

FLCON | UKB

FLIGHT CONTROL COMPUTER

#Avionics



RTCA DO-254 CERTIFIABLE HARDWARE
RTCA DO-178B CERTIFIABLE BSP AND DRIVER SOFTWARE
MODULAR AND OPEN SYSTEM ARCHITECTURE



aselsan

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FLIGHT CONTROL COMPUTER

FLCON UKB Flight Control Computer is designed in order to provide multiple reliable interface options, high processing and performance capability for flight sensors, control surfaces, equipments and other avionics sub-systems.

FLCON UKB consists of RTCA DO-178B Level B certifiable BSP and driver software for Green Hills Integrity 178B real-time operating system and RTCA-DO-254 Level B certifiable hardware.

Isolated interface groups, fully redundant power circuits and Built-In-Test capabilities of Flight Control Computer Hardware provide reliable and safe operation during the mission.

Rugged, lightweight and conduction-cooled Flight Control Computer hardware is designed to operate in tough airborne environment.

FLCON UKB was initially designed for ANKA-S platform however nowadays it is widely used on others platforms like AKSUNGUR.

General Specifications

- RTCA DO-254 DAL B Certifiable Hardware
- RTCA DO-178 DAL B Certifiable Software
- BSP and Driver Software for Real-Time Operating Systems
- Built-In Test Capability
- Conduction Cooled Fanless Chassis

Interfaces

- 8x OPEN/GND Discrete Input, 8x OPEN/GND Discrete Output
- 4 x Redundant MIL-STD-1553B Interface
- 4x Software Configurable Synchronous/Asynchronous RS-422 Interface
- 13 x RS-422/RS-485 Interface
- 3 x CAN 2.0 A&B CANBus Interface
- 8 Rx and 4 Tx ARINC 429 Interface
- 1 x 10/100 Ethernet Interface
- 1 x 10/100/1000 Ethernet Interface

Physical Specifications

- Dimensions: 290mm (W) X 81.7mm (L) X 223mm (H)
- Weight: < 4.5kg

Technical Specifications

- PowerPC Computing Processor
- 64 MB Boot Flash Memory
- RTC/ETC/WDT
- Power Specifications
 - Input: 28 VDC
 - Power Hold-Up For Short Power Interrupts
 - Power Consumption: < 55W
- Software Specifications
 - Operating System: Integrity-178B RTOS

Environmental Conditions

- Operational Temperature and Altitude: -40°C/+55°C, 35.000 ft
- Storage Temperature: -55°C / +85°C

Qualifications

- MIL-STD-704
- MIL-STD-810 / DO-160
- MIL-STD-461

