.

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