MIC-8101

6U CompactPCI® 10/100 Ethernet Switch

PICMG 2.16

Features

- Full-wire speed on all ports
- VLAN IEEE 802.1Q - ID tagging, 802.1p priority
- Link aggregation
- Packet filtering and port security
- Multicast and broadcast storm control
- GVRP/GMRP VLAN and multicast registration
- DHCP/BootP packet forwarding
- RIPv1, RIPv2 routing, DVMRP, PIM (dense mode)
- Low port latency
- Hot-swappability with LED indication for RSS

CE FCC

Introduction

The MIC-8101 board is a high performance managed switch that supports both Layer 2 and Layer 3 features. This high-performance managed Layer 3 switch with 22 10/100 Mbps Ethernet ports and 2 Gigabit Ethernet ports enables fast connection speeds and flexibility in a 6U CompactPCI board. The in-chassis switch minimizes external wiring and needs no extra rack height, improving density and reliability. The MIC-8101 routes and switches at full wire speed with its non-blocking architecture, along with its sophisticated multicast protocols to limit unnecessary traffic. The console is accessed through a RS-232 serial cable to configure the following management functionalities: SNMP, Telnet CLI and RMON. It provides an in-chassis switch fabric that can operate in a redundant configuration. The PICMG® 2.16 Packet Switching Backplane Specification blends the benefits of CompactPCI with the broad acceptance of Ethernet.

Specifications

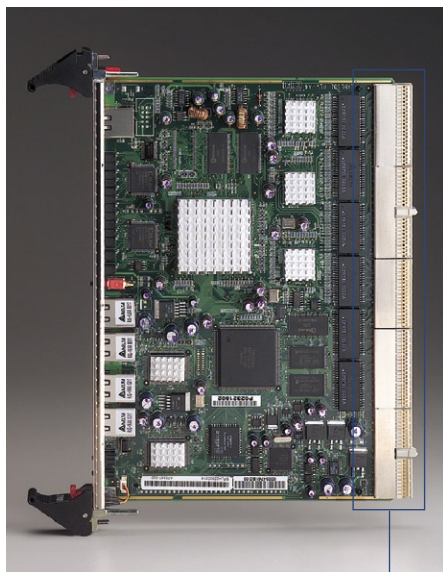| Ethernet	Interface	10Base-T/100Base-TX/1000Base-T		
Front I/O Panel	Connector	10/100 RJ-45 x2 100/1000 RJ-45 x2		
	Serial	1 (RS-232)		
Power Consumption	Typical	+3.3 V	+5 V	+12 V
		6 A	4 A	20 mA
Electrical	Layer 2 Switching Function	22 10/100 Fast Ethernet ports to the mid-plane connectors 2 10/100 Fast Ethernet ports (RJ-45) on the front panel 2 100/1000Base-T Ethernet ports (RJ-45) on the front panel Auto-negotiation function for 10 M/100 M speed, duplex (full and half) and flow-control Auto polarity and auto MDI/MDI-X 8000 entry MAC address forwarding table IEEE 802.3x-compliant flow control support in full-duplex 802.1D Spanning Tree/802.1Q tagged VLAN/802.1p priority GARP VLAN registration protocol		
	Layer 3 Switching Function	Hardware-based Layer 3 IP switching 2000 entry IP address forwarding table RIP-I/II routing protocol IPv4/IGMPv2/DVMRPv3/802.1D frame/DHCP/BootP relay PIM dense mode/IP multi-netting/IP fragmentation Path MTU discovery Wire speed IP forwarding rate		
	Management Capability	RS-232 port for out-of-band management and system diagnosis Telnet remote control console SNMPv1 agent RMON 4 groups-statistics, history, alarm, event Web-based IP filtering on management interface DHCP client Password-enabled		

MIC-8101

1 Industrial Motherboards
2 Industrial Motherboard Chassis
3 PICMG Single Board Computers
4 Industrial Computer Chassis
5 Industrial Computer Peripherals
6 6U CompactPCI Enclosures
7 6U CompactPCI Boards
8 6U CompactPCI I/O
9 6U CompactPCI Accessories
10 3U CompactPCI Systems
11 Internet Security Platforms
12 Network Application Ready Platforms

Specifications Cont.

		Operating	Non-Operating
Environment	Temperature	0 ~ 50 °C (32 ~ 122 °F)	-25 ~ 55 °C (-7 ~ 131 °F)
	Humidity	-	95 % @ 40 °C (non-condensing)
	Vibration (5-500 Hz)	1.0 Grms	2.0 G
Physical Characteristics	Dimensions (W x D)	233.35 x 160 mm (9.2" x 6.3"), 1-slot width	
	Connector	J1~J5	
	Weight	0.7 Kg (1.54 lb)	
Compliance	Standard	PICMG 2.16, R1.0 Packet Switching Backplane Specification PICMG 2.9, R1.0 System Management Specification	
Regulatory	CE	-	
	Safety	UL/cUL 60950, EN/IEC 60950, CB report Scheme	
	Emission	FCC Part 15 (subpart B), EN 55022, CISPR 22, Bellcore GR-1089T	

Ordering Information

Part Number	Description
MIC-8101-A	Single-slot 6U CompactPCI 10/100 Ethernet Switch

Note: MIC-8101 is licensed from Intel® ZT-8101, please refer to Intel web site for more detailed technical information
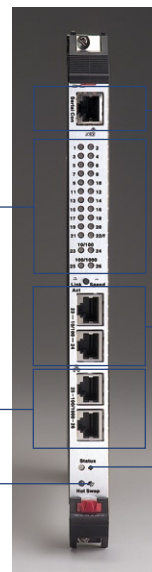
J1~J5

RS-232 serial port for out-of-band management and system diagnosis (Management Serial Port)

LEDs for Ethernet port link, speed, and activity

Two 10/100 Mbps LAN

Two Gigabit Ethernet ports

LED for board status

LED for hot-swap status