

PCI-6871 PCI Eden400/Eden667 SlotPC SODIMM/VGA/ LCD/LVDS/8139/CFC2

Startup Manual

Packing List

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

- 1 PCI-6871 all-in-one single board computer
- 1 startup manual
- CD-ROM or disks for utility, drivers, and manual (in PDF format)
- 1 power cable p/n: 1703080101
- 1 PS/2 KB/M cable p/n : 1700060202
- 1 Printer cable p/n :1700260250
- 1 FDD cable p/n :1701340603
- 1 EIDE cable p/n :1701400452

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

Note: For detailed contents of the PCI-6871, please refer to the enclosed CD-ROM or disk (in PDF format).

Specifications

- **CPU:** VIA Eden 400MHz (PCI-6871F-J0A1)
VIA Eden 677 MHz (PCI-6871F-M0A1)
- **System chipset:** VIA VT8606 "Twister™" + VT82C686B
- **BIOS:** Award 256 KB Flash memory
- **System memory:** Two 144-pin SODIMM socket (on the backside), accept 32 MB~1024MB, (512MBx2) SDRAM
- **2nd cache memory:** 64 KB on the processor
- **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 slave.
- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Two serial RS-232 ports. COM1: RS-232, COM2: RS-232/422/485

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<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 PCI-6871 series, Rev. A1.

Part No. 200K687100

2nd Edition

Printed in Taiwan

May, 2004

- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **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:** Four universal serial bus ports
- **PC/104 expansion:** PC/104 connector for ISA and PCI control board

Solid State Disk

- Supports one 50-pin socket for CFC type I/II

VGA/LCD Interface

- **Chipset:** VIA VT8606 "Twister™" chip with integrated Savage4 2D/3D/Video Accelerator
- **Frame buffer:** Supports 8/16/32MB frame buffer with system memory
- **Interface:** 4X AGP VGA/LCD interface: support for 9, 12, 15, 18, 24, 36 bit TFT and optional 16- or 24-bit DSTN panel
- **Display modes:**
 - CRT Modes:** 1280 x 1024 @16bpp (60 Hz),
1024 x 768 @16bpp (85 Hz),
800 x 600 @16bpp (60Hz)
 - LCD/Simultaneous Modes:**
1280 x 1024 @16bpp (60Hz)
1024 x 768 @16bpp (60Hz)
- **LVDS:** Supports 2-channel (2x18bit) LVDS interface

Ethernet interface

- **Chipset:** RTL 8139C
- **Ethernet interface:** IEEE 802.3u 10/100BASE-T Fast Ethernet compatible
- I/O address switchless setting

Mechanical and Environmental

- **Dimensions (L x W):** 146 x 105 mm (5.75" x 4.13")
- **Power supply voltage:** +5 V, +12 V \pm 5%
- **Power requirements:**
 - Max: 10.33A @ +5V, 205mA @ +12V (with 128 MB SDRAM, VIA C3-400MHz CPU)
 - Typical: 2.37A @ +5V, 34.02mA @ +12V (with 256 MB SDRAM, VIA C3-400MHz CPU)
- **Operating temperature:** 0 ~ 60°C (32 ~ 140°F)
- **Weight:** 0.27 kg (weight of total package)

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
JP1	CMOS clear
JP2	LAN power select
JP3	RS-232/422/485 select
JP4	Watch-Dog output select
S1	Panel type select

Label	Function
JP1	CMOS clear
1-2	normal*
2-3	clear CMOS

normal*



clear CMOS



Label	Function
JP2	LAN power select
1-3, 2-4	normal power*
3-5, 4-6	WOL power

normal power*



WOL power



Label	Function
JP3	RS-232/422/485 select
1-2	RS-232*
3-4	RS-422
5-6	RS-485

RS-232*



RS-422



RS-485

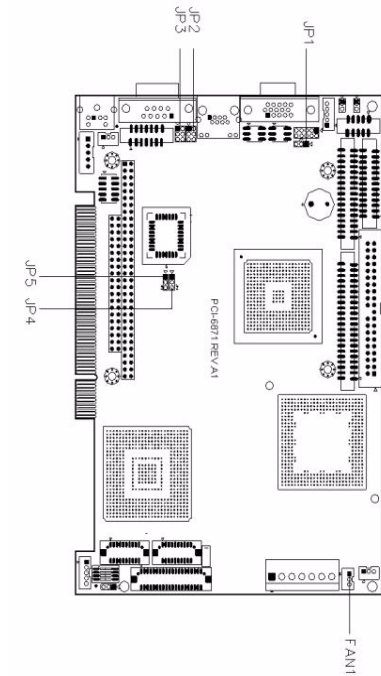


Label	Function
JP4	Watch-Dog output select
1-2	reset
2-3	IRQ11

reset*



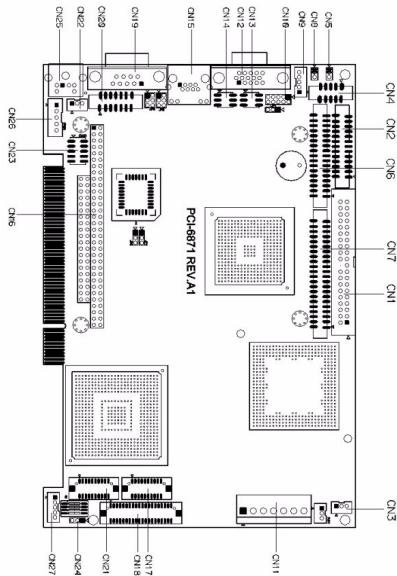
IRQ11



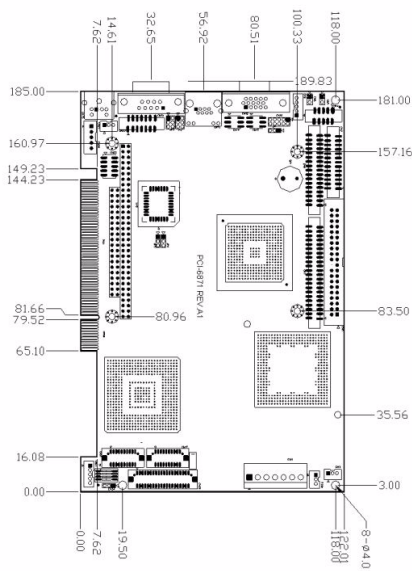
PCI-6871 Jumpers

Connectors

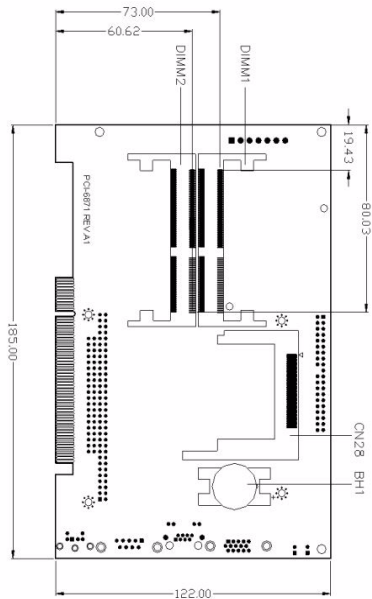
Label	Function
CN1	Primary IDE
CN2	LPT
CN3	ATX Suspend PWR
CN4	USB1,2
CN5	PWR_SW
CN6	Floppy
CN7	Secondary IDE
CN8	Reset
CN9	IR CON
CN10	Audio I/F
CN11	MAIN PWR CON
CN12	D-SUB VGA
CN13	HDD, PWR LED CON & WDT Output
CN14	DIO CON
CN15	LAN RJ45 CON
CN16	PC104
CN17	LCD CON2 (10*2)
CN18	LCD CON1 (20*2)
CN19	COM1
CN20	COM2
CN21	LVDS CON
CN23	USB3,4
CN24	LCD back Light
CN25	PS/2 KB/MS
CN26	EXT_KB
CN27	LCD INV PWR
CN28	CF CON
FAN	CPU fan power



PCI-6871 Connectors



PCI-6871 Dimensions (component side)



PCI-6871 Dimensions (solder side)