

# AMC-1000 Military Dual Core PC Airborne, Naval and Vehicles

## **Extended Temperature Range**

AMC-1000 is a miniature military PC computer loaded with **Windows XP Embedded**, and/or **INTIME RMX** for Windows . The computer is used on military planes, Fighters, Helicopters as well as on Autonomous Vehicles and on Naval Vessels. AMC-1000 is tailored to meet special requirements, such as various input output cards, additional serial ports, sound, video, A/D, 1553 bus, ARINC-429 CAN Bus etc'.

## **Base Line Configuration**

- ◆ Dual Core ATOM D510 (2 Cores 4 Threads).
- ◆ L2 Cache 1MB.
- ◆ 8-128GB Flash Disk.
- ◆ DRAM - 1GB
- ◆ 4 x RS-232 4 x RS-422.
- ◆ VGA
- ◆ 4 x USB 2.0 (or 2 x PS2 + 2 x USB 2.0)
- ◆ 4 x 100 BaseT LAN ports
- ◆ Output discrete signals  
8 outputs of discrete signals via SI2308DS MOSFET. Each of the outputs is capable of sinking Continuous load current ratings to 800 mA @71°C, withstanding 60V in the off state.
- ◆ Input Discrete Signals  
4 x TTL discrete signals.  
4 x HV (28VDC) Isolated discrete signals.
- ◆ 1PPS interrupt time sync.
- ◆ Power Supply: 9-36VDC per MIL-704E, MIL-STD-1275B
- ◆ Environmental Conditions per MIL-STD-810F
- ◆ EMI/RFI per MIL-STD-461E
- ◆ Standard temperature range  
-20°C to +71°C,
- ◆ Extended temperature range from  
-40°C to +71°C,



## **Dimensions & Weight**

135x100x250 (WXHXL) [mm], 5.5Lbs

## **Options**

- ◆ RS-170, S-Video AUDIO Recording & Streaming via TCP/IP (MPEG4, H.264).
- ◆ Video Out—RS-170 & VGA
- ◆ MIL-STD-1553 - 1 or 2 channels with BC, RT, Monitor.
- ◆ ARINC-429
- ◆ A/D CONVERTER
- ◆ CAN Bus.

## **Software development**

AMC-1000 is loaded with a development environment, drivers and code examples.

## **Test Cables**

BES offers a set of test cables that could be used in software lab to run the computer during development.

**ETI Services Inc. [www.military-computers.com](http://www.military-computers.com) CAGE CODE: 1PZ92**

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## **Environmental Conditions**

### **Temperature:**

The AMC-1000 will not be damaged or affected by the effects of ambient air temperature as follows: Operating: The AMC-1000 shall meet performance requirements specified herein after exposure to temperatures from -20° to +71°C or -40° to +71°C.  
Non-operating: (Storage/transportation) from -54° to 85°C.

### **Relative humidity**

Operating: 95% relative humidity (RH) with no condensation.  
Non-operating: 95% RH.

### **Vibration**

According to MIL-STD-810F for Airborne, Helicopter or Vehicle environment.

### **Shock**

According to MIL-STD-810E, 40g saw tooth for duration of 11msec.

### **Fungus**

The AMC-1000 is non-nutrient to fungus growth according to the requirements in MIL-STD-810F.

### **Sand and Dust**

The AMC-1000 shall operate as specified herein while and after being subjected to sand and dust as encountered in dry arid areas according to the requirements of MIL-STD-810F.

## **Thermal Design**

The cooling of the components on the AMC-1000 PC cards, Power Supply and the Pentiums chip is accomplished by conduction through the aluminum enclosure of the unit.

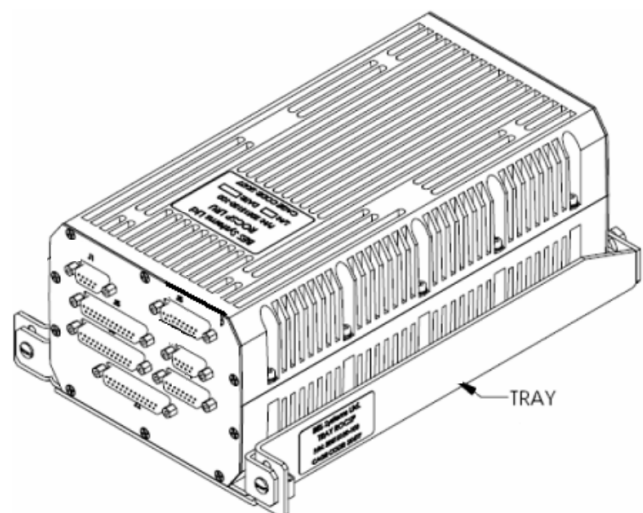
## **External Connectors**

External connectors are used for interfacing with the subassemblies or equipment and are in accordance with requirement of MIL-STD-454. Connector mating bodies are keyed, and keyed locations are varied to prevent improper installation.

## **Electromagnetic Interference:**

AMC-1000 complies to MIL-STD-461E.

- ◆ CS101 Conducted Susceptibility, Power Leads, 30HZ-150KHz.
- ◆ CE101 Conducted Emissions, Power Leads, 30Hz - 10kHz
- ◆ CE102 Conducted Emissions, Power Leads, 10kHz - 10MHz
- ◆ RE102 - Radiated Emissions, 10 KHz to 18 GHz



**AMC-1000 with a tray,  
for fast installation and removal**

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