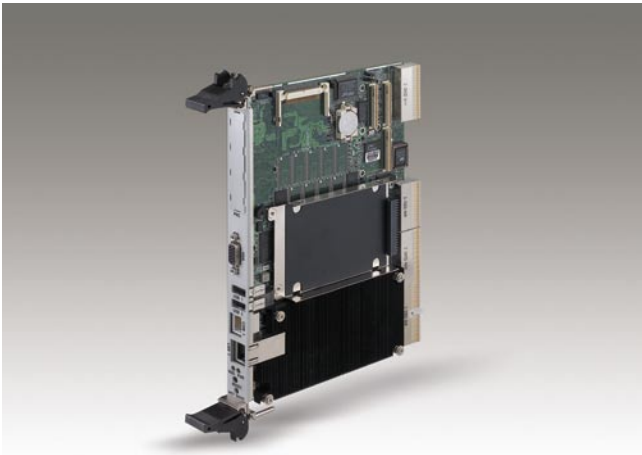# MIC-3358A

6U CompactPCI® Intel® Pentium® 4 Processor-M based Board with VGA/Dual PCI GbE/PMC (PICMG 2.16)

Features

- Supports Intel® Pentium® 4 processor-M up to 2.2 GHz
- Dual Gigabit Ethernet on board
- Up to 2 GB (DDR 200/266) memory on board with ECC
- Intel 845E chipset
- PICMG 2.16 R1.0 CompactPCI Packet Switching Backplane Specification compliant
- PICMG 2.1 R2.0 CompactPCI Hot Swap Specification compliant
- Onboard 2.5" HDD bay, PMC connector and CompactFlash socket

RoHS COMPLIANT 2002/95/EC   c**RU**us E180881   CE   FCC

Introduction

The MIC-3358A is an Intel Pentium 4 Processor-M based CompactPCI server blade, fully compliant with the PICMG 2.16 Packet Switched Backplane specification. It provides a cost effective platform for applications that demand low power and high performance. The MIC-3358A can be used in either a system slot or peripheral slot, making it an ideal choice for emerging applications requiring fast switched-fabric interconnection between blades. With these features and full hot swap functionality, the MIC-3358A is well-suited for mission critical telecom and data communication applications such as 3G wireless infrastructure, Voice-over-IP, media gateways, soft switches and triple play server clusters. The MIC-3358A is designed around the Intel 845E chipset, and delivers compelling system bus performance across a 400 MHz Intel NetBurst microarchitecture. Its innovative wider data paths and flexible memory refresh technology help to maximize DDR SDRAM performance. In addition to a full array of industry standard I/O features, the MIC-3358A also provides dual Gigabit Ethernet ports and one PMC site for onboard I/O expansion. The MIC-3358A single board computing blade is ready to meet the demanding performance, computation-intensive and I/O processing needs.

Specifications

Processor System	CPU (Not Included)	Intel Pentium 4 Processor-M
	Max. Speed	2.2 GHz
	L2 Cache	512 KB on die
	Chipset	Intel 845E + ICH4
	BIOS	Award™ 4 Mbit (optional network booting/console redirection)
Bus	Front Side Bus	400 MHz
	PCI	32-bit/33 MHz
Memory	Technology	DDR 200/266 MHz SDRAM with ECC support
	Max. Capacity	2 GB
	Integrated	512 MB/1 GB/2 GB memory on board (no DIMM socket)
Graphic	Controller	ATI RageXL™
	VRAM	8 MB dedicated
Ethernet	Interface	10/100/1000Base-TX Ethernet
	Controller	Intel 82541 x 2
	I/O Connector	RJ-45 x 1 (front)
EIDE	Mode	ATA 33/66/100
	Channel	2
	Storage Site	One IDE connector and space reserved for embedded 2.5" HDD
PCI-to-PCI Bridge	Interface	Universal (System/Peripheral mode capability)
	Controller	HiNT HB6
	System Bus	Up to 64-bit/33 MHz
Front I/O Interface	LAN	1
	Serial	1 (RS-232, RJ-45 connector)
Operating System	Compatibility	Windows® XP/2000/NT 4.0, Red Hat Linux 8.0 and 9.0, VxWorks
Hardware Monitor	Controller	Winbond® W83782D
	Monitor	CPU temperature, +3.3 V, +5 V, +12 V
Watchdog Timer	Output	Interrupt, system reset, NMI
	Interval	Programmable, 0 ~ 255 sec.
PMC	Site	1
	Interface	32-bit/33 MHz PCI Mezzanine (IEEE1386.1)
	Signal	+5 V/+3.3 V compliant

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All product specifications are subject to change without notice.   Last updated : 1-Mar-2007

Specifications Cont.

Miscellaneous	Solid State Disk	1 CompactFlash socket			
	LED Indicator	HDD, Power, Hot Swap			
	USB 2.0	2 channels			
	Real Time Clock	Built-in			
Power Requirement (Intel Pentium 4 M 1.7GHz)	Voltage	+3.3 V	+5 V	+12 V	-12 V
	Maximum	4.43 A	4.9 A	35 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 G	
Physical Characteristics	Dimensions (W x D)	233.35 x 160 mm (9.19" x 6.3"), 1-slot width			
	Weight	0.8 kg (1.76 lb)			
Compliance		PICMG 2.0 R3.0 CompactPCI Specification PICMG 2.1 R2.0 CompactPCI Hot Swap Specification PICMG 2.16 R1.0 CompactPCI Packet Switching Backplane Specification			

Recommended Configurations

CPU Board	PMC Module	Rear I/O Board	Enclosure
MIC-3358A-MxE	MIC-3665-AE, MIC-3665-BE	RIO-3309C-AE, RIO-3309S-AxE	MIC-3039, MIC-3056, MIC-3038, MIC-3041, MIC-3042, CP-150, MIC-3043, MIC-3081B series

Rear Transition Board

Part Number	Rear Panel							Onboard Header/Socket/Connector							Slot Width
	KB & Mouse	COM2*	GbE LAN	VGA	USB	10/100 LAN**	SCSI	IDE	FDD	SCSI	COM1	PRT	USB	Conn.	
RIO-3309C-AE	1	1	2	1	1	1	-	1	1	-	1	1	1	J3/J5	1
RIO-3309S-A1E	1	1	2	1	1	1	-	1	1	1	1	1	1	J1/J2/J3/J5	1
RIO-3309S-A2E	1	1	2	1	1	1	1	1	1	-	1	1	1	J1/J2/J3/J5	1

* RS-232/422/485 selectable
** Optional 3rd LAN port occupies the rear COM2 port

Ordering Information

Part Number	Front Panel I/O					Main Onboard Features			
	LAN	COM	PMC	USB	VGA	Memory	IDE Channel	CF Socket	Slot Width
MIC-3358A-M0E *	1	1	1	2	1	512 MB	2.5" HDD	1	1
MIC-3358A-M1E *	1	1	1	2	1	1 GB	2.5" HDD	1	1
MIC-3358A-M2E **	1	1	1	2	1	2 GB	2.5" HDD	1	1

* Please order RIO module (refer to above table) with MIC-3358 for rear I/O access.

** Please contact your local distributor for MIC-3358A-M2E availability.
Note: The above part numbers do not include the CPU, please order separately.

One CompactFlash socket
Onboard memory
Micro-FCPGA socket
One 2.5" IDE socket
One 32-bit/33 MHz PMC connector
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