

PCM-9570/S Socket 370 Celeron™ SBC with 3D LCD/Ethernet/SCSI

Startup Manual

Packing List

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

- 1 PCM-9570/9570S 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-9570/9570S, please refer to the enclosed CD-ROM or disk (in PDF format).

Specifications

Standard SBC Functions

- **CPU:** Socket 370 for Intel® Celeron™ processor
- **BIOS:** Award 256 KB Flash memory
- **System memory:** Two 144-pin SO DIMM sockets accept 16 ~ 128 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

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

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

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This manual is for the PCM-9570/S series Rev.A1

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- **Infrared port:** Shared with COM2. Transfer rates up to 115 Kbps
- **Keyboard/mouse connector:** Supports standard PC/AT keyboard and a PS/2 mouse
- **Power management:** Supports power saving modes including Normal/Standby/Suspend modes. APM 1.1 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 8139B
- **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**

Ultra2 SCSI (PCM-9570S only)

- **Chips:** Symbios SYM53C893 chips
- **Performance:** Ultra2 SCSI interface, up to 80 MB/sec. transfer rate

PanelLink (optional)

- **Chips:** Si I 154 PanelLink digital transmitter
- **Scalable bandwidth:** 25 ~ 112 MHz (VGA to SAG)

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)

Jumpers and Connectors

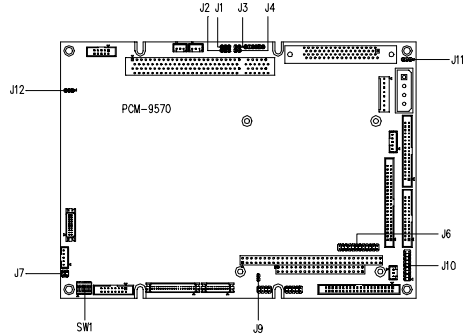
The board has a number of jumpers that allow you to configure your system to suit your application.

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

Label	Function
J1	CMOS clear
J2	Watchdog timer action
J3	SCSI terminator power enable/disable
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
SW1	Panel type select

Label	Function
CN1	Ethernet 100/10Base-T connector
CN2	ATX feature connector
CN4	SCSI 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
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

J3: SCSI terminator

Pins	Result
Closed	Terminator on
Open	Terminator off*

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

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	+5 V*
2-3	ATX standby 5 V

J12: LAN controller power select

1-2	Default off*
2-3	Default on

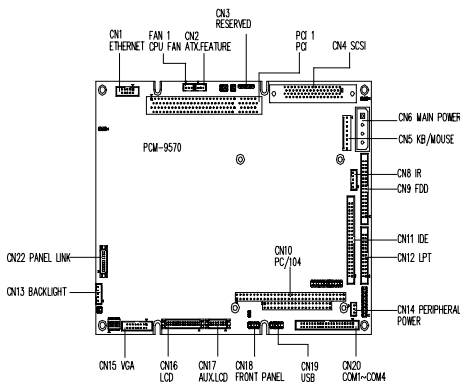
*default setting

SW1: Panel type select

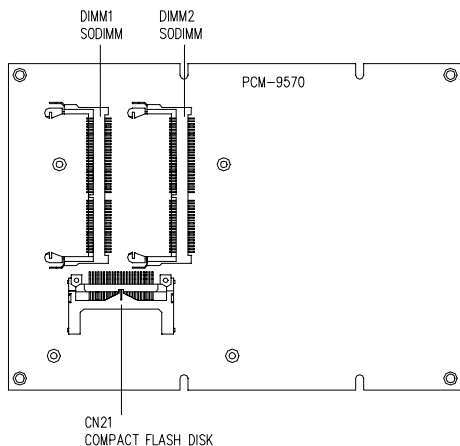
Pin						Panel Type		
1	2	3	4	5	6			
0	0	0	0	0	NC	TFT	640 x 480	18 bits
0	X	0	0	0	NC	TFT	800 x 600	18 bits
0	0	X	0	0	NC	TFT	1024 x 768	24 bits
0	X	X	0	0	NC	TFT	1024 x 768	36 bits
0	0	0	0	X	NC	STN	640 x 480	16 bits
0	X	0	0	X	NC	STN	800 x 600	16 bits
0	0	X	0	X	NC	STN	1024 x 768	16 bits
0	X	X	0	X	NC	STN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

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

Locating Connectors

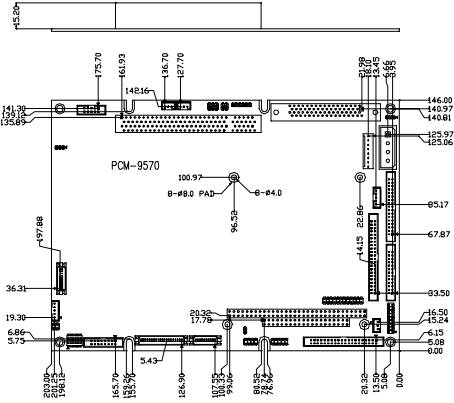


PCM-9570/S connectors (solder side)

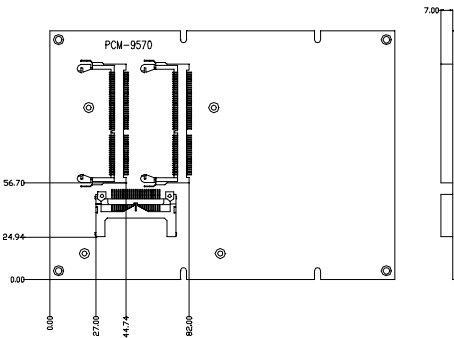


PCM-9570/S connectors (component side)

PCM-9570/S Mechanical Drawing



PCM-9570/S mechanical drawing (component side)



PCM-9570/S mechanical drawing (solder side)



Be sure to use the correct component side. Improper installation can cause serious damage to your hardware!