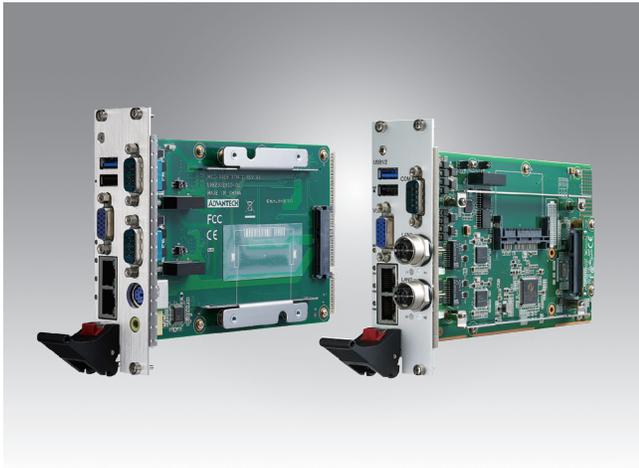


MIC-3329

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
- Supports Super CAP and FERAM on 8HP XTM-3 by BOM option
- 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 R2.0 Compliant

Compliant with
EN 50121-4

Certified with
EN 50155

CE FCC

RoHS
COMPLIANT
PRODUCT

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-1 provides 2 x DB9 COM, 1 x PS/2, 1 x Audio Line in/out; XTM-2 provides 1 x DB9 COM; 2 x M12 X-coded GbE; XTM-3 provides 2 x M12 X-code, 2 x M12 D-code.

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); 2xM12 X-Code, 2xM12 D-Code on 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
		Option 2: 1 x SATA connector on 8HP and 1 x Cfast socket on RTM (Switchable with NAND flash, upon request)
Option 3: 2 x M.2 SATA on 8HP		
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
		Option 2: 1 x DB9 COM; 2 x M12 X-coded GbE
	Option 3: 2 x M12 X-code, 2 x M12 D-code	
Buttons	System reset button	
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)

Specifications (Cont.)

Watchdog Timer	Output	Local reset
	Interval	Programmable 1s ~ 255s
Operating System	Compatibility	Windows7, Windows 10, Linux, CentOS6.6, VxWorks 6.9 & 7.0
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 EN50121-4, EN50155
Compliance	Standards	PICMG2.0 R3.0, PICMG2.1 R2.0

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

	Front/Rear Panel						On Board Features								
	4HP			8HP XTM			COM		Audio		PS/2		SATA Conn.		Cfast Socket
P/N List	RJ45 LAN ⁽¹⁾	USB2.0	USB3.0	VGA ⁽²⁾	CPU	M12 LAN									
	Front Board														
MIC-3329C1-D2E	2	1	1	1	E3845	2	1	N/A	N/A	N/A	1	1	1	1	N/A
MIC-3329C2-D2E	2	1	1	1	E3845	4 ⁽³⁾	N/A	N/A	N/A	N/A	2	1	1	1	N/A
MIC-3329C3-D2E	2	1	1	1	E3845	N/A	2	1	1	1	1	1	1	1	N/A
	RIO Board														
MIC-3329R1-D1E	2	2	N/A	1		N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

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

(3) 4*M12: 2*M12 X-Code, 2*M12 D-Code

(4) MIC-3329C1-D1E replace model is MIC-3329C3-D2E

Related Products

Peripheral board	Description
MIC-3955	3U CPCI 4 or 8 ports 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	4U enclosure for 3U cards, with RIO support
MIC-3023	3U enclosure for 3U cards, with RIO support

Front Board



MIC-3329C3-D2E

RIO Board



MIC-3329R1-D1E



MIC-3329C1-D2E



MIC-3329C2-D2E