

PCA-6752 Super7™ with CPU, VGA/LCD and Ethernet

Startup Manual

Packing List

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

- 1 PCA-6752 all-in-one single board computer
- 1 Ultra ATA (HDD) cable (457 mm)
p/n: 1701400453
- 1 floppy disk drive interface cable (700 mm)
p/n: 1701340700
- 1 COM port/Parallel port cable
p/n: 1701260303
- 1 Y cable for AT-keyboard, PS/2 mouse (190 mm)
p/n: 1700060201
- 1 ATX/AT power cable
p/n: 1700040052
- 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-6752, 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.)

Specifications

Standard SBC Functions

- **CPU:** Supports Super7™ for Intel™ P54/P55C, AMD K5/K6/K6-2/K6-3, NS MI/MII and IDT Winchip CPU
- **BIOS:** Award 256 KB Flash memory
- **System memory:** SDRAM DIMM x 1 Max. 128 MB
- **IDE interface:** One enhanced IDE interface, Ultra DMA mode up to 66 MB/sec
- **FDD interface:** Supports up to two FDDs (360 KB/1.2 MB/720 KB/1.44 MB/2.88 MB)
- **Serial ports:** COM1: RS-232 port, COM2: RS-232/422/485
- **Parallel port:** One parallel port, supports EPP/ECP
- **Infrared port:** 115 Kbps SIR, IrDA 1.0 compliant
- **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:** 1-62 Sec. System reset or IRQ11
- **USB:** Two Universal Serial Bus ports, USB 1.1 compliant

Solid State Disk

- DiskOnChip™/ CompactFlash™ (optional)

AGP SVGA/Flat Panel Interface

PCA-6752F

- **Controller:** Trident Cyber i7 VGA/LCD controller, AGP 1.0 compliant, 2 x AGP
- **LCD Interface:** 18 bit
- **Display Memory:** 2 ~ 8 MB
- **Display type:** Simultaneously supports CRT and flat panel (EL, LCD and gas plasma) displays
- **Resolution:**
LCD panel supports up to 1024 x 768 @ 24 bpp
Crt display supports up to 1024 x 768 @ 18 bpp

PCA-6752N

- **Controller:** VIA MVP4 Built-in VGA controller, AGP 1.0 compliant, 2 x AGP
- **Display Memory:** 2 ~ 8 MB
- **Resolution:** CRT display supports up to 1024 x 768 @ 24 bpp

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-6752 series Rev.A1

Part No. 2006675210
Printed in Taiwan

1st Edition
Nov. 1999

Specifications Cont.

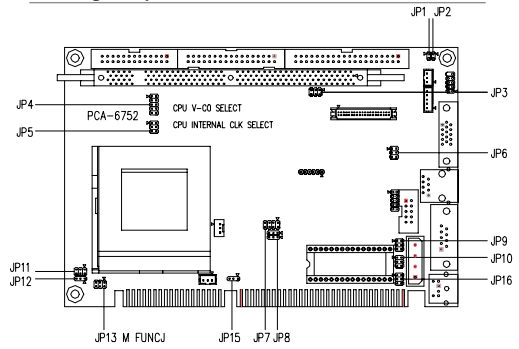
Ethernet Interface

- **Ethernet interface:** Realtek 8139B PCI bus 10/100Base-T Ethernet (PCA-6752F/N only)
- **Connection:** On-board RJ-45 connector

Mechanical and Environmental

- **Dimensions (L x W):** 185 x 122 mm (7.3" x 4.8")
- **Power requirements:** 6.68 A @ +5 V w/ K6-3 450 MHz, 64 MB SDRAM (standard mode)
- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Weight:** 0.27 kg (.59 lb)

Locating Jumpers



Locating jumpers (component side)

JP2: Power LED connector

Pin	Result
1	LED +
2	LED -



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	HDD LED connector
JP2	Power LED connector
JP3	LCD/Panel select
JP4	V _{core} (CPU voltage) select
JP5	CPU internal clock select
JP6	Wake On Lan (WOL) select
JP7	Clock select
JP8	AT/ATX power select
JP9	RS-232/485 select (Part 2)
JP10	RS-232/422/485 select (Part 1)
JP11	DOC address select
JP12	Watch Dog function select
JP13	Multi/System functions Jumper
JP15	CMOS clear
JP16	COM2 for RS-232/485 setting (Part 3)

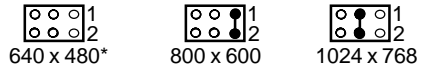
JP1: HDD LED connector

Pin	Result
1	LED +
2	LED -

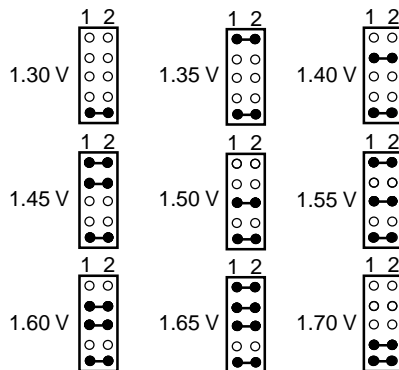


JP3: LCD/Panel Select

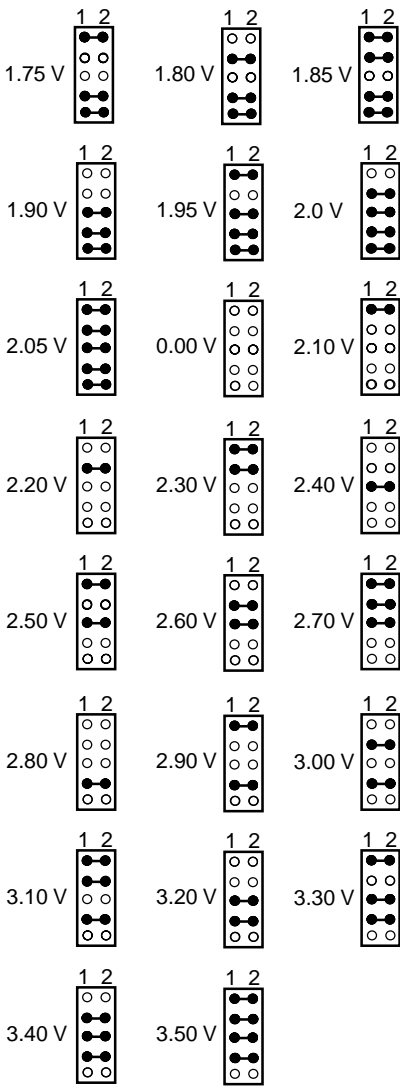
Pin	Result
None	640 x 480 TFT*
1-2	800 x 600 TFT
3-4	1024 x 768 TFT



JP4: Vcore (CPU voltage) select

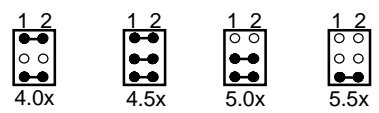
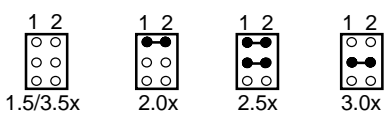


* Default Setting



JP5: CPU Internal Clock Select

Pin	Result
None	1.5X/3.5X
1-2	2.0X
1-2, 3-4	2.5X
3-4	3.0X
1-2, 5-6	4.0X
1-2, 3-4, 5-6	4.5X
3-4, 5-6	5.0X
5-6	5.5X



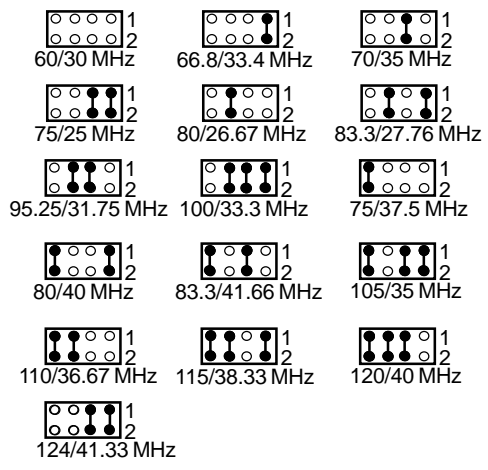
JP6: Wake On LAN Select

Pin	Result
1-3, 2-4	Normal (AT, ATX)*
3-5, 4-6	WOL Enable (ATX Only)



JP7: Clock Select

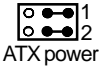
Pin	CPU	PCI
None	60 MHz	30 MHz
1-2	66.8 MHz	33.4 MHz
3-4	70 MHz	35 MHz
1-2, 3-4	75 MHz	25 MHz
5-6	80 MHz	26.67 MHz
1-2, 5-6	83.3 MHz	27.76 MHz
3-4, 5-6	95.25 MHz	31.75 MHz
1-2, 3-4, 5-6	100 MHz	33.33 MHz
7-8	75 MHz	37.5 MHz
1-2, 7-8	80 MHz	40 MHz
3-4, 7-8	83.3 MHz	41.66 MHz
1-2, 3-4, 7-8	105 MHz	35 MHz
5-6, 7-8	110 MHz	36.67 MHz
1-2, 5-6, 7-8	115 MHz	38.33 MHz
3-4, 5-6, 7-8	120 MHz	40 MHz
1-2, 3-4, 5-6, 7-8	124 MHz	41.33 MHz



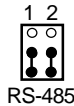
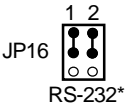
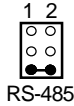
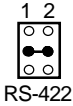
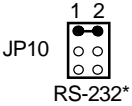
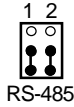
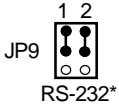
* Default Setting

JP8: AT/ATX Power Select

Pin	Result
1-3, 2-4	Use ATX power
3-5, 4-6	Use AT power*



JP9, JP10, JP16: RS-232/422/485 Select for COM2



JP11: DOC Address Select

1-2, 3-4	DOC address at CC000h
1-2, 5-6	DOC address at D0000h*
1-2	DOC address at D4000h
3-4, 5-6	DOC address at D8000h
3-4	DOC address at DC000h



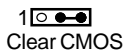
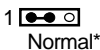
JP12: Watch Dog Function Select

Pin	Result
1-2	Select Reset System*
2-3	Select IRQ-11



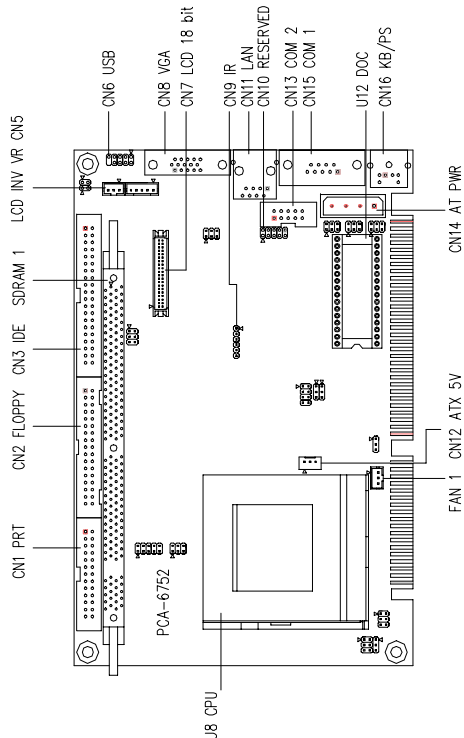
JP15: CMOS Clear

Pin	Result
1-2	Normal*
3-4	Clear CMOS



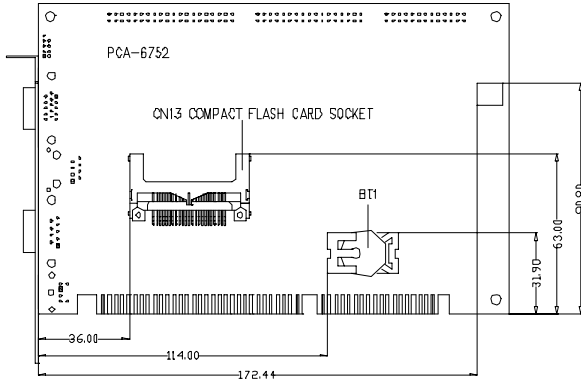
Label	Function
CN1	Parallel port connector
CN2	Floppy drive connector
CN3	IDE hard drive connector
CN4	LCD Inverter Power connector
CN5	Inverter VR connector
CN6	USB connector
CN7	LCD 18-24 bit connector
CN8	VGA connector
CN9	FIR/SIR connector
CN10	Audio Out/AC97 connector
CN11	10/100Base-T Ethernet connector
CN12	ATX SB5V connector
CN13	COM2 connector
CN14	AT (Big 4P) power connector
CN15	COM1 connector
CN16	Keyboard and PS/2 mouse connector
CN18	ISA Bus Gold Finger connector
CN19	CompactFlash™ connector

Mechanical Drawings

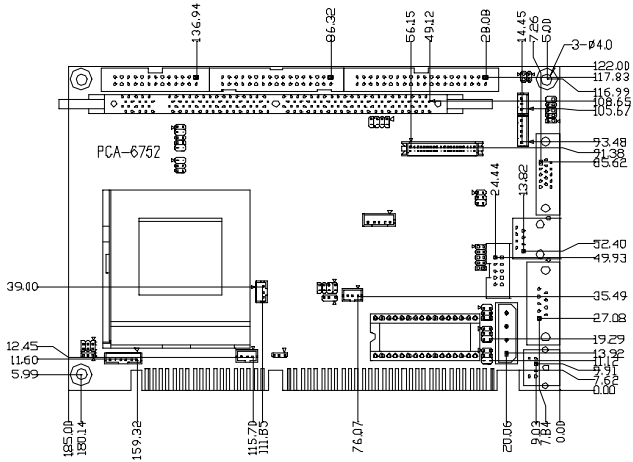


Locating connectors (component side)

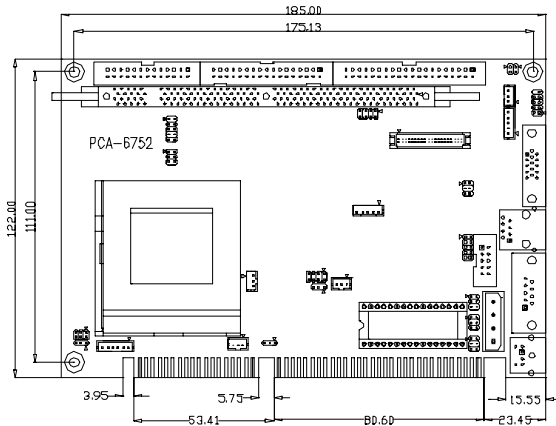
* Default Setting



Locating connectors (solder side)



Mechanical drawing (component side)



Mechanical drawing (dimensions)