SB AMC68™
SAS Disk Drive Module

DATASHEET

Product Highlights

- Dual port AMC.3 SAS storage signaling
- One integrated SAS disk, 10K RPM
- Wave shape and adjust SAS signals
- Disk Activity LED
- Mid or full height front panels

Key Applications

- AMC storage for *Micro*TCA
- ATCA, In chassis embedded storage systems requiring high performance
- Enterprise SAS storage
- Rugged, high capacity, high throughput, mission critical requirements

Features

- One Integrated 2.5" SAS hard drive
- Dual Port SAS disk support
  - AMC port 3, primary data path
  - AMC port 2, secondary data path
- Capacity options 146 , 300 GB
- Serial burst data rate 3.0Gb/s
- Front panel disk activity LED
- S.M.A.R.T support
- Hot Swappable
- Integrated IPMI, Rev 1.5, 2.0
- RoHS Compliant
- Programmable SAS link parameters
- AMC.0 rev 2 front panel LED design
- AMC.3 rev 1, storage signaling option

SAS Disk Drive Module

The **SANBlaze SB-AMC68** is a second generation AdvancedMC disk module for AdvancedTCA or MicroTCA systems. This highly flexible AMC card accommodates one 2.5” SAS disk drives – with multiple capacity options to meet your specific project needs.

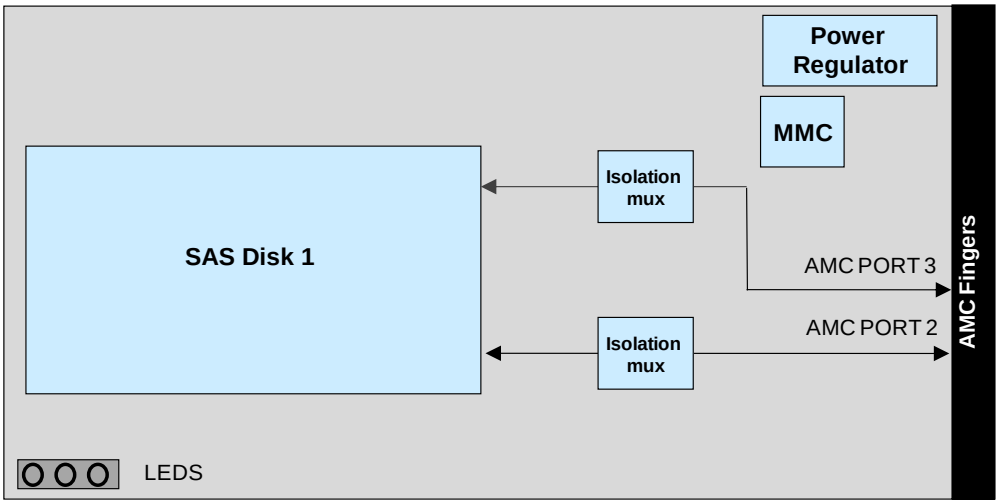
The module boasts several unique features intended to help embedded systems designers address both thermal and signal integrity design challenges associated with in-chassis ATCA and MicroTCA applications.

Users may choose to include a custom heat sink, which improves the chassis’s ability to remove heat and cool the SAS disk. With proper airflow, AMC carriers featuring the heat sink will lower the average operating temperature of the SAS disk and increase MTBF.

The SB-AMC68 also incorporates new signal integrity ‘tuning’ circuits to adjust and optimize the high speed SAS serial links to better tolerate imperfections in µTCA backplanes; the wave shape adjustments include transmit pre-emphasis, output swing, receiver equalization and can be applied individually to AMC Port-2 and Port-3; If needed, custom settings are permanently stored on non-volatile flash on the module.

Available front panel options include full or mid height (MH) Advanced Mezzanine Card (AMC). It incorporates an MMC to monitor and report temperature and voltage statistics. The module is AMC.0 rev 2.0 compliant and uses the serial storage signaling defined in AMC.3.

Block Diagram:



Technical Specifications:

SB AM68	SAS DISK SPECIFICATIONS		MANAGEMENT
Capacity:	146 or 300 GB	500GB	Intelligent Platform Management Controller (IPMC) Dual Redundant IPMB A/B Interfaces E-Keying Features
Seek Time (track to track)	0.2/0.4 ms (Read/Write)	0.8/1.0ms (Read/Write)	
Average (read):	4.0ms	4.16 ms	
MB/s Max sustained	129MB	95MB/s	**CERTIFICATIONS**
Rotational speed	10,000 RPM	7200 RPM	FCC Class A, VCCI, CE Designed for safety compliancy: IEC60950, EN60950 EN55022, EN50082
Buffer size	16MB	16MB	
Front panel activity LED	AMC power and I/O activity AMC Failure / Out of Service AMC Hot Swap		
Environmental Conditions			**AMC CONNECTOR**
Operating Temperature	5ºC to +55ºC		AMC.3 , rev. 1 Compliant IPMP_L Interface between the carrier and AMC
Storage Temperature	-40ºC to +70ºC		
Relative Humidity	5%-95% (Operating)		
Power typical	12 W (typical), 17.1W spin up		

Ordering Information:

SB-AMC68M146

Base Part Number	Front Panel Height Designation	Drive Size Giga Byte (GB)	Shipping option
SB-AMC68	**M= mid** **F= full**	**146, 300, 500**	blank

For more information please visit the SANBlaze web site at: www.sanblaze.com
or send email info@sanblaze.com.

SANBlaze is a leading provider of storage solutions for embedded systems, delivering high performance enterprise storage technologies and functionality to the embedded computing market. Our AMC, PMC, ATCA and cPCI board level storage solutions provide maximum design flexibility, ease of integration and cost effectiveness.

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