SB-AMC59™

Quad Gigabit Ethernet Module

DATASHEET

Product Highlights

- Four 1000Base-T ports (RJ45)
- AMC.1 PCI express x4 (Gen2, 5GT/s)
- Link/Speed/AMC LEDs
- Mid or Full height AMC form factor

Key Applications

- Slot constrained ATCA blades
- uTCA or ATCA applications
- LAN aggregation functions
- iSCSI boot

Features

- AMC.0 R2.0 front panel compliant
- AMC.1, PCIe signaling
- PCI Express, x4, 2.5 or 5.0MT/s
- 4 Ports 1Gb Ethernet, for CAT5 copper
- IEEE 802.3ab Auto-Negotiation support
- IEEE 802.1q (VLAN)
- IEEE 802.3ad (Link Aggregation)
- IPv4 and IPv6 support
- On-chip receive/transmit buffers (48kB)
- TCP and UDP checksum offload
- TCP segmentation offload
- Jumbo frame support (up to 9kB)
- PXE boot (Preboot eXEcution)
- iSCSI remote boot support
- Link/Speed LEDs for all LAN ports
- Integrated IPMI, Rev 1.5x
- Customizable FRU data, OEM Labeling

Regulatory

- RoHS 6/6
- IEC60950, EN60950
- EN55022, EN50024
- FCC, VCCI, EN5022 (Class A)

SB-AMC59M

AdvancedMC™

4 Ports: 1Gb Ethernet

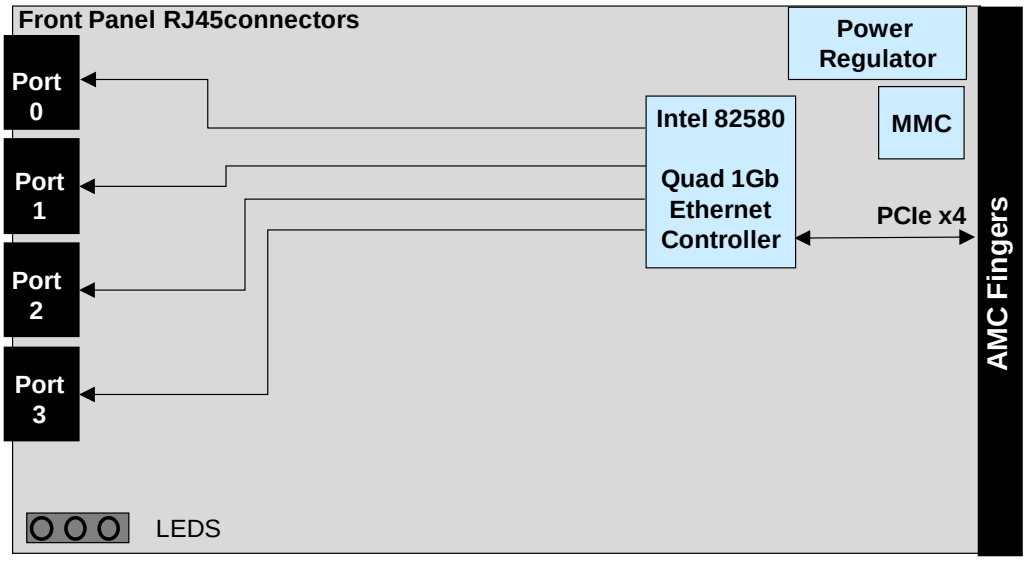
The SANBlaze SB-AMC59 is a full or mid-height AMC module that features four (4) ports of 1Gb Ethernet ports.

Each LAN port provides a fully independent Ethernet connection, with independent IP credentials; all ports can simultaneously achieve line-rate operation, supporting 10Base-T/100Base-Tx/1000Base-T link speeds.

Featuring an Intel 82580EB Ethernet controller, the SB-AMC59 boasts numerous performance acceleration features that include wide internal data paths, independent transmit and receive queues, and up to 64 packet descriptors cached on-chip. TCP/UDP/IP checksum offloading, TCP segmentation assist, and large 48 KByte per port on-chip packet buffers ensure your application will attain superior performance and low latency.

The module also conforms to the PCI-express signaling defined in AMC.1. It includes an MMC to manage hot-swap control, monitor numerous on board voltage and temperature sensors, and is fully remotely manageable via IPMI v1.5x protocol.

Block Diagram:



Technical Specifications:

FRONT PANEL CONNECTIONS	MANAGEMENT
Four- 10/100/1000BaseT Ethernet (RJ45)	Memory Management Controller (MMC) E-Keying Features
AMC CONNECTOR	**CERTIFICATIONS**
X1, x4 PCI express , V2.0 (2.5 or 5.0 MT/s) IPMP_L signal interface	FCC Class A, VCCI, CE Designed for safety compliancy: IEC60950, EN60950 EN55022, EN50082
OS SUPPORT	**POWER**
Linux, Windows	4.4W max
ENVIRONMENTAL CONDITIONS	**LEDS**
Operating Temperature 0ºC to +70ºC	AMC Blue HS (hot swap), AMC LED2 Green ACT (active) AMC LED 1 Red OOS (Out of Service) Link and Speed LEDs for all Ethernet ports

ORDERING INFO

Part number*	Subassembly model	Description
SB-AMC59M	600-059001	Quad 1GE, Mid-height panel
SB-AMC59F	600-059001	Quad 1GE, Full-height panel

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

SANBlaze Technology, Inc. is a leading provider of storage, networking and multifunction solutions for embedded systems and a pioneer in SAN Emulation technologies. SANBlaze embedded computing products include a complete ecosystem of ATCA storage blades, AMC and PMC storage and networking controllers and modules and a growing line of multifunction RTMs for ATCA blades. Additionally, the company provides fully configured and integrated ATCA systems and services.

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