PCM-4825/4825L 486 SBC with VGA/LCD and Audio

Startup Manual

Packing List

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

- 1 PCM-4825/4825L all-in-one single board computer
- 1 start-up manual
- 1 audio cable (PCM-4825 only)
- 1 3.5" IDE flat cable
- 1 keyboard/mouse cable
- 1 secondary serial port cable (RS-232/422/485)
- 1 parallel cable
- · 1 floppy cable
- 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 information on the PCM-4825/4825L, please refer to the enclosed CD-ROM or disk (in PDF format).

Specifications

Standard SBC Functions

- CPU: Embedded AMD 5x86-133 (DX5-133) processor
- · BIOS: Award 128 KB Flash memory
- Chipset: VIA VT82C496G

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-4825/4825L Rev. A1 or higher.

Part No. 2006482501 Printed in Taiwan 1st edition Aug. 1999

- System memory: One 72-pin SIMM sockets (accepts 1/2/4/8/16/32 MB) and supports FPM or EDO DRAM 1 ~ 32 MB
- Enhanced IDE hard disk drive interface: Supports up to two IDE (VL-bus) hard disks. BIOS autodetect and PIO Mode 3 transfer protocol
- Serial ports: One serial RS-232 port, one serial RS-232/422/485 port. Two 16550 serial UARTs
- Parallel port: One parallel port, supports SPP/EPP/ ECP mode
- Infrared port: Shared with COM2. Transfer rate up to 115 Kbps
- Keyboard/mouse connector: Mini-DIN connector supports a standard PC/AT keyboard and a PS/2 mouse
- Power management: Supports power saving modes including Normal/Standby/Suspend modes. APM 1.1 compliant

Local-bus Flat Panel/VGA Interface

Chipset: C&T 65550

Display memory: 1 MB DRAM

- Display type: Supports CRT and flat panel (EL, LCD, and gas plasma flat panel) displays.
 Simultaneous display of CRT and flat panel possible
- Flat panel display mode: Up to 800 x 600 @ 256 colors
- CRT display mode: Non-interlaced CRT monitors resolutions up to 1280 x 1024 @16 colors

Audio Function (PCM-4825 only)

Chipset: ESS 1868/1869

Audio controller: 16-bit Sound Blaster Pro compatible

• Stereo sound: Full-duplex, integrated 3D audio

 Audio interface: Mic in, Line in, CD audio in, Line out, Stereo speaker out

Mechanical and Environmental

- Dimension (L x W): 145 mm x 102 mm (5.9" x 4.2")
- Power supply voltage: +5 V (4.75 ~ 5.25 V)
- Power requirements: +5 V @ 2 A (typical)
- Operating temperature: $0 \sim 60^{\circ} \text{ C } (32^{\circ} \sim 140^{\circ} \text{ F})$
- Weight: 0.65 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 board jumpers and connectors:

Jumpers		
Label	Function	
J2	DOC® 2000 address setting	
J3	LCD power selector	
J4	Clear CMOS	
J5	Audio AMP power selector	
J7	COM2 selector	

Connectors		
Label	Function	
CN1	Power connector (-5 V, -12 V)	
CN2	Floppy disk connector	
CN3	PC/104 connector	
CN4	Parallel port connector	
CN5	PC/104 connector	
CN6	Flat panel connector	
CN7	Hard disk connector	
CN8	IR connector (infrared)	
CN9	COM2 connector	
CN10	CD audio in connector	
CN11	Audio connector	
CN12	Power connector (+5 V, +12 V)	
CN13	COM1 connector	
CN14	PS/2 keyboard & PS/2 mouse connector	
CN15	CRT display connector	
J6	Reset switch	

Jumper Settings

Pins			Address
1-2	3-4	5-6	
closed	closed	closed	C800
closed	closed	open	CC00
*closed	open	closed	D000
closed	open	open	D400
open	closed	closed	D800
open	closed	open	DC00
open	open	closed	E000
open	open	open	OFF

J3: LCD power					
Voltage					
3.3 V					
5 V					
	3.3 V				

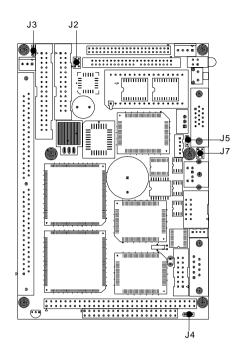
J4: Clear CMOS			
Closed pins	Result		
1-2	Clear CMOS		
*2-3	3.6 V battery		

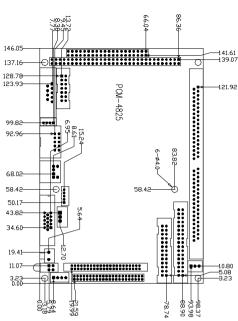
Closed pins	Audio power
1-2	From main power (5 V)
*2-3	From 7805CT (5 V)

J7: COM2 selector		
Closed pins	Result	
*1-2	RS-232	
3-4	RS-422	
5-6	RS-485	

^{*}default setting

Mechanical Drawing





Locating Connectors

