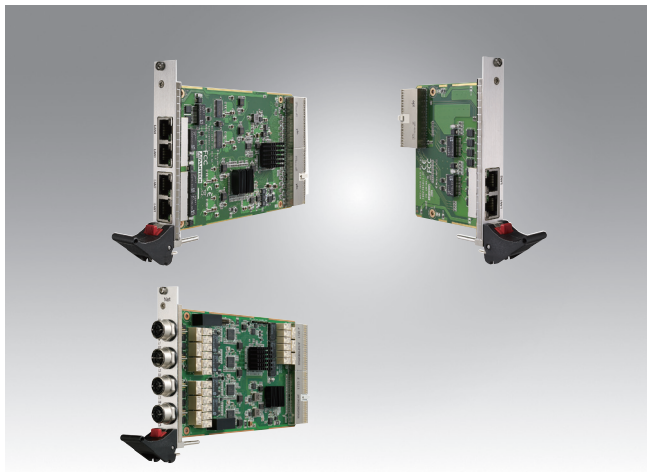# MIC-3958 Ethernet Card

3U CompactPCI® 4 Ports Gigabit Ethernet Card

Features

- Up to 4x i210 Intel Ethernet Controller
- 32bit 33/66MHz PCI or PCIe bus
- Up to 4x RJ45 or X-code M12 connector on front panel
- LAN Bypass and RIO spec reserved per request
- PICMG 2.0 Rev. 3.0

Fully Compliant with **EN 50121-4**   Fully Certified with **EN 50155**   CE   FCC   RoHS COMPLIANT 2002/95/EC

Introduction

The MIC-3958 series, 3U/4HP CompactPCI form factor, is a Gigabit ethernet periperal card equipped with Intel i210 controllers in different SKUs. 2 different kinds of features as MIC-3958A and MIC-3958B series provides four RJ45 or four X-code M12 Gigabit Ethernet ports with two switchable to the rear transition module, both SKUs are routed PCI bus to backplane.

MIC-3958 is designed to meet EN50155 and EN50121-4, with its high capabilities on mechanical, EMC, safety and wide range of environment requirements, it is especially suited for applications in harsh environment like railway and military.

Specifications

Ethernet Interface		- Four 10/100/1000 Base-T interface - IEEE802.3x Support - MIC-3958A/MIC-3958B: 32bit,33/66MHz PCI bus	
Front Panel		- Four standard RJ45 or Four X-code M12 connectors (2 or 4 ethernet interfaces are shared between front and rear board) - LED indicators: LNK:(100Mb/s:Green, 1000Mb/s:Orange); ACT: Green Blink	
Dimension		3U/4HP, 100x160mm - Weight:200g	
OS support		Windows7/10,Vxworks 6.9/7.0, Linux Centos6.5/6.6	
Power Consumption		Test Environment: windows OS run Passmark burn in 10min MIC-3958A/MIC-3958B: 5V/10W	
Isolation Protection		- MIC-3958A: 1KV AC (ethernet signal to chassis ground); 1.5KV AC (ethernet signal to digital ground) - MIC-3958B: 1KV AC (ethernet signal to chassis ground); 1 KV AC (ethernet signal to digital ground) Note: Test <20mA	
Dielectric Withstanding Voltage		- MIC-3958A: 840V AC, chassis ground to digital ground - MIC-3958B:1KV AC, chassis ground to digital ground Note: Test chassis ground to digital ground,<20mA	
Environment		Operating	Non-Operating
	Temperature	-40 ~ 70° C (-40 ~ 158° F)	-40 ~ 80° C (-40 ~ 176° F)
	Humidity	10 ~ 95% @ 40°C, non-condensing	10 ~ 95% @ 60°C, non-condensing
	Shock	3 G, 30ms, each axis three times	
	Vibration	2G rms	

ADVANTECH   **CPCI Boards & Enclosures**

All product specifications are subject to change without notice.   Last updated: 22-Mar-2021

Ordering Information

| | Front Board[5] | | | | | Rear Board |
	Front Panel	Controller	Bus interface	On Board Features	RTM	Rear Panel
MIC-3958A1-S1E[1]	4 x RJ45 Connector,LAN LED[4]	i210	PCI	-	Yes	-
MIC-3958B1-S1E[1]	4 x M12 Connector,LAN LED	i210	PCI	2 x Pair LAN Bypass[2]	By Request[3]	-
MIC-3958R1-S1E	-			-	-	2 x RJ45 Connector,LAN LED[4]

Note:
1. 4 ethernet interfaces share 1 Gbit/s data transfer rate.
2. LAN bypass LED Connect: ACT(Green),Link (Off); Disconnect:ACT(Green Blink),Link (Off).
3. RTM board is based on customer request,1 pair LAN Bypass reserved to RIO.
4. MIC-3958R1-S1E is compatible to MIC-3958A1-S1E, they share two Ethernet interfaces, switchable by on front board jumper "SW1"; The default setting of "SW1"is for 4 ports RJ45 on front board.
5. No accessory M12 cable, please contact local sales for cable spec.

Related Products

CPU board	Description
MIC-3328 Series	3U CompactPCI 3rd generation Ivy bridge Intel® Core™ i3/i7 Processor Blades
MIC-3329 Series	3U CompactPCI Baytrial Intel® Atom™ Low power Processor Blades
MIC-3332 Series	3U CompactPCI 6th generation Skylake Intel® Core™ i7/Xeon E3 Processor Blades

Products Picture

MIC-3958A1-S1E

MIC-3958R1-S1E

MIC-3958B1-S1E