MIC-3397

6U CompactPCI Quad Core Intel® Xeon® Processor Blade



Features

- Supports 22nm Intel® Xeon® processor
- Intel® DH8900 chipset supports DM1.0 x 4
- Up to 16GB DDR3-1333/1600 ECC memory
- Supports up to five GbE ports, six USB2.0 ports, two VGA ports, three COM ports, one PS/2 connector, three 2.5" SATA connector (one SATA HDD is optional with 8GB NAND flash), one Cfast, one PCle 2.0x4 interface to the Rear Transition Module (RTM)
- PICMG2.0 R3.0, PICMG2.1 R.0, PICMG2.16 R1.0 Compliant

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Introduction

Advantech's MIC-3397 is a 6U CompactPCI single board computer with a choice of server class processors based on the Quad-Core Intel® Xeon® E3-1125C v2(40W) with DH8900 chipset. The processor is based on Intel® 22nm 64 bit process technology, with up to 2.5GHz clock speeds 8MB L3 cache, Intel® Hyper-Threading, Virtualization, and Trusted Execution Technology, all of which enable the board for applications requiring higher levels of performance and security. The MIC-3397 supports dual channel ECC memory, up to 16GB DDR3 at 1333/1600MHz with max 8GB on board and 8GB SO-DIMM memory, three 2.5" Serial ATA interfaces (one on board optional with one 8 GB NAND flash, two to RTM),one Cfast slot, five Gigabit Ethernet ports (two on front panel, two to PCIMG2.16, two to RTM with one optional on the front panel), six USB2.0 ports (three on front panel, three to RTM), two VGA ports (one on front panel, one to RTM) on the 4HP model, three COM ports (one to front panel, two to RTM), one PS/2 port, and one PCle2.0 x4 interface reserved for user define extensions on the rear transition module.

MIC-3397 Series can be installed in a standard CompactPCI system slot as system master, or peripheral slot as stand-alone server blade without CompactPCI bus communication, it meets the needs of applications operating in harsh environments and is ideally suited for datacom, telecom and military applications. Its outstanding graphics capabilities make it a good choice for image-processing in medical, defense system and many other vertical segments applications.

Specifications

Processor System	CPU	Quad-Core Intel® Xeon® Processor E3-1125C v2
	Max Speed	Up to 8MB L3 Cache, 2.5 GHz
	Chipset	Intel® DH8900 PCH (Cave creek)
	BIOS	Redundant AMI 8 MByte SPI flash
	Technology	Dual Channel DDR3 1333/1600 MHz with ECC
Memory	Max. Capacity	8GB on board
	Socket	SO-DIMM x1, up to 8GB
	J1 ~ J2 Connectors	64bit/66MHz PCI local bus
	J3 Connector	PICMG2.16 + RTM
Compact PCI Interface	J5 Connector	RTM
	Bridge	Pericom PI7C9X130DNDE
	Mode	System Master/Drone
	PHY	4 Marvel 88E1112-C2-NNC11000 Gigabit Ethernet PHY
	Interface	SGMII, 10/100/1000 Base TX Ethernet
Ethernet	I/O Connector	PICMG2.16 x 2 to J3, RTM x2 or RJ45 x1 to front
EUIGIIIGU	Controller	Intel® WGI210AT SLJXR Gigabit Ethernet Controller
	Interface	PCIe 1.0x1, 10/100/1000 Base TX Ethernet
	I/O Connector	RJ45 x1 to front
	Controller	SM750GX160000-AC ,265P, 16Mbytes of embedded 32-bit DDR memory
Graphics	Resolution	Dual display: 1360 x 768 (Clone & extended mode) Single display:1920 x 1080 (16bit, clone mode only)
Storage	Mode	SATA-II
		1 channel to on board SATA carrier or on board NAND flash
	Channels	1 channel to on board cfast socket
		2 channels to RTM

Specifications (Cont.)

	USB2.0	3 type A						
Front I/O	COM	1 RS232/422 on RJ45						
	LAN	2 10/100/1000Mbps on RJ45						
	Graphics	1 VGA port on 4HP						
	Front Panel LEDs	x1 blue/yellow for Hot Swap/HDD, x1 green for Power, and x1 green for Master/Drone mode						
	Buttons	System reset button						
	USB2.0	3 ports						
	COM	DM 2 RS232/422/485 on RJ45 or DB9						
	LAN	PICMG2.16 x2 to J3, RTM x2 (1 mux to front)						
To RTM	SATA	ATA 2 ports						
	PCle	·						
	Graphics	1 VGA port						
	Others	PS/2 for KB & Mouse						
BIOS	Boot Options	SATA,USB port, USB disk, network (PXE)						
Watahdaa Timor	Output Local reset & interrupt							
Watchdog Timer	Interval	Programmable 1s ~ 255s						
Hardware Monitor	Controller	NCT6776D						
Operating System	Compatibility	Windows7, Windows7 Embedded, Linux						
Power Requirement	TDP (max./typ.)	4HP:80W (MIC-3397)						
Physical	Dimension & Weight	6U/1 slot width (4HP): 233.35 x 160 x 20 mm (9.2" x 6.3" x	0.8")					
		Operating	Non-operating					
	Temperature	0 ~ 55° C (32 ~ 122° F)	-40 ~ 85° C (-40 ~ 185° F)					
Environment	Humidity	95 % @ 40° C, non-condensing	95 % @ 60° C, non-condensing					
	Vibration	2.0G Grms (Single slot, without on-board 2.5" SATA HDD) 1.06 Grms (Dual slot, without on-board 2.5" SATA HDD)	2Grms					
	Shock	10G (Without on-board 2.5" SATA HDD)	30G (Single slot, without on-board 2.5" SATA HDD)					
	Altitude	15000 feet above sea level	40000 feet above sea level					
Regulatory	Conformance	FCC Class A, CE, RoHS						
	NEBS Level 3	Designed to meet GR-63-Core and GR-1089-Core						
Compliance	Standards	PICMG2.0 R3.0, PICMG2.1 R.0, PICMG2.16 R1.0,						

Supported CPU Configurations

Intel® CPU Model Number	# Cores	Freq.	Cache	Memory Types	CPU TDP
Intel® Xeon® Processor E3-1125C v2	4	2.5GHz	8 MB L3 Cache	DDR3/3-1333/1600	40W

Ordering Information

Front panel						On board Featur	res						
CPU Board	LAN (1)	COM (RJ45) (2)	USB	VGA	DVI	DP	CPU	Memory (Up to 8GB) (3)	SO-DIMM (Up to 8G)(4)	SATA HDD Socket (4)	Cfast Socket	Slot Width	Conn.
MIC-3397C2-M8E	2	1	3	1	NA	NA	Xeon® E3-1125C v2	8 GB	1	1	1	1	J3/J5

Note:

- 1. LAN2 on front is switchable with RIO LAN1 which can be set in BIOS
- 2. COM support RS232/422 mode only
- 3. Total memory capacity is up to 16GB, 8GB on board, 8GB on SO-DIMM
- 4. 8GB onboard NAND flash is per request, not in default SKU

Recommended Configurations

CPU board	Rear I/O Board
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MIC-3397x-MxF Series	RIO-3317-XXX

