PCM-9361 Intel® Atom N270 3.5” SBC with PCI-104, VGA/ TTL/LVDS Ethernet/USB 2.0, SATA and SSD Startup Manual

Packing List

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

1.	1 PCM-9361SBC	
2.	1 Startup Manual	Optional
3.	1 Utility CD	Optional
4.	1 Mini jumper pack	p/n: 9689000002
5.	1 SATA cable	p/n: 1700006291
6.	1 Keyboard/Mouse cable	p/n: 1700060202
7.	1 ATX Power cable	p/n: 1700000265
8.	1 Audio cable	p/n: 1703100152
9.	1 COM2 cable	p/n: 1701140201
10.	2 USB 2 port cables	p/n: 1703100121
11.	1 LPT cable	p/n: 1700260250

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

Note 1: For detailed contents of PCM-9361, please refer to information on the enclosed CD-ROM (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file.Acrobat Reader can be downloaded at: www.adobe.com/Products/acrobat/readstep2.html (Acrobat is a trademark of Adobe)

For more information on this and other Advantech products, please visit our website at:

http://www.emacinc.com

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

http://www.emacinc.com/suppot/

This quick manual is for the PCM-9361 Series Rev. A1

Part No. 2006936100 1st Edition,
Print in China Dec. 2008

Specifications

General

- **CPU:** Intel® Atom™ Processor N270 1.60 GHz
- **System Chipset:** Intel® 945GSE+ICH7M
- **System Memory:** DDR2 400/533 MHz up to 2 GB
- **BIOS:** Award 4-Mbit Flash BIOS
- **Watchdog Timer:** 255 level timer interval
- **Expansion Interface:** PCI-104
- **Battery:** Lithium 3 V/210 mAH
- **SATA interface:** Two SATA ports support 150 MB/s
- **Keyboard/mouse connector:** Supports one standard PC/AT keyboard and a PS/2 mouse
- **USB:** Five USB 2.0 compliant universal serial bus ports
- **Audio:** High Definition Audio(HD),Lin-in, Lin-out, Mic-in
- **GPIO:** 8-bit general purpose Input/Output
- **Serial ports:** COM1: RS-232, COM2: RS-232/422/485

Solid State Disk

- Supports one 50-pin socket for CFC type I/II

VGA/LVDS Interface

- **Chipset:** Intel® 945GSE
- **Memory Size:** Up to 64 MB of dynamic video memory allocation
- **Resolution:**
  - CRT display Mode: Supports QXGA Up to 2048 x 1536
  - TTL display Mode: Up to 800 x 600
- **TTL LCD:** Supports 18-bit TTL LCD
- **LVDS LCD:** Supports 36-bit LVDS LCD
- **Dual Display:**
  - CRT + LVDS (36-bits)
  - CRT + TTL (18-bits)

Ethernet Interface

- **Chipset supports:** 10/100/1000 Mbps - Realtek RTL8110SC (With Wake on LAN)
- **Ethernet interface:** IEEE 802.3,IEEE 802.3u, IEEE 802.3x, IEEE802.3ab protocol compatible

Specifications

Mechanical and Enviromental

- **Dimensions:** 146 x 105 mm (5.7" x 4")
  Mechanical Drawing is available.
- **Power Supply Type:** AT/ATX
- **Power Requirement:** +5 V ±5%, +12 V ±5% (Optional), 5 V standby for ATX mode, or supports single +5 V only
- **Power Consumption:**
  - XP Mode (Typical): +5 V @1.90 A, +12 V @ 0.07 A
    (Suspend): +5 V @ 1.36 A, +12 V @ 0.06 A
    (Max Load): +5 V @ 2.38 A, +12 V @ 0.09 A
- **Operating Temperature:** 0 ~ 60° C (32 ~ 140° F)
- **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 function of each of the jumpers an connectors.

Jumpers and connectors

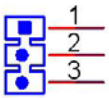
Jumpers	
Label	**Function**
J1	Audio Power
J2	AT/ATX Power Setting
J3	PCI VIO Setting
J4	Clear CMOS
J5	LCD Power
J6	COM2 Setting

Jumpers and Connectors

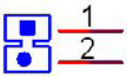
Connectors	
Label	**Function**
CN1	Audio
CN2	Internal USB
CN3	Internal USB
CN4	SATA
CN5	SATA
CN6	Power Swtich (Low Active)
CN7	PCI-104 -12V Input
CN8	AT/ATX Power Input
CN9	PCI-104
CN10	36 bits LVDS Panel
CN11	LPT
CN12	GPIO
CN13	18 bits TTL Panel
CN14	Inverter Power Output
CN15	HDD & PWR LED
CN16	SMBus
CN17	COM2
CN18	LAN
CN19	FAN (+5 V)
CN20	External USB
CN21	PS2
CN22	COM1
CN23	VGA
CN24	CF
CN25	DDR2 SO-DIMM H=6.5 mm
CN26	Reset Button

Jumper Setting

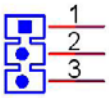
J1	Audio Power
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D (M) 2.0 mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	+12 V to +5 V LDO
(2-3)	+5 V



J2	AT/ATX Power Setting
Part Number	1653002101
Footprint	JH2X1V-2M
Description	PIN HEADER 2*1P 180D (M) SQUARE 2.0 mm DIP W/O Pb
Setting	Function
NC	ATX Power
(1-2)	AT Power

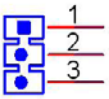


J3	PCI VIO Setting
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D (M) 2.0 mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	+5 V
(2-3)	+3.3 V

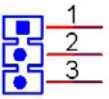


Jumpers and Connectors

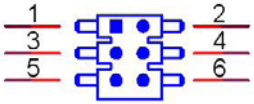
J4	Clear CMOS
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D (M) 2.0 mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	Normal
(2-3)	Clear COMS

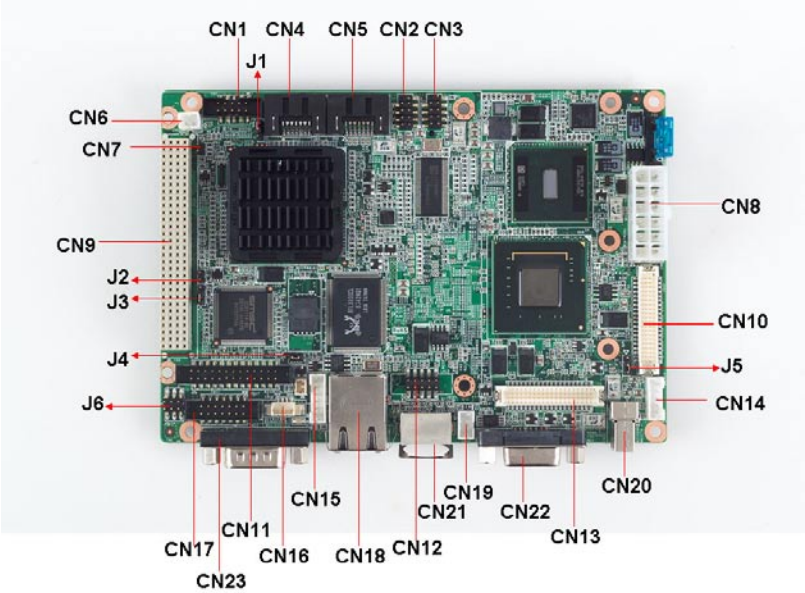


J5	LCD Power
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D (M) 2.0 mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	+5 V
(2-3)	+3.3 V

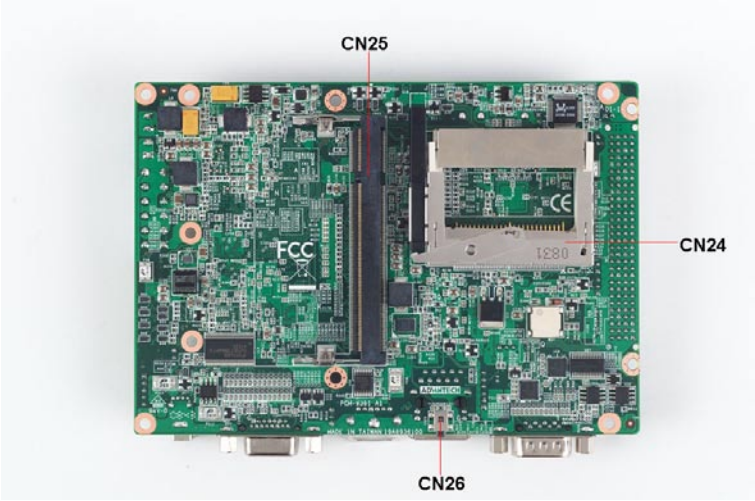


J6	COM2 Setting
Part Number	1653003260
Footprint	JH3X2S-2M
Description	PIN HEADER 3*2P 180D (M) 2.0 mm SMD SOUARE PIN
Setting	Function
(1-2)	RS232
(3-4)	RS485
(5-6)	RS422

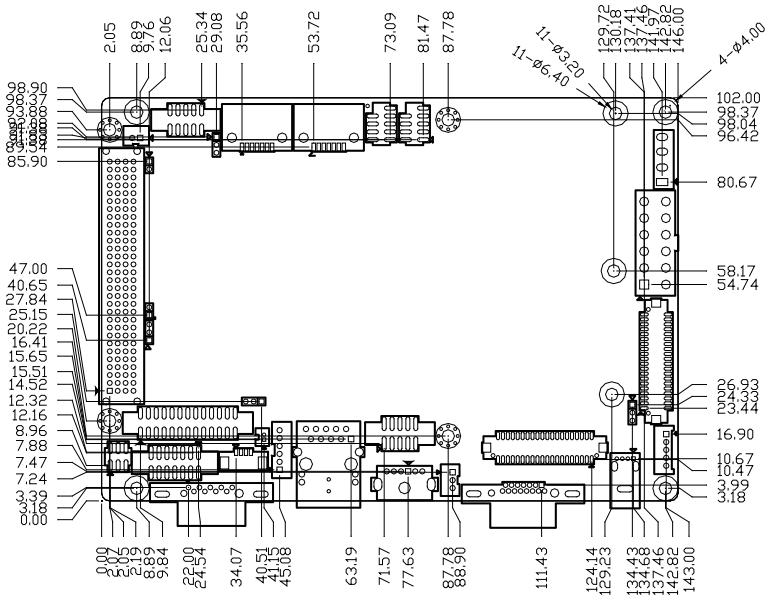




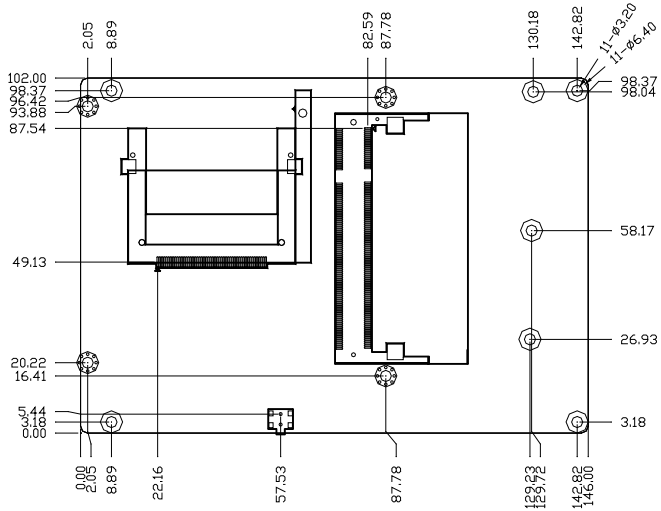
PCM-9361 Jumpers & Connectors (Component Side)



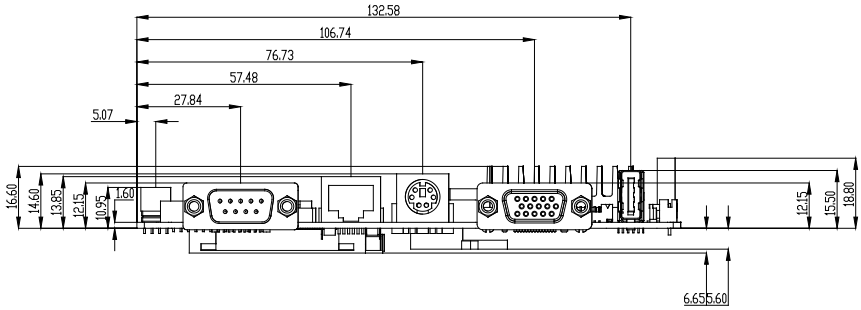
PCM-9361 Jumpers & Connectors (Solder Side)



PCM-9361 Mechanical Drawing (Top)



PCM-9361 Mechanical Drawing (Bottom)



PCM-9361 Mechanical Drawing (Side)