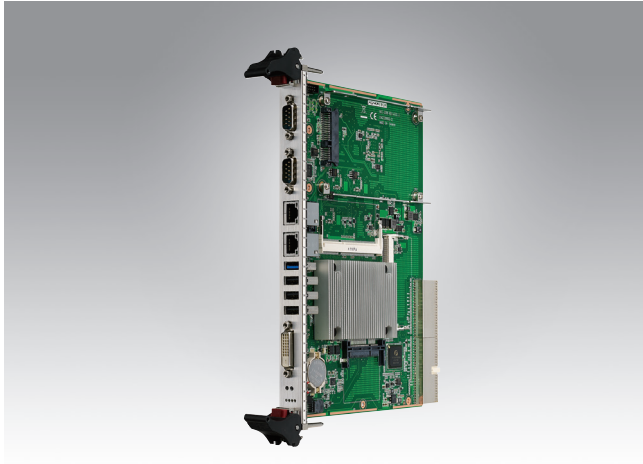


MIC-3398

6U CompactPCI Intel® Atom™ Processor Blade



Features

- Supports Intel® Atom™ E38xx, Celeron N2930 and J1900 processors, up to quad-core at 2 GHz
- Up to 8GB of 1333MHz DDR3L memory
- 2.5" SATA-II HDD/SSD mounting site
- Comprehensive I/O capabilities: DVI, USB 3.0/USB 2.0, Gigabit Ethernet, Serial Ports, SATA-II/CFast
- 4HP single slot high with dual GbE interfaces or 8HP dual slot high with quad GbE interfaces
- PICMG 2.1 R2.0, PICMG 2.6 R1.0 compliant



Introduction

The MIC-3398 is a Low-Power 6U CompactPCI® CPU blade with best in class price/performance ratio tailored for applications that require a state of the art processor platform based on Intel® Architecture with full IO capability at an attractive cost point.

The MIC-3398 supports Intel® Atom™ E3845 and Celeron N2930, J1900 SoC (system on a chip) family previously codenamed Bay trail with a maximum of quad-core 2.00 GHz processing performance.

Intel® Atom™ technology provides significant increases in performance and energy efficiency by using the 22nm Intel® manufacturing process making it an ideal choice for control and workstation applications that require passive cooling with a power dissipation as low as 10W.

Up to 8GB, dual channel 1333 MHz DDR3L memory with ECC support provide a high performance and robust memory interface for demanding applications. With built-in graphics based on Intel® HD Graphics Technology this blade offers a significant improvement in graphics performance compared to previous generation platforms. Support for an onboard 2.5" SATA-II drive as well as CFast SSDs adds comprehensive mass storage support.

On the system side, the MIC-3398 supports 32-bit, 33MHz and 64-bit, 66MHz PCI bus interfaces to a CompactPCI backplane.

A rich set of I/O interfaces such as DVI-D, USB3.0/2.0, Gigabit Ethernet and RS-232/422/485 ports round off the feature set. In addition to the single slot wide (4HP) board offering, a dual slot wide (8HP) version of the blade offers additional network connectivity by increasing Gigabit Ethernet port count from two to four.

Specifications

Processor System	CPU	Intel® Atom™TM SoC (22nm) E38xx and Celeron N2930 and J1900, up to quad core 2.00 GHz
	BIOS	AMI 8MByte SPI flash
CompactPCI Interface	J1 Connector	32-bit PCI local bus
	J2 Connector	64-bit PCI local bus
Memory	Technology	DDR3L 1333 MHz, dual channel without ECC support
	Max. Capacity	Up to 8GB
	Socket	SODIMM x2
Graphic	Controller	Intel® Gen 7 Graphics Engines and media encode/decode engine; GPU Frequency 750MHz
	VRAM	Shared memory up to 224 MB SDRAM
	Resolution	High resolution display up to 2560 x 1600 @ 60Hz
Ethernet	Controller	2 or 4 Intel® I210AT single-port Gigabit Ethernet controllers (on PCIe x1 channel)
	Interface	10/100/1000Base-T Ethernet
	I/O Connector	2 RJ45 (4HP), 4 RJ45 (8HP)
Storage	Onboard HDD/SSD	1 2.5" mounting site (SATA-II)
	Channels	1 CFast socket (SATA-II)
Front I/O	USB3.0	1 type A
	USB2.0	3 type A
	DVI-D	1
	COM	2 RS232/422/485 on D-Sub-9
	LAN	2 10/100/1000 Mbps on RJ45 (4HP) 4 10/100/1000 Mbps on RJ45 (8HP)
	Front Panel LEDs	1x yellow for HDD, x1 green for Master/Drone mode, and x1 green for Power
Hardware Monitor	Buttons	CPU reset button and power button
	HWM	NCT7904

Specifications (Cont.)

Operating System	Compatibility	Win7/WES7, Win8/WES8, Linux, VxWorks 6.x(on request)			
Power Requirement	CPU	J1900		E3845	
	Voltage	+3.3 V	+5 V	+3.3 V	+5 V
	Current	0.02 A	3.91 A	0.02 A	4.02 A
	Maximum	0.07 W	20.41 W	0.07 W	20.94 W
Physical	Dimension (W x D)	233.35 x 160.0 mm			
Environment	Temperature	Operating 0 ~ 55° C (32 ~ 122° F)		Non-operating -40 ~ 85° C (-40 ~ 185° F)	
	Humidity	95 % @ 40° C, non-condensing		95 % @ 60° C, non-condensing	
	Vibration (5-500 Hz)	2 Grms (without on-board 2.5" SATA HDD)		3.5 Grms	
	Shock	10G 11ms			
	Altitude	15000ft, 55° C, above sea level		40000 ft, -40° C, above sea level	
Regulatory	Conformance	FCC Class A, CE, RoHS			
Compliance	Standards	PICMG2.0 R3.0, PICMG2.1 R.0, PICMG2.9 R1.0			

Ordering Information

System Board Model Number	Front I/O					Main On-board Features						
	DVI-D	USB3.0 (type A)	USB2.0 (type A)	Ethernet (RJ45)	Console (D-Sub9)	CPU	Installed SODIMM	ECC Support	CFast Socket	Storage Channel	SODIMM Sockets	Front Panel
MIC-3398A-M2E	1	1	3	2	2	J1900	1x 2GB	No	1	1 SATA II	2	4HP
MIC-3398B-M4E	1	1	3	4	2	J1900	1x 4GB	No	1	1 SATA II	2	8HP

For availability of other configurations please contact your Advantech representative.

CPU Configuration

Intel® CPU Model Number	# Cores	Freq.	Turbo Freq.	Cache	CPU TDP	ECC
E3845	4	1.91 GHz	Na	2 MB	10 W	Yes
N2930	4	1.83 GHz	2.16 GHz	2 MB	7.5 W	Yes
J1900	4	2.00 GHz	2.42 GHz	2 MB	10 W	No

MIC-3398x-Mx E Series

