



Safe and reliable solutions for the Aerospace Industry: Innovative electronic hardware and software for complex missions

f.u.n.k.e. AVIONICS is a certified and experienced partner for developing and producing complete electronic systems and equipment for aerospace and defence applications. We offer comprehensive turn-key solutions with full life-cycle support from specification, system design, hardware and software design, production and qualification to delivery, installation,

operation support and maintenance. Our focus is finding optimal solutions for our customers' needs to ensure that highly demanding requirements are met. Based on our vast experience in numerous challenging aerospace projects, we ensure the provision of reliable and effective solutions meeting the highest quality standards.

Services & Competences

- » Analogue & digital electronic hardware
- » Specific RF components and devices
- » Digital signal processing and RF signal generation
- » PCB layout
- » Microcontroller software
- » FPGA firmware development
- » Application software & apps
- » Measurement automatisaton
- » EMC and mechanical environmental qualification (DO-160, CE)
- » Compliance with software and electronic hardware guidelines for airborne systems up to DAL B (RTCA DO-178 & DO-254)
- » Accordance with Systems Engineering, Development and Safety processes (ARP4754 & SAE ARP4761, IEEE 15288, SAE)

Application examples

- » Mission Management Systems
- » Avionic Systems
- » Communication Subsystems
- » Radios and Transponders
- » Traffic Awareness Systems
- » Navigation Equipment (GNSS, SBAS, GBAS)

Certified by:



f.u.n.k.e. AVIONICS project references



L3HARRIS™



Lufthansa Technik
More mobility for the world

Mission computer system for Airbus A310 MRTT / CC-150 tanker aircraft

Turnkey airborne mission planning and control system for air-to-air refuelling. f.u.n.k.e. AVIONICS developed and provided hard- and software for this highly complex avionics system which is in operation for over 10 years at the German and Canadian air forces.



Safe integration of drones into the existing air traffic system

Development of reliable products and solutions for drone operators and U-space service providers in the areas of ADS-B, e-Conspicuity, Mission Management and autonomous flight



AIRBUS

Development and implementation of a hardware-in-the-loop test rig for the military mission management system of the A400M military transport aircraft



Development and production of ground station equipment including signal generation and integrity monitoring devices



Development, qualification and production of a Link 22 device for series production which will be installed in military aircraft to allow the exchange of tactical data among the involved military units



1090 MHz frequency receiver



UAV mission computer including AI technology



eVTOL data logging unit



GBAS-based approach system for airports



Aircraft cabin light control via 4.3 GHz WAIC



Management & Quality

- » Implementation of turnkey projects up to 3 M€ and 3 years duration plus after sales support
- » Management of projects and suppliers according to international quality standards (ISO9001, EN9100)



Production & Assembly

- » In-house assembly, integration and verification
- » In-house production



Design & Development

- » Radio frequency (RF) and electronic hardware systems incl. transponder and radar technologies
- » FPGA and VHDL code development for embedded systems (microcontroller) and applications for safety critical systems



Requirements & Engineering

- » Tool-based engineering according to specific customer requirements
- » Reliability, Availability, Maintainability, Safety (RAMS)



Qualification & Certification

- » Environmental qualification in accordance to RTCA DO-160 (EMC, mechanical, environmental), RTCA DO-178 (software), RTCA DO-254 (hardware), ECSS, CE etc.
- » Certification for airworthy products



Maintenance & Support

- » Logistics and supplier management
- » Customer service, maintenance and repair
- » Obsolescence management



Dr. Jörg Selle

Director of Business Development

We would be happy to develop the right solution for you.



+49-731-975280-21



joerg.selle@funkeavionics.de



SCAN ME