SATA Mass Storage Single-Width AdvancedMC™ Module

RoHS
2002/95/EC

APPLICATIONS

The AM 600/10x is a single-width full height (or mid-height) AdvancedMC™ mass storage module. The module supports either a SATA hard disk drive or two CompactFlash® drives. The AM 600/10x is designed in compliance to AMC.0 and AMC.3 Type S2 (2x SATA on Ports 2 and 3). The AM 600/10x is compatible with Concurrent Technologies AMC processor modules and supports full hot swap and IPMI capabilities. The AM 600/10x is designed for use in AdvancedTCA® or MicroTCA™ applications in the telecommunications, scientific, and defense markets. Application examples include mass storage data servers, database management, or local system storage.

HIGHLIGHTS

- Single width, full-height (or mid-height) Advanced Mezzanine Card mass storage module:
  - compliant to AMC.0 AdvancedMC base specification
- Support for one SATA 2·5 inch hard drive
  - compliant to AMC.3 AdvancedMC specification for storage
  - hard disk SATA connection on Port 2
  - option to support 2 x CompactFlash™ drives or 2 x Hitachi GST Microdrives™ on Ports 2 & 3
- Compatible with RAID 0 and RAID 1 systems
  - higher RAID number systems can be supported with multiple boards
  - RAID operation is system dependent

- IPMI management support with E-Keying.
- Compatible with Concurrent Technologies' AMC processor boards
- Extended temperature versions available:
  - -25°C to +70°C (E-Series)
  - -40°C to +85°C (K-Series)
  - CompactFlash version only
- Double-width version available:
  - see separate AM 600/20x datasheet
- Supported operating systems depend on the AMC processor board used

Mass Storage
- Serial ATA150:-
  - → AMC.3 Type S2
  - → transfer rate up to 150 Mbytes/s
  - → 2 x SATA connections on Ports 2 & 3
- compatible with Raid 0 and Raid 1 systems
  - → higher Raid number systems can be supported with multiple boards
- supports 1 x SATA Hard Disk or 2 x CompactFlash™/Hitachi GST Microdrives™
  - → 2.5" SATA drive bay on Port 2
  - → sales option converts SATA to ATA for CompactFlash/Microdrive operation

Compatible AMC Boards
- designed to interface to:-
  - → AM 110/10x - Intel® Core™ 2 Duo
  - → AM 100/20x - Dual-Core Intel® Xeon®
  - → PR AMC/33x - Intel® Pentium® M

IPMI
- IPMI Version 1.5 according to AMC.0
- on-board BMC (Baseboard Management Controller)
- supports 8 Kbytes of non-volatile memory
- IPMI management support with E-Keying.

Software Support
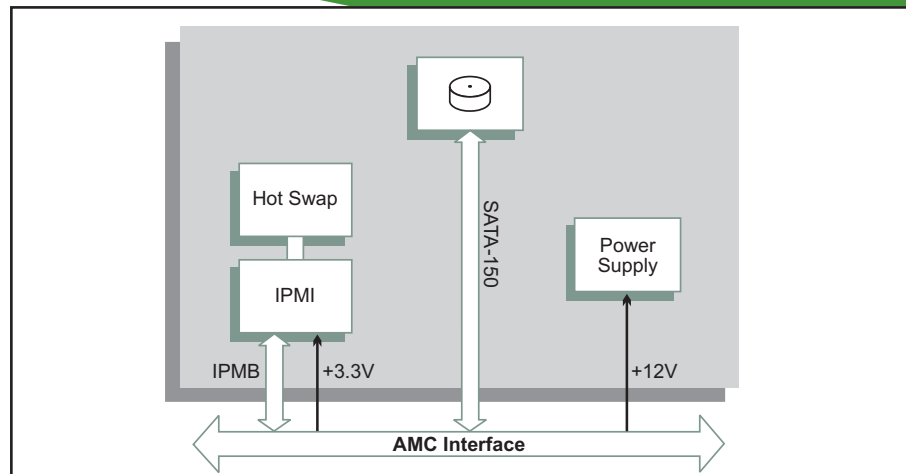- depends on the AMC processor board

Electrical Specification
- +3.3V@0.1A; ±5%
- +12V@0.5A; ±2V (max, at startup)
- +12V@0.2A; ±2V (typical, with drive active)
- all current specifications dependent on hard disk drive fitted
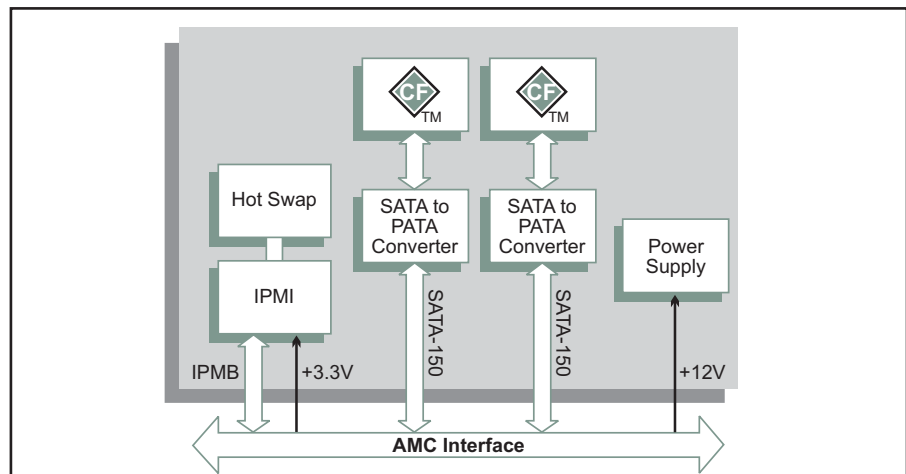
Environmental Specification (Hard Disk Version)
- all specifications dependent on hard disk drive
- +5°C to +55°C (operating)
- 10% to 80% Relative Humidity, non condensing (operating)
- -25°C to +65°C (storage)
- 10% to 90% Relative Humidity, non condensing (storage)
- operating change rate <10°C/ hour
- storage temperature change rate <20°C/ hour

Environmental Specification (Compact Flash Version)
- operating temperatures:-
  - → 0°C to +55°C (N-Series)
  - → -25°C to +70°C (E-Series)
  - → -40°C to +85°C (K-Series)
- 10% to 90% Relative Humidity, non condensing (operating):-
  - → K-Series includes humidity sealant
- -40°C to +85°C (storage)
- 10% to 90% Relative Humidity, non condensing (storage)
- operating change rate <10°C/ hour
- storage temperature change rate <20°C/ hour

AM 600/102 with SATA drive

AM 600/102 with dual CompactFlash drives

Mechanical Specification
- compliant with AMC.0 Advanced Mezzanine Card Base Specification:-
  - → single-width module: 7.1 inches x 2.9 inches (181mm x 73.5mm)
- options for panel height:-
  - → full height panel: 1.1 inches (29mm)
  - → mid-height panel: 0.7 inches (19mm)
- also available as a double width board:-
  - → see separate AM 600/20x datasheet

ORDERING INFORMATION

Order Number	Product Description (Hardware)
AM 600/101-1y	1 SATA Hard Disk Drive kit, single-width full-height Mass Storage AMC Module
AM 600/102-49	2 CompactFlash/Microdrive sockets, single-width full-height Mass Storage AMC Module
AM 600/301-1y	1 SATA Hard Disk Drive kit, single-width mid-height Mass Storage AMC Module
AM 600/302-49	2 CompactFlash/Microdrive sockets, dual width mid-height Mass Storage AMC Module

Replace the order number suffix (y) with selections from the following:
where y = Hard Disk Drive fitted

0 - typical capacity HDD
5 - larger capacity HDD
7 - HDD mounting kit only

For extended temperature, E or K-Series with CompactFlash, please contact your local sales office