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Find the *Advantech PCM-3362Z* at our website: *Click HERE*

ADVANTECH

PCM-3362 PC/104-plus SBC w/Intel® Atom N450, VGA, LVDS, LAN, USB2.0, SATA, and on-board flash Startup Manual

Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 x PCM-3362 SBC
- 1 x SATA data cable (p/n: 1700071000)
- 1 x SATA power cable (p/n: 1703150102)
- 1 x Keyboard/Mouse cable (p/n: 1703060053)
- 1 x Y cable for KB/MS extension (p/n: 1700060202)
- 1 x Ethernet RJ-45 conn. cable (p/n: 1700017863)
- 1 x VGA cable (p/n: 1700000898)
- 1 x USB cable (p/n: 1703100260)
  (bracket type with two USB ports)
- 1 x RS-422/485 COM cable (p/n: 1703040157)
- 1 x RS-232 COM cable (p/n: 1701200220)
- 1 x ATX power cable (p/n: 1700002332)
- 1 x AT power cable (p/n: 1700003491)
- 1 x Startup Manual (this manual)
- 1 x CD-ROM (Manual, Driver, Utility)

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Model No.List	Description
PCM-3362N-S6A1E	Intel Atom N450 PC/104-Plus SBC, VGA, LVDS, LAN, USB,SATA and on-board flash

Optional Accessary

1 x heatspreader (p/n:1960047106T001)

Note: Acrobat Reader is required to view PDF files. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/read-step.html (Acrobat is a trademark of Adobe).

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http://www.advantech.com

http://www.advantech.com/eplatform

For technical support and service, please visit our support website at:

http://service.advantech.com/support

This manual is for the PCM-3362 Series Rev. A1.

Part No. 2006336200 1st Edition
Printed in China Decmber 2009

Specifications

Standard SBC functions

- **CPU:** Intel Atom N450 processor, up to 1.67 GHz
- **System memory:** supports Double Data Rate (DDR) DDR2 667 SDRAM up to 2 GB

Note: PCM-3362 does not support DDR2 533 SDRAM

- **2nd cache memory:** 512 KB on the processor
- **System chipset:** Intel® ICH8M
- **BIOS:** AMI 16 Mbit Flash BIOS
- **Watchdog timer:** 255 levels timer interval
- **Expansion interface:** PC/104-Plus (ISA and PCI bus)
- **Battery:** Lithium 3 V/210 mAH
- **Power management:** ACPI supported
- **Serial ATA:** One Serial ATA2 interface, speed up to 300MB/s
- **Flash:** On board 2 GB flash (IDE interface)
- **Serial ports:** Two serial RS-232 ports, one RS-422/485 ports
- **Keyboard/mouse connector:** Supports one standard PC/AT keyboard and a PS/2 mouse
- **USB:** Four USB 2.0 ports compliant universal serial bus ports
- **High definition audio:** PCM-3362 can provide audio function with the optional audio extension module PCA-AUDIO-HDA1E and specific audio cable

VGA/TTL Interface

- **Controller:** Integrated graphic core of Embedded en3.5+ technology
- **VRAM:** 224 MB shared system memory
- **Output interfaces:**
  - **VGA:** Supports up to SXGA 1400 x 1060 @ 60 Hz
  - **LVDS:** Singe channel 18-bit LVDS up to WXGA 1366 x 768
  - **Dual display:** CRT + LVDS, supports extended mode and clone mode

Ethernet Interface

- Supports Single 10/100/1000 Mbps Ethernet networking
- **Controller:** Intel® 82567V

OS Support

- This board supports Win 7, Win XP, Win CE and Win XPe
- For further information about OS support in your PCM-3362, please visit the Adventech website: www.advantech.com, or contact your technical support center.

Mechanical and Environmental

- **Dimensions:** 96 x 90 mm (3.8" x 3.5")
- **Power supply type:** AT/ATX

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Specifications

- **Power requirement:** +5 V ± 5%, +12 V ± 5% (Optional), 5 V only, 12 V optional for PC104 add on card and LCD inverter)
- **Power consumption:** (Geode LX800, 512 MB DDR333)
  - **Power on Load:** +5 V@ 1.79 A, +12 V@ 0.02 A
  - **Max load:** +5 V@ 2.37 A, +12 V@ 7 mA
  - **Idle mode:** +5 V@ 2 A, +12 V@ 5 mA
- **Power consumption Conditions:**
  - **Test software:** Maxpower + 3DMark 2005
  - **Power on - Boot:** Measure the maximum current value of between system power on and boot-up to O.S.
  - **Max. load:** Measure the maximum current value which system under maximum load (CPU: Top speed , RAM & Graphic: Full loading)
  - **Idle mode:** Measure the current value when system in windows mode and without running any program
- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F) (operation humidity: 40°C @ 85% RH Non-Condensing)
- **Weight:** 0.85 kg (reference weight of total package)

Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application.

The table below lists the functions of each of the jumpers and connectors.

Jumpers	
Label	**Function**
JP1	CLEAR CMOS
JP2	LVDS Panel Power Select
JP3	COM3 RS422/RS485 Select
JP4	PCI I/O Voltage Select

Connectors	
Label	**Function**
CN1	HD Audio Connecter
CN4	SO-DIMM Connector
CN6	LVDS Connecter
CN7	Panel Inverter Connecter
CN8	VGA Connecter
CN9	USB Port0/1 Connecter
CN10	USB Port2/3 Connecter
CN12	Front Panel Connecter
CN13	Buzzer Connecter
CN15	SATA Connecter
CN16	COM1~COM2 Connecter

Jumpers and Connectors

CN17	RS422/485 Connecter
CN18	LAN Connecter
CN19	LAN LED Connecter
CN20	PS2 Keyboard/Mouse Connecter
CN21	GPIO Connecter
CN23	ATX Power In Connecter
CN24	Power In Connecter
CN25	I2C BUS Connecter
CN26	-12V & -5V power connecter
P1	PC104-plus Connecter
BH1	RTC Battery Connecter

Clear CMOS (JP1)	
Setting	**Function**
1 ~ 2	Normal (default)
2 ~ 3	Clear CMOS



Warning! To avoid damaging the computer, always turn off the power supply before clearning CMOS.

LVDS Panel Power Select (JP2)	
Setting	**Function**
1 ~ 2	5 V
2 ~ 3	3.3 V (default)



COM3 RS422/RS485 Select (JP3)	
Setting	**Function**
1 ~ 2	RS-485 (default)
2 ~ 3	RS-422



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Jumpers and Connectors

PCI I/O Voltage Select (JP4)	
Setting	**Function**
1 ~ 2	5 V (default)
2 ~ 3	3.3 V



Software Installation

The CD disc contains a driver installer program that will guide you through the installation of various device drivers needed to take full advantage of your CPU card.

Caution! The computer is provided with a battery-powered Real-time Clock circuit. There is a danger of explosion if the battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.

Safety Information

This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Locating Connectors and Jumpers

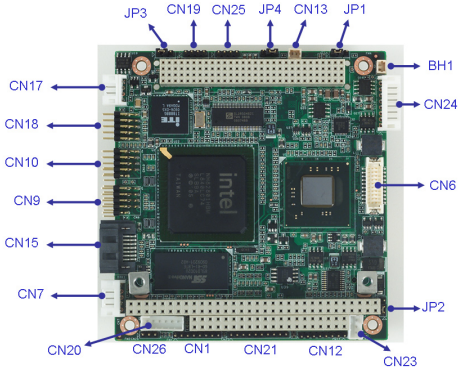


Figure 1: PCM-3362 Location Connectors & Jumpers (component side)

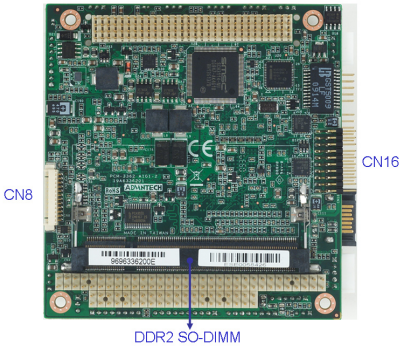


Figure 2: PCM-3362 Location Connectors & Jumpers (solder side)

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Mechanical Drawings

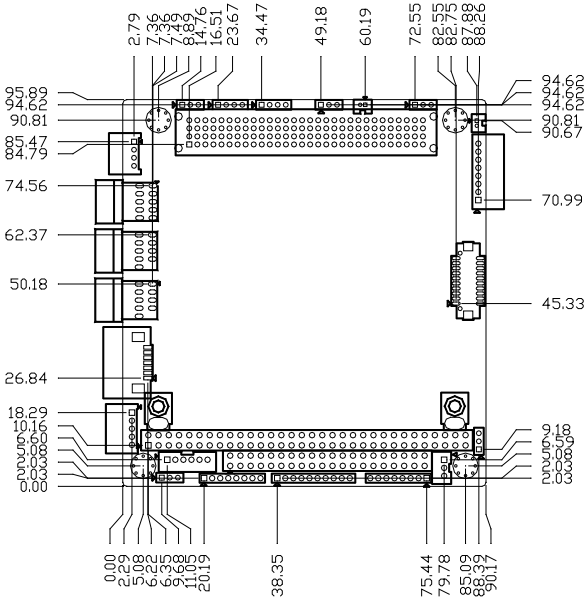


Figure 3: PCM-3362 Mechanical Drawing (component side)

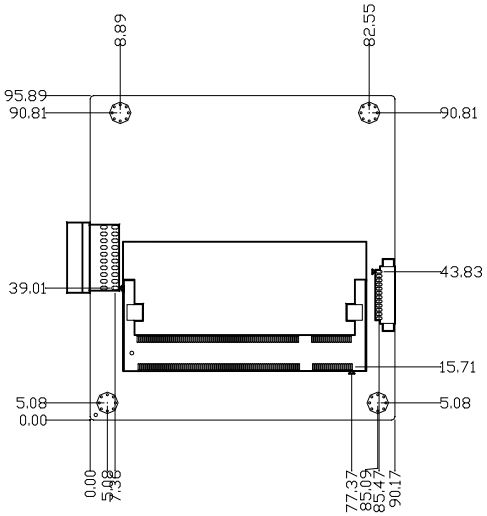


Figure 4: PCM-3362 Mechanical Drawing (solder side)

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