# SETUP DELLA SCHEDA SPEEDEASY

### Procedura di installazione:

- Inserite il microprocessore Pentium®I/ Intel® Celeron™ come da istruzioni.
- 2. Modificate la configurazione del computer e ripristinate il sistema.
- 3. Premete il tasto <Del> e accendete il computer per entrare nel setup BIOS.
- 4. Entrate nel menu "SpeedEasy CPU\* SETUP" per regolare la velocit..del microprocessore. 1

Nota: se non regolate la velocità del microprocessore, il sistema funzionerà con le regolazioni standard (Microprocessore da 200MHz con velocità di "host bus" da 100MHz e microprocessore da 133MHz con velocità di "host bus" da 66MHz).

5. Salvate e uscite dal Setup BIOS, e fate ripartire il computer.

\*CPU= microprocessore



Spiegazioni tecniche sul microprocesore SpeedEasy

## Menu del Setup del Microprocessore SpeedEasy

Selezionare <SpeedEasy CPU SETUP> dal menu principale ed entrare nel seguente sottomenu:



Figure -1 Menu del Setup del Microprocessore SpeedEasy

11 sistema BIOS Vi forniràuna serie di valori base per la selezione del microprocessore al posto della regolazione jumper (dell'accoppiamento). Potete selezionare manualmente la  $velocit\`{a} del \, microprocessore \,\, sulla \, schermata \, ``SpeedEasy \, CPU \, SETUP" \, .$ 



Avvertenza:

non dovete regolare la frequenza del microprocessore più alta di quella predisposa, altrimenti la casa produttrice non si farà carico di eventuali danni al micorprocessore.





# SpeedEasy ¿ËÙŚÖÄÏ

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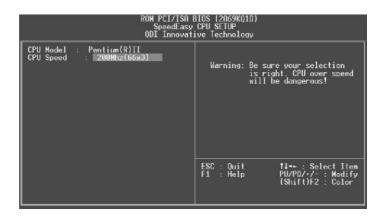
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∯B BIOS£ 45. **Ç**e



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**1. (50**) Pentium<sup>®</sup>II»òIntel<sup>®</sup> Celeron<sup>™</sup>

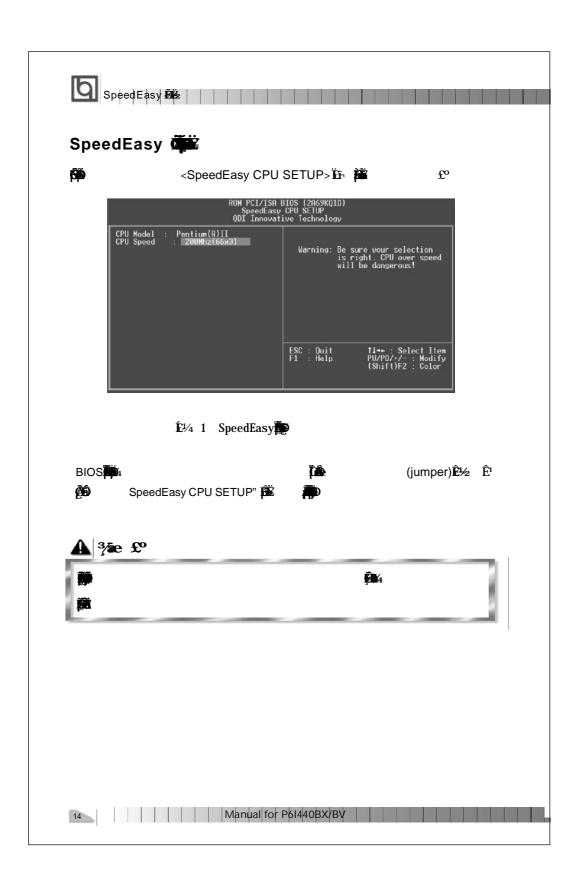
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# Chapter 1 Introduction

### Overview

The P6I440BX/BV is a high-performance, cost-effective, microATX motherboard which is centered on the Intel®440BX AGPset. It provides 66MHz and 100MHz system bus support for all Intel Pentium®II and Celeron™processors. Both 66MHz/100MHz SDRAM and 66MHz EDO DIMMs are supported. The maximum memory size is 768MB. It also provides advanced features such as wake-up on LAN, wake-up on internal/external modem, and keyboard password power-on function. The green function is in compliance with the ACPI specification. Manage Easy, our system management application is supplied to enable remote monitoring and configuration of the system. Together with the SecurityEasy function and integrated Creative ViBRA™16XV CT2511 ISA audio, you get a powerful state-of-the-art system.

### **Key Features**

### Form factor

- microATX form factor of 244mm x 200mm.
- Provides backward compatibility with standard ATX 2.01 chassis for easy integration.

### Microprocessor

- Supports all Intel Pentium®II processors at 233/266/300/333MHz with 66MHz bus speed and at 350/400/450MHz with 100MHz bus speed.
- Supports all Intel®Celeron™ processors at 266/300/333 MHz with 66MHz bus speed.
- Supports 66MHz and 100MHz host bus speed.
- CPU core frequency = Bus speed x3, x3.5, x4, x4.5, x5, x5.5
- CPU core supply voltage adjustable from 1.3V to 3.5V through on-board switching voltage regulator with VID(Voltage ID).

Intel® 440BX AGPset: 82443BX, 82371EB (PIIX4E)

### System memory

- Provides three 168 pin 3.3V unbuffered DIMM sockets.
- Supports both 66MHz/100MHz SDRAM and 66MHz EDO DIMMs.
- Minimum memory size is 8MB, maximum memory size is 768MB.
- SDRAM 64 bit data interface with ECC support.



### **On-board IDE**

- · Supports two PCI PIO and bus Master IDE ports.
- · Supports up to Mode 4 Timing
- Supports 2 Fast IDE interfaces for up to 4 IDE devices including IDE hard disks and CD ROM drives.
- Supports "Ultra DMA/33" Synchronous DMA mode transferring up to 33 Mbytes/sec.
- Integrated 16x32bit buffer for IDE PCI Burst Transfers.

### On-board I/O

- Uses Winbond W83977EF super I/O chip.
- One floppy port supporting up to two 3.5" or 5.25" floppy drives with 360K/720K/1.2M/1.44M/2.88M format.
- Two high speed 16550 fast compatible UARTs(COM1/COM2/COM3/COM4 selective) with 16-byte send/receive FIFOs, supporting MIDI mode.
- One enabled parallel port at the I/O address 378H/278H/3BCH with additional bi-direction I/O capability and multi-mode as SPP/EPP/ECP (IEEE 1284 compliant).
- Circuit protection provided, preventing damage to the parallel port when a connected printer is powered up or operates at a higher voltage.
- Supports LS-120 floppy disk drive.
- All I/O ports can be enabled/disabled in the BIOS setup.

### **On-board Audio**

- Based on the Creative ViBRA™16XV CT2511 sound chip.
- Compatible with Sound Blaster™, Sound Blaster Pro™and Windows Sound System™.
- Integrated CQM™Music Synthesizer.
- · Stereo Enhancement Support.
- Provides on-board Line-in Jack, Microphone-in Jack, speaker/Line-out Jack and MIDI/ Joystick Connector.

### Advanced features

- Provides Trend ChipAwayVirus®On Guard.
- Provides on-board PS/2 mouse and PS/2 keyboard ports.
- Two USB ports supported.
- · Provides infrared interface.
- Supports Windows 95/98 software power-down.





- Supports external modem ring power-on.
- Supports wake-up on LAN and wake-up on internal modem.
- Supports auto fan off when the system enters suspend mode.
- On-board W83782D supports system monitoring (monitors the CPU&system temperature, system voltages, chassis intrusion and FAN speed) (manufacturing option).
- Provides management application such as ManageEasy, and LDCM(LANDesk Client Manager) (manufacturing option).
- Supports keyboard password power-on function.
- Supports SecurityEasy function (manufacturing option)
- System status resumes after AC power failure.

### **BIOS**

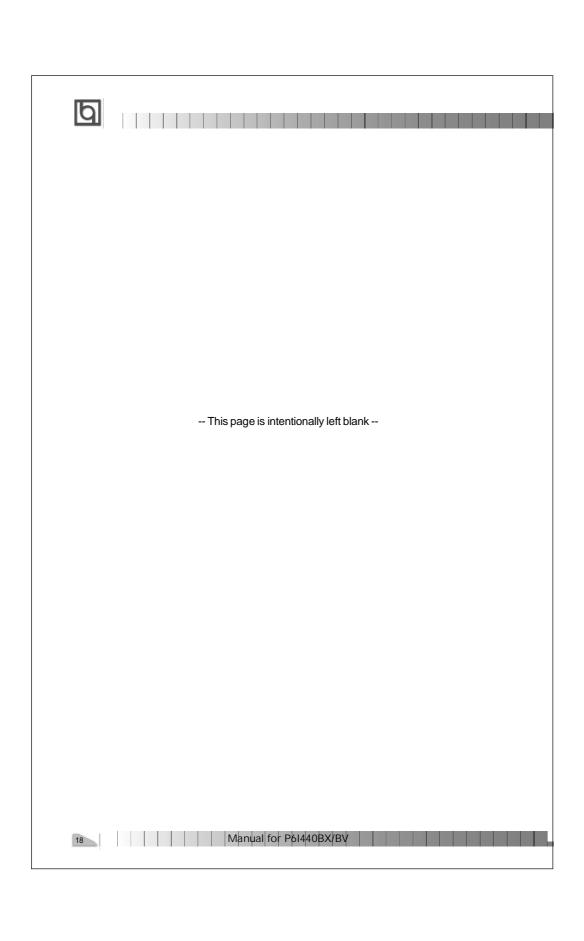
- Licensed advanced AWARD BIOS, supports DIP flash ROM BIOS with 2MB memory size, plug and play ready.
- Supports IDE CD-ROM or SCSI boot up.

### **Green function**

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management).
- Supports three green modes: Doze, Standby and Suspend.

### **Expansion slots**

- 2 PCI slots and 1 ISA/PCI shared slot.
- 1 AGP Slot





# **Chapter 2**

### Installation Instructions

This section covers External Connectors, Jumper Settings, and Memory Configuration. Refer to the motherboard layout chart for locations of all the jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pins assignment for your reference. The particular state of the jumpers, connectors and ports are illustrated in the following figures. Before setting the jumpers or inserting these connectors, please pay attention to the directions.

### **External Connectors**

### PS/2 Keyboard Connector, PS/2 Mouse Connector

PS/2 keyboard connector is for the usage of PS/2 keyboard. If you choose to use a standard AT size keyboard, an adapter should be used to fit this connector. PS/2 mouse connector is for the usage of PS/2 mouse.



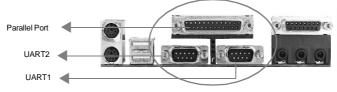
### USB1, USB2

Two USB ports are available for connecting USB devices.



### Parallel Port Connector and Serial Port Connector (UART1, UART2)

The parallel port connector can be connected to a parallel device such as a printer, while the serial port connectors can be connected to serial port devices such as a serial port mouse. You can enable/disable them and choose the IRQ or I/O address in "Integrated Peripherals" from AWARD BIOS SETUP.







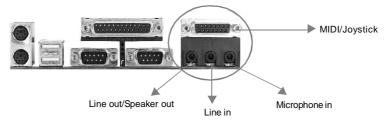
# Line-in jack, Microphone-in jack and Line/Speaker-out jack MIDI/Joystick Connector

The Line-in jack can be connected to devices such as a cassette or Minidisc player for playback or recording.

The Microphone-in jack can be connected to a microphone for voice input.

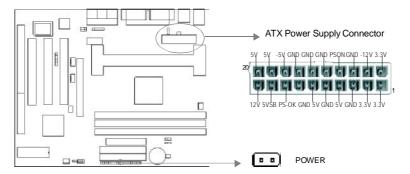
The Line/Speaker-out jack is controlled by the jumper JP10 & JP11 (refer to <u>Jumper Settings</u> below for details). If set as Line out, this allows you to bypass the built-in power amplifier to connect powered speakers or an external amplifier for audio output. If set as Speaker out, this allows you to connect speakers or headphones for audio output from the internal amplifier.

The MIDI/Joystick connector allows you to connect a game joystick or a MIDI device.



### **ATX Power Supply Connector & Power Switch (POWER)**

ATX/SFX power supply can both be used on this system. Be sure to connect the power supply plug to this connector in its proper orientation. The power switch (POWER) should be connected to a momentary switch. When powering up your system, first turn on the mechanical switch of the power supply if one is provided, then push once the button of the momentary switch. When powering off the system, you needn't turn off the mechanical switch, just *Push once*\* the button of the momentary switch.



Note: \* If you change "soft-off by PWR-BTTN" from default "Instant-off" to "Delay 4 Secs" in the "POWER MANAGEMENT SETUP" section of the BIOS, the power button should be pressed for more than 4 seconds before the system powers down.





21

### Hard Disk LED Connector (HD\_LED)

The connector connects to the case's IDE indicator LED to show the activity status of IDE hard disk.

### Reset Switch (RESET)

The connector connects to the case's reset switch. Press the switch once, the system

### **Speaker Connector (SPEAKER)**

The connector can be connected to the speaker on the case.

### Power LED Connector (PWR\_LED)

The indicator LED connected to "PWR\_LED" will glow dimly when the system is in the soft power-down status.

### **Key-Lock Connector (KEY\_L)**

The connector can be connected to the keyboard lock switch on the cabinet for locking the keyboard.

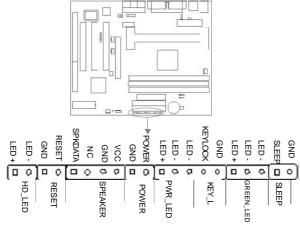
### **Green LED Connector (GREEN\_LED)**

The LED connected to this header shows the status of the system as described below:

LED Status	System Status
Off	No power supply or the current of 5VSB is not strong enough.
On	The system is in power-up status.
Flashing at a frequency of about 1.5Hz	The system is in soft power-down status.
Flashing at a frequency of about 0.5Hz	The system is in Green Mode.
Flashing at a frequency of about 1/6Hz	The system is in Lock status.

### **Hardware Green Connector (SLEEP)**

If the SecurityEasy function is enabled, push once the switch connected to this header and the system will enter lock status. If the lock function is disabled, push once the switch, the system enters suspend mode

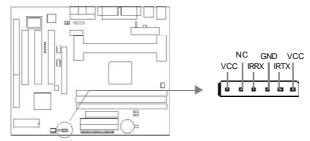


Manual for P6I440BX/BV



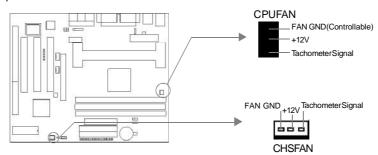
### Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. If using this function, set "Serial Port 2 Mode" to IrDA or ASKIR then configure the settings in the "INTEGRATED PERIPHERALS" section of the BIOS.



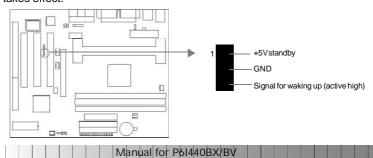
### Fan Connector (CPUFAN, CHSFAN)

These two fans are controllable. They will be automatically turned off after the system enters suspend mode. You also can choose not to turn the CPUFAN off by setting "CPUFAN Off In Suspend" as Disabled in the "POWER MANAGEMENT SETUP" section of the BIOS.



### Wake-Up On LAN (WOL)

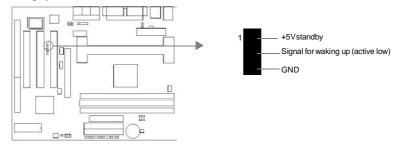
Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. If this function is to be used, please be sure an ATX 2.01 power supply of which 5VSB line is capable of delivering 720mA, and a LAN adapter which supports this function are used. Then connect this header to the relevant connector on the LAN adapter, set "Wake Up On LAN" as Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.





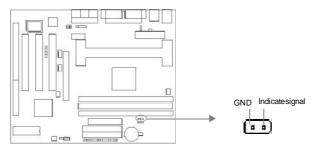
### Wake-Up On Internal Modem (WOM)

Through the Wake-Up On Internal Modem function, the system which is in the power-off status can be powered on by a ring signal received from the internal modem. If this function is to be used, be sure an internal modem card which supports the function is used. Then connect this header to the relevant connector on the modem card, set "Resume by Ring" to Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



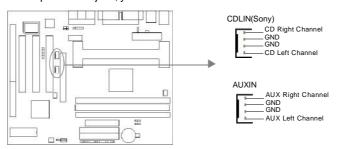
### **Chassis Security Switch (CHSSEC)**

If the switch is off, this indicates the chassis is closed. Otherwise, it indicates the chassis is opened.



### **Digital Audio Connector (CDLIN, AUXIN)**

CDLIN is a CD audio connector which can be connected to a CD-ROM drive (Sony standard) through a CD audio cable. AUXIN is an auxiliary audio connector. With the speakers connected to Line/Speaker-out jack, you can listen to audio from the CD-ROM drive.

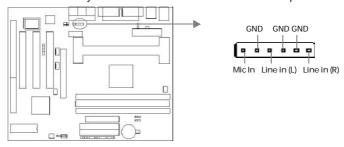






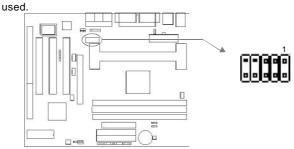
### Microphone-in and Line-in Connector (BLSND)(manufacturing option)

This connector allows you to connect the audio devices or microphone with cable.



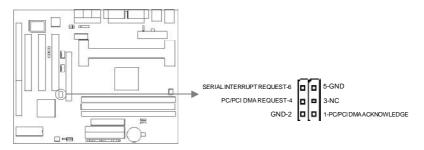
### First COM Port Connector (1STCOM)(manufacturing option)

This connector allows you to connect the COM port device inside the cabinet. If this COM port is already occupied, note the other one located on the back panel (UART1) can't be



### Sound Connector (PC-PCI)(manufacturing option)

This connector is for the usage of PCI sound card.





### Expansion Slots & I/O Ports description

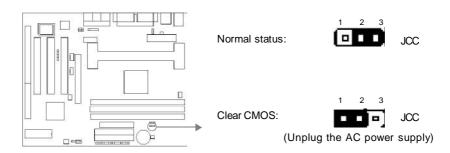
Description
ISA slot.
First PCI slot.
Second PCI slot.
Third PCI slot.
Primary IDE port.
Secondary IDE port.
Floppy Driver Port.
Accelerated Graphics Port

### **Jumper Settings**

There are some jumpers on the motherboard, they represent, clear CMOS jumper JCC,  $enable\,key board\,password\,power-on\,function\,jumper\,JP2\,and\,Speaker/Line-out\,selection$ jumper JP10&JP11. Pin 1 for all jumpers are located on the side with a thick white line (  $Pin1 \rightarrow$ ), referring to the motherboard's silkscreen. Jumpers with three pins will be shown as to represent pin1&pin2 connected and to represent pin2&pin3 connected.

### Clear CMOS (JCC)

If you want to clear CMOS, unplug the AC power supply first, close JCC(pin1&pin2) once, set JCC back to the normal status with pin2&pin3 connected, then power on the system.

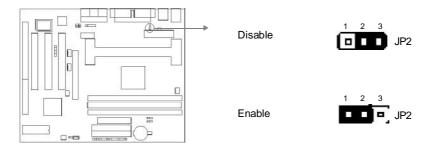






### Enable keyboard password power-on function (JP2)

The motherboard provides the advanced keyboard password power-on function. When wanting to use this function set JP2 with pin1&pin2 closed. Otherwise, set JP2 with pin2&pin3 shortened for disabling this function.



In order to implement this function, set "POWER ON Function" to **Password** and enter the keyboard power-on password in the "INTEGRATED PERIPHERALS" section of the BIOS. Save and exit, then power off your system. In this case, the power button's power-on function has been disabled. The only way to power up the system is to enter the correct password. If you forget the password, clear CMOS and set it again. Refer to BIOS description on page 46 for detail information.

Note: 1.If wanting to use this function, 5VSB line of the power supply should be capable of delivering 200mA, or the system can't be powered up.

2.If you set JP2 with pin2&pin3 closed, set "POWER ON Function" to BUTTON ONLY, don't set it to Password, or this will prevent you from powering up your system.

3. If you encounter problems above, clear CMOS and set the jumper and BIOS option properly again.

### Speaker/Line out selection (JP10, JP11)

If you want to set the Line-out/Speaker-out jack as Line out, set JP10 & JP11 with pin2&pin3 closed. Otherwise, set JP10 & JP11 with pin1&pin2 shortened for Speaker out.

