

PCM-5862/5862L Pentium®-based SBC with Audio, VGA/LCD, and Ethernet Startup Manual

Packing list

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

- 1 PCM-5862/5862L All-in-one single board computer
- 1 Startup Manual
- 1 CD-ROM or disk 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-5862/5862L, please refer to the enclosed CD-ROM or Disk (in PDF format).

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 for please visit our support website at:

<http://support.advantech.com>

This manual is for the PCM-5862/5862L.

Part No. 2006586230
 Printed in Taiwan

1st edition
 July 1999

Specifications

Standard SBC functions

- **CPU:**
 Intel® Pentium®, Pentium® MMX, up to 233 MHz
 AMD K5
 Cyrix 6x86
- **BIOS:** AWARD 128 KB Flash BIOS, supports Plug&Play, APM
- **Chipset:** SiS 5571
- **Green function:** APM 1.1 compliant
- **2nd level cache:** On-board 512 KB Pipelined Burst SRAM
- **RAM:** Two 72-pin SIMM sockets accept 8 ~ 128 MB EDO/FPM DRAM
- **Enhanced IDE interface:** Supports two EIDE devices
- **FDD interface:** Supports up to two FDDs (360 K / 1.2 M / 720 K / 1.44 MB / 2.88 MB)
- **Parallel port:** One parallel port, supports SPP/EPP/ECP parallel mode
- **Serial ports:** Four serial RS-232 ports; three RS-232 (COM1, 3, 4) and one RS-232/422/485 (COM2). All ports with 16C550 compatible UARTs
- **Watchdog timer:** 63-level interval from 1 ~ 63 seconds. Generates system reset or IRQ15. Jumperless selection and software enabled/disabled
- **Keyboard/mouse connector:** 8-pin header connector for keyboard and PS/2 mouse
- **USB interface:** two USB connectors with fuse protection. Compliant with USB Spec. Rev. 1.0 (optional)
- **PC/104 expansion:** 104-pin 16-bit PC/104 module connector
- **I/O bus expansion:** One 32-bit PCI bus expansion slot

PCI SVGA/flat panel interface

- **Chipset:** C&T 65550
- **Display memory:** 1 MB on-board memory, supports up to 2 MB
- **Display type:** Simultaneously supports CRT and flat panel (EL, LCD, and gas plasma) displays

- **CRT resolution:** Supports non-interlaced CRT and LCD monitors up to 1024 x 768 @ 256 colors with 1 MB on-board display memory

Audio function (PCM-5862 only)

- **Chipset:** ESS 1868 or 1869
- **Audio controller:** 16-bit codec, Sound Blaster Pro compatible
- **Stereo sound:** Full-duplex, integrated 3D audio
- **Audio interface:** Microphone in, Line in, CD audio in, Line out, Speaker out
- **Power:** Accepts +12 V source for improved audio quality

Ethernet interface

- **Chipset:** REALTEK RTL8029 Ethernet controller
- **Ethernet interface:** Novell NE2000 compatible 10Base-T interface. Includes drivers & boot ROM

Mechanical and environmental

- **Max. power requirements:** 7 A @ 5 V (4.75 V ~ 5.25 V)
- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Size (L x W):** 203 mm x 146 mm (8" x 5.75")
- **Weight:** 0.32 kg (0.7 lbs) (w/o package)

J16

Audio power source setting

Connectors

Label	Function
CN1	CRT display connector
CN2	Flat panel display connector
CN3	PC/104 ISA-bus expansion
CN4	USB channel 1 connector
CN5	USB channel 2 connector
CN6	Fan power connector
CN7	Front panel connector
CN8	CD audio input connector
CN9	PC/104 ISA-bus expansion
CN10	Peripheral power connector
CN11	Ethernet 10Base-T connector
CN12	IR connector
CN13	Audio connector
CN14	Main power connector
CN15	Keyboard and PS/2 mouse connector
CN16	COM-port connector
CN17	IDE hard drive connector
CN18	Floppy drive connector
CN19	Parallel port connector

Jumper settings

J1 & J2: System/PCI clock setting

System	50MHz	50MHz	60MHz	*66MHz	75MHz
PCI	25	33.3	30	*33.3	32
J1					
J2					

J3: CPU voltage setting

2.5 V	2.8 V	3 V	*3.3 V

J4: CPU frequency ratio

1.5	*2	2.5	3

J4: P55C enabled/disabled

P55C enabled	*P55C disabled

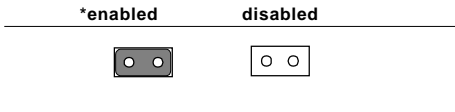
Jumpers and connectors

The PCM-5862/5862L has a number of jumpers that allow you to configure your system to suit your applications. The table below lists the function of each of the board's jumpers.

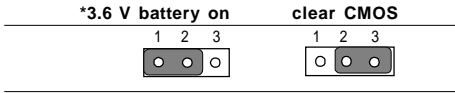
Jumpers

Label	Function
J1	System/PCI clock setting
J2	System/PCI clock setting
J3	CPU voltage setting
J4	CPU frequency ratio setting/ P55C enabled/disabled
J5	M1 cache linear mode setting
J6	CMOS clear
J7	Buzzer enable/disable
J8	COM4 IRQ occupied/released
J9	COM3 IRQ occupied/released
J10	LCD power setting
J11	COM4 RI pin setting
J12	COM3 RI pin setting
J13	Watchdog timer action
J14	COM2 RS-232/422/485 setting
J15	COM2 RS-232/422/485 setting

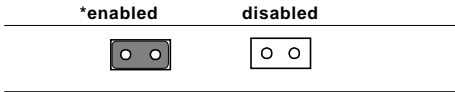
J5: M1 cache linear mode enabled/disabled



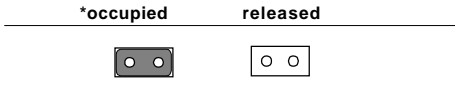
J6: Clear CMOS



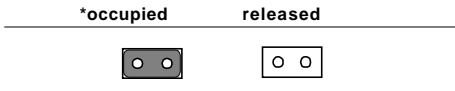
J7: Buzzer enabled/disabled



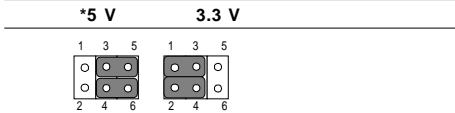
J8: COM4 IRQ occupied/released



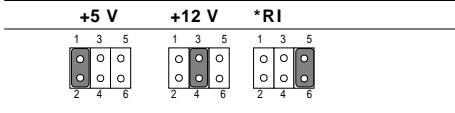
J9: COM3 occupied/released



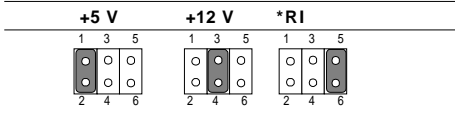
J10: LCD power setting



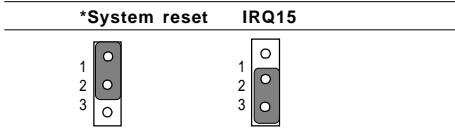
J11: COM4 RI pin setting



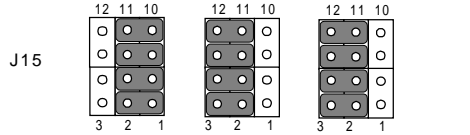
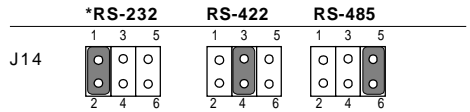
J12: COM3 RI pin setting



J13: Watchdog timer action



J14 & J15: COM2 RS-232/422/485



J16: Audio power source setting

