

Embedded computers for Avionic applications

Air Cube



DO-254
DO-178C



The Air Cube embedded computer is using COTS and custom electronics and can be certified DO254. The computer is using modules architecture with ARM or Intel® core processors. I/Os are defined according to customer requirements.

Lightweight aluminium construction with convection cooling dissipation powered by ARINC600 avionic rack.

Features

- ◆ 2 or 4 MCU (ARINC 600)
- ◆ Lightweight Aluminium construction
- ◆ Air-cooled design for convection cooling
- ◆ Integrated Front Panel with folding handles
- ◆ Removable front, rear and side panels for easy access

Available configuration

- ◆ Intel® core or ARM processors
- ◆ Extractible 256 GB SSD
- ◆ Multi avionic I/Os (Arinc429, Arinc717, RS- 232/422/485, discrete I/Os)
- ◆ Internal Gigabit Ethernet Switch
- ◆ Linux OS
- ◆ 18-36 VDC input power



Typical applications

- ◆ Mission computer
- ◆ Network management
- ◆ Data acquisition, processing and analysis
- ◆ Airborne maintenance computer
- ◆ IFE/IFC connectivity
- ◆ Video / Graphic compression
- ◆ Display / Console management



Technical information

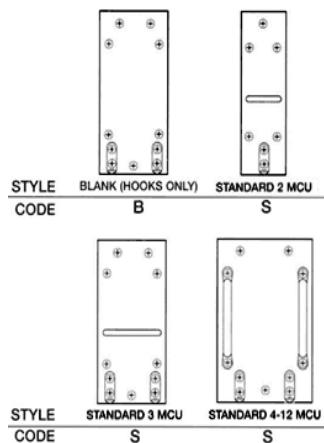
Form Factor	2MCU or 4MCU ARINC600
Processor	Intel® or ARM up to 2GHz
Boot Device	Compact Flash, Solid State Drive, USB
Discrettes	Discrete inputs & outputs
Avionic buses	ARINC 429, ARINC 717 interfaces
Serial I/O	Support for RS-232/422/485 Physical Interface
Storage	Solid State Drive(s) up to 2TB
Network	Up to 10 x GB Ethernet external ports L2/L3 managed switch
Front Panel Maintenance Port	Status leds available on Front panel VGA, USB, RS232 within D38999 connector
Power	18 - 36VDC, power Hold-up time
O/S	Linux® or certifiable OS (PikeOS®)
Environment	Cooling-sealed convection Air-cooled Qualified to RTCA DO-160, compliant to RTCA DO-254 DAL D
Weight	4 kg (2MCU) 6 kg (4MCU)

I/Os are defined according to customer requirements

ARINC form factor

ARINC	W	H	L
2 MCU	2.25	7.62	12.675
3 MCU	3.56	7.62	12.675
4 MCU	4.88	7.62	12.675
5 MCU	6.19	7.62	12.675
6 MCU	7.50	7.62	12.675
7 MCU	8.79	7.62	12.675
8 MCU	10.09	7.62	12.675
9 MCU	11.39	7.62	12.675
10 MCU	12.69	7.62	12.675
11 MCU	13.99	7.62	12.675
12 MCU	15.29	7.62	12.675

Front Plate



Rear Connectors

