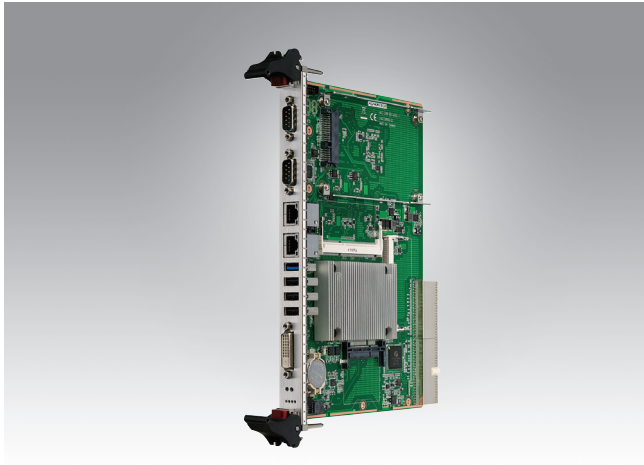


MIC-3398

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

CE FCC

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™ 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 |
| | Buttons | CPU reset button and power button |
| Hardware Monitor | 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

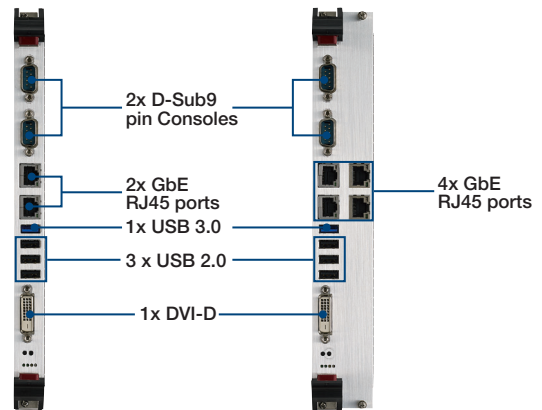
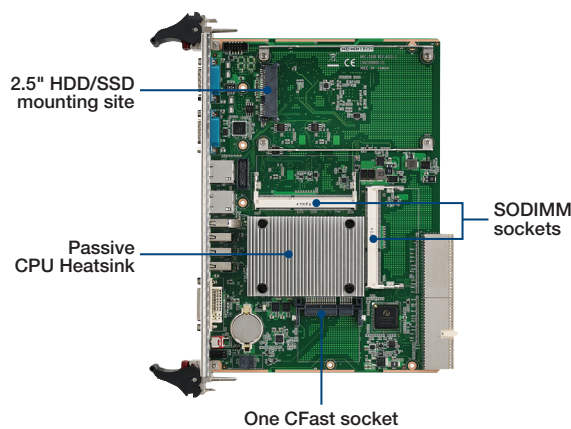
| System Board Model Number | Front I/O | | | | | Main On-board Features | | | | | | |
|---------------------------|-----------|-----------------|-----------------|-----------------|------------------|------------------------|------------------|-------------|--------------|-----------------|----------------|-------------|
| | 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



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