

MIC-3927

CompactPCI® Intelligent Chassis Management Module (PICMG® 2.9)



Features

- Compatible with PICMG 2.1, 2.16, and 2.9-compliant components
- Monitors via the Intelligent Platform Management Bus (IPMB) protocol
- Provides isolated IPMI signals for each slot for maximum security and reliability
- Out-of band management interface
- Hot swap support for IPMI based field replaceable components
- Alarm cut off push button on the front panel
- Standalone system monitoring: no driver needed, independent OS

Introduction

The MIC-3927 is a proprietary form factor Chassis Management Module (CMM) intended for use with PICMG* 2.1, 2.16, and 2.9-compliant systems (the CompactPCI* Hot Swap, Packet Switching Backplane, and System Management specifications respectively). The MIC-3927 plugs into a dedicated slot in compatible systems. It provides centralized management and alarm notification for system power supplies and fans as well as single board operation status. The CMM may be paired with a backup for high-availability applications.

The MIC-3927 is essentially a special-purpose single board computer with a CPU, some memory, a PCI bus, an operating system and peripherals. The MIC-3927 monitors and configures IPMI-based components in the chassis. When the thresholds for temperature and voltage limitations are reached or when failure occurs, the CMM will capture an event. At the same time, the MIC-3927 sends SNMP traps and drives the Telco alarm relays that trigger onboard LEDs. The CMM can query FRU information (such as serial number, model number, manufacture date, etc.), detect presence of components (such as fan tray, CPU board, etc.), and monitor the status of each component.

The MIC-3927 also has a built-in Web-based administration interface that allows users to monitor the system's operation from any place with Internet connectivity. The MIC-3927 adds another dimension to the reliability of your most critical applications.

*IPMI function only supported for MIC-3390 and MIC-3392

Sensor Specifications

Voltage	Input	+3.3 V _{DC} , +5 V _{DC} , -5 V _{DC} , +5 V _{SB} , +12 V _{DC} , -12 V _{DC} , VBat
	Temperature	
Temperature	Input	1 (onboard)
	Sensor	Thermistor
	Interface	I2C
	Range	-40 ~ 120° C (-40 ~ 248° F)
Fan Speed	Input	9
	Range	700 ~ 10000 rpm
Power Good	Input	4
	Range	High > 2.4 V _{DC} , Low < 0.8 V _{DC}
CPU Board Health	Interface	I2C
	Input	CPU Vcore, CPU fan, CPU temperature (up to 2 CPUs), DC +5 V, DC -5 V, V (I/O), DC +12 V, DC -12 V
	Max. SBC Monitoring	8 boards
Digital Input/Output (optional)	Input	4
	Output	4

Hardware Specifications

Processor System	CPU	RDC2880	
	Firmware	2 MB Embedded Flash ROM	
	Memory	2 MB SRAM	
Ethernet	Interface	10/100Base-T	
Serial Port	Interface	RS-232	
	Baud Rate	9600 bps	
Miscellaneous	Buzzer support	Yes	
	Time-out Signal for watchdog timer detection	Yes	
Battery	Charge Time	24 hr	
	Battery Type	Ni-MH	
	Capacity	1500 mA-H (full charged, for 15~20 minutes operation, depending on the system configuration)	
	Battery Life	80% capacity @ 20° C after 1000 cycles of charge and discharge	
Power Requirement	Typical	5 V @ 550 mA	
Environment	Temperature	Operating	Non-Operating
		0 ~ 60° C (-32 ~ 140° F)	-20 ~ 70° C (-4 ~ 158° F)
	Humidity	-	5 ~ 95 % RH, non-condensing
Physical Characteristics	Dimensions (W x D)	Kernel module: 40.5 x 93 mm (1.6" x 3.7")	
		Carrier module: 100 x 95 mm (3.9" x 3.7")	

Ordering Information

Part Number	Description
MIC-3927AE	MIC-3927 alarm module for MIC-3056, MIC-3081
MIC-3927BE	MIC-3927 alarm module for MIC-3038, MIC-3041
MIC-3927CE	MIC-3927 alarm module for MIC-3042, MIC-3043

Firmware Specifications

System Status Monitoring and Management	Real-time system status monitoring: provides real-time status display in HTTP/Java graphical format
	Monitor the temperature, fan speed and system voltage
	Alarm event record display
Alarm Notification	E-mail: can setup up to 4 addresses to receive notification e-mails
	Audible alarm sound
	SMS support for receiving short message through mobile phone
Supported Protocol	TCP, UDP, IP, ICMP, DHCP, BOOTP, ARP, SNMP, HTTP, Telnet
Management Function	Web-based remote configuration, control and monitor
	Remote power up and power down
	Firmware upgrade from serial port and Ethernet port
	Supports Time Sync with system board
	The SSL and SSH secure communications across Internet



RS-232 COM port LAN port



Onboard Battery