

MIC-3927

CompactPCI® Intel® Intelligent Chassis Management Module (PICMG® 2.9)



Features

- Compatible with PICMG 2.1, 2.16, and 2.9-compliant components
- Monitors via the Intel® 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-3392 and MIC-3395

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 | 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

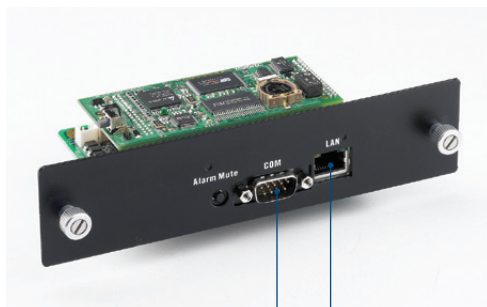
| | | | |
|--------------------------|--|--|--|
| Processor System | CPU | RDC2880 | |
| | Firmware | 2 MB Embedded Flash ROM | |
| | Memory | 2 MB SRAM | |
| Ethernet | Interface | 10/100 Mbps | |
| Serial Port | Interface | RS-232 | |
| | Baud Rate | 9600 bps | |
| Miscellaneous | Buzzer support | 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 0 ~ 60° C (-32 ~ 140° F) | Non-Operating -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") | |

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 | | |
| | Firmware upgrade from serial port and Ethernet port | | |
| | Supports Time Sync with system board | | |
| | The SSL and SSH secure communications across Internet | | |

Ordering Information

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



RS-232 COM port LAN port



Onboard Battery