



REAL-TIME GENERATION OF PWM SIGNALS TO DRIVE SERVO MOTORS

SYSGO has created an integrated, certifiable demonstrator platform for Avionics. PikeOS (SYSGO real-time OS & Hypervisor), Connex DDS Micro and Ansys SCADE provide a software architecture that combined with a Xilinx UltraScale board reduces integration and certification risk while accelerating time-to-market and deployment of secure, Safety-critical systems. PikeOS is running on both ARM Cortex A52 (MMU) and R5 (MPU) cores.

Highlights

- PikeOS enablement of MMU and MPU core functionalities
- PikeOS for MPU manages Xilinx UltraScale FPGA
- Communication via RTI Connex DDS
- Real time signal calculation via Ansys Scade Model

Customer Value

- Reduction of integration- and certification risk
- Accelerating of time-to-market
- Scaling of PikeOS on MMU and MPU on the same development tool chain

AVIONICS DEMO PARTNERS



AMD Xilinx develops highly flexible and adaptive processing platforms that enable rapid innovation across a variety of technologies - from the endpoint to the edge to the cloud. Xilinx is the inventor of the FPGA, hardware programmable SoCs and the ACAP, designed to deliver the most dynamic processor technology in the industry and enable the adaptable, intelligent and connected world of the future.



Real-Time Innovations (RTI) is the largest software framework company for autonomous systems. RTI Connex® is the world's leading architecture for developing intelligent distributed systems. Uniquely, Connex shares data directly, connecting AI algorithms to real-time networks of devices to build autonomous systems.



Ansys provides a model-based embedded software development and simulation environment with a built-in automatic code generator to accelerate embedded software development projects. System and software engineers use Ansys Scade solutions to graphically design, verify and automatically generate critical systems and software applications with high dependability requirements. Scade solutions are highly interoperable and can be easily integrated, allowing for development optimization and increased communication among team members.

Founded in 1991, SYSGO became a trusted advisor for Embedded Operating Systems and is the European leader in hypervisor-based OS technology offering worldwide product life cycle support. We are well positioned to meet customer needs in all industries and offer tailor-made solutions with highest expectations in Safety & Security. More information at www.sysgo.com/avionics