MIC-3369A

6U CompactPCI® Intel® Pentium® M Processor Board with VGA/Dual Gigabit LAN/PMC (PICMG 2.16)

Features

- Supports Intel® Pentium® M processor @ 1.6 GHz/1 MB L2 cache
- Supports Dual Gigabit LANs
- Up to 2 GB (DDR-200) memory on board with ECC
- Intel® E7501 chipset
- One 64-bit/66 MHz PMC expansion slot
- PICMG® 2.16 compliant with Packet Switching Backplane Specification
- Hot-Swap Specification compliant (PICMG 2.1)
- On-board 2.5" HDD connector and CompactFlash socket
- Master/Drone mode mode selectable

CE FCC

Introduction

The MIC-3369A is a highly integrated and cost effective CompactPCI single-board computer based on the Intel® Pentium® M processor. It is an ideal application blade for integration into products where high-performance and low-power consumption are key requirements. The MIC-3369A has been optimized for the Intel® Pentium® M processor and Intel® E7501 chipset which deliver a compelling 3.2 GB/s bandwidth across a 400 MHz front side bus. The Pentium® M incorporates 32 KB of level 1 cache, 1 MB of level 2 advanced transfer cache and up to 3.2 GB/s of bandwidth across dual data rate memory channels. The MIC-3369A supports up to 2 GB of ECC DDR-200 on-board memory.

With performance in mind, the MIC-3369A design makes extensive use of Intel's latest I/O controller hub technology and provides 64-bit data buses throughput. The on-board dual Gigabit Ethernet controller is connected via a 64-bit/133 MHz PCI-X bus for maximum sustained packet throughput.

In addition to a full array of industry standard I/O features including on-board 2.5" hard disk drive and two USB ports, the MIC-3369A also provides one 64-bit/66 MHz PMC site for on-board I/O expansion making it ready to meet the most flexible and demanding I/O processing needs.

The MIC-3369A can be used in either a system slot or peripheral slot, making it an ideal choice for applications requiring PICMG 2.16 Packet Switched Backplane support for Gigabit speed switched-fabric interconnection between blades. The board is designed in compliance with the PICMG 2.9 specification to cooperate with remote system and platform management modules. With all these features and inherent hot-swap the MIC-3369A is perfectly matched for mission critical telecom and data communication applications where high availability is essential, such as 3G wireless infrastructure, Voice-over-IP, media gateways, softswitches and triple-play server clusters.

When used in conjunction with the SCSI Ultra 320 controller on the RIO-3309S Rear Transition Module, RAID 0, 1, 10 capabilities are added to to its extensive list of features.

Specifications

Processor System	CPU (CPU not included)	Intel® Pentium® M processor (Socket 479)
	Speed	1.6 GHz (both 400 MHz FSB)
	L2 Cache	1 MB
	Chipset	Intel® E7501/ICH4
	BIOS	Award 4 Mbit Flash (By request : Network booting/Console redirect)
Bus	Front Side Bus	400 MHz
	PCI	64-bit/133 MHz (PCI-X support)
Memory	Technology	DDR-200 SDRAM with ECC support
	Max. Capacity	2 GB
	Integrated	512 MB/1 GB/2 GB memory on board
Graphic	Controller	ATI RageXL
	VRAM	8 MB on board
Ethernet	Interface	10/100/1000Base-TX
	Controller	Intel® 82546GB (Dual GbE ports)
	I/O Connector	RJ-45 x1 (front)
EIDE	Mode	ATA 33/66/100
	Channel	2
	Connector	One IDE connector and space reserved for embedded 2.5" HDD
PCI-to-PCI Bridge	Interface	System/Drone mode capability
	Controller	Hint HB6
	Bus	64-bit/66 MHz
Front I/O Interface	PMC	1
	VGA	1
	USB	2 (USB 2.0)
	Serial (COM1)	1 (RS-232, RJ-45 connector)
	LAN	1
Operating System	Compatibility	Windows2000/NT 4. 0/XP, Red Hat Linux 9.0, VxWorks
Hardware Monitor	Controller	Winbond W83782D
	Monitor	CPU temperature, 3.3 V/5 V/12 V

Specifications Cont.

Watchdog Timer	Output	Interrupt, system reset, NMI			
	Interval	Programmable, 0 ~ 255 sec.			
PMC	Site	1			
	Interface	64-bit/66 MHz PCI Mezzanine (IEEE1386.1)			
	Signal	+5 V/+3.3 V compliant			
Miscellaneous	Solid State Disk	CompactFlash socket			
	LEDs	HDD, power, hot swap			
	USB (2.0)	2 channels			
	Real Time Clock	Built-in the South Bridge			
Power Requirement (Intel® Pentium® M 1.6 GHz)	Voltage	+3.3 V	+5 V	+12 V	-12 V
	Maximum	5.18 A	4.19 A	38 mA	<25 mA
Environment		Operating		Non-Operating	
	Temperature	0 ~ 55° C (32 ~ 131° F)		-40 ~ 70° C (-40 ~ 158° F)	
	Humidity	-		95 % @ 60° C (non-condensing)	
	Shock	20 G		50 G	
	Vibration (5-500 Hz)	1.5 Grms		2.0 Grms	
	Altitude	60 m below sea level to 4000 m above sea level			
	Airflow	300 LFM = 1.54 m/s			
Physical Characteristics	Dimensions	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 PICMG 2.1, R2.0 Hot-Swap Specification PICMG 2.16, R1.0 Packet Switching Backplane Specification			

Recommended Configurations

CPU Board	PMC Module	Rear I/O Board	Enclosure
MIC-3369A	MIC-3665-A, MIC-3665-B	RIO-3309C-A, RIO-3309S-A1, RIO-3309S-A2	MIC-3036-A/S2, MIC-3039-B, MIC-3056A, MIC-3038A/C, MIC-3041A/B/C/CW/L, MIC-3042A/B, MIC-3081A/B*, MIC-3082A, CP-150

* MIC-3081A doesn't support RIO-3309S-Ax

Rear Transition Board

Part Number	Rear Panel							On-board Header / Socket / Connector							Slot Width
	KB & Mouse	COM2*	GbE LAN	VGA	USB	10/100 LAN**	SCSI	IDE	FDD	SCSI	COM1	USB	PRT	Conn.	
RIO-3309C-A	1	1	2	1	1	1	-	1	1	-	1	1	1	J3/J5	1
RIO-3309S-A1	1	1	2	1	1	1	-	1	1	1	1	1	1	J1/J2/J3/J5	1
RIO-3309S-A2	1	1	2	1	1	1	1	1	1	-	1	1	1	J1/J2/J3/J5	1

* Supports RS-232/422/485 selectable
** Optional for 3rd LAN from MIC-3369A but occupies the I/O port for COM2.

Ordering Information

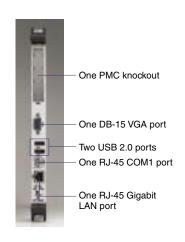| Part Number	Front Panel I/O						On-board Main Features				
	CPU Support	LAN	COM	PMC	USB	VGA	CPU	Memory	EIDE Channel	CF Socket	Slot Width
MIC-3369A-M0	1 MB L2	1	1	1	2	1	--	512 MB	2.5" HDD	1	1
MIC-3369A-M1	1 MB L2	1	1	1	2	1	--	1 GB	2.5" HDD	1	1
MIC-3369A-M2	1 MB L2	1	1	1	2	1	--	2 GB	2.5" HDD	1	1

* The above part numbers do not include the CPU, please order separately.

One CompactFlash socket

u-FCPGA socket

Memory on board

One 64-bit/66 MHz PMC connector

One 2.5" IDE socket

One 2.5" HDD bay

One passive CPU heatsink

One PMC knockout

One DB-15 VGA port

Two USB 2.0 ports

One RJ-45 COM1 port

One RJ-45 Gigabit LAN port