

# PCM-9574 Socket 370 Pentium® III SBC with 3D LCD/Ethernet/Audio

## Startup Manual

### Packing List

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

- 1 PCM-9574 all-in-one single board computer
- 1 startup manual
- CD-ROM or disks for utility, drivers, and manual (in PDF format)

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

*Note: For detailed contents of the PCM-9574, please refer to the enclosed CD-ROM or disk (in PDF format).*

### Specifications

#### Standard SBC Functions

- **CPU:** Socket 370 for Intel® Celeron™/Pentium® III processors
- **BIOS:** Award 256 KB Flash memory
- **System memory:** Two 144-pin SO DIMM sockets accept 16 MB up to 256 MB SDRAM
- **Enhanced IDE interface:** Supports up to two EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, UDMA/33 transfer
- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Four serial RS-232 ports, COM1, 3, 4; RS-232, COM2: RS-232/422/485
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Infrared port:** Shared with COM2. Transfer rates up to 115 Kbps
- **Keyboard/mouse connector:** Supports standard PC/AT keyboard and a PS/2 mouse

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

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

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

<http://support.advantech.com>

This manual is for the PCM-9574 series Rev. A1.

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2nd Edition  
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- **Power management:** Supports power saving modes including Normal/Standby/Suspend modes. APM 1.2 compliant
- **Watchdog timer:** 63 level timer intervals
- **USB:** Two universal serial bus ports

#### Solid State Disk

- Supports one 50-pin socket for CompactFlash card

#### VGA/LCD Interface

- **Chipset:** Trident Cyber 9525DVD 2.5 MB SDRAM on chip
- **Interface:** 2 x AGP interface, 3D 64-bit engine

#### Ethernet Interface

- **Chipset:** RTL 8139
- **Ethernet interface:** PCI 10/100 Mbps Ethernet. IEEE 802.3 U protocol compatible
- **Connection:** On-board RJ-45 connector
- **I/O address switchless setting**
- **Built-in boot ROM**

#### Audio Function

- **Chipset:** ES 1989
- **Audio controller:** AC97 ver. 2.0 compliant interface
- **Audio interface:** Microphone in, Line in, CD audio in, line out, Speaker L, Speaker R

#### MDC interface

- **Supports:** MDC (Mobile Audio/Modem Daughter Card) interface for optional MDC software modem card.

#### PanelLink (optional)

- **Chips:** Sil 154 PanelLink digital transmitter
- **Scalable bandwidth:** 25 ~ 112 MHz (VGA to SAGG)

#### Mechanical and Environmental

- **Dimensions (L x W):** 203 x 146 mm (8" x 5.75")
- **Power supply voltage:** +5 V ±5%
- **Power requirements:** 5.2 A @ +5 V (typical, 64 MB DRAM, Celeron™-433 CPU)
- **Operating temperature:** 0 ~ 60° C
- **Weight:** 0.7 kg (weight of total package)

PCM-9574 Startup Manual

# Jumpers and Connectors

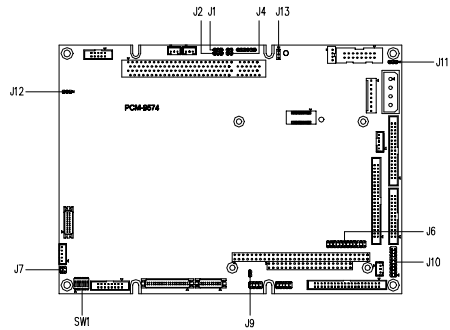
The board has a number of jumpers that allow you to configure your system to suit your application.

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

Label	Function
J1	CMOS clear
J2	Watchdog timer action
J4	ATX power switch button
J6	COM port RI pin setting
J7	PanelLink control
J9	Buzzer enable/disable
J10	COM2 RS-232/422/485 setting
J11	ATX power on function select
J12	LAN controller power select
J13	Audio power source setting
SW1	Panel type select

Label	Function
CN1	Ethernet 100/10Base-T connector
CN2	ATX feature connector
CN5	Keyboard and PS/2 mouse connector
CN6	Main power connector
CN8	IR connector
CN9	Floppy drive connector
CN10	PC/104 ISA-bus expansion
CN11	IDE hard drive connector
CN12	Parallel port connector
CN13	Backlight connector
CN14	Peripheral power connector
CN15	CRT display connector
CN16	Flat panel connector
CN17	Ext. flat panel display connector
CN18	Front panel connector
CN19	USB channel 1, 2 connector
CN20	COM-port connector
CN21	CFC connector
CN22	PanelLink connector
CN24	MDC connector
CN25	CD Audio input connector
CN26	Audio connector
FAN1	Fan power connector

## Locating Jumpers



Jumper settings

J1: CMOS clear

Closed pins	Result
1-2	Normal (3 V battery on)*
2-3	Clear CMOS

J2: Watchdog timer action

Closed pins	Result
1-2	IRQ11
2-3	System reset

J4: ATX power switch button

Power on/off toggle button

J6: COM1-4 RI settings

Pins	Com port	RI	Power setting
1-2	COM1	RI pin	+5 V
3-4	COM1	RI pin	+12 V
5-6	COM1	RI pin	R I*
7-8	COM2	RI pin	+5 V
9-10	COM2	RI pin	+12 V
11-12	COM2	RI pin	R I*
13-14	COM3	RI pin	+5 V
15-16	COM3	RI pin	+12 V
17-18	COM3	RI pin	R I*
19-20	COM4	RI pin	+5 V
21-22	COM4	RI pin	+12 V
23-24	COM4	RI pin	R I*

J7: PanelLink control

	Open	Closed
1-2	Falling-edge latch*	Rising-edge latch
3-4	Pixel/clock*	2 pixels/clock

J9: Buzzer enable/disable

Pins	Result
Closed	Buzzer enabled
Open	Buzzer disabled

J10: COM2 RS-232/422/485 select

	RS-232*	RS-422	RS-485
1-2	Open	Open	Closed
3-4	Open	Closed	Open
5-6	Closed	Open	Open
7-9	Closed	Open	Open
8-10	Closed	Open	Open
9-11	Open	Closed	Closed
10-12	Open	Closed	Closed
13-15	Closed	Open	Open
14-16	Closed	Open	Open
15-17	Open	Closed	Closed
16-18	Open	Closed	Closed

J11: ATX power on function select

1-2	Default off*
2-3	Default on

J12: LAN controller power select

1-2	+5 V*
2-3	ATX standby 5 V

J13: Audio power source setting

1-2	+12 V (7805 5 V)
2-3	+5 V*

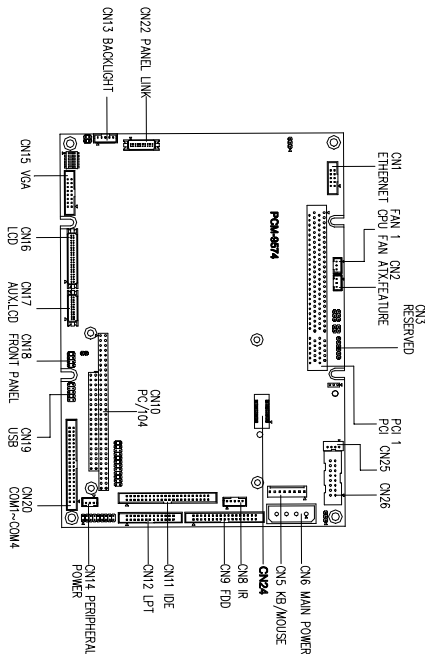
\*default setting

SW1: Panel type select

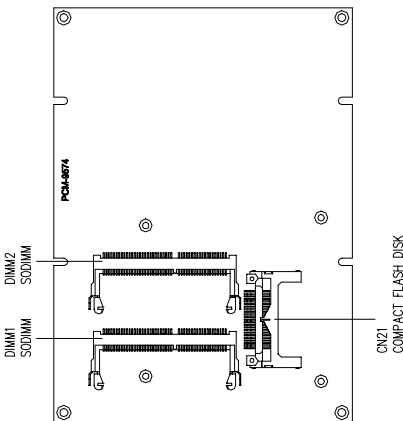
Pin						Panel Type		
1	2	3	4	5	6			
0	0	0	0	0	NC	TFT	640 x 480	18 bits
0	X	0	0	0	NC	TFT	800 x 600	18 bits
0	0	X	0	0	NC	TFT	1024 x 768	24 bits
0	X	X	0	0	NC	TFT	1024 x 768	36 bits
0	0	0	0	X	NC	STN	640 x 480	16 bits
0	X	0	0	X	NC	STN	800 x 600	16 bits
0	0	X	0	X	NC	STN	1024 x 768	16 bits
0	X	X	0	X	NC	STN	1024 x 768	24 bits

Note: If the "1" in SW1 is in the OFF position, the LCD is disconnected.

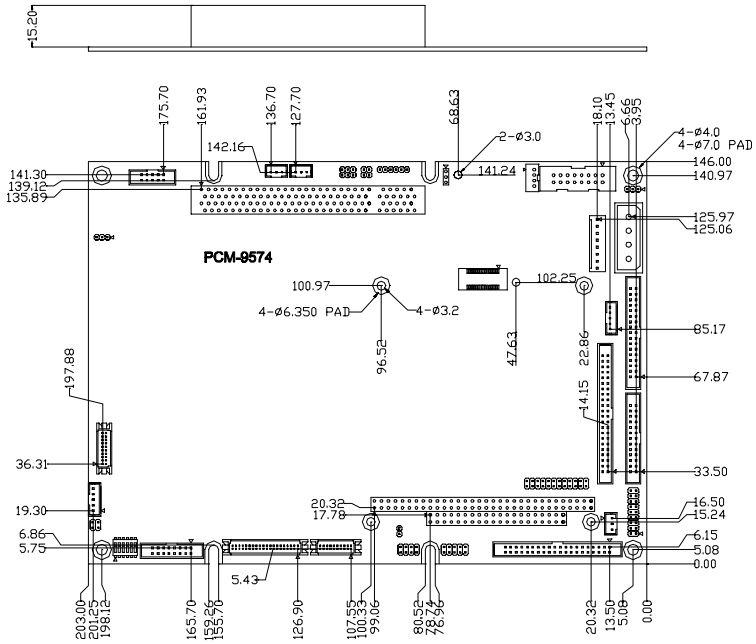
Locating Connectors



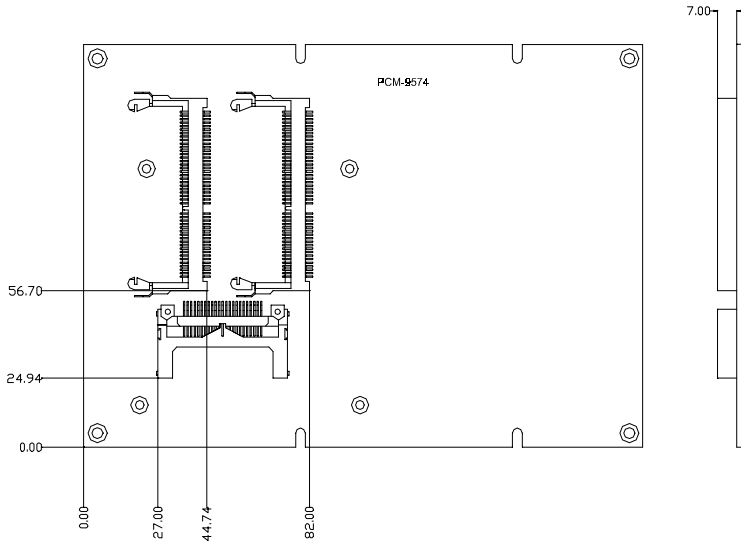
PCM-9574 connectors (component side)



# PCM-9574 Mechanical Drawing



PCM-9574 mechanical drawing (component side)



PCM-9574 mechanical drawing (solder side)