PCM-4823/L
486 SBC with VGA/LCD/Ethernet
Startup Manual

Packing List

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

• 1 PCM-4823/L all-in-one single board computer

• 1 startup manual

• 1 CD-ROM or disk for utilities, drivers, and manual (in PDF format)

• 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

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

Note: For detailed information on the PCM-4823/L, please refer to the enclosed CD-ROM or disk (in PDF format).

Specifications

Standard SBC Functions

• **CPU**: Embedded AMD DX5-133 (5 x 86-133) processor

• **BIOS**: AWARD 128 KB Flash memory

• **Chipset**: VIA VT82C496G

• **System memory**: One 72-pin SIMM socket, accepts 4/8/16/32 MB and supports FPM or EDO DRAM from 1 to 32 MB

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-4823/L.

• **Enhanced IDE hard disk drive interface**: Supports up to two IDE (VL-bus) hard disks. BIOS auto-detect 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 PS/2 mouse

• **Power management**: Supports power saving modes including Normal/Standby/Suspend modes. APM 1.1 compliant

• **Supports M-Systems' DiskOnChip® 2000 Flash disk up to 144 MB**

• **Watchdog timer:** 1.6 second interval

Local-bus Flat Panel/VGA Interface (PCM-4823)

• **Chipset**: C&T 65550

• **Display memory**: 1 MB DRAM

• **Display type**: Supports CRT and flat panel (EL, LCD and gas plasma flat panel) displays. Can simultaneously display CRT and flat panel

• **CRT display mode:** Non-interlaced CRT monitors, resolutions up to 1280 x 1024 @ 16 colors

• **Panel display modes:** Supports resolutions up to 1024 x 768

Ethernet Interface

• **Chipset:** RTL 8019AS

• **I/O address switchless setting**

• **Software compatible with NE1000 and NE2000**

• **Built-in boot ROM**

Mechanical and Environmental

• **Dimensions (L x W)**: 145 mm x 102 mm (5.9" x 4.2")

• **Power supply voltage**: +5 V (4.75 V ~ 5.25 V)

• **Power requirements**: +5 V @ 2 A (typical)

• **Operating temperature**: 0 ~ 60° C (32 ~ 140° F)

• **Weight**: 0.65 kg (weight of total package)

Jumpers and Connectors

The PCM-4823/L 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's jumpers and connectors:

Jumpers

Label	Function
J2	DOC® 2000 address setting
J3	LCD power selector
J4	Clear CMOS
J6	COM2 selector
J8	Watchdog timer action

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	Ethernet connector
CN11	Power connector (+5 V, +12 V)
CN12	COM1 connector
CN13	PS/2 keyboard and PS/2 mouse
CN14	CRT display connector
J5	Reset switch
J7	CPU fan connector

Jumper Settings

J2: DOC® 2000 address setting

Pins			Address
1-2	**3-4**	**5-6**	
closed	closed	closed	C800 ~ C9FF
closed	closed	open	CC00 ~ CDFF
*closed	open	closed	D000 ~ D1FF
closed	open	open	D400 ~ D5FF
open	closed	closed	D800 ~ D9FF
open	closed	open	DC00 ~ DDFF
open	open	closed	E000 ~ E1FF
open	open	open	OFF

J3: LCD power setting

Closed pins	Voltage
1-2	3.3 V
*2-3	5 V

J4: Clear CMOS

Closed pins	Result
1-2	Clear CMOS
*2-3	3 V Battery on

J6: COM2 selector

Closed pins	Result
*1-2	RS-232
3-4	RS-422
5-6	RS-485

J8: Watchdog timer action

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

* default setting

Locating Jumpers

Locating Connectors