

PCA-6770 Socket 370 Celeron™ SBC with AGP/VGA/LCD, Ethernet and SSD

Startup Manual

Packing List

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

- 1 PCA-6770 all-in-one single board computer
- 1 hard disk drive (IDE) interface cable (44-pin)
p/n: 1701440350
- 1 floppy disk drive interface cable (34-pin)
p/n: 1701340600
- 1 parallel port cable (26-pin) p/n: 1700260250
- 1 COM port cable (9-pin) p/n: 1700100250
- 1 6-pin mini-DZN keyboard & PS/2 mouse adaptor
p/n: 1700060201
- 1 ATX/AT power cable p/n: 1700000450
- 1 CPU cooling fan p/n: 1759200100
- 1 startup manual
- CD-ROM or disks for utility, drivers, 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-6770, please refer to the enclosed CD-ROM or disk (in PDF format).

Note 2: Acrobat Reader is acquired 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>
<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 PCA-6770 series Rev.A1

Part No. 2006677010
Printed in Taiwan

1st Edition
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Specifications

Standard SBC Functions

- **CPU:** Socket 370 for Intel® Celeron™ processor
- **BIOS:** Award 256 KB Flash memory
- **System memory:** Two 144-pin SO DIMM sockets accept 16 ~ 256 MB SDRAM
- **Enhanced IDE interface:** Supports up to two EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, UDMA/33 transfer
- **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
- **Infrared port:** Shared with COM2. Transfer rates up to 115 Kbps
- **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 Universal Serial Bus ports

Solid State Disk

- Supports one 50-pin socket for ATA CompactFlash™ disk (IDE interface) card

VGA/LCD Interface

- **Chipset:** C&T 69000 64-bit engine, 2 MB SDRAM on chip
- **Interface:** 1 x AGP, Accelerator graphics ports, 1.0 compliant

Ethernet Interface

- **Chipset:** Realtek™ RTL8139
- **Ethernet interface:** PCI 10/100 Mbps Ethernet, IEEE 802.3U protocol compatible

Specifications Cont.

- **Connection:** On-board RJ-45 connector

Mechanical and Environmental

- **Dimensions (L x W):** 185 x 122 mm
- **Power supply voltage:** +5 V \pm 5%
- **Power requirements:** 4.72 A @ +5 V (typical, 64 MB DRAM, Celeron™500 CPU)
- **Operating temperature:** 0 ~ 60° C
- **Weight:** 0.7 kg (weight of total package)

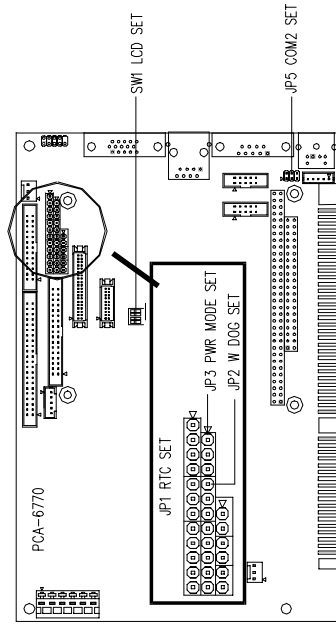
Jumpers and Connectors

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 jumpers and connectors.

Label	Function
JP1	CMOS clear
JP2	Watchdog timer action
JP3	Power type select
JP5	COM2 RS-232/422/485 setting
SW1	Panel type select

Label	Function
CN1	IDE hard drive connector
CN2	Parallel port connector
CN3	ATX feature connector
CN4	Main power connector (AT power p8)
CN5	LCD inverter power
CN6	Floppy drive connector
CN7	Reset connector
CN8	IR connector
CN9	Keyboard Lock connector
CN10	External IDE LED
CN11	ATX power switch button
CN12	Speaker connector
CN13	USB channel 1, 2 connector
CN14	Flat panel connector
CN15	Ext. flat panel display connector
CN16	CRT display connector
CN18	Ethernet 100/10Base-T connector
CN19	Fan power connector
CN22	COM1, 232 connector
CN20	COM2, 422/485 connector
CN21	COM2, 232 connector
CN25	EXT keyboard connector
CN26	Keyboard and PS/2 mouse connector
CN27	CFC connector



Locating Jumpers (Component Side)

JP1: CMOS clear function

Closed pins	Result
1-2	Normal (3 V battery on)*
2-3	Clear CMOS

3	2	1
○	○	○

JP2: Watchdog timer action

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

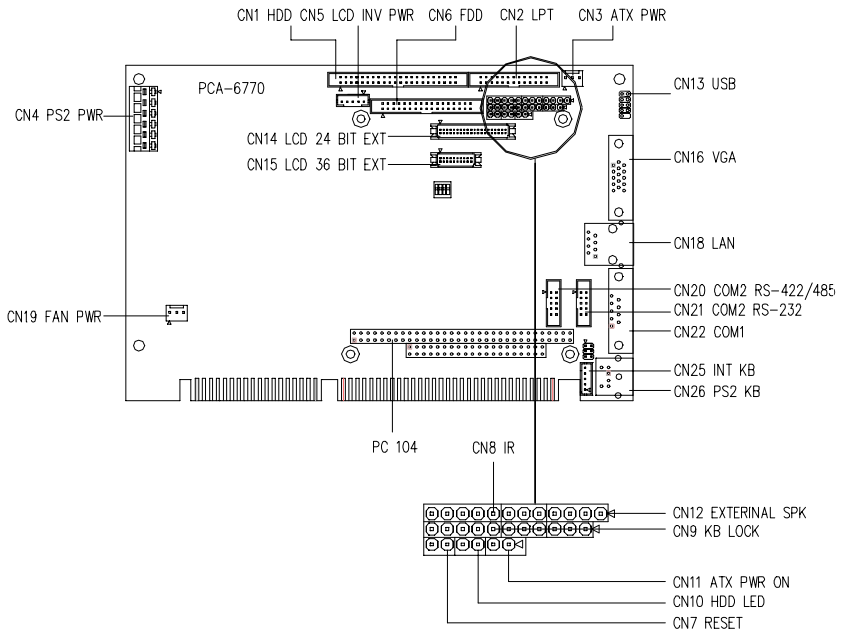
3	2	1
○	○	○

JP3: Power type select

1-2	ATX power
2-3	AT power*

3	2	1
○	○	○

* default setting



Locating connectors (solder side)

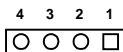
JP5: COM2 RS-232/422/485 select

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



CN7: External speaker connection

Pins 3-4	Result
Closed	Internal speaker enabled*
Open	Internal speaker disabled

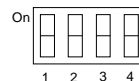


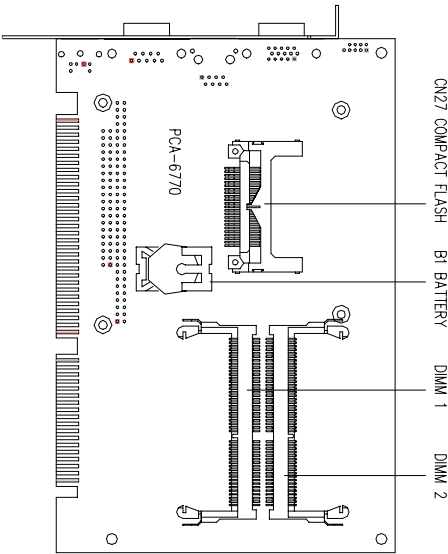
* default setting

SW1: Panel type select

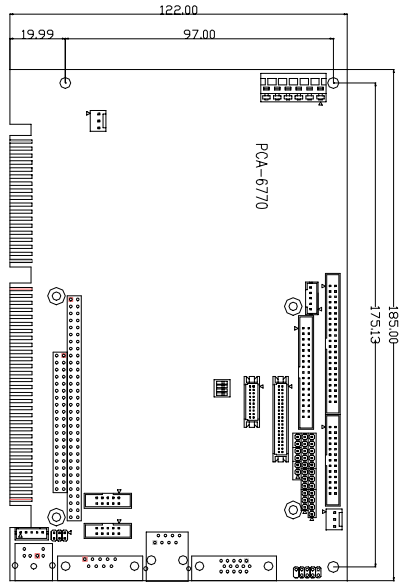
Panel #	Pin				Panel Type	
	1	2	3	4		
1	0	0	0	0	1024 x 768	Dual Scan STN Color Panel
2	x	0	0	0	1280 x 1024	TFT Color Panel
3	0	x	0	0	640 x 480	Dual Scan STN Color Panel
4	x	x	0	0	800 x 600	Dual Scan STN Color Panel
5	0	0	x	0	640 x 480	Sharp TFT Color Panel
6	x	0	x	0	640 x 480	18-bit TFT Color Panel
7	0	x	x	0	1024 x 768	TFT Color Panel
8	x	x	x	0	800 x 600	TFT Color Panel
9	0	0	0	x	800 x 600	TFT Color Panel
10	x	0	0	x	800 x 600	TFT Color Panel
11	0	x	0	x	800 x 600	Dual Scan STN Color Panel
12	x	x	0	x	800 x 600	Dual Scan STN Color Panel
13	0	0	x	x	1024 x 768	TFT Color Panel
14	x	0	x	x	1280 x 1024	Dual Scan STN Color Panel
15	0	x	x	x	1024 x 600	Dual Scan STN Color Panel
16	x	x	x	x	1024 x 600	TFT Color Panel

Note: 0 : ON, X: OFF



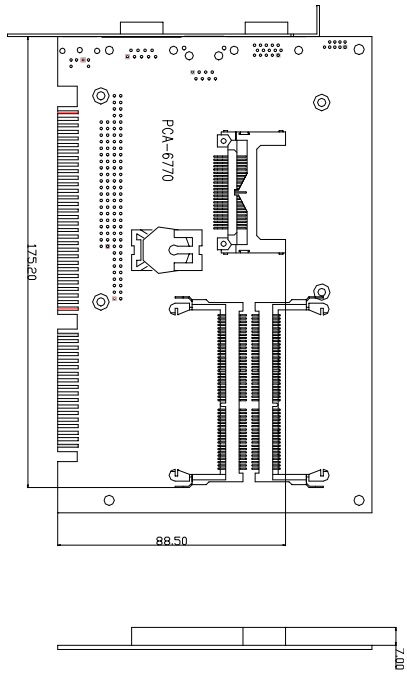
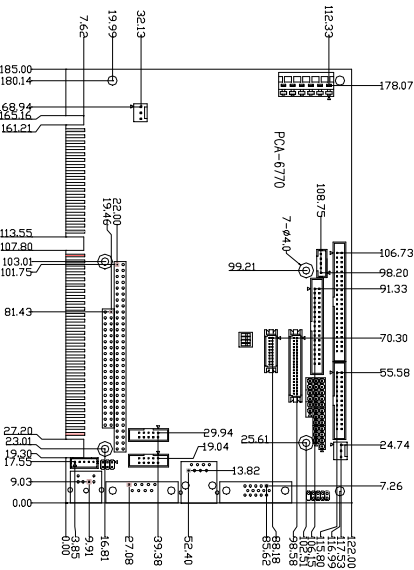


Locating Connectors (Solder Side)



Board Dimensions (Component Side)

PCI-6771 Mechanical Drawing



Board Dimensions (Solder Side)