

PCM-9374 3.5" SBC with VIA CPU, Audio, VGA/ LCD & 2 LAN

Startup Manual

Packing List

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

- 1 PCM-9374 SBC
- 1 Startup manual
- 1 Utility CD
- 1 Mini jumper pack p/n: 9689000002
- 1 Audio cable p/n: 1703100152
- 1 IDE 44 pin p/n: 1701440351
- 1 USB 2 port cable p/n: 1703100121
- 1 Parallel port cable p/n: 1700260250
- 1 Keyboard/Mouse cable p/n: 1700060202
- 1 serial port cable p/n: 1701140201
- 1 ATX power cable 20P-12P p/n: 1700000265 cable

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

Note 1: For detailed contents of the PCM-9374, please refer to the enclosed CD Disc or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: <http://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://www.advantech.com/support>

This manual is for the PCM-9374 Series Rev. A1.

Part No. 2006937401

2nd Edition
Sep. 2005.

Specifications

Standard SBC Functions

- **CPU:** Embedded low power VIA Eden 400/667 MHz or VIA C3-LP 1GHz Processor
 - VIA Eden 400MHz PCM-9374F-J0A1
 - VIA Eden 667MHz PCM-9374F-M0A1
 - VIA C3-LP 1GHz PCM-9374F-S1A1
- **System Memory:** One 200 pin SODIMM socket, support DDR 200/266 SDRAM
- **2nd Cache Memory:** 64 KB on the Eden processor
- **System Chipset:** VIA CLE266 100/133MHz FSB
- **BIOS:** Award 2Mbit Flash BIOS
- **Watchdog Timer:** 1-62sec, 62 level timer intervals system reset
- **Expansion Interface:** PCI-104
- **Battery:** Lithium 3V/210 mA
- **Power management:** ACPI 1.0B
- **Enhanced IDE interface:** One channels supports up to two EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, supports UDMA 33 mode
- **Serial ports:** Two serial RS-232 ports, COM1: RS-232, COM2: RS-232/422/485
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Keyboard/mouse connector:** Supports one standard PC/AT keyboard and a PS/2 mouse
- **Audio:** Support AC97 Audio stereo sound
- **USB:** Five USB 2.0 compliant universal serial bus ports

Solid State Disk

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

VGA/LCD Interface

- **Chipset:** VIA CLE266 Twister chip with S3 Graphics UniChrome IGP 2D/3D/Video Accelerator
- **Memory Size:** 8/16/32/64 MB
- **Resolution:**
 - CRT Mode:** 1400 x 1050@32bpp(85Hz)
 - LCD Mode:** 1600 x 1200@32bpp(60Hz)
- **LCD Interface:** support 24-bit TTL interface for TFT LCD
- **LVDS:** support 24-bit LVDS interface(optional BIOS support)
- **Display Mode:** CRT+LCD

Ethernet interface

- **Chipset:** 10/100Mbps RealTek RTL8100
- **Speed:** 10/100 Mbps (optional)
- **Interface:** Two RJ45 connectors
- **Standard:** IEEE 802.3u 100 Base-T Fast Ethernet compatible Build-in boot ROM in Flash BIOS

Audio Function

- **Chipset:** Realtek ALC202
- **Audio controller:** Support AC97 3D Audio stereo sound
- **Audio interface:** line in, line out, Microphone in

Mechanical and Environmental

- **Dimensions:** 145 x 102 mm (5.9" x 4.2")
Mechanical Drawing (dxf file) is available.
- **Power supply Type:** AT/ATX
- **Power requirements:** +5 V \pm 5%, +12V \pm 5%(optional),
5V standby for ATX mode
- **Power Consumption:** Max: 2.8A@ +5V
(with 512MB, Eden 400 MHz CPU)
Max: 3.3A@ +5V
(with 512MB, Eden 667 MHz CPU)
Max: 4.3A@ +5V
(with 512MB, VIA C3-LP 1GHz CPU)
- **Operating temperature:** 0 ~ 60°C (32 ~ 140°F)
- **Weight:** 0.85 kg (reference weight of total package)

Connectors

Label	Function
CN22	LAN Connector
CN23	LAN Connector
CN24	PC104-PCI+Connector
CN25	USB Connector(External)

J1: AT/ATX Setting (1)

Description	PIN HEADER 2*1P 180D (M) SQUARE 2.0mm
Setting	Function
J1(1-2)	AT Power
None	ATX Power



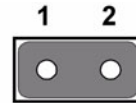
J2: Clear CMOS

Description	PIN HEADER 3*1P 180D (M) SQUARE 2.0mm
Setting	Function
1-2	Normal
2-3	Clear CMOS



J4/J5/J6: COM2 Setting

Description	PIN HEADER 2*1P 180D (M) SQUARE 2.0mm
Setting	Function
J6(1-2)	RS232
J5(1-2)	RS422
J4(1-2)	RS485



J7: LVDS Power

Description	PIN HEADER 3*1P 180D (M) SQUARE 2.0mm
Setting	Function
1-2	+5V
2-3	+3.3V



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

Label	Function
J1	AT/ATX Setting (1)
J2	Clear CMOS
J4/J5/J6	COM2 Setting
J7	LVDS Power
J8	Audio Power Source
J9	PCI VIO Setting
J10	AT/ATX Setting (2)
S1	Reset Button

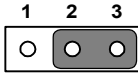
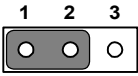
Connectors

Label	Function
CN1	ATX Power
CN2	Battery Connector
CN3	Power Switch
CN4	GPIO
CN5	Fan Power
CN6	COM1
CN7	Print Port
CN8	SIR Connector
CN9	COM2
CN11	CF Connector
CN12	Primary IDE
CN13	HD LED & Power LED
CN14	USB Connector(Internal)
CN15	USB Connector(Internal)
CN16	Keyboard/Mouse Connector
CN17	LVDS Connector
CN18	CRT Connector
CN19	LCD Connector
CN20	Inverter Power
CN21	Audio Connector

J8: Audio Power selector**Description** PIN HEADER 3*1P 180D (M) SQUARE 2.0mm**Setting** **Function**

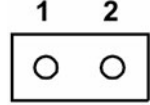
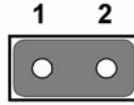
1-2 Audio Power from 12V

2-3 Audio Power from 5V

**J10: AT/ATX Setting(1)****Description** PIN HEADER 2*1P 180D (M) SQUARE 2.0mm**Setting** **Function**

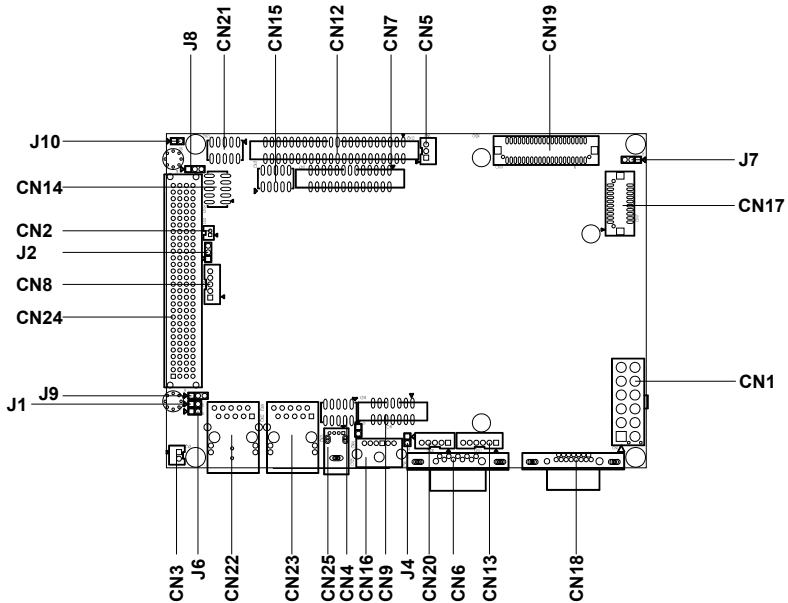
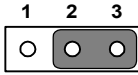
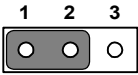
J10(1-2) AT Power

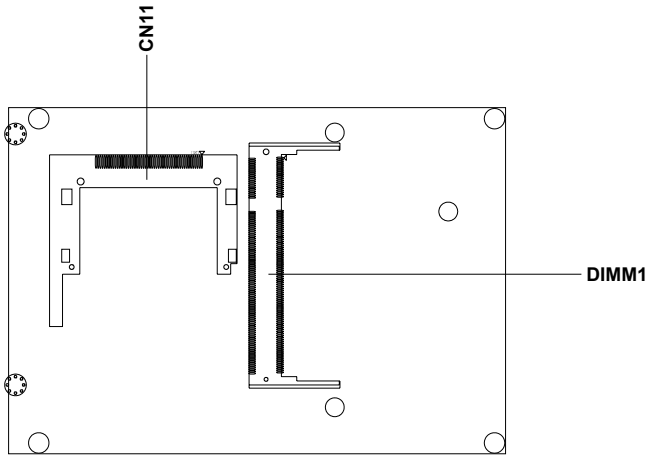
None ATX Power

**J9: PCI VIO Setting****Description** PIN HEADER 3*1P 180D (M) SQUARE 2.0mm**Setting** **Function**

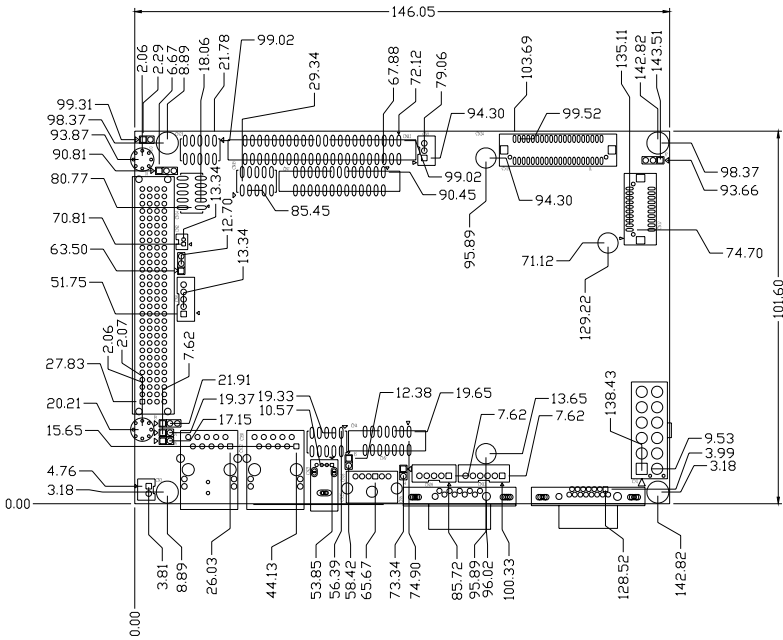
1-2 +5V

2-3 +3.3V

**PCM-9374 Connectors (Component Side)**



PCM-9374 Connectors (Solder Side)



PCM-9374 Mechanical Drawing (Component Side)