

MIC-5203

Advanced Mezzanine Card Quad Gigabit Ethernet AMC



Features

- Intel® i350 Quad Port Gigabit Ethernet Controller
- PCIe x4 Gen.2 host interface
- Quad SFP or RJ-45 connectors
- Compliant with AMC.0 R1.0, AMC.0 R2.0, AMC.1 R2.0 and IPMI v1.5 specifications

Introduction

The MIC-5203 is a low power, quad-port GbE AMC, with copper RJ-45 or fiber SFP pluggable modules. It incorporates the Intel® i350 Quad Gigabit Ethernet controller. The AMC provides a high performance PCIe x4 interface at 5 Gb/s per lane at an outstanding low power dissipation of less than 10W. Support for Intel's offloading and platform enhancement features yields maximum network throughput while preserving valuable CPU cycles for application processing.

The MIC-5203 features an Intel® i350 which provides Intel® Virtualization Technology for Connectivity (VT-c) and Virtual Machine Device Queues (VMDq), helping to reduce I/O bottlenecks, boost throughput, and reduce latency. Where virtualization is required, VMDq improves performance by offloading the data-sorting burden from the virtual machine manager (VMM) to the network controller. The MIC-5203's specialized features include VLAN tagging, stripping and packet filtering; iSCSI, UDP, TCP and IP Checksum offload.

For a maximum of interoperability, the MIC-5203 supports a PCIe x4 (AMC Ports 4..7) host interface. The PCIe reference clock can be supplied over FLCKA or an onboard oscillator for systems which do not supply a PCIe reference clock. The MIC-5203 is compliant with both AMC.0 R1.0 and R2.0 specifications.

Specifications

Controller	Controller	Intel i350 quad GbE MAC/PHY	
	Virtualization technologies	VMDq, VT-c	
	IP	IPv4, IPv6	
	Queues	8RX, 8TX per port	
	Offloading	TCP, UDP, SCTP	
IO	LEDs	AMC FRU LEDs, Network Link, Activity and Speed	
Software	Operating Systems	Linux, Windows	
	Boot	PXE, iSCSI	
Power Requirement		SFP	RJ-45
	Consumption	8.5W (w/o FOTs)	5.5W
Environment		Operating	Non-Operating
	Temperature	0 ~ 55° C (32~131° F)*	-40 ~ 70° C (-40 ~ 158° F)
	Humidity	95 % @ 40° C, non-condensing	95 % @ 60° C, non-condensing
Physical Characteristics	Dimensions (W x D)	180.6 x 73.5 mm; mid-size, single-width**	
	Weight	0.128 kg (0.28 lbs)	
Compliance		AMC.0 R1.0, AMC.0 R2.0, AMC.1 R2.0 and IPMI v1.5	

*Note: Operating temperature depends on actual air flow through the AMC slot.

**Note: Full-size front panel available on request. Pls contact your Advantech sales representative.

Ordering Information

Part Number	Description
MIC-5203-AE	Mid-size GbE AMC with quad SFP interfaces
MIC-5203-BE	Mid-size GbE AMC with quad RJ-45 interfaces