

Bluewind is a premier Research and Development company that develops Safety critical embedded electronics for the Space & Avionics domains. Electronics control system design includes: firmware development & verification, secure code generation, Cybersecurity & risk management, safety compliance and testing. We design to improve performance while striving to make Space applications safer, more sustainable, reliable and efficient.

APPLICATIONS



SPACE & AVIONICS SOFTWARE DEVELOPMENT

We bring forth software engineering with Requirements Lifecycle Management (IBM Doors based) and Model Based Design (Sparx Enterprise Architect based) as well as DO-178C compliant Avionics Software.



SECURE CODING

We are qualified in secure coding with C, C++, LPIC-1. RUST and Ada languages are used for an easier compliance to DO-178C.



SAFETY COMPLIANCE

We offer support for EASA certification and we provide analysis & assessment of avionic concepts according to industry standards (ISO 26262, DO-254, DO-160G, DO-178C, CAST-32A, AMC 20-193 and DO-332..)



HARDWARE DEVELOPMENT

We develop safety-compliant Control Units (ECUs) for Avionics.



OPERATING SYSTEMS FOR SPACE AND AVIONICS

Our expertise in RTOS/Hypervisors for Avionic Safety critical applications includes: VxWorks 653, INTEGRITY-178B (Single core), & RTEMS, XtratuM (Multicore)



KEY EXAMPLES

Satellites Docking Procedures for ESA

A part of team members have previously worked on an experiment in collaboration with ESA on Micro-gravity Environment Study with the objective to investigate docking procedures for autonomous small satellites with its focus on proximity operations.

Safety Software According to DO-178C

Development of qualified software for safe operations of an automated system on aircrafts ensure that the most critical operations are performed after an interlock check, based on ARINC-grade operating systems and DO-178C standard.



BLUEWIND VALUE

- Authorized Competence Center to major Semiconductor Manufacturers.
- In possession of exida safety qualification.
- Network and Cybersecurity trainings and qualifications

CUSTOMER'S BENEFITS

- Single provider for a full design solution.
- Full compliance with the Avionics Safety standards such as DO-254, DO-160G, DO-178C
- Support in the architecture definition of the Avionic concept.
- Translating system requirements of the avionic concept into software architectures and implementing them into programming languages such as Ada.

