

# PCA-6002 Low Power Pentium III/Celeron™SBC with AGP/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-6002 Pentium® III/Celeron™ processor-based single board computer
- 1 FDD cable p/n: 1700340640
- 2 Ultra ATA 100 HDD cables p/n: 1701400452
- 1 printer (parallel port) and COM port cable kit p/n: 1701260305
- 1 ivory cable for PS/2
- keyboard and PS/2 mouse (optional) p/n: 1700060202
- 1 USB cable (optional) p/n: 1700100170
- 1 single-slot bracket (optional) p/n: 1962159010
- 1 PCA-6002 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-6002, 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](http://www.adobe.com/Prodindex/acrobat/readstep.html) (Acrobat is a trademark of Adobe.)

## Specifications

### Standard SBC Functions

- **CPU:** Low power BGA-type Pentium III 500 MHz/Celeron™ 400 MHz processor, FSB 100MHz
- **BIOS:** Award 4 Mb Flash memory BIOS

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

<http://www.advantech.com>

<http://www.advantech.com/nc>

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

<http://support.advantech.com>

This manual is for the PCA-6002 series Rev. A1

Part No. 2002600211 2nd. Edition

Printed in Taiwan

July 2002

- **Chipset:** Supports standard PC/AT keyboard and a PS/2 mouse
- **System memory:** Two 168-pin angle DIMM accepts up to 512 MB SDRAM
- **Enhanced IDE interface:** Supports up to four EIDE devices. BIOS auto-detect, PIO Mode 4, Ultra ATA 100/66/33 transfer
- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Two serial RS-232 ports
- **Parallel port:** One parallel port, supports SPP/EPP mode
- **Keyboard/mouse connector:** Supports two PS/2 connectors for standard PS/2 keyboard and a PS/2 mouse
- **Watchdog timer:** 255 level timer intervals
- **USB:** Four Universal Serial Bus ports

### VGA/LCD Interface

- **Chipset:** Chipset integrated
- **Interface:** AGP 2x

### Ethernet Interface

- **Chipset:** One onboard Intel®E GD82559 and one chipset integrated LAN controller (82562)
- **Ethernet interface:** 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:** Typical: +5V: 5.76A, +12V: 500mA (Low Power Celeron 400MHz and 128 MB SDRAM)
- **Operating temperature:** 0 ~ 60 C (depends on CPU used)
- **Weight:** 0.5 kg (weight of board)

## 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
J1	CMOS clear
J2	Watchdog timer output selection

### Connectors

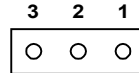
Label	Function
CN1	Primary IDE connector
CN2	Secondary IDE connector
CN3	Floppy driver connector
CN4	Parallel port
CN6	USB port
CN7	VGA connector
CN8	10/100Base-T Ethernet connector 1
CN9	Serial port: COM1
CN10	Serial port: COM2
CN11	PS/2 keyboard and mouse connector
CN12	External keyboard connector
CN13	Infrared (IR) connector
CN14	CPU FAN connector
CN16	KB Lock/Power LED
CN17	External speaker
CN18	Reset connector
CN19	HDD LED connector
CN20	ATX feature connector
CN21	ATX soft power switch
CN22	H/W monitor alarm
CN27	Extension I/O board connector
CN28	Extension I/O board connector
CN29	SM bus connector

### I/O Extension Board

CN31	USB port 0, 1
CN32	USB port 2, 3
CN33	PS/2 mouse connector
CN34	10/100Base-T Ethernet connector 2

### J1: CMOS clear function

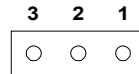
Closed pins	Result
1-2	Keep CMOS data*
2-3	Clear CMOS



\*default setting

### J2: Watchdog timer output option

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



\*default setting

**Note:** If your system has only one unused expansion slot to accommodate the CPU card, you can replace the standard dual-slot bracket with the single-slot bracket included in your PCA-6002 package.

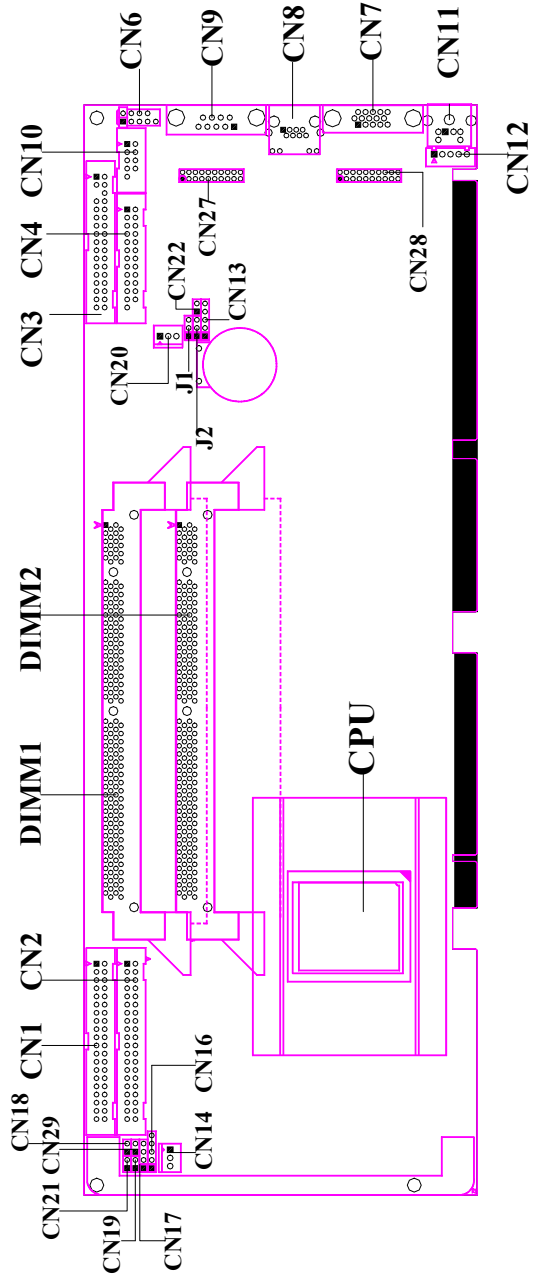
## Software Installation

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. Note that:

- You must install the CSI utility before installing all the other drivers.
- If your computer uses Windows 98SE or Windows ME, and your CPU card has two Ethernet ports, you may have to update the driver Windows automatically installed the first time it detects the LAN devices. Refer to Chapter 6 for details.

## 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.



**PCA-6002 Jumpers and Connectors Location**

