

SYSGO's PikeOS delivers certified functional Safety Solution for Avionics, Industrial Automation, and IoT

SYSGO's PikeOS now supports Intel's new 13th Generation Intel® Core™ processors.

SYSGO, the leading European supplier of real-time operating systems (RTOS), announces the official support of Intel's 13th Gen Intel® Core™ processor family (formerly named Raptor Lake) functional safety-capable SoCs (System on a Chip) with its certified flagship PikeOS RTOS & Hypervisor. This collaboration underscores the value SYSGO and Intel® bring to cutting-edge technology solutions for avionics, industrial automation, and the Internet of Things (IoT).

SYSGO's PikeOS is renowned for its safety and security certifications across various industries. By supporting Intel's 13th Gen Intel® Core™ processor SKUs (Stock Keeping Units) with integrated Intel® Silicon Integrity Technology such as, i.e., Intel® Core™ i7-1375PRE and i7-1366URE processors, PikeOS enables seamless execution of high-performance safety workloads. These hybrid processors, equipped with Intel's Efficient-code (E-core), Performance-core (P-core), and high-performance integrated graphics architecture (Intel® Iris® Xe), provide a robust platform for software-defined workload consolidation of mixedcriticality (real-time, AI, and functional safety) and high-performance applications on a single SoC.

"The integration of PikeOS with 13th Generation Intel® Core™ processors marks a significant milestone in our commitment to delivering certified functional safety solutions," says Franz Walkembach, VP of Marketing & Alliances at SYSGO. "This partnership allows us to address the growing demands of safety-critical systems in avionics, industrial automation, and IoT, empowering manufacturers and integrators to innovate with confidence."

The 13th Generation Intel[®] Core[™] functional safety-capable processors have cutting-edge features like Intel[®] Silicon Integrity Technology and Intel[®] Time Coordinated Computing Technology, making them suitable for safety-critical applications. When paired with SYSGO's

PikeOS, these processors offer manufacturers and system integrators a comprehensive platform for achieving stringent safety certification standards.

"Our 13th Generation Intel® Core™ processors bring improved performance, high determinism, and functional safety capabilities to the table," said Ricky Watts, Senior Director of Federal and Industrial Solutions at Intel. "With SYSGO's PikeOS, platform manufacturers and system integrators can now leverage Intel's new 13th Generation Intel® Core™ functional safety-capable processors to accelerate development and certification of their next-generation solutions."

Key Benefits for Platform Manufacturers and System Integrators

- Integrated Functional Safety Capabilities: The 13th Generation Intel[®] Core[™] functional safety-capable processors, with Intel[®] Silicon Integrity Technology embedded in the silicon and with Intel[®] Functional Safety Essential Design Package (Intel[®] FSEDP) documentation, support safety-critical SKUs, enabling seamless compliance with industry standards.
- 2. Workload Consolidation and high performance: Consolidating real-time, AI, and functional safety workloads on a single SoC optimizes efficiency and reduces system complexity.
- 3. Enhanced Safety Certification Support: PikeOS's safety certification positioning streamlines compliance with functional safety standards, such as DO-178C for avionics and ISO 26262 for automotive applications.
- 4. **Certification Evidence for Avionics:** The Intel® Airworthiness Evidence Package (Intel® AEP) provides manufacturers with additional reliability and safety analysis evidence to meet DO-254 development assurance requirements.

For more information on SYSGO's PikeOS, please visit www.sysgo.com/pikeos

Please contact our Sales team at www.sysgo.com/contact

For more information on 13th Gen Intel[®] Core[™] Functional Safety-capable processors, please visit:

www.intel.com/content/www/us/en/products/sku/235070/intel-core-i71375pre-processor-24m-cache-up-to-4-80-ghz/specifications.html

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