

Airborne High Power Computer

VULCAIN



Open VPX multiple core processing computer

The High Power ATR rugged computer is able to dissipate up to 400W by a combination of air-forced and conduction-cooled technology. This computer is compliant with most demanding applications for high power computing or FPGA signal processing, such as Radar & sonar processing or ELINT/COMINT front end.

Features

- ◆ ¾ ATR low depth (other dimension on demand)
- ◆ Lightweight aluminum construction
- ◆ Conduction cooled board within forced air cooled chassis
- ◆ Removable top cover for equipment mounting
- ◆ Integrated front panel with folding handles, mounting hooks, connectors, power switch...
- ◆ Suitable for airborne electronics, high tolerance product

Architecture Example

- ◆ 400W Power supply
- ◆ Open VPX topologies multiple core processing
- ◆ High speed CPU links - PCIe with VxFabrics
- ◆ Up to 5 core i7 processing boards
- ◆ Signal processing through FPGA and DSP
- ◆ 10 GbE and 1GbE Ethernet switch



Technical Information	
Form Factor	¾ ATR – low depth
Processing	Core i7 multiple core, Multiple SBC capabilities, up to 5
O/S	Linux, Windows
Boot Device	Compact Flash, Solid State Drive, USB
Storage	Solid State Drive(s) 1 Fixed
SSD Capacities	Up to 4TB
Network	Up to 2x10 GbE & 12x100GbE Ethernet ports, L2/L3 switches
Power Supply	28 VDC 400W, with up to 50msec Hold-up
Environment	DO-160 certified
Weight	12kg
Options	
Signal processing / Acquisition	Various FPGA and DSP boards
Avionic / Vetronics ports	MIL-STD1553, ARINC429, CANbus, RS links, discretes
Video acquisition & compression	3G-SDI, H264/H265 compression
Graphics	GPGPU capability upon request



Signal data processing computer

← Example of
GACI Customization



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