

UKB-501

FLIGHT CONTROL COMPUTER

RTCA DO-178B

CERTIFIABLE BSP AND DRIVER SOFTWARE

RTCA DO-254

CERTIFIABLE HARDWARE

MODULAR AND OPEN
SYSTEM ARCHITECTURE





UKB-501

FLIGHT CONTROL COMPUTER

UKB-501 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.

UKB-501 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 UKB-501 provide reliable and safe operation during the mission.

Rugged, lightweight and conduction-cooled UKB-501 hardware is designed to operate in tough airborne environment.

General Specifications

- RTCA DO-254 Certifiable Hardware
- RTCA DO-178B Certifiable Software
- COM Express Form Factor
- BSP and Driver Software for Real-Time Operating Systems with Built-In Test Capability
- To be used in ANKA-S UAV and other fixed and rotary wing airborne platforms.
- Cooling Method: Conduction cooled thru chassis

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 : < 60W
- Software Specifications
 - Operating System: Integrity-178B RTOS

Interfaces

- 8x OPEN/GND Discrete Input, 8x OPEN/GND Discrete Output
- 4 x MIL-STD-1553B Interface
- 13 x RS-422/RS-485 Interface (2400 - 230400 baud rate)
- 3 x CAN 2.0 A&B CANBus Interface (100Kbit/sec - 1Mbit/sec)
- 8 Rx and 4 Tx ARINC 429 Interface (12.5 Kbps - 100 Kbps)
- 4x software configurable Synchronous / Asynchronous RS-422 Interface (2400 - 230400 Baud Rate)
- 1 x 10/100 Ethernet Interface
- 1x 10/100/1000 Ethernet Interface

Qualifications

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

Physical Specifications

- Dimensions: 290mm (W) X 81.7mm (L) X 223mm (H)
- Weight : < 4,5kg