MIC-3368

6U CompactPCI® Low Power Pentium® III Processor Board with VGA/Dual LAN/PMC/ Embedded HDD

Features

- Low power Intel® Pentium® III 700 MHz (BGA2) processor built in
- Intel 440GX chipset
- PICMG 2.16 compliant with Packet Switching Backplane Specification
- Full Hot-Swap Specification compliance (PICMG® 2.1, R2.0)
- Up to 1 GB ECC SO-DIMM SDRAM memory
- One 32-bit PMC expansion site
- Dual Fast 10/100 Mbps Ethernet on board with rear I/O
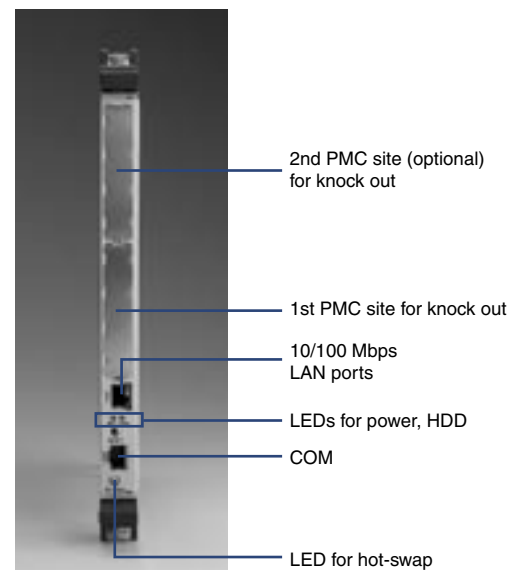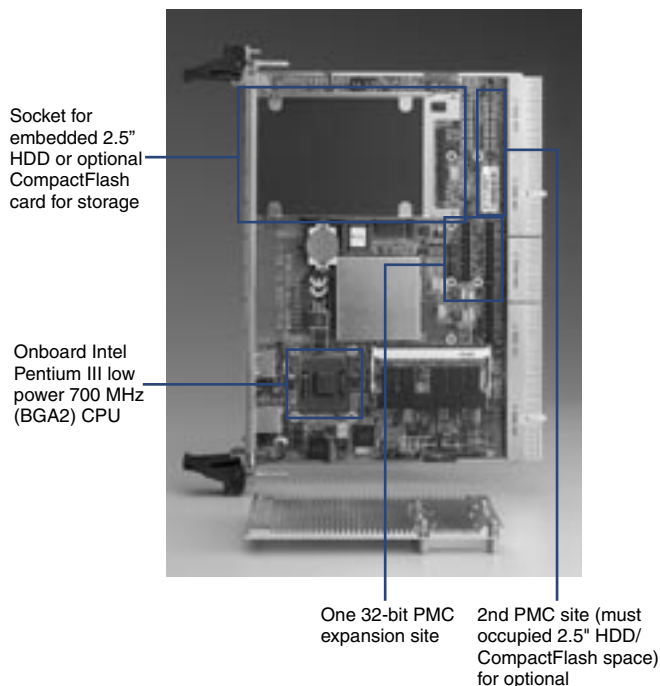- Embedded 2.5" HDD or optional CompactFlash

CE FCC

Introduction

The MIC-3368 series CompactPCI low power CPU board is an ultra-high density design built with a high performance Intel 700 MHz Pentium III processor and upgradeable SODIMM expansion up to 1 GB as well as an integrated 2.5" HDD on board. For I/O expansion, it comes with one built-in standard PMC site for various applications.

With fully integrated features, the MIC-3368 acts as a powerful master system CPU board, as well as a cPCI server blade with PICMG 2.16 compliance, which allows integration with most third-party products.

The MIC-3368 was designed with high availability features like low power dissipation, onboard CPU, passive cooling, dual LANs, and an IPMI controller. It acts as a master operating center for mission critical and computing intensive applications, such as third-generation (3G) wireless, voice over Internet protocol (VoIP), networking, image processing and other demanding telecom/data communication applications which need a clustered multiprocessing solution to increase over-all system performance.

Socket for embedded 2.5" HDD or optional CompactFlash card for storage

Onboard Intel Pentium III low power 700 MHz (BGA2) CPU

One 32-bit PMC expansion site

2nd PMC site (must occupied 2.5" HDD/ CompactFlash space) for optional

2nd PMC site (optional) for knock out

1st PMC site for knock out

10/100 Mbps LAN ports

LEDs for power, HDD

COM

LED for hot-swap

Specifications

		MIC-3368	MIC-3368B	MIC-3368C	MIC-3368E	MIC-3368E1
Processor System	CPU	Intel Pentium III low power (fanless)				
	Max. Speed	700 MHz (100 MHz FSB)				
	L2 Cache	256 KB				1 GHz (133 MHz FSB)
	Chipset	Intel 440GX	Intel 440BX	Intel 440GX	Intel 440GX	Intel 400GX
	BIOS	Award 2 Mb Flash (network booting optional)				
Bus	Front Side Bus	66/100 MHz				
	PCI	64-bit/33 MHz				
SCSI Controller Support		--	--	--	Rear I/O	Rear I/O
Memory	Technology	PC-100 SDRAM with ECC support				
	Max. Capacity	1 GB	512 MB	1 GB	1 GB	1 GB
	Socket	144-pin SO-DIMM x2				
Graphic	Controller	69030				
	VRAM	4 MB SDRAM				
Ethernet	Interface	10/100Base-TX				
	Controller	Intel 82559 x2				
	Connector	RJ-45 x1				
EIDE	Mode	ATA 33				
	Channel	2 (Max. 4 devices)				
	Connector	One IDE connector for embedded 2.5" HDD				
PCI-to-PCI Bridge	Controller	Intel 21154	Intel 21154	--	Intel 21154	Intel 21154
	System Bus	64-bit/33 MHz	64-bit/33 MHz	--	64-bit/33 MHz	64-bit/33 MHz
Front I/O Interface	LAN	1				
	Serial	1 (RS-232, RJ-45 connector)				
Operating System	Compatibility	Windows 2000/NT 4.0/XP, Red Hat Linux 7.2, Sun Solaris 8.0				
Hardware Monitor	Controller	Winbond W83782D				
	Monitor	CPU temperature, 3.3 V/5 V/12 V, fan				
Watchdog Timer	Output	Interrupt, system reset				
	Interval	Programmable, 1 ~ 63 sec.				
PMC	Site	1				
	Interface	PCI Mezzanine (IEEE 1386), 32-bit/33 MHz				
	Signal	5 V/3.3 V compliant				
Miscellaneous	Solid State Disk	CompactFlash socket (optional) **				
	Real Time Clock	Built-in the South Bridge				
Power Requirement (Intel Pentium III 700 MHz)	Maximum	+3.3 V	+5 V	+12 V	-12 V	
		2.5 A	2.5 A	< 270 mA	< 25 mA	
Environment	Temperature	Operating: 0 ~ 55 °C (32 ~ 131 °F)				
	Humidity	Non-Operating: -40 ~ 70 °C (-40 ~ 158 °F) Non-Operating: 95 % @ 60 °C (non-condensing)				
	Vibration (5-500 Hz)	Operating: 1.0 Grms, Non-Operating: 2.0 G				
Physical	Dimensions (W x D)	233.35 x 160 mm (9.2" x 6.3"), 1-slot width				
	Weight	0.7 Kg (1.54 lb)				
Hot-swap Switch		N/A	N/A	Yes	Yes	Yes
Hot-swap LED		N/A	N/A	Yes	Yes	Yes
Compliance	PICMG 2.1, R1.0 Hot-Swap Specification PICMG 2.9, R1.0 System Management Specification PICMG 2.16, R1.0 Packet Switching Backplane Specification	N/A N/A N/A	N/A N/A N/A	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes

* PCI-to-PCI bridge is transparent, drives up to 7 PCI masters
** CompactFlash socket is supported for special orders (Embedded HDD will not be supported).

Recommended Configurations

CPU Board	PMC Module	Rear I/O Board	Enclosure
MIC-3368 MIC-3368B	MIC-3662D, MIC-3661D	RIO-3308-A	MIC-3036-A, MIC-3039, MIC-3056A, MIC-3038A, MIC-3041A, MIC-3081A, MIC-3082A
MIC-3368C		RIO-3308C-A	MIC-3039, MIC-3038C
MIC-3368E MIC-3368E1		RIO-3308C-A, RIO-3308S-A	MIC-3036-A, MIC-3039, MIC-3056A, MIC-3038A, MIC-3041A, MIC-3081A, MIC-3082A

Rear Transition Board

Part Number	Rear Panel						On-board Header							Slot Width
	SCSI	KB & Mouse	COM2	LAN	VGA	USB	IDE	FDD	COM1	USB	CF	PIM	Parallel	
RIO-3308-A	--	1	1	2	1	--	2	1	1	1	1	1*	1	1
RIO-3308C-A	--	1	1	2	1	1	2	1	1	1	1	--	1	1
RIO-3308S-A	1	1	1	2	1	1	2	1	1	1	1	--	1	1

* Optional for OEM/ODM (Please contact your local sales or distributors for details)

Ordering Information

Part Number	Front Panel I/O					
	LAN	COM	PCI-to-PCI Bridge	PMC Site	Chipest	Slot Width
MIC-3368-A	1	1	1	1	Intel 440GX	1
MIC-3368B-A	1	1	1	1	Intel 440BX	1
MIC-3368C-A	1	1	--	1	Intel 440GX	1
MIC-3368E-A	1	1	1	1	Intel 440GX	1
MIC-3368E1-A	1	1	1	1	Intel 440GX	1

Remark: 1. Dual PMC sites are also supported for special order (Embedded HDD or optional CompactFlash will not be supported).
2. MIC-3368 series does not support media blade MIC-3960 due to J3 reserved for PICMG 2.16 design, even MIC-3368-A and MIC-3368B-A.

MIC-3377

6U CompactPCI® Socket 370 Pentium® III/ Celeron® Processor Board with VGA/Dual LAN
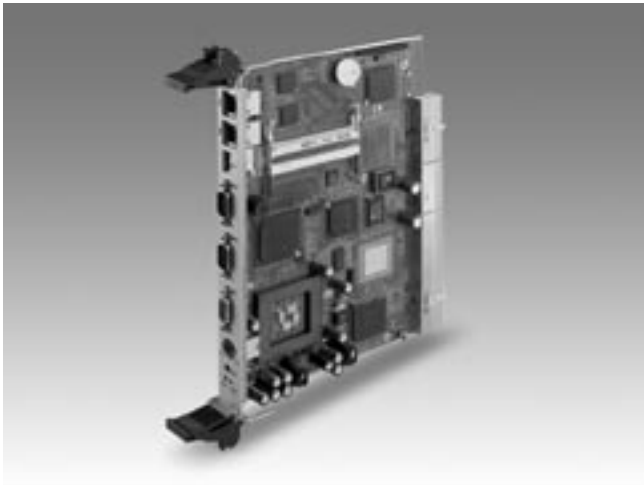
Features

- Socket 370 Intel® Pentium® III/Celeron® processor
- Intel 440BX chipset
- Up to 512 MB SO-DIMM SDRAM memory
- Dual 10/100 Mbps LAN ports
- Fanless heat sink

CE FCC

Introduction

The MIC-3377 is a 6U-high CompactPCI master CPU board that accepts an Intel Pentium III or Celeron processor with 370-pin FC-PGA package. The Pentium III/Celeron processor incorporates a 256 KB/128 KB on-die L2 Cache. The L2 cache implements the new advanced transfer cache architecture with 256-bit wide bus and runs at the full speed of the processor core. The MIC-3377 is well suited for demanding mission-critical CompactPCI applications.
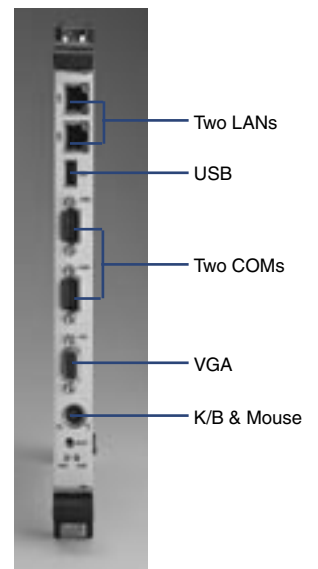
Fanless heat sink with space-saving design

Socket 370 Pentium III/Celeron CPU

Two PCI-to-PCI bridges drive up to 14 bus master PCI slots (MIC-3377D/M)

Single PCI-to-PCI bridge drives up to 7 bus master PCI slots

Onboard I/Os on front panel

Two LANs

USB

Two COMs

VGA

K/B & Mouse

Specifications

Processor System	CPU	Intel Pentium III	Intel Celeron
	Max. Speed	1 GHz (100 MHz FSB)	733 MHz (66 MHz FSB)
	L2 Cache	256 KB	128 KB
	Chipset	Intel 440BX	
	BIOS	Award 2 Mb Flash	
Bus	Front Side Bus	66/100 MHz	
	PCI	32-bit/33 MHz	
Memory	Technology	PC-100 SDRAM with ECC support	
	Max. Capacity	512 MB	
	Socket	144-pin SO-DIMM x2	
Graphic	Controller	69000	
	VRAM	2 MB SDRAM	
Ethernet	Interface	10/100Base-TX	
	Controller	Intel 82559 x2	
	Connector	RJ-45 x2	
EIDE	Mode	ATA 33	
	Channel	2 (Max. 4 devices)	
PCI-to-PCI Bridge	Controller	Intel 21150	
	System Bus	32-bit/33 MHz	
Front I/O Interface	LAN	2	
	USB	1 (USB 1.0 compliant)	
	Serial	2 (RS-232, 16C550 compatible)	
	PS/2	1	
	VGA	1	
Operating System	Compatibility	Windows 2000/NT 4.0/XP, Red Hat Linux 7.0, Sun Solaris 8	
Watchdog Timer	Output	System reset	
	Interval	Programmable, 1 ~ 63 sec.	

Power Requirement	Maximum (Pentium III, 850 MHz)	+3.3 V	+5 V	+12 V
		2.5 A	2.1 A	640 mA

Environment		Operating	Non-Operating
	Temperature	0 ~ 50 °C (32 ~ 122 °F)	-40 ~ 60 °C (-40 ~ 140 °F)
	Humidity	--	95 % @ 60 °C, non-condensing
	Vibration (5-500 Hz)	1.0 Grms	2.0 G

Physical	Dimensions (W x D)	233.35 x 160 mm (9.2" x 6.3"), 1-slot width
	Weight	0.8 Kg (1.76 lb)
Compliance	Standard	PICMG® 2.0, R3.0 CompactPCI Specification

Recommended Configurations

CPU Board	PMC Module	Rear I/O Board	Enclosure
MIC-3377M	--	RIO-3301-A, RIO-3302-A, RIO-3302S-A	MIC-3037, MIC-3039, MIC-3036, MIC-3056, MIC-3041A, MIC-3038A/B, MIC-3081
MIC-3377D/M	--	RIO-3301-A	MIC-3031

Rear Transition Board

Part Number	Rear Panel I/O						On-board Header							Slot Width
	Keyboard	Mouse	COM	USB	LAN	VGA	COM	SCSI	IDE**		FDD	CF Socket	2.5" HDD Carrier	
									40-pin	44-pin				
RIO-3301-A	1	1	1	--	--	--	1	--	2	1	1	1	Optional	1
RIO-3302-A	1	1	2	1	2	1	--	--	2	1	1	1	Optional	1
RIO-3302S-A	1	1	2	1	2	1	--	1*	2	1	1	1	Optional	1

* SCSI chipset (Adaptec 7892) on board.
** The 40-pin and 44-pin connectors share the same channel; user can only use one of these two connectors.

Ordering Information

Part Number	LAN	VGA	COM	USB	PCI-to-PCI Bridge	Slot Width
MIC-3377/M-A	2	1	2	1	1	1
MIC-3377D/M-A*	2	1	2	1	2	1

* MIC-3377D only can be used with RIO-3301 in MIC-3031/14-12R enclosure