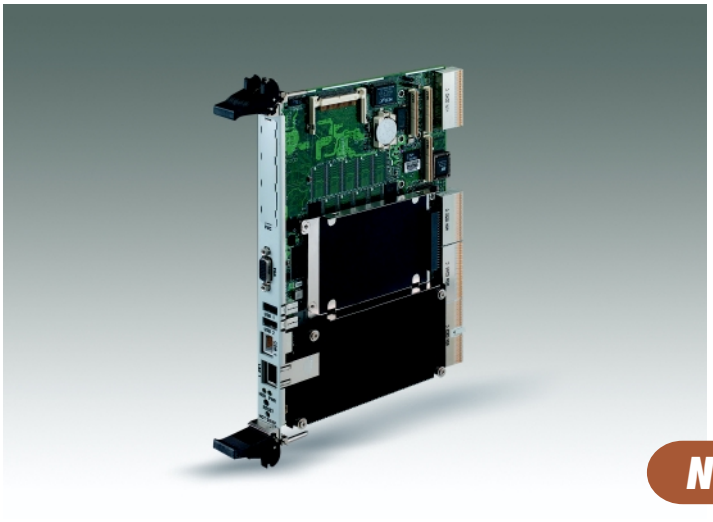
MIC-3358

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



Features

- Intel® Pentium® 4 Processor-M up to 2.2 GHz with u-FCPGA and u-FCBGA socket design
- 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)
- Optional on-board 2.5" HDD or CompactFlash
- System/Drone mode selectable

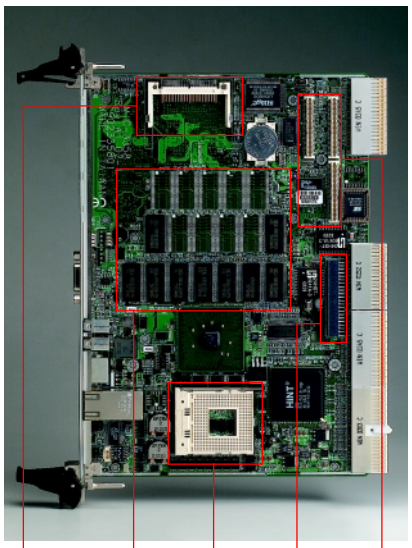
NEW

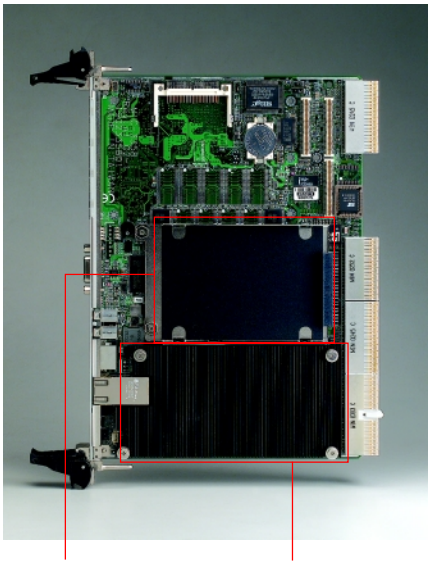
Introduction

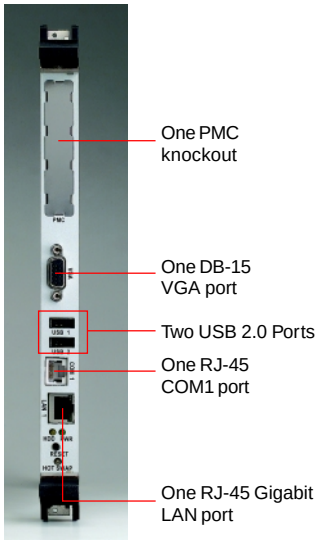
The MIC-3358 is a CompactPCI server blade with Intel® Pentium® 4 Processor-M on board in compliance with Compact Packet Switching Backplane (cPSB) systems. Supporting the PICMG 2.16 specification, the MIC-3358 delivers a cost performance platform for those applications that demand low power and high 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 and 533 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 equipments, 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 complaince with PICMG 2.9 specification in cooperating with the remote system and platform management.







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- All specifications are subject to change without notice

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Specifications

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)		
Graphic	Controller	ATI RageXL		
	VRAM	8 MB on board		
	Resolution	Up to 1600 x 1200 64 k color / 75 Hz		
Ethernet	Interface	10/100/1000Base-TX Gigabit Ethernet		
	Controller	Intel® 82540 x 2		
	I/O Connector	RJ-45 x 1 (Front)		
EIDE	Mode	ATA 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		
	Controller	Hint HB6		
	Bus	Up to 64-bit/ 33 MHz PCI		
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 (P4-M 1.7 GHz)	Voltage	+3.3 V	+5 V	+12 V
	Typical	2.0 A	3 A	< 50 mA
	Maximum	4.43 A	4.9 A	35 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 2.16, R1.0 Packet Switching Backplane Specification PICMG 2.0, R3.0 CompactPCI Specification PICMG 2.9, R1.0 System Management Specification PICMG 2.1, R2.0 Hot-Swap Specification		

Recommended Configurations

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

Rear Transition Board

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

* 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.