MIC-3358

6U CompactPCI® Intel® Pentium® 4 Processor-M Board with VGA/Dual Gigabit LAN/PMC

NEW

Features

- Supports Intel® Pentium® 4 Processor-M up to 2.2 GHz
- Dual Gigabit Ethernet on board
- Up to 2 GB (DDR-266) memory on board with ECC
- Intel® 845E chipset
- One 32-bit/33 MHz PMC expansion slot
- PICMG® 2.16 compliant with Packet Switching Backplane Specification
- PICMG 2.9 compliant with System Management Specification
- Hot-Swap Specification compliant (PICMG 2.1)
- On-board 2.5" HDD connector and CompactFlash socket
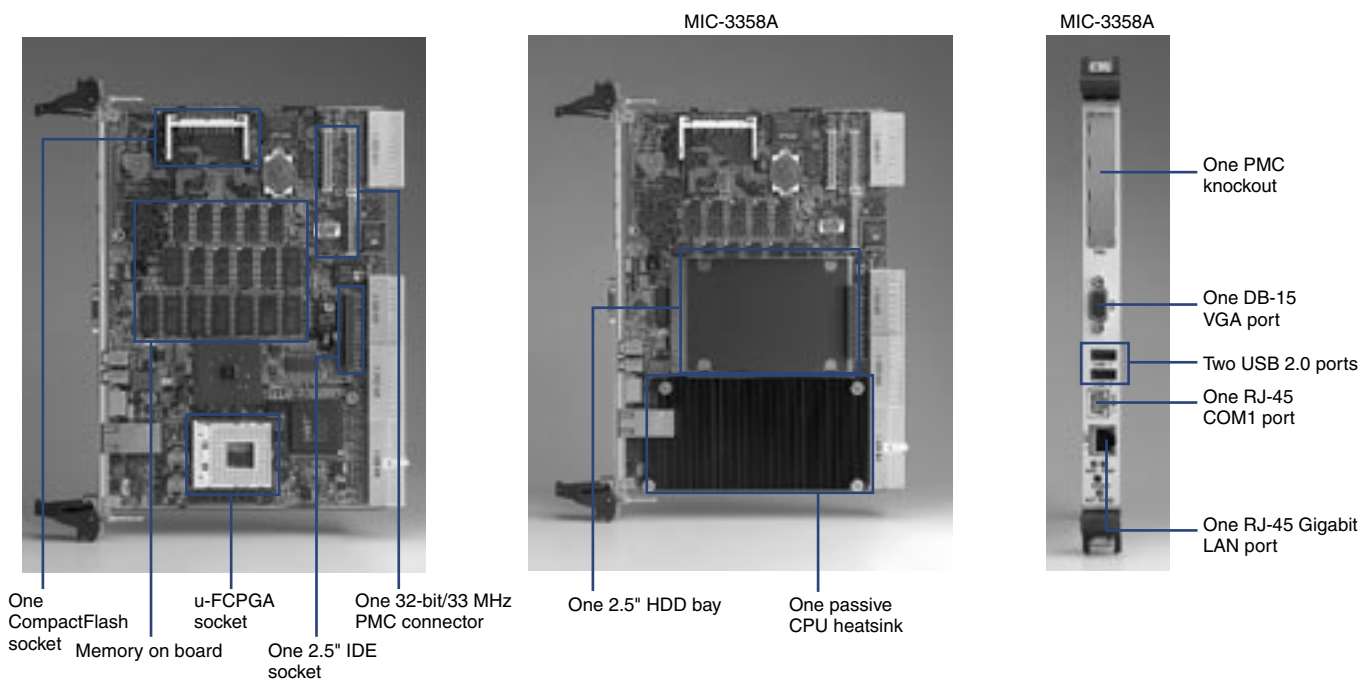- System/Drone mode selectable

CE FCC

Introduction

The MIC-3358 is a CompactPCI server blade with Intel® Pentium® 4 Processor-M on board in compliance with Compact Packet Switching Backplane (cPSB) systems. Supporting the PICMG 2.16 specification, the MIC-3358 delivers a cost performance platform for those applications that demand low power and high performance. It is an ideal platform for emerging application such as switch-fabric blade server, mission critical and computing intensive applications like third-generation (3G) wireless, voice over Internet protocol (VoIP), networking, image processing and converged data and voice communication applications.

The new MIC-3358 has been optimized for the Intel® Pentium® 4 Processor-M and Intel 845E chipset. It unveils as a high performance cPCI platforms, delivering compelling system bus speed performance across the 400 MHz with Intel® NetBurst™ microarchitecture. Its innovative wider data paths and flexible memory refresh technology optimize the DDR SDRAM performance in the MIC-3358. It also provides 512 KB of on-die L2 cache, dual Gigabit Ethernets. Advantech is ready, with the MIC-3358 platform to meet customer's high performance requirements for both CPUs and I/Os.

As the mission-critical demand increases in the next generation networking and telecommunication equipment, the MIC-3358 has been optimized to play as a master card in a cPCI system, it could also plug into a peripheral slot as a "drone mode" operating in stand-alone computer. The MIC-3358 is designed in compliance with PICMG 2.9 specification in cooperating with the remote system and platform management.

MIC-3358A

MIC-3358A

One CompactFlash socket
Memory on board
u-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

ADVANTECH

Specifications

		MIC-3358A		MIC-3358L	
Processor System	CPU	Intel® Pentium® 4 Processor-M (fanless)			
	Speed	1.7 GHz/2.2 GHz (400 MHz FSB)			
	L2 Cache	512 KB on die			
	Chipset	Intel® 845E			
	BIOS	Award 4 Mb Flash (Network booting/Console Redirect optional)			
Bus	Front Side Bus	400 MHz			
	PCI	32-bit/33 MHz			
Memory	Technology	DDR-200/266 SDRAM with ECC support			
	Max. Capacity	2 GB (optional)			
	Integrated	512 MB/1 GB/2 GB memory on board (No onboard SO-DIMM connector for upgradility)		256 MB on board	
Graphic	Controller	ATI RageXL			
	VRAM	8 MB on board			
Ethernet	Interface	10/100/1000Base-TX Gigabit Ethernet		--	
	Controller	Intel® 82540 x2		--	
	I/O Connector	RJ-45 x1 (Front)		--	
EIDE	Mode	ATA 33/66/100 mode			
	Channel	2			
	Storage Site	One IDE connector and space reserved for embedded 2.5" HDD		--	
PCI-to-PCI Bridge	Interface	System/Drone mode capability		System mode	
	Controller	Hint HB6		Hint HB2	
	System Bus	Up to 64-bit/ 33 MHz		Up to 32-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 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	PCI Mezzanine (IEEE1386.1)		--	
	Signal	+5 V/+3.3 V compliant		--	
Miscellaneous	Solid State Disk	1 CompactFlash socket			
	LEDs	HDD, power, hot swap			
	USB (2.0)	2 channels			
	Real Time Clock	Built-in the South Bridge			
Power Requirement (Intel Pentium 4 M 1.7GHz)	Voltage	+3.3 V	+5 V	+12 V	-12V
	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 Grms	
Physical	Dimensions	233.35 x 160 mm (9.19" 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 2.9, R1.0 System Management Specification, PICMG 2.16, R1.0 Packet Switching Backplane Specification		PICMG 2.0 R3.0 Compact PCI Specification PICMG 2.1 R2.0 Hot Swap Specification PICMG 2.9 R1.0 System Management Specification --	

Recommended Configurations

CPU Board	PMC Module	Rear I/O Board	Enclosure
MIC-3358A	MIC-3662D, MIC-3661D	RIO-3309C-A	MIC-3036-A, MIC-3039-B, MIC-3056A, MIC-3038A, MIC-3038C, MIC-3041B, MIC-3081, MIC-3082A
MIC-3358L	--	RIO-3309L	MIC-3036-A, MIC-3039-B, MIC-3056A, MIC-3038A, MIC-3041B, MIC-3041L, MIC-3081, MIC-3082A

Rear Transition Board

Part Number	Rear Panel						On-board Header / Socket / Connector						Slot Width
	KB & Mouse	COM2*	GbE LAN	VGA	USB	10/100 LAN**	IDE	FDD	COM1	PRT	USB	Conn.	
RIO-3309C-A	1	1	2	1	1	1	1	1	1	1	1	J3/J5	1
RIO-3309L	1	0	0	1	1	1	1	1	1	1	1	J3/J5	1

* Support RS-232/422/485 selectable
** Optional for 3rd LAN from MIC-3358 but occupies the I/O port for COM2.

Ordering Information

Part Number	Front Panel I/O					On Board Main Features				
	LAN	COM	PMC	USB	VGA	CPU	Memory	EIDE Channel	CF socket	Slot Width
MIC-3358A-M0 *	1	1	1	2	1	--	512 MB	2.5" HDD	1	1
MIC-3358A-M1 *	1	1	1	2	1	--	1 GB	2.5" HDD	1	1
MIC-3358A-M2 **	1	1	1	2	1	--	2 GB	2.5" HDD	1	1
MIC-3358L	0	1	0	2	1	--	256 MB	--	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-M2, not for standard ordering process.