

AMC

ADVANCED MODULAR COMPUTER

FIGHTER JET PLATFORM
QUALIFIED

REDUNDANT
OPERATION

MISSION AND DISPLAY
MANAGEMENT





AMC

ADVANCED MODULAR COMPUTER

Advanced Modular Computer (AMC) is the processing center of the Integrated Fighter Avionics System. Two AMC units can be equipped to form a dual redundant tactical mission management structure. AMC is based on multiple, high performance quad-core PowerPC family processors. AMD Radeon based graphical processing units can support up to seven digital display generation.

AMC has modular system architecture. AMC's expandable hardware and software design allows adapting its performance and interfaces according to the platform or application needs.

General Specifications

- Avionic System Management
- Aircraft Interface Management
- Operator Interface Management, Symbology Generation and Multi Function Display Management, Head Up Display Management
- Communications and Identification Management
- Navigation Management
- Tactical Surveillance Management
- Stores Management, Weapons Release, Launch and Jettison Management, Weapons System Diagnostics
- Emergency/Auxiliary Operations and Zeroization Management
- Mission Planning, Mission and Test Data Upload /Download
- Moving Map including Synthetic Vision(3D Terrain), Digital Terrain System

Technical Specifications

- Rugged Forced Air Cooled Chassis
 - 6 (six) 6U VPX Slots
 - MIL-DTL-38999 Connectors
 - Single Slot 2.5" SATA SSD
- 3 (Three) or 1 (one) phase 115VAC@400Hz Power Input, average 350W Power Consumption
- VITA 46.4 Compliant PCIe Bus Architecture
- VITA 62.0 Compliant Power Supply
- Software
 - Greenhill Integrity 178B RTOS
 - RTCA DO-178B
 - Qualified bsp/driver
 - ARINC 653 RTOS
- Extensive Built In Test infrastructure (Initiated BIT, Power-Up BIT, Continuous BIT)

Interfaces

- MIL-STD-1553B/ MIL-STD-1760D
- Ethernet (10/100/1000)
- ARINC-429
- Serial Ports (RS-232/RS-485/RS-422)
- Display Port Digital Video Out
- Analog Video In/Out
- Discrete In/Out
- Analog In/Out
- Audio In/Out
- W-194 (w-mux)

Qualifications

- Compliant to fighter jet environmental qualification conditions
- MIL-STD-810 / DO-160E
- MIL-STD-704
- MIL-STD-461

Environmental Conditions

- Operating Temperature and Altitude : -55°C to +95°C, 55.000 ft.
- Storage Temperature and Altitude : -55°C to +95°C, 70.000 ft

Physical Specifications

- Dimensions: 374 mm (H) x 199 mm (W) x 235 mm (D)
- Weight: <21 kg

