AMC Storage

AdvancedMC Storage Modules

Embedded Computing for Business-Critical Continuity™

Provides rotational and solid state disk storage functionality for telecom applications

- Designed for NEBS/ETSI compliance
- Storage capacities from 32GB to 500GB
- SATA and SAS storage protocols supported
- Mid-size form factor
- AMC.0 R2.0 front panel compliant
- AMC.3 R1.0 storage signaling option
- Support for Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.)
- Hot swappable
- Integrated IPMI
- Low power

The Advanced Mezzanine Card (AdvancedMC™) standard is a collaboration by major telecom OEMs and suppliers to create an optimal expansion platform for AdvancedTCA® (ATCA®), MicroTCA®, or proprietary baseboards and systems that addresses major bandwidth, availability, field upgradeability, cost, scalability, management and interoperability issues.

The AMC storage module line from Emerson Network Power is built upon a drive carrier module for AdvancedTCA platforms designed to provide hard disk drive (HDD) and solid state disk (SSD) storage functionality for telecom applications. While HDD-based storage solutions provide cost-effective, high capacity storage for extended, extreme, and enterprise duty environments, SSD-based storage solutions outperform traditional rotating hard drives and are superior in terms of reliability, availability, and durability – providing an ideal range of storage solutions for AdvancedTCA platforms that require NEBS, rugged storage with extended environmental characteristics and increased performance.

Available front panel options include mid-size AdvancedMC (AMC) modules. The modules are AMC.0 R2.0 compliant and use serial storage signaling defined in AMC.3.

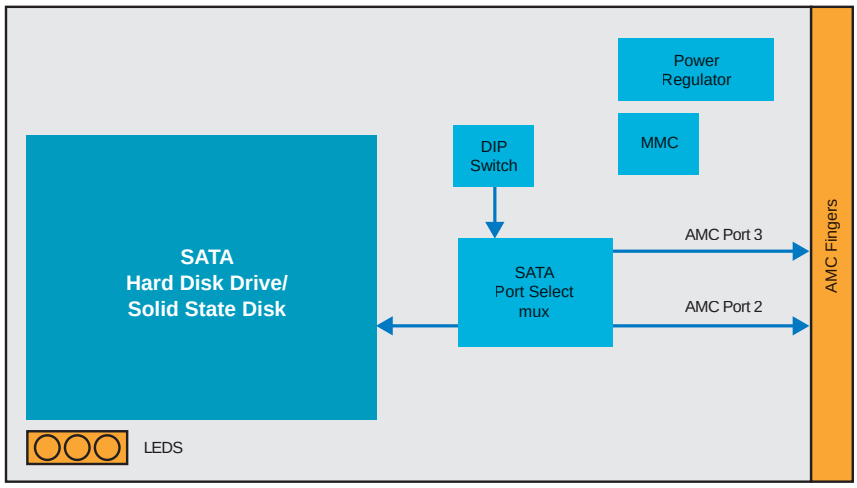
For SATA drives, a port selection switch is used to route traffic over either AMC Port 2 or Port 3 for even greater deployment flexibility. AMC Port 2 is the primary interface for SAS protocol drives and Port 3 is the secondary interface supporting enterprise class storage architecture for redundancy and failover.

RoHS 6/6 COMPLIANT

AdvancedMC™

EMERSON™ Network Power

Block Diagram



Specifications – AMC-S303-500G

TECHNICAL SPECIFICATIONS

- Capacity: 500GB
- Protocol: SATA
- Rotational speed: 7,200 RPM
- Seek time track/track (T/T) = 1.0 ms
- Seek time average (read): 10.5 ms
- Buffer size: 16MB
- Typical power: 2.3W

LED STATUS INDICATORS

- ACT (Power On, In Service)
- OOS (Out of Service)

STANDARDS COMPLIANCE

- AMC.0 R2.0 (AdvancedMC Mezzanine Module)
- AMC.3 R1.0 (AdvancedMC Storage)

PHYSICAL CHARACTERISTICS

- PCB dimensions: 7.11" x 2.89"
- Single mid-size form factors

ENVIRONMENTAL

- Operating temperature: 5° C to +55° C
- Storage temperature: -40° C to +65° C

Specifications – AMC-S502-32G

TECHNICAL SPECIFICATIONS

- Capacity: 32GB
- Protocol: SATA Solid State
- Average latency: 1 ms
- Max. read bandwitch: 200MB/s
- Max. write bandwitch: 200MB/s
- Burst data rate: 300MB/s
- Maximum power: 5.0W

LED STATUS INDICATORS

- ACT (Power On, In Service)
- OOS (Out of Service)

STANDARDS COMPLIANCE

- AMC.0 R2.0 (AdvancedMC Mezzanine Module)
- AMC.3 R1.0 (AdvancedMC Storage)

PHYSICAL CHARACTERISTICS

- PCB dimensions: 7.11" x 2.89"
- Single mid-size form factors

ENVIRONMENTAL

- Operating temperature: -5° C to +55° C
- Storage temperature: -40° C to +65° C

Ordering Information

Marketing Number	Description
AMC-S303-M-500G	Storage AMC with 500GB HDD – High Durability – SATA
AMC-S502-M-32G	Storage AMC with 32GB SSD – SATA

Regulatory Compliance

Item	Description
Designed to comply with NEBS	GR-63-CORE, NEBS Physical Protection, Level 3
	GR-1089-CORE, Electromagnetic Compatibility and Electrical Safety — Generic Criteria for Network Telecommunications Equipment. Level 3, Equipment Type 2
Designed to comply with Acoustic	ETS-300-753, Equipment Engineering (EE); Acoustic noise emitted by telecommunications equipment
EMC	EN-300-386 Electromagnetic compatibility and Radio spectrum Matters (ERM); telecommunication network equipment; ElectroMagnetic Compatibility (EMC) requirements, Telecommunication equipment room (attended)
	FCC 47 CFR Part 15 Subpart B (US), Class A
	EMC Directive 89/336/EEC (EU)
	AS/NZS 3548 (Australia/New Zealand), Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
	VCCI Class A (Japan), Voluntary Control Council for Interference by Information Technology Equipment
Designed to comply with these safety standards	Compliance to UL/CSA 60950-1, EN 60950-1 and IEC 60950-1 CB Scheme. Marked with U.S. NRTL, Canadian Safety and CE Mark. Safety of information technology equipment, including electrical business equipment
	ETS 300-132-2 Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 2: Operated by direct current (dc)
RoHS/WEEE compliance	DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
	DIRECTIVE 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on waste electrical and electronic equipment (WEEE)

SOLUTION SERVICES

Emerson Network Power provides a portfolio of solution services optimized to meet your needs throughout the product lifecycle. Design services help speed time-to-market. Deployment services include global 24x7 technical support. Renewal services enable product longevity and technology refresh.

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