

MIC-3081

10U CompactPCI® Enclosure with 8-slot 6U Backplane and Redundant Power Supply (CT Bus and Rear I/O)



Features

- 10U-high enclosure, 19-inch enclosure
- 8-slot 6U CompactPCI backplane
- Supports rear I/O
- H.110 CT bus compliant (PICMG® 2.5)
- 560 W ATX 2+1 redundant power supply
- Hot-swappable fan modules and blowers
- Built-in advance intelligent alarm module/Chassis Management Module
- Device bay accommodates up to three devices

Introduction

The MIC-3081 series CompactPCI is a 10U-high enclosure with eight CompactPCI slots for rackmounting, which provides a flexible, and configurable development platform. It supports an 8-slot backplane H.110 CT bus backplane and rear I/O, designed to speed the implementation of telecom Internet and Industrial automation applications.

Optimal for Cooling Airflow with Hot-swap Fans

A 2U space underneath the card slots accommodates two 163-CFM high-speed fans, to provide forced cooling air into the system. There are also two high-speed blowers on the top for linear air flow to optimize the chassis cooling system operation. All the fans in this chassis are individually hot-swappable, allowing users to replace any of the fans without interrupting the system operation. The fan's tachometer output enables the alarm module to monitor the speed of the fans. A protective circuit has been designed into the fan backplane to reduce spikes and noise during fan hot-swapping. This design allows users to replace new fans safely without turning the system off.

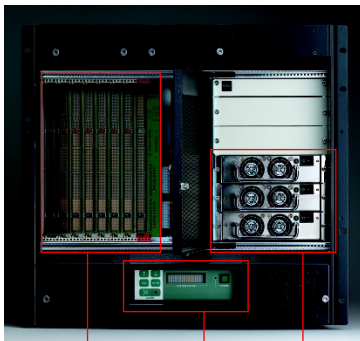
System Fault Detection and Alarm Notification

The MIC-3081 has an optional intelligent chassis management module, the MIC-3924A, to monitor and report internal conditions via SNMP trap, email,

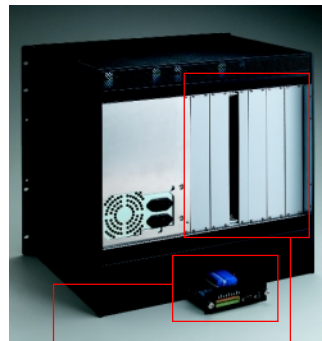
pager and beep sounds. The system's status including CPU (SBC) temperature, system power voltage levels, and fan speeds can be easily checked from a remote web browser for administrator monitoring. The chassis management module's serial port can be linked to a modem, to communicate to a remote host for real time monitoring, module configuration and alarm reporting. No software is needed for remote monitoring since the SNMP/HTTP protocol provides an open platform for all operating systems.

Hot-swap Passive Backplane with H.110 CT Bus

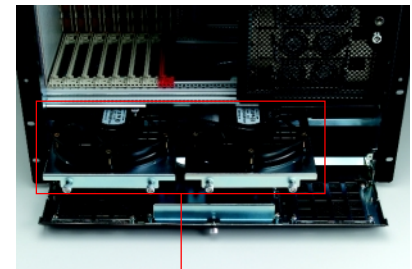
The 6U-sized 8-slot backplane of the MIC-3081 supports 32/64-bit operation, and complies with PICMG 2.1 Hot-Swap Specification. Eight CompactPCI slots are available. Slot 8 is dedicated to the system master, while slot 1 through 7 are available for 32/64-bit CompactPCI peripheral boards. Connectors P3 and P5 on each peripheral slot of the telephony backplane are configured for rear I/O, while connector P4 is configured for the ECTF H.110 CT bus (TDM telephony bus). The backplane may be configured for 3.3 V or 5 V_{I/O} CompactPCI device support. A short-bar is provided on the backplane to select the desired V_{I/O} voltage. The eight rear I/O are provided directly behind the backplane for IEEE 1101.11 specification, 80 mm depth transition board. Slot 8 is dedicated to the system master, and slot 1 through 7 are available for additional rear I/O boards.



8-slot backplane with H.110 CT bus
LCM for system status (MIC-3921)
560 W ATX 2+1 redundant power supply



Intelligent alarm module (MIC-3921) or chassis management module (MIC-3924), detecting system power, fan speed, CPU temperature



Two hot-swappable 163-CFM fan modules underneath the system for heavy loading application



Specifications

Backplane	6U Slot	System x8, Rear transition x8 (80 mm, IEEE 1101.11 compatible)											
	Bus	32-bit/33MHz, 64-bit/66MHz											
	H.110 CT Bus	Yes											
	V _{IO} Voltage	3.3 V/5 V (short-bar selectable)											
Drive Bay		MIC-3081A/8-10A					MIC-3081A/8-10R, MIC-3081B/8-10R						
	5.25" HDD	3					2						
	3.5" HDD	1					1						
Cooling	Fan	2 (hot-swap, 163 CFM/each) on the chassis bottom (inlet)											
	Blower	2 (hot-swap, 40 CFM/each) on the chassis top (outlet)											
Power Requirement	Input	AC 100 ~ 240 V @ 47 ~ 63 Hz, full range (PFC)											
	Output	460 W ATX**					560 W ATX (2+1 redundant, 280 W/each)*						
		+3.3 V	+5 V	-5 V	+12 V	-12 V	+5 Vsb	+3.3 V	+5 V	-5 V	+12 V	-12 V	+5 Vsb
	Max. Load	45 A**	40 A**	0.0 A	16 A	2.0 A	3.5 A	36 A*	58 A*	0.5 A	20 A	1.5 A	1.5 A
	Min. Load	--	1.0 A	--	0.5 A	--	--	0.3 A	2.0 A	--	0.5 A	--	0.1 A
Safety	CE, TUV, cUL, UL												
Environment		Operating					Non-Operating						
	Temperature	0 ~ 45 °C (32 ~ 113 °F)					-40 ~ 60 °C (-40 ~ 140 °F)						
	Humidity	--					10 ~ 95 % @ 40 °C, non-condensing						
	Vibration (5-500 Hz)	1.0 Grms					2.0 G						
Physical	Dimensions (W x H x D)	444 x 446 x 342 mm (17.5" x 17.6" x 13.5")											
	Weight	16.5 Kg (36.3 lb)					18 Kg (39.7 lb)						
Reliability	MTBF	100,000 hours											
Serviceability	MTTR	5 minutes											
Compliance	Standard	PICMG 2.0, R3.0 CompactPCI Specification PICMG 2.1, R2.0 CompactPCI Hot-Swap Specification PICMG 2.5, R1.0 CompactPCI Computer Telephony Specification											

* The Maximum combined load on +5 V and +3.3 V output shall not exceed 290 W

** The Maximum combined load on +5 V and +3.3 V output shall not exceed 300 W

Recommended Configurations

Enclosure	CPU Board		Rear I/O Board	Alarm Module and CMM
	Master	Slave		
MIC-3081A/8-10A MIC-3081A/8-10R	MIC-3389 MIC-3377/M MIC-3357		RIO-3301 RIO-3302 RIO-3302S	MIC-3921
	MIC-3365 MIC-3365F		RIO-3301 MIC-3302 MIC-3302F	
	MIC-3369A MIC-3358A		RIO-3309C	MIC-3924A MIC-3924B (Optional)
MIC-3081B/8-10R	MIC-3368 MIC-3368B		RIO-3308	MIC-3924B
	MIC-3368E MIC-3368E1		RIO-3308C RIO-3308S	
		MIC-3366* MIC-3366B	RIO-3306	
	MIC-3369A MIC-3358A		RIO-3309C	MIC-3924A MIC-3924B (Optional)

* Four peripheral slots are available when use this CPU board (2-slot width)

Ordering Information

Part Number	Power Supply	Alarm Module/Chassis Management Module
MIC-3081A/8-10A	460 W single ATX	MIC-3921
MIC-3081A/8-10R	560 W ATX 2+1 redundant, 280 W/each	MIC-3921
MIC-3081B/8-10R	560 W ATX 2+1 redundant, 280 W/each	MIC-3924A

Parts Information

Part Number	Descriptions
1757930036	Single power supply module for RPS 560 W (2+1) ATX
9682308100	Fan tray module including metal bracket, 163-CFM x1 fan, foam and connector
9682308101	Blower tray module including metal bracket, 40-CFM x1 fan, and connector

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