

PCM-9361 Intel® Atom N270 3.5" SBC with PC/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
3. 1 Utility CD
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. 1 USB 2 port cable p/n: 1703100121

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.advantech.com>

<http://www.advantech.com/eplatform>

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

<http://service.advantech.com.tw/support/>

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

Part No. 2006936101
Print in China

2nd Edition,
October 2009

Specifications

General

- **CPU:** Intel® Atom™ Processor N270 1.60 GHz
- **System Chipset:** Intel® 945GSE+ICH7M
- **System Memory:** DDR2 400/533 MHz up to 2GB(1GB per Rank)
- **BIOS:** Award 4-Mbit Flash BIOS
- **Watchdog Timer:** 255 level timer interval
- **Expansion Interface:** PC/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), Line-in, Line-out, Mic-in
- **GPIO:** 8-bit general purpose Input/Output

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:**
 - Support 36-bit LVDS LCD;
 - Support 48-bit LVDS LCD (PCM-9361EVG only)
- **Dual Display:**
 - CRT + LVDS (36-bits)
 - CRT + TTL (18-bits)
 - CRT+LVDS2 (48bits, only for PCM-9361EVG)
 - LVDS1+LVDS2 (only for PCM-9361EVG, not support in DOS)

Ethernet Interface

- **Chipset supports:** 10/100 Mbps - Realtek RTL8100CL (With Wake on LAN)
- **Ethernet interface:** IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 8023y, IEEE802.ab (100 BASE-T) protocol compatible
- **Temperature:** 0 ~ 40° C (32 ~ 104° F)

Specifications

Mechanical and Environmental

- **Dimensions:** 146 x 105 mm (5.7" x 4")
Mechanical Drawing is available.
- **Power Supply Type:** AT/ATX
- **Power Requirement:** +5 V \pm 5%, +12 V \pm 5% (Optional), 5 V standby for ATX mode, or supports single +5 V only
- **Power Consumption:** DOS Mode: +5V @ 1.70A
- **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 and 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
J7	LCD Power (only for PCM-9361EVG)

Connectors

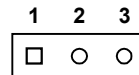
Label	Function
CN1	Audio
CN2	Internal USB
CN3	Internal USB
CN4	SATA
CN5	SATA
CN6	Power Switch (Low Active)
CN7	PCI-104 -12V Input
CN8	AT/ATX Power Input
CN9	PCI-104
CN10	36 bits LVDS Panel
CN11	LPT
CN12	GPIO

Jumpers and Connectors

CN13	18 bits TTL Panel
CN14	Inverter Power Output
CN15	HDD & PWR LED
CN16	SMBus
CN17	COM2
CN18	LAN
CN19	CPU 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
CN27	Inverter Power Output (only for PCM-9361EVG)
CN28	48 bits LVDS (only for PCM-9361EVG)

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

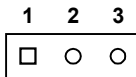


Jumpers and Connectors

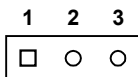
J2	AT/ATX Power Setting
Part Number	1653002101
Footprint	JH2X1V-2M
Description	PIN HEADER 2*1P 180D(M) SQUARE 2.0mm DIP W/O Pb
Setting	Function
NC	ATX Power
(1-2)	AT Power



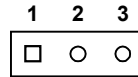
J3	PCI VIO Setting
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D(M) 2.0mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	+5 V
(2-3)	+3.3 V



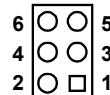
J4	Clear CMOS
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D(M) 2.0mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	Normal
(2-3)	Clear CMOS



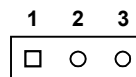
J5	LCD Power
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D(M) 2.0mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	+5 V
(2-3)	+3.3 V



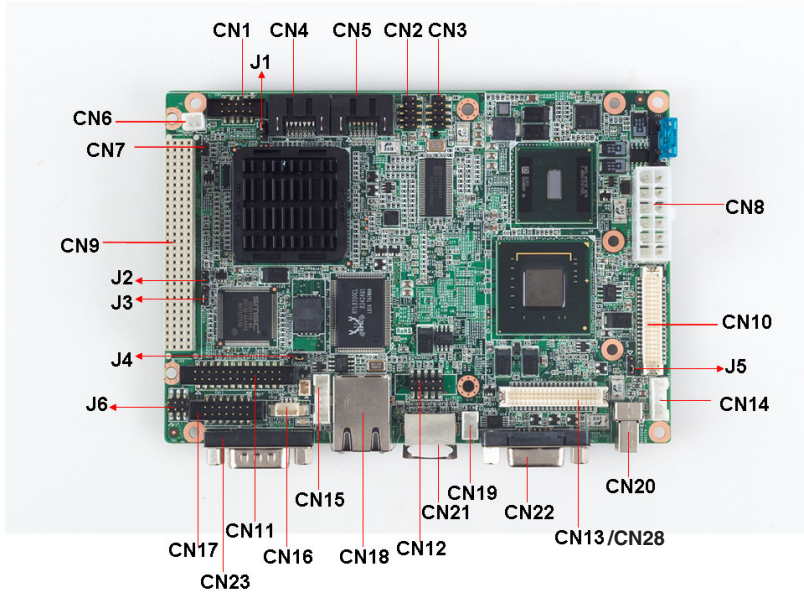
J6	COM2 Setting
Part Number	1653003260
Footprint	HD_3x2P_79
Description	PIN HEADER 3*2P 180D(M) 2.0mm SMD SQUARE PIN
Setting	Function
(1-2)	RS232
(3-4)	RS485
(5-6)	RS422



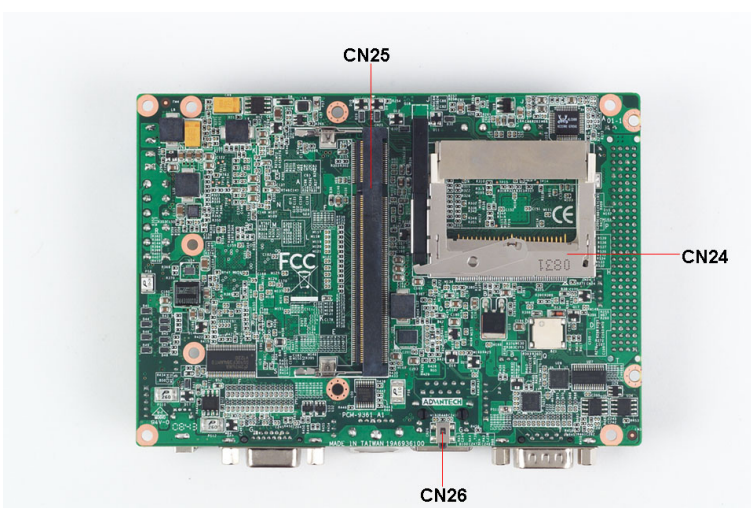
J7	LCD Power (only for PCM-9361EVG)
Part Number	1653003101
Footprint	JH3X1V-2M
Description	PIN HEADER 3*1P 180D(M) 2.0mm DIP SQUARE W/O Pb
Setting	Function
(1-2)	+5 V
(2-3)	+3.3 V



PCM-9361 Jumpers and Connectors

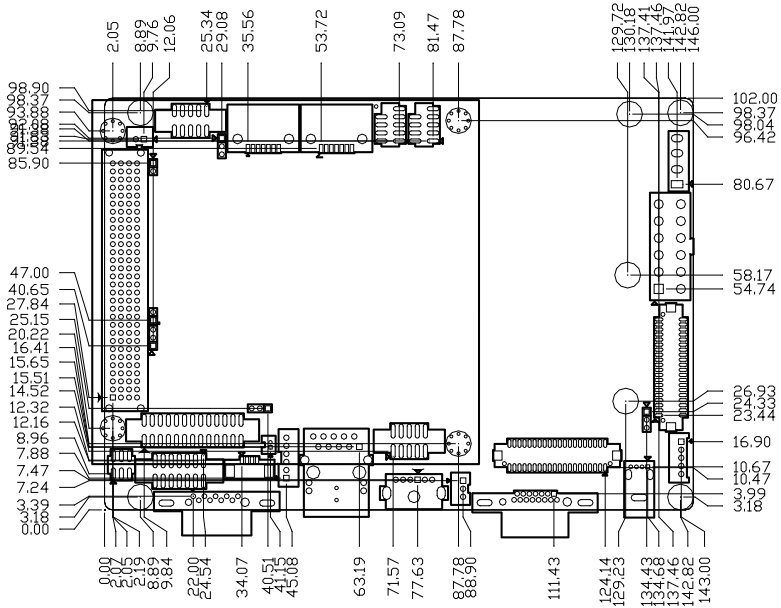


PCM-9361 Jumpers & Connectors (Component Side)

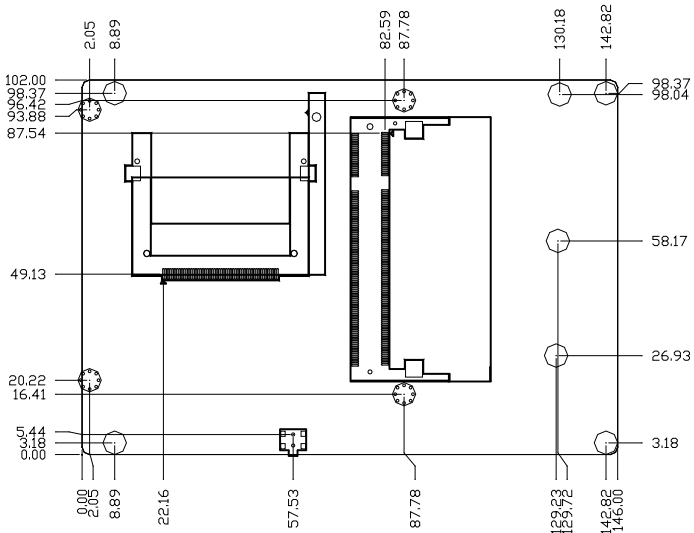


PCM-9361 Jumpers & Connectors (Solder Side)

PCM-9361 Mechanical Drawing



PCM-9361 Mechanical Drawing (Component Side)



PCM-9361 Mechanical Drawing (Solder Side)