MIC-3081A

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



CE FCC ®

Introduction

Features

- 10U-high enclosure, 19-inch enclosure
- 8-slot 6U CompactPCI[®] backplane
- Supports rear I/O
- H.110 CT Bus compliance (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

The MIC-3081A CompactPCI is a 10U-high enclosure with eight CompactPCI slots for rack mounting, which provides a flexible, and configurable development platform. It supports an 8-slot 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. 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.

Hot-swap Passive Backplane with H.110 CT Bus

The 6U-sized 8-slot backplane of the MIC-3081A supports 32/64-bit operations, 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 additional 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 I/O voltage. The eight rear I/O are directly behind the backplane for IEEE 1101.11 compliance.

Specifications

Backplane	6U Slot	System x1, Peripheral x7, Rear transition x8 (80 mm, IEEE 1101.11 compatible)											
	Bus	32-bit/33 MHz, 64-bit/66 MHz											
	H.110 CT Bus	Yes											
	VI/O Voltage	3.3 V/5 V (short-bar selectable)											
Drive Bay		MIC-3081A/8-10A						MIC-3081A/8-10R					
	5.25" HDD	3						2					
	3.5" HDD	1					1						
Cooling	Fan	2 (hot-sw	2 (hot-swap, 163 CFM/each) on the chassis bottom (inlet)										
	Blower	2 (hot-sw	2 (hot-swap, 40 CFM/each) on the chassis top (outlet)										
	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range (PFC)											
	Output	500 W ATX					560 W ATX (2+1 redundant, 280 W/each)*						
Power Requirement		+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	30A	40A	0.8 A	32 A	1 A	2 A	36 A*	58 A*	0.5 A	20 A	1.5 A	1.5 A
	Min. Load	1 A	2.5 A	-	1 A	-	0.1 A	0.3 A	2.0 A	-	0.5 A	-	0.1 A
	Safety	CB/TUV/UL/CCC					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"") "											
Characteristics	Weight	16.5 Kg (36.3 lb)				18 Kg (39.7 lb)							

Specifications Cont.

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

 $^{\ast}~$ The Maximum combined load on +5 V and +3.3 V output shall not exceed 290 W

Recommended Configurations

Engloqueg	CPU	Board	Boox I/O Booxd	Alarm Module and CMM		
Eliciosure	Master	Slave	near i/o boaru			
	MIC-3377/M MIC-3389	-	RIO-3301, RIO-3302, RIO-3302S	MIC-3921		
MIC-3081A/8-10A	MIC-3358L MIC-3359	-	RIO-3309L	MIC-3921		
MIC-3001A/0-10h	MIC-3358A-Mx MIC-3369A-Mx MIC-3369C-Mx	-	RIO-3309C	MIC-3921		

* 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	500 W single ATX	MIC-3921
MIC-3081A/8-10R	560 W ATX 2+1 redundant, 280 W/each	MIC-3921

Accessories

Part Number	Description
1757000031	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
968A390000	MIC-3924A-B intelligent chassis management module
968A390010	MIC-3924B-B intelligent chassis management module with blade server support
968A390020	MIC-3924L-A alarm module



8-slot backplane LCM for with H.110 CT system status 2+1 redundant Bus (MIC-3921)

560 W ATX power supply



Intelligent alarm module (MIC-3921), detecting system power, fan speed and CPU temperature

Supports IEEE 1101.11 rear I/O transition boards



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