

PCA-6775 ISA VIA Mark Half-sized SBC with VGA/LCD/LVDS/10/100 Ethernet/USB and SSD Startup Manual

Packing List

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

- 1 x PCI-6775 Series Half-sized SBC
- 1 x Startup manual
- 1 x Utility disk/CD driver
- 1 x Y cable for PS/2 Keyboard, PS/2 Mouse p/n:1700060202
- 1 x EIDE (HDD) cable p/n:1701440500
- 1 x FDD cable (600mm) p/n:1701340603
- 1 x Parallel port cable p/n:1700260250
- 1 x Power cable p/n:1700000265
- 1 x Mini jumper p/n:1653302122
- 1 x USB cable p/n:1703100260
- 1 x VGA cable p/n:1701160070 (only for PCA-67753F series)

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

Note 1: For detailed contents of the PCA-6775, please refer to the enclosed CD-ROM or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: <http://www.adobe.com/products/acrobat/readstep2.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/eplatform>

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

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

This manual is for the PCA-6775 Series Rev. A2.

Part No. 2006677510

1st Edition
Sep. 2007

Specifications

Standard SBC Functions

- **CPU:** Supports VIA Mark 533 MHz or 800 MHz Processor
- **BIOS:** Award 4 Mbit Flash BIOS
- **System Chipset:** VIA Mark + 686B
- **System Memory:** 144 pin SODIMM x1, supports SDRAM up to 512MB, accepts PC-133 SDRAM
- **2nd Cache Memory:** 64KB on CPU
- **Enhanced IDE Interface:** Enhanced IDE Interface: Supports two enhanced IDE channels. Primary channel supports ATA-100 mode; Secondary channel only supports ATA-33 and PIO mode. CFC card occupies secondary IDE master.)
- **Serial Ports:** Two serial ports: COM1: RS232; COM2: RS232/422/485
- **Parallel Ports:** One parallel port, supports SPP/EPP/ECP
- **Keyboard/Mouse Connector:** Supports standard PC/AT Keyboard and a PS/2 Mouse
- **Power Management:** Supports Power Saving Mode including Normal/Standard/Suspend modes. APM 1.2 compliant.
- **FDD Interface:** 8-bit general purpose input/output
- **SSD:** LSupports CompactFlash Card Type I/II
- **Watchdog Timer:** 0 ~ 255 sec. System reset or IRQ11
- **Expansion Interface:** 32-bit

Display

- **Chipset:** VIA Mark
- **Memory Size:** Shared up to 32 MB
- **Resolution:**
 - **CRT Modes:** 1920x1440 @ 75 Hz
 - **LCD/Simultaneous Modes:** up to 1600x1200 panel resolution with frequency range from 25-MHz to 112-MHz
- **LVDS Interface:** Supports 2 channel (36-bit) LVDS LCD panel

Ethernet

- **Chipset:** Realtek 8100C
- **Ethernet Interface:** IEEE 802.3u (100Base-T) protocol compatible
- **Connection:** On-board RJ-45 connector

Mechanical and Environmental

- **Size/Weight:** 185 mm x 122 mm (7.3" x 4.8"), 0.27 kg (0.59 lb)
- **Power Supply Voltage:** +5 V, +12 V \pm 5%
Power Requirements:
Max:
 +5 V @ 2.20 A, +12 V @ 0.04 A
Typical:
 +5 V @ 1.64 A, +12 V @ 0.01 A (VIA Mark 533 MHz with 256 MB SDRAM)
- **Environment:** 0 ~ 60°C (32 ~ 140°F), operation
- **Operating Humidity:** 0% ~ 90% relative humidity, non-condensing

Jumpers and Connectors

Connectors on the board link it to external devices, such as hard disk drives, a keyboard or expansion bus connectors. In addition, 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.

Jumpers

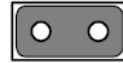
Label	Function
J4	Clear CMOS
J2	COM2 232/422/485 select
J3	AT Power select
J1	LVDS Panel Power select

Connectors

Label	Function
CN1	System FAN connector
CN2	ATX Power Connector
CN3	Printer port Connector
CN4	Floppy disk device Connector
CN5	Primary IDE Connector
CN6	Front panel Connector
CN7	Digital I/O Connector
CN8	LCD inverter Connector
CN9	ATX Power Connector
CN10	Secondary IDE Connector
CN11	LVDS Connector
CN12	LCD (24~35bit) Connector
CN13	LCD (0~23bit) Connector
CN14	AC97 Connector
CN15	VGA Connector
CN16	Universal Series Bus Connector1/2
CN17	Universal Series Bus Connector3/4
CN18	Power input Connector
CN19	LAN * 3 Connector
CN21	COM1 Connector
CN22	COM2 Connector (share with RS422, RS485)
CN23	Extend Keyboard and Mouse Connector
CN24	PS2 Keyboard and Mouse Connector
CN25	Compact Flash Card Connector
CN26	Memory Connector SODIMM

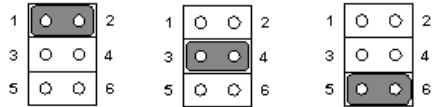
J4: Clear CMOS

Pin	Function
1-2	Clear CMOS



J2: COM2 232/422/485 select

Pin	Function
1-2 (default)	RS232
3-4	RS422
5-6	RS485



J3: AT Power select

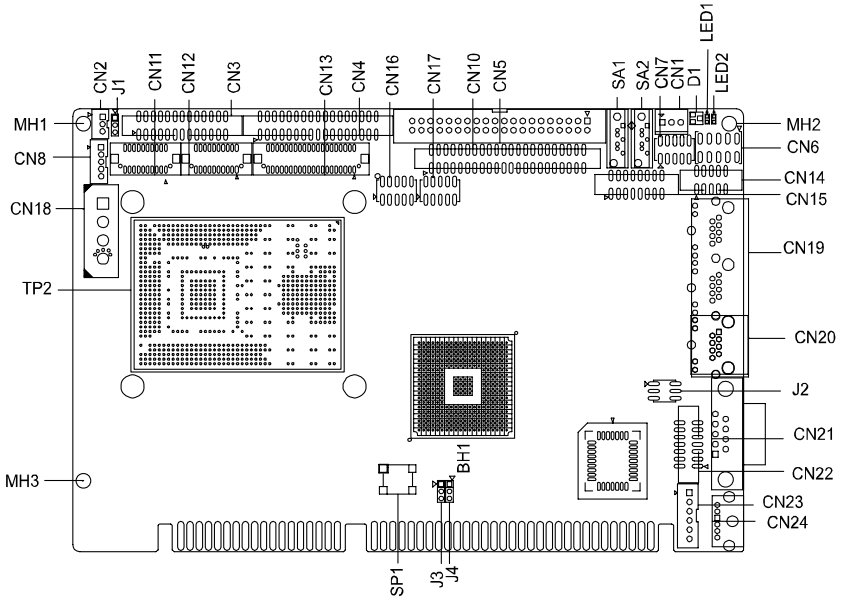
Pin	Function
1-2 (default)	AT Power
2-3	No Active



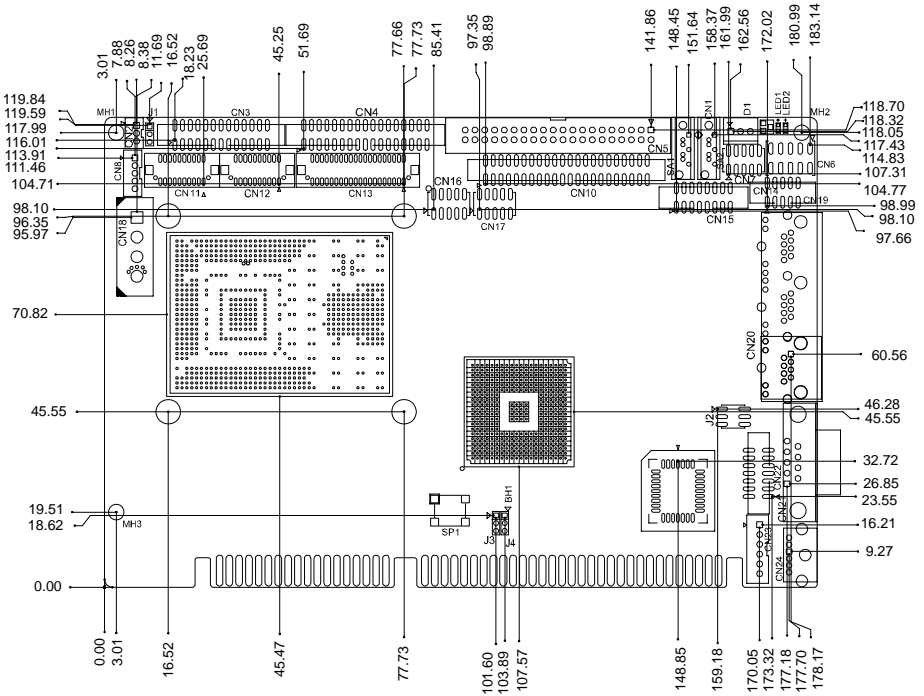
J1: LVDS Panel Power select

Pin	Function
1-2 (default)	+5 V
2-3	+3.3 V

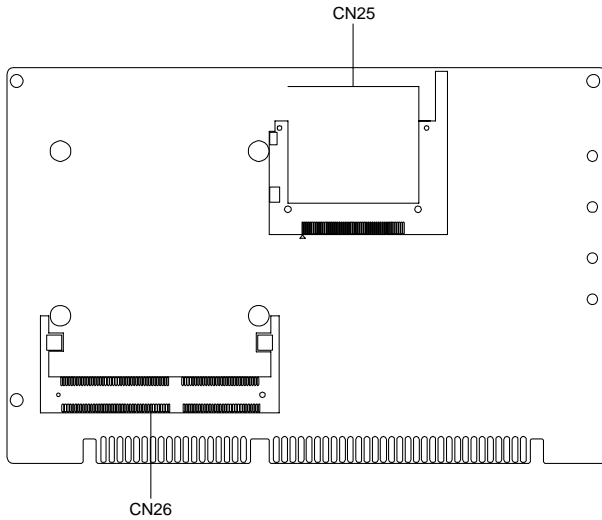




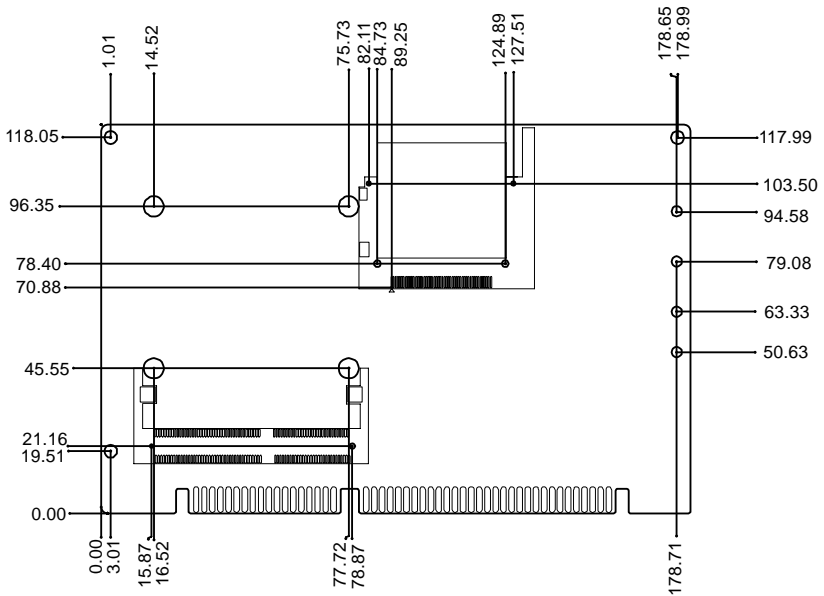
PCA-6775 Location Connectors and Jumpers (Component side)



PCA-6775 Dimensions (Component side)



PCA-6775 Location Connectors (Solder side)



PCA-6775 Dimensions (Solder side)