PCA-6278 Dual Pentium® III SBC with 64-bit/66 MHz PCI bus, VGA, Dual Ethernet, and HISA Startup Manual

Packing List

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

- 1 PCA-6278 socket 370 PentiumÆ III processor-based single board computer
- 1 FDD cable p/n: 1701340703
- 2 UDMA 33 HDD cables p/n: 1701400607
- 1 printer (parallel port) and COM port cable kit p/n: 1701260305
- 1 ivory cable for PS/2
- keyboard and PS/2 mouse p/n: 1700060202
- 1 USB cable (optional) p/n: 1700100170
- 1 PCA-6278 startup manual
- CD disc and manual (in PDF format)
- Warranty certificate

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

Note 1: For detailed contents of the PCA-6278, please refer to the enclosed CD Disc or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/readstep.html (Acrobat is a trademark of Adobe.)

For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com

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

http://support.advantech.com

This manual is for the PCA-6278 series Rev. A1.

Part No. 2002627811 2nd. Edition

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Specifications

Standard SBC Functions

- **CPU:** Dual socket 370 for Intel® Pentium® III processor, FSB 100/133
- **BIOS:** Award 2 Mb Flash memory BIOS
- **Chipset:** ServerWorks ServerSet 30 LE
- **System memory:** Four 168-pin DIMM sockets accepts up to 4 GB registered SDRAM, support ECC
- **Enhanced IDE interface:** Supports up to four EIDE devices. BIOS auto-detect, PIO Mode 4, Ultra DMA 33
- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Two serial RS-232 ports
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Keyboard/mouse connector:** Supports a standard PS/2 keyboard and a PS/2 mouse
- **Watchdog timer:** 63 level timer intervals
- **USB:** Four Universal Serial Bus ports

VGA/LCD Interface

- **Chipset:** ATI 3D Rage XL, 8 MB SGRAM
- **Interface:** PCI

Ethernet Interface

- **Chipset:** Intel 82559
- **Ethernet interface:** Dual PCI 10/100 Mbps Ethernet, IEEE 802.3U protocol compatible
- **Connection:** On-board RJ-45 connector x 2

Mechanical and Environmental

- **Dimensions (L x W):** 338 x 122 mm
- **Power supply voltage:** +5 V ± 12 V
- **Power requirements:** 11.8A @ +5V (typical, Pentium III 1 GHz)
- **Operating temperature:** 0 ~ 60× C (depends on CPU)
- **Weight:** 0.5 kg (weight of board)

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Jumpers and Connectors

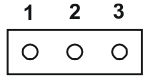
The board has a number of jumpers that allow you to configure your system to suit your application.

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

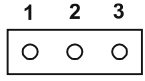
Label	Function
J1	CMOS clear
J2	Watchdog timer output selection

Label	Function
CN1	Primary IDE connector
CN2	Secondary IDE connector
CN3	Floppy drive connector
CN4	Parallel port
CN6	USB 0, 1 port
CN7	VGA connector
CN8	10/100Base-T Ethernet connector 1
CN9	Serial port: COM1
CN10	Serial port: COM2
CN11	PS/2 keyboard and mouse connector
CN12	External keyboard connector
CN13	IR Connector
CN14	CPU_2 FAN connector
CN15	CPU_1 FAN Connector
CN16	Power LED and keyboard lock
CN17	External speaker
CN18	Reset connector
CN19	HDD LED connector
CN20	ATX feature connector
CN21	ATX soft power switch
CN26	USB 2,3
CN34	10/100Base-T Ethernet connector 2

J1: CMOS clear function	
Closed pins	**Result**
1-2	Keep CMOS data*
2-3	Clear CMOS



J2: Watchdog timer output option	
Closed pins	**Result**
1-2	IRQ11
2-3	System reset *



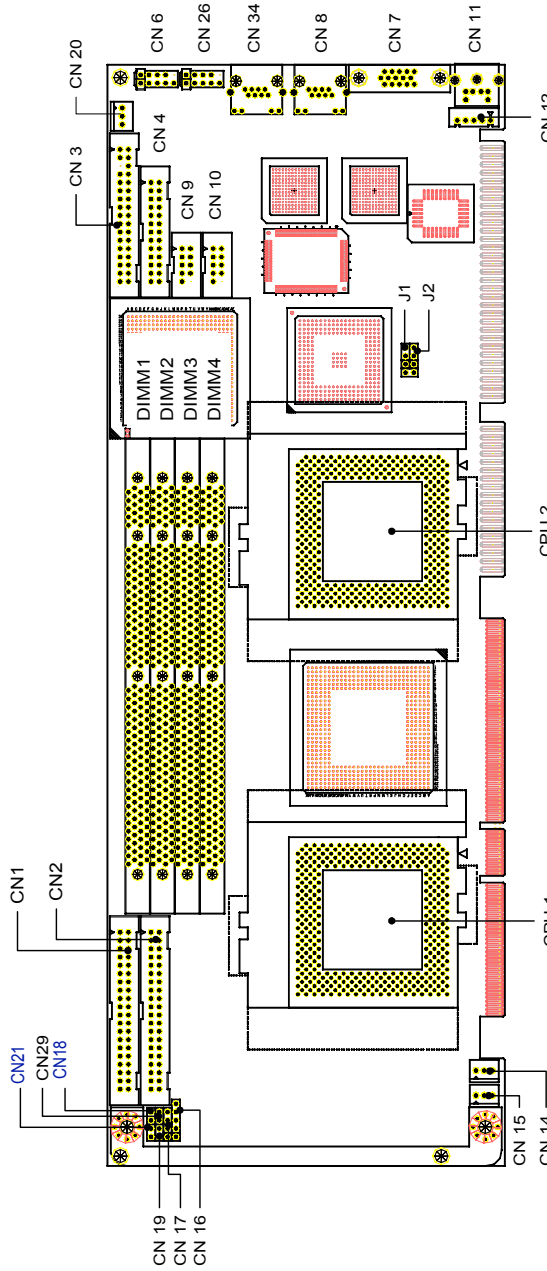
*default setting

Software Installation

The CD disc contains a driver installer program that will lead you through the installation of various device drivers needed to take full advantage of your CPU card.

Caution

The computer is provided with a battery-powered Real-time Clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.



Location of PCA-6278's jumpers and connectors