

PCM-9372 VIA Eden SBC with CPU, VGA/ LCD, LVDS, Ethernet, and Audio Startup Manual

Packing List

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

- 1 PCM-9372 all-in-one single board computer
- 1 startup manual
- CD-ROM or disks for utility, drivers, and manual (in PDF format)
- 1 3.5" IDE flat cable 40-pin to 40-pin (part no: 1701400452)
- 1 keyboard/ PS2 mouse cable (part no. 1700060202)
- 1 second serial port cable (part no.1701140201)
- 1 parallel port cable (part no. 1700260250)
- 1 FDD cable for 3.5" FDD only (part no.1701340603)
- 1 Audio cable (part no. 1703100152)
- 1 USB cable (part no. 1703100121)

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

Note: For detailed contents of the PCM-9372, please refer to the enclosed CD-ROM or disk (in PDF format).

Specifications

- **CPU:** Onboard Eden 667MHz MHz (PCM-9372F-M0A1) or VIA Eden 400 MHz processor (PCM-9372F-J0A1) with 128KB L1 cache memory
- **BIOS:** Award 256 KB Flash memory
- **System memory:** One 144-pin SODIMM socket accepts 64 MB up to 512 MB SDRAM
- **2nd cache memory:** 64 KB on the processor
- **Enhanced IDE interface:** One channels supports up to two EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, supports up to UDMA 66/100 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:

<http://support.advantech.com>

This manual is for the PCM-9372 series Rev. A1.

Part No. 2006937200

1st Edition

Printed in Taiwan

Sep., 2002

- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Two serial RS-232 ports, COM1: RS-232, COM2: RS-232/422/485
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **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 1.2 compliant
- **Watchdog timer:** 62 level timer intervals
- **USB:** Two USB 1.1 compliant universal serial bus ports
- **Expansion:** One PC/104 connector for ISA control board

Solid State Disk

- Supports one 50-pin socket for CFC type I/II

VGA/LCD Interface

- **Chipset:** VIA Twister chip with integrated Savage4 2D/3D/Video Accelerator
- **Frame buffer:** Supports 4/8/16/32MB frame buffer with system memory
- **Interface:** 4X AGP VGA/LCD interface, Support for 9, 12, 15, 18, 24, 36 bit TFT and optional 16- or 24-bit DSTN panel
- **Display mode:** CRT Modes: 1280 x 1024@16bpp (60Hz), 1024 x 768@16bpp (85Hz); LCD/Simultaneous Modes: 1280 x 1024@16bpp (60Hz), 1024 x 768@16bpp (60Hz)
- **LVDS:** Supports 2 Channel (2 x 18bit) LVDS interface

Ethernet interface

- **Chipset:** RTL 8100
- **Ethernet interface:** IEEE 802.3u 100BASE-T Fast Ethernet compatible
- **I/O address switchless setting**
- **Built-in boot ROM**

Audio Function

- **Chipset:** VIA 82C686
- **Audio controller:** AC'97 ver. 2.0 compliant interface
- **Audio interface:** Microphone in, line in, line out

Mechanical and Environmental

- **Dimensions** 145 x 102 mm (5.9"x 4.2")
- **Power supply voltage:** +5 V $\pm 5\%$ and +12V $\pm 5\%$
- **Power requirements:**
Max
 4.5A@+5V, 1.3A@+12V
 (Within 5ms after power on)
typical
 2.08A@5V,0.08A@+12V (W/ Eden-400,128MB)
 2.33A@5V,0.08A@+12V (W/ Eden-667,128MB)
- **Operating temperature:** 0 ~ 60°C (32 ~ 140°F)
- **Weight:** 0.85 kg (weight of total package)

Jumpers and Connectors

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

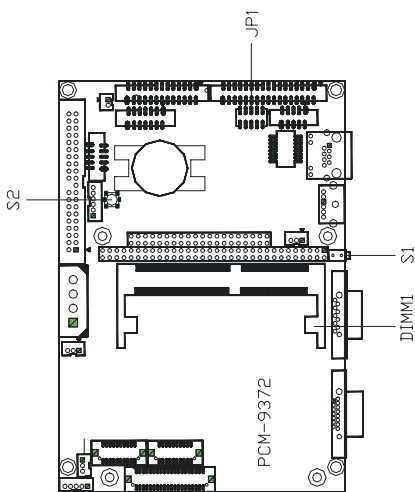
The tables below list the function of each jumper and connector.

Jumpers

Label	Function
S1	System reset button
S2	CMOS clear button
S3	Panel type select
JP1	COM2 RS232/422/485 & WDT setting

Connectors

Label	Function
CN1	LCD Inverter control connector
CN2	Flat panel connector
CN3	LVDS connector
CN4	Ext. flat panel connector
CN5	CRT display connector
CN6	PC/104 expansion
CN7	ATX feature connector
CN8	COM 1 port connector
CN9	Main Power connector
CN10	Peripheral power connector (-5V, -12V)
CN11	Power & HDD LED connector
CN12	Keyboard and PS/2 mouse connector
CN13	IDE hard drive connector (primary)
CN14	Audio connector
CN15	Ethernet connector
CN16	COM2 port connector
CN17	USB channel 1, 2 connector
CN18	ATX power on/off switch connector
CN19	Parallel port connector
CN20	Floppy drive connector
CN21	CFC connector
CN22	CPU fan power connector



PCM-9372 Switches & Jumpers

S2 CMOS clear button

Condition	Result
unpressed*	Normal
pushed	Clear CMOS

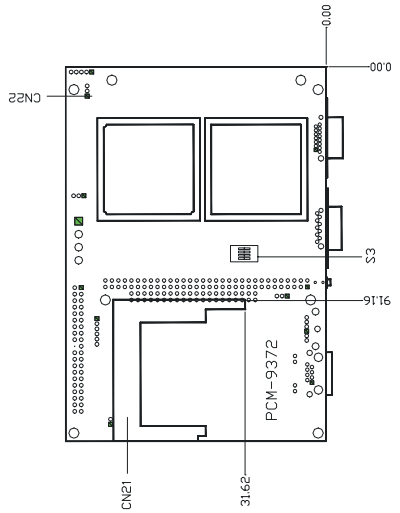
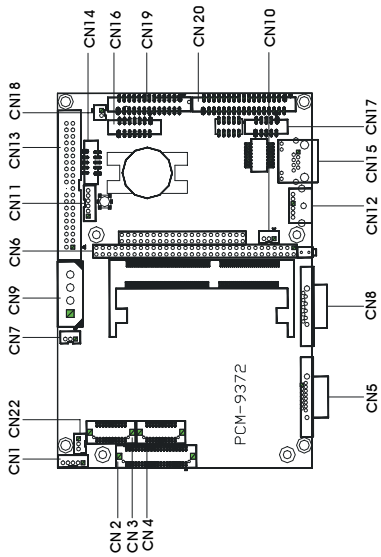
JP1 Watchdog timer action

Pins	System reset*	IRQ11
7-8	closed	open
9-10	open	closed

JP1 COM2 RS-232/422/485 select

Pins	RS-232*	RS-422	RS-485
1-2	Open	Open	Closed
3-4	Open	Closed	Open
5-6	Closed	Open	Open

* default setting



PCM-9372 Connectors (component side)

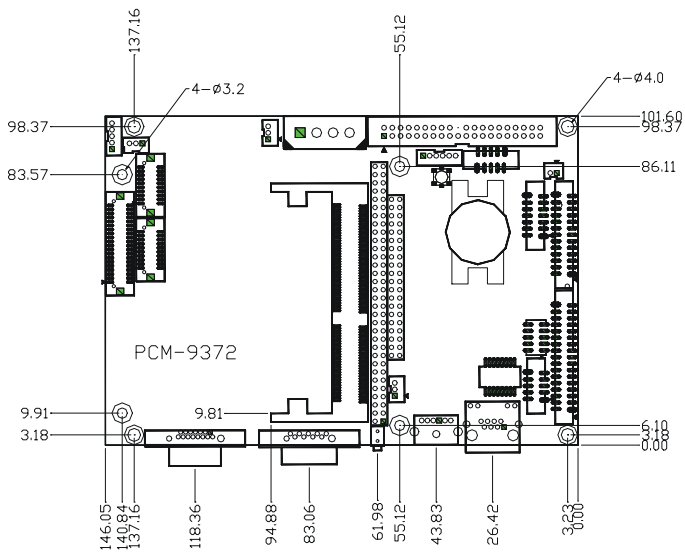
PCM-9372 Switches & Connectors (solder side)

S1 Panel Type select

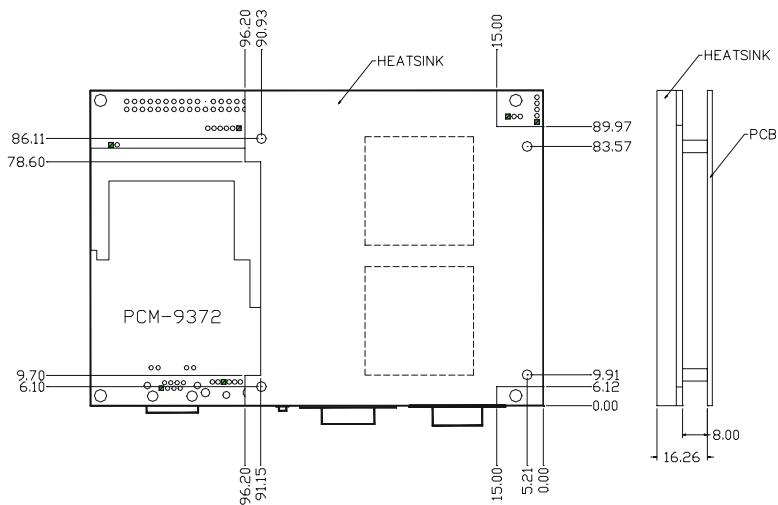
SW	SW	SW	SW	Panel type
1-1	1-2	1-3	1-4	
ON	ON	ON	ON	DSTN** 640x480 18bit
ON	ON	ON	OFF	TFT 640x480 18bit
ON	ON	OFF	ON	TFT 640x480 LVDS
ON	ON	OFF	OFF	(Resvd)
ON	OFF	ON	ON	(Resvd)
ON	OFF	ON	OFF	DSTN** 800x600 18bit
ON	OFF	OFF	ON	TFT* 800x600 18bit
ON	OFF	OFF	OFF	TFT 800x600 LVDS
OFF	ON	ON	ON	(Resvd)
OFF	ON	ON	OFF	(Resvd)
OFF	ON	OFF	ON	DSTN** 1024x768 36bit
OFF	ON	OFF	OFF	TFT 1024x768 36bit
OFF	OFF	ON	ON	TFT 1024x768 1Chan LVDS
OFF	OFF	ON	OFF	TFT 1024x768 2Chan LVDS
OFF	OFF	OFF	ON	TFT 1024x768 18bit
OFF	OFF	OFF	OFF	TFT 1024x768 24bit

* Default setting

** will support in the future



PCM-9372 Mechanical Drawing (component side)



PCM-9372 Mechanical Drawing (solder side)