

MIC-5401

Advanced Mezzanine Card SAS/SATA Storage AMC

NEW



Features

- Single-width mid-size AMC form factor
- SAS or SATA 2.5" hard disk drive compatible
- Hot-swap capable
- AdvancedTCA and MicroTCA compatible
- Dual port SAS drive support
- 3.0 Gb/s interface speed support
- Two thermal sensors to monitor on-board temperatures
- System management compliant to PICMG3.0 R2.0, AMC.0 R2.0, AMC.3 R1.0, and IPMI1.5
- Power-on hour counter
- HPM.1 compliant firmware upgrade and rollback support through IPMB



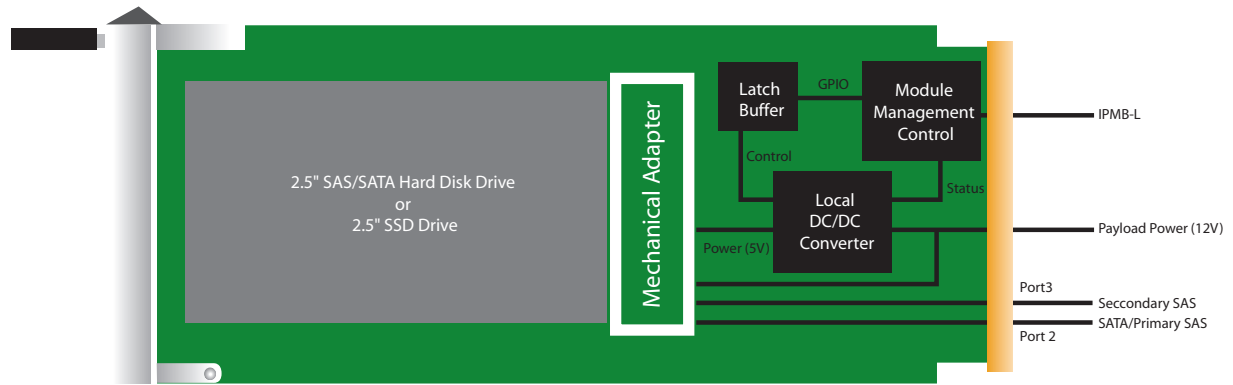
Introduction

The Advantech MIC-5401 is a single-width/mid-size Advanced Mezzanine Card (AMC) designed to support a 2.5" SAS or SATA hard disk drive to work as an enterprise storage module on an ATCA platform or in a MicroTCA shelf. The 2.5" hard disk drive is connected to the AMC port 2 (SAS and SATA) and port 3 (SAS only) according to the AMC.3 specifications. Dual port SAS drives may be used on the MIC-5401 to increase the interface bandwidth of failover support between dual hosts in fault tolerant environments. Like all other standard AMC modules, an IPMI-based module management controller (MMC) is also implemented on the MIC-5401 to serve as a communication interface to the Carrier Management Controller on an ATCA platform, or to the MicroTCA Carrier Management Controller on the MicroTCA Carrier Hub in a MicroTCA shelf. As a local IPMI controller on the AMC, it manages all hot-swap activities, E-keying, and hardware health monitoring such as voltages (12V, 5V, and management power 3.3V) and on-board temperatures (including hard disk drive's ambient temperature). The MIC-5401's mechanical design is optimized for a maximum of shock and vibration durability combined with a user- and service friendly mounting process for the disk drive.

Specifications

| | | |
|--------------------------|---|---|
| AMC Module | Single width, mid-size form factor (full-size front panel available as an option) | |
| Storage Device Supported | 2.5" SAS or SATA hard disk drives, or 2.5" SATA SSD (solid state drive) | |
| System Management | PICMG 3.0 R2.0, AMC.0 R2.0, and IPMI 1.5 compliant Redundant firmware images based on Pigeon Point Systems' solution supporting HPM.1 compliant upgrades and manual/automatic rollback | |
| Monitor | Power-on hour counter Voltage: 12 V, 5 V, and 3.3 V management power Temperature: two on-board locations | |
| Watchdog | AMC compliant watchdog | |
| Thermal Sensor | LM75/DS75 (x2) | |
| Environmental Conditions | Temperature and humidity (operating) | GR-63-CORE, Issue 3, R4-7 (-5° C ~ 55° C; 5% ~ 95%RH) |
| | Temperature and humidity (non-operating) | GR-63-CORE, Issue 3, R4-7 (-40° C ~ 70° C; 95%RH) |
| | Altitude | GR-63-CORE, Issue 3, R4-8, R4-9, R4-10, R4-11, R4-12 (-60 m ~ 4000 m) |
| | Vibration (operating) | IEC 60068-2-64 (0.002G ² /Hz, 1 Grms, 5 ~ 500 Hz) |
| | Vibration (non-operating) | IEC 60068-2-6 (2 G, 5 ~ 500 Hz, 1 Octave/min) |
| | Shock (operating) | IEC 60068-2-27 (half-Sine, 10 G, 11 ms) |
| Regulatory | Conformance | UL94V0, FCC Class B, CE, RoHS & WEEE compliant |
| | NEBS Level 3 | Designed for GR-63-CORE and GR-1089-CORE |
| Compliance | Standards | PICMG 3.0 R2.0, AMC.0 R2.0, AMC.3 R1.0, IPMI1.5, and SCOPE AdvancedMC Hardware Profile V1.0 |

Block Diagram



Ordering Information

| Model Number | Front Panel |
|----------------|-------------|
| MIC-5401-0000E | Mid-Size |

Note:

1. AMC modules with pre-installed hard disk or solid state disk drives are available on request. Please contact Advantech sales representative for further detail.
2. Full size front panel is available on request.