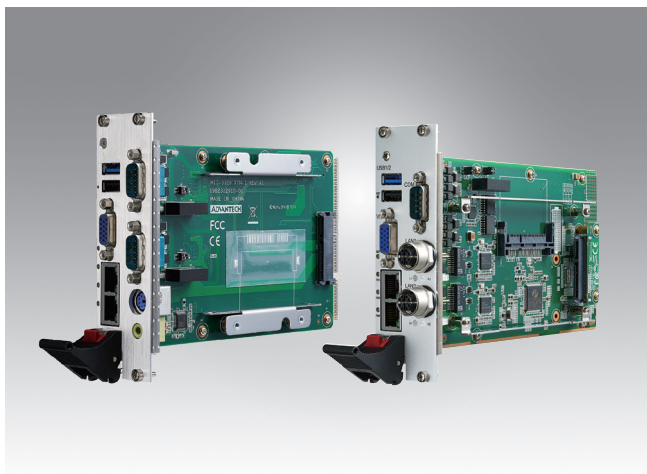


# MIC-3329

## 3U CompactPCI® Intel® Quad-Core Atom™ Processor Blade



### Features

- Supports Intel® Atom™ Processor E3826/E3827/E3845
- Supports up to 4GB DDR3L-1333 soldered ECC memory
- Optional extension module on 8HP and RIO for VGA, LAN, USB, PS/2, Audio, COM ports
- Supports fanless application with optimized heatsink design
- Designed to meet EN50121-4 and EN50155 for railway applications
- PICMG2.0 R3.0, PICMG2.1 R.0 Compliant

Fully Compliant with  
**EN 50121-4**

Fully Certified with  
**EN 50155**

RoHS  
Compliant  
Directive

**CE FCC**

### Introduction

The Advantech MIC-3329 is based on Intel® Atom™ technology, previously codenamed Baytrail and is designed to provide balanced performance and power efficiency. The MIC-3329 is a 3U CompactPCI® processor blade designed for dual-core Intel® Atom E3826/E3827 and quad-core Intel® Atom E3845 processors, and up to 4GB soldered DDR3L-1066/1333 ECC memory. It is available in single and dual slot form factor, offering a range of I/O functionality by XTM (8HP) & Rear I/O extensions.

Front panel I/O on the single slot (4HP) provides 2 x RJ45 GbE ports (Switchable with RIO 4HP), 1 x VGA port (Switchable with RIO 4HP), 1 x USB2.0 port and 1 x USB3.0 port.

Front panel I/O on the second layer (XTM) provides 2 x COM ports (RS232/422/485), 1 x PS/2 KB/MS and 1 x Audio ports or 2 x M12 GbE ports, 1 x COM ports (RS232/422/485).

The MIC-3329 provides an ideal solution for transportation, railway and factory automation applications. Its robust design from a layout and thermals perspective allows it to meet or exceed EN50155 and EN50121-4 using a very low TDP selection of 7W/8W/10W processors.

Its low power consumption and industrial SoC features make the MIC-3329 a perfect fit for all fanless system applications.

### Specifications

|                       |                  |                                                                                                                                                                          |
|-----------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor System      | CPU              | Intel® Atom™ Processor E3826/E3827/E3845                                                                                                                                 |
|                       | Max Speed        | Up to 2MB L2 Cache, 1.91 GHz                                                                                                                                             |
|                       | BIOS             | 2 x AMI 8 MByte SPI flash                                                                                                                                                |
| Memory                | Technology       | Single Channel DDR3L 1066/1333 MHz with ECC                                                                                                                              |
|                       | Max. Capacity    | Up to 4GB on board                                                                                                                                                       |
| Compact PCI Interface | J1 Connectors    | 32bit/33MHz PCI local bus                                                                                                                                                |
|                       | J2 Connector     | RTM                                                                                                                                                                      |
|                       | Mode             | System Master/Drone (Stand alone)                                                                                                                                        |
| Ethernet              | Controller       | Intel® WG1210 SLJXR Gigabit Ethernet Controller                                                                                                                          |
|                       | Interface        | PCIe 1.0 x 1, 10/100/1000 Base TX Ethernet                                                                                                                               |
|                       | I/O Connector    | 2 x RJ45 to 4HP front (Switchable with RIO 4HP); 2 x M12 Coded to 8HP front                                                                                              |
| Graphics              | Chipset          | Integrated in processor                                                                                                                                                  |
|                       | I/O Connector    | 1 x VGA to 4HP front (Switchable with RIO 4HP)                                                                                                                           |
|                       | Resolution       | 1 x VGA 2560 x 1600, 60Hz                                                                                                                                                |
| Storage               | Mode             | SATA-II                                                                                                                                                                  |
|                       | Channels         | Option 1: 1 x SATA connector and 1x Cfast connector on 8HP<br>Option 2: 1 x SATA connector on 8HP and 1 x Cfast socket on RTM (Switchable with NAND flash, upon request) |
| Front I/O             | USB              | 1 x US2.0 type A, 1 x USB3.0 type A                                                                                                                                      |
|                       | VGA              | 1 x VGA (Switchable with RIO)                                                                                                                                            |
|                       | LAN              | 2 x 10/100/1000Mbps on RJ45 (Switchable with RIO)                                                                                                                        |
|                       | Front Panel LEDs | x 1 blue/yellow for Hot Swap/HDD, x 1 green for Power, and x 1 green for Master/Drone mode                                                                               |
|                       | 8HP (XTM)        | Option 1: 2 x DB9 COM; 1 x PS/2; 1 x Audio Line in/out<br>Option 2: 1 x DB9 COM; 2 x M12 X-coded GbE                                                                     |
|                       | Buttons          | System reset button                                                                                                                                                      |

## Specifications (Cont.)

|                  |                    |                                                     |                              |
|------------------|--------------------|-----------------------------------------------------|------------------------------|
| To RTM           | USB                | 2 x US2.0 type A,                                   |                              |
|                  | VGA                | 1 x VGA (Switchable with front)                     |                              |
|                  | LAN                | 2 x 10/100/1000Mbps on RJ45 (Switchable with front) |                              |
|                  | 8HP (XTM)          | 2 x COM port on DB9 (RS232/422/485)                 |                              |
| BIOS             | Boot Options       | SATA, USB, network (PXE)                            |                              |
| Watchdog Timer   | Output             | Local reset                                         |                              |
|                  | Interval           | Programmable 1s ~ 255s                              |                              |
| Operating System | Compatibility      | Windows7, Windows 10, Linux, CentOS6.6              |                              |
| Physical         | Dimension & Weight | 3U/ 4HP&8HP: 100mm x 160 mm                         |                              |
| Environment      |                    | Operating                                           | Non-operating                |
|                  | Temperature        | -40 ~ 70 °C (-40 ~ 158 °F) Fanless                  | -40 ~ 85 °C (-40 ~ 185 °F)   |
|                  | Humidity           | 95 % @ 40 °C, non-condensing                        | 95 % @ 60 °C, non-condensing |
|                  | Vibration          | 2Grms (X,Y,Z 1H/axis, w/o HDD)                      | 2G                           |
|                  | Shock              | 30 G, 11ms, each axis three times                   |                              |
| Regulatory       | Conformance        | FCC Class A, CE, RoHS<br>EN50121-4, EN50155         |                              |
| Compliance       | Standards          | PICMG2.0 R3.0, PICMG2.1 R.0                         |                              |

## Supported CPU Configurations

| Intel® CPU Model Number      | # Cores | Freq.   | Cache         | Memory Types | CPU TDP |
|------------------------------|---------|---------|---------------|--------------|---------|
| Intel® Atom™ Processor E3845 | 4       | 1.91GHz | 2 MB L2 Cache | DDR3L-1333   | 10W     |

## Ordering Information

| P/N List           | Front/Rear Panel        |        |        |                    |       |         | On Board Features |       |      |            |                             |
|--------------------|-------------------------|--------|--------|--------------------|-------|---------|-------------------|-------|------|------------|-----------------------------|
|                    | 4HP                     |        |        | 8HP XTM            |       |         |                   |       |      |            |                             |
|                    | RJ45 LAN <sup>(1)</sup> | USB2.0 | USB3.0 | VGA <sup>(2)</sup> | CPU   | M12 LAN | COM               | Audio | PS/2 | SATA Conn. | Cfast Socket <sup>(3)</sup> |
| <b>Front Board</b> |                         |        |        |                    |       |         |                   |       |      |            |                             |
| MIC-3329C1-D2E     | 2                       | 1      | 1      | 1                  | E3845 | 2       | 1                 | NA    | NA   | 1          | 1                           |
| MIC-3329C1-D1E     | 2                       | 1      | 1      | 1                  | E3845 | NA      | 2                 | 1     | 1    | 1          | NA                          |
| <b>RIO Board</b>   |                         |        |        |                    |       |         |                   |       |      |            |                             |
| MIC-3329R1-D1E     | 2                       | 2      | NA     | 1                  |       | NA      | 2                 | NA    | NA   | NA         | 1                           |

Notes:

\*(1)(2) are switchable between front and rear boards.\*On board NAND flash is requested by customer.

(3): MIC-3329R1-D1E Cfast socket is only active in MIC-3329C1-D1E

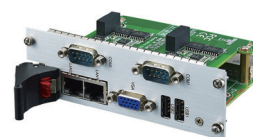
## Related Products

| Peripheral board | Description                                                                 |
|------------------|-----------------------------------------------------------------------------|
| MIC-3955         | 4 or 8-port RS232/422/485 communication card, with RIO support              |
| MIC-3958         | 3U CPCI 4/2 port RJ45 or M12 X-Code Gigabit Ethernet Card, with RIO support |
| MIC-3022         | 3U or 4U enclosure for 3U cards, with RIO support                           |

Front Board



RIO Board





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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