

P5VX-Be

User's Manual (for Award BIOS)

V1.2

February, 1997

This mainboard requires correct configuration information; otherwise, a malfunction may result.



Static electricity can cause serious damage to integrated circuit mainboards. To avoid building up a static electric charging on your body, be sure you discharge any static electricity by grounding yourself before handling the mainboards. If mainboards are handed from one person to another, they should touch hands first, then pass the mainboards.

Information presented in this publication has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this document is subject to change without notice.

Contact your dealer for warranty details.

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Table of Contents

1. Introduction	
Mainboard Features	1-1
Mainboard Description	1-1
Specification	1-2
Mainboard Layout	1-4
2. Installation	
Check List	2-1
Dimensions	2-2
Install Main Memory	2-2
DRAM Memory Installation	2-3
How to do the combination	2-3
Cache Memory	2-5
Install CPU	2-5
CPU frequency and Bus frequency	2-6
Intel Pentium® processor or Intel's Pentium ® processor with MMXTM technology(P55C)	2-6
Cyrilx or IBM 6x86 CPU	2-7
AMD K5 CPU	2-8
Set the Jumpers for CPU Voltage	2-9
CPU Fan	2-10
Install Fan Power On-board	2-10
Green LED	2-11
Install Cables	2-11
IDE Connector	2-11
Floppy Cable	2-12
IrDA	2-12
USB Header	2-13
20-pin Front Panel Switch Connector	2-13
H.D.D. LED	2-14
Power Supply Connector	2-15
AT Keyboard Connector	2-15
PS/2 Mouse & Keyboard Connector	2-16
Serial Port COM1 and COM2	2-16
Parallel Port Printer Connector	2-17
Install Add-on Card	2-18
Other Jumpers	2-18
Clear CMOS (JP4) and Clear Password (JP1)	2-18
Other Jumpers	2-18
Audio Solution (Manufacture Option)	2-19
J9 Audio Header (Manufacture option with audio chip)	2-19
J100 CD-In Header	2-19
Audio Connector Bracket	2-20
Summary	2-21
Jumper Settings	2-21
Host Clock Setting	2-21
Voltage Setting	2-22
Connector Table	2-22
3. Built-in BIOS Setup Program	
SETUP Program	3-1
Standard CMOS Setup	3-3
BIOS Features Setup	3-4
Chipset Features Setup	3-6
Power Management Setup	3-8
PNP/PCI Configuration Setup	3-10
Load BIOS Defaults	3-11
Load Setup Defaults	3-11
Integrated Peripherals	3-12
Supervisor Password	3-13
User Password	3-14
IDE HDD Auto Detection	3-14
Quitting SETUP	3-15

About this Manual

This manual is designed to offer detailed information about the P5VX-Be mainboard. The content includes the main features of the mainboard, the installation, and the BIOS settings. There are three chapters to offer clear and detailed information of P5VX-Be.

- Chapter 1 Introduction**
Describes the main features and major components.
- Chapter 2 Installation**
Describes the installation of hardware including jumpers, cables and connectors.
- Chapter 3 BIOS Setup**
Describes the setup of BIOS. Briefly explain each item and show the selection of option.

Warning Marks

In this manual, **warning marks** are used to stress important parts or notices of text that require users' attention. There are two kinds of warning marks in this manual:



Stress the important information or instructions that must pay more attentions to and should be noted.

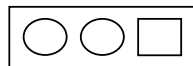


Avoid the possible system error or damages, and offer detailed information.

Graphic Descriptions of Jumper Settings



means Pin 1 & Pin 2 are set as short



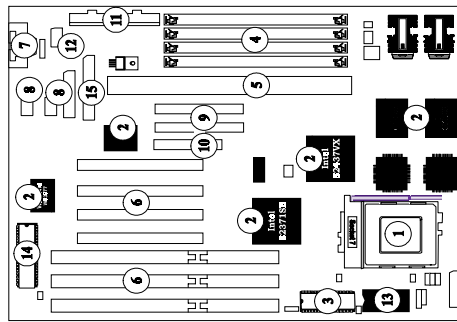
means Pin 1 & Pin 2 are set as open

1 Introduction

Main Features

P5VX-Be is a main stream 3/4 Baby - AT mainboard supported with Intel Pentium® processor and Intel Pentium® processor with MMX™ technology. Based on Intel 430VX PCIsset, P5VX-Be can support up to 512KB Pipelined Burst SRAM, two banks 72-pin SIMM module, and one 168-pin DIMM module. Besides, on-board 3D-audio chip solution help users easily build a multimedia PC and enjoy 3D sound on this high performance platform.

Mainboard Description



- | | |
|---------------------------------------|--------------------------|
| ① Processor Socket | ⑨ PCI IDE Connectors |
| ② Chipset | ⑩ FDD Connector |
| ③ System BIOS | ⑪ Power Supply Connector |
| ④ SIMM Memory Socket | ⑫ USB Header |
| ⑤ DIMM Memory Socket | ⑬ RTC |
| ⑥ Expansion Slots | ⑭ Keyboard Controller |
| ⑦ AT K/B or PS/2 Mouse & Keyboard Set | ⑮ Audio Connector |
| ⑧ Serial / Parallel Ports | |

Introduction

Specification

1. Processor Socket:

One Socket 7 supports:

- Intel Pentium[®] processor 75/90/100/120/133/150/166/200 MHz.
- Intel's Pentium[®] processor with MMX™ technology 166/200 MHz .
- Cyrix 6x86 P120+/P133+/P150+/P166+ CPU.
- AMD K5 PR75/ PR90/ PR100/PR120 CPU.
- Upgrade capacity to future Pentium[®] OverDrive[®] processor.

2. Chipset:

- Intel 430VX PCIset.
- Winbond 83877 (PnP Super I/O Controller).
- Crystal CS 4237B (3D Audio Chip) (Manufacture Option)

3. System BIOS:

- Award flash BIOS.
 - DMI 2.0
 - PnP 1.0a (comply with Intel and Windows 95)
 - PCI 2.1
 - CD ROM boot
 - APM 1.2

4. SIMM System Memory Socket:

- 4 pieces of 72-pin SIMM sockets with memory size from 4MB to 128MB.
- Support EDO / Fast Page Mode DRAM .

5. DIMM Memory Socket:

- 1 piece of 168-pin DIMM socket.
- Support up to 8/16/32 MB unbuffered EDO or synchronous DRAM. (SDRAM)
- Compliances with JEDEC specifications for 3.3V unbuffered EDO/SDRAM Module.

6. Expansion Slots:

- 3 16-bit ISA slots with 100% ISA compatible function.
- 4 32-bit PCI slots all support PCI master.
 - PCI specification version 2.1.
 - CPU to PCI memory write posting with 4 Word deep buffers.

Introduction

- Convert Back-to-Back sequential CPU to PCI memory writes to PCI Burst writes.

7. AT Keyboard or PS/2 Mouse & Keyboard Set:

- Provides Connectors for AT Keyboard & PS/2 mouse cable / bracket or PS/2 mouse & keyboards connector set. (manufacture option)

8. Serial / Parallel Ports:

- One multi-mode parallel port with chip-protect circuitry supports standard, enhanced (EPP), high speed (ECP) mode.
- Two high speed 16C550 UART compatible buffer fast serial port.
- Support IrDA/ASKIR Infrared Interface.

9. PCI IDE Connector:

- Build-in Intel 82371SB chip 32-bit PCI IDE interface with 2 IDE channels.
 - Support Maximum 4 IDE devices.
 - Support PIO and Bus master IDE.
 - Support up to PIO mode 4 timings or bus master.
 - Transfer 8x32 bit buffer for Bus master IDE PCI Burst
 - Support Separate Master / Slave IDE mode.
 - Plug and Play compatible.
 - Fully compatible with PCI local bus specification V2.1.

10. FDD Connector:

- One floppy drive supports 360K/720K/1.2MB/1.44MB/2.88MB and 3 mode floppy drives.

11. Power Supply Connector:

- Provides the connectors for standard PC power supply.

12. USB Header:

- Provides the interface for use of two USB channels.

13. RTC:

- Stores the CMOS data, Real Time Clock and build-in battery.

14. Keyboard Controller:

- It's function compatible with Intel 8042 Keyboard Controller, which provides enhanced gate A20 switching & PS/2 compatible mouse.

15. Audio Connector (Manufacture option with Audio Chip)

- Provides the interface for use of Line-in, Line-out, Speaker, Mic-in, and game port. (midi port)

Introduction

Mainboard Layout

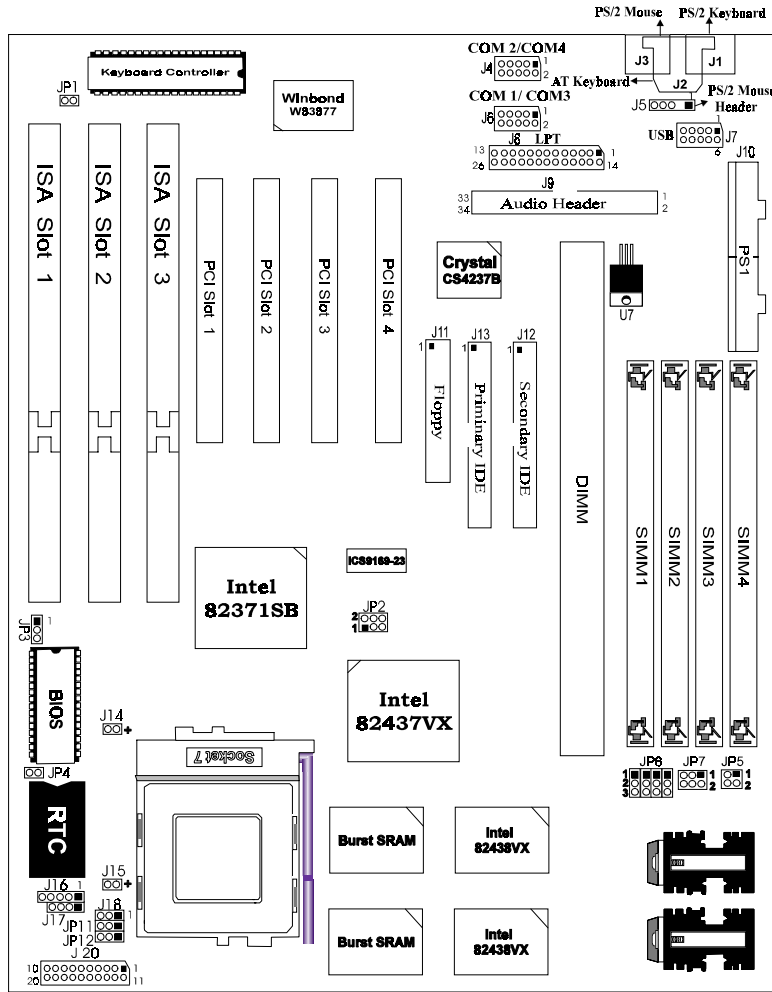


Figure 1 -1. P5VX-Be Mainboard Layout

2 Installation

This chapter provides information on how to install and configure P5VX-Be Mainboard.

Check List

The standard packing of P5VX-Be should include:

- P5VX-Be mainboard
- 1 IDE cable
- 1 Floppy cable
- 1 9-pin Serial port & PS/2 mouse cable / bracket
- 1 9-pin Serial port & 25-pin parallel port cable / bracket
- P5VX-Be User's Manual

Optional packing of P5VX-Be includes:

Device driver package

IrDA cable / bracket

USB cable / bracket

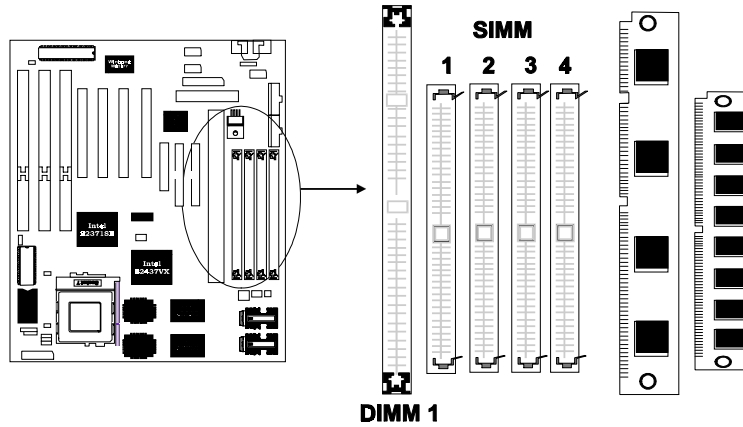
1 Audio Cable / Bracket

Special offer package of P5VX-Be includes:

IrDA Motherboard Adapter

Installation

DRAM Memory Installation:



How to do the Combination ?

Users can install the SIMM module on any bank according to the listing table last page. The possible combinations will make the total memory size from minimum 4 MB to maximum 128MB.

There are a lot of kinds memory combination to choose. Please refer to the table on page 4 for the detailed combination.

The following table lists a number of possible DRAM combinations

Bank 0		Bank 1		DIMM	Total Memory Size
SIMM1	SIMM2	SIMM3	SIMM4	DIMM1	
----	----	----	----	8MB/16MB/32MB	8MB/16MB/32MB
2MB(S)☆	2MB(S)	----	----	----	4MB
2MB(S)	2MB(S)	2MB(S)	2MB(S)	----	8MB
4MB	4MB	----	----	----	8MB
4MB	4MB	2MB(S)	2MB(S)	----	12MB
4MB	4MB	4MB	4MB	----	16MB

Continued.....

Installation

Bank 0		Bank 1		DIMM	Total Memory Size
SIMM1	SIMM2	SIMM3	SIMM4	DIMM1	
8MB(S)	8MB(S)	----	----	----	16MB
8MB(S)	8MB(S)	2MB(S)	2MB(S)	----	20MB
8MB(S)	8MB(S)	4MB	4MB	----	24MB
8MB(S)	8MB(S)	8MB(S)	8MB(S)	----	32MB
8MB(D)	8MB(D)	----	----	----	16MB
8MB(D)	8MB(D)	2MB(S)	2MB(S)	----	20MB
8MB(D)	8MB(D)	4MB	4MB	----	24MB
8MB(D)	8MB(D)	8MB(S)	8MB(S)	----	32MB
8MB(D)	8MB(D)	8MB(D)	8MB(D)	----	32MB
16MB	16MB	----	----	----	32MB
16MB	16MB	2MB	2MB	----	36MB
16MB	16MB	4MB	4MB	----	40MB
16MB	16MB	8MB(S)	8MB(S)	----	48MB
16MB	16MB	8MB(D)	8MB(D)	----	48MB
16MB	16MB	16MB	16MB	----	64MB
32MB(D)	32MB(D)	----	----	----	64MB
32MB(D)	32MB(D)	2MB(S)	2MB(S)	----	68MB
32MB(D)	32MB(D)	4MB	4MB	----	72MB
32MB(D)	32MB(D)	8MB(S)	8MB(S)	----	80MB
32MB(D)	32MB(D)	8MB(D)	8MB(D)	----	80MB
32MB(D)	32MB(D)	16MB	16MB	----	96MB
32MB(D)	32MB(D)	32MB(D)	32MB(D)	----	128MB

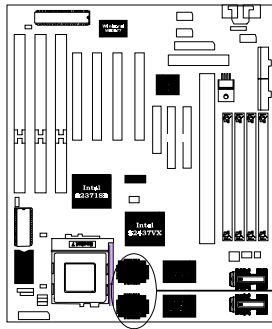
Table 2 -1. System Memory Configurations

☆ : (S) means : Single Side

☆ : (D) means : Double Side

Cache Memory

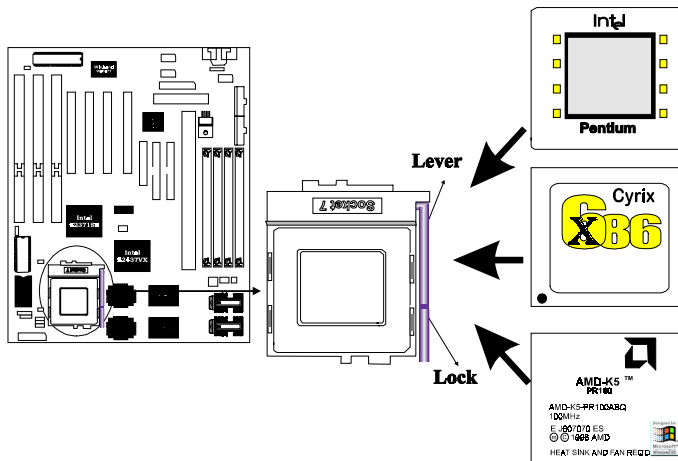
P5VX-Be is equipped with L2 cache size 256KB or 512KB. L2 Pipelined Burst Cache memory size is manufactured option.



Size	Data RAM (U28, U35)
256KB	32K x32 (3.3V) (Pipelined Burst)
512KB	64K x32 (3.3V) (Pipelined Burst)

Install CPU

P5VX-Be provides one ZIF socket 7 for installation of Intel Pentium® processor, Intel Pentium® processor with MMX™ technology, Cyrix 6x86 or AMD K5 processor. To install processor, check the direction of CPU and ZIF socket, lift the lever up to the top, put the CPU onto the socket, and lay down the lever of socket and then lock the lever of socket.

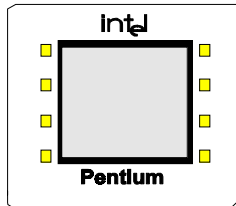


Installation

CPU frequency and Bus frequency:

To install the CPU at its correct frequency, Please refer the following table to set up CPU frequency.

Intel Pentium[®] processor or Intel Pentium[®] processor with MMX[™] technology(P55C) :

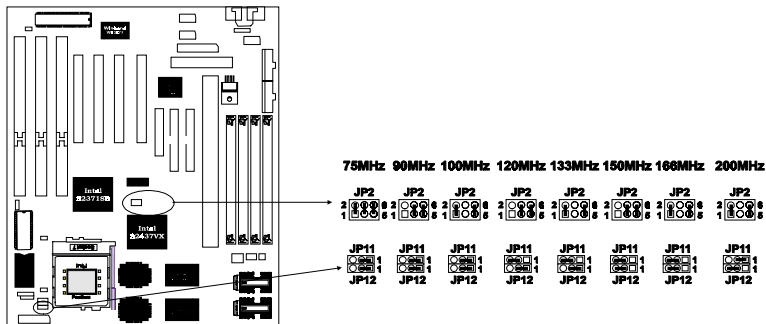


Core CPU Freq. Intel Pentium [®] processor(P55C)	Host Clock	JP2 (Jumper short)	Clock Multiplier	JP11 (Jumper short)	JP12 (Jumper short)
75 MHz	50	1-2, 3-4, 5-6	1.5	1-2	1-2
90 MHz	60	3-4, 5-6	1.5	1-2	1-2
100 MHz	66	1-2, 5-6	1.5	1-2	1-2
120 MHz	60	3-4, 5-6	2	2-3	1-2
133 MHz	66	1-2, 5-6	2	2-3	1-2
150 MHz	60	3-4, 5-6	2.5	2-3	2-3
166 MHz	66	1-2, 5-6	2.5	2-3	2-3
200 MHz	66	1-2, 5-6	3	1-2	2-3

Table 2 -2. Intel Pentium[®] processors Frequency and Bus Frequency

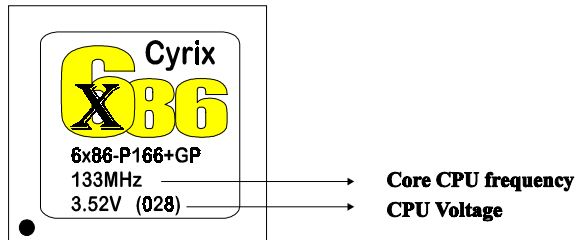


This P5VX-Be can only install Intel Pentium[®] processor with MMX[™] technology with 166MHz or 200MHz.



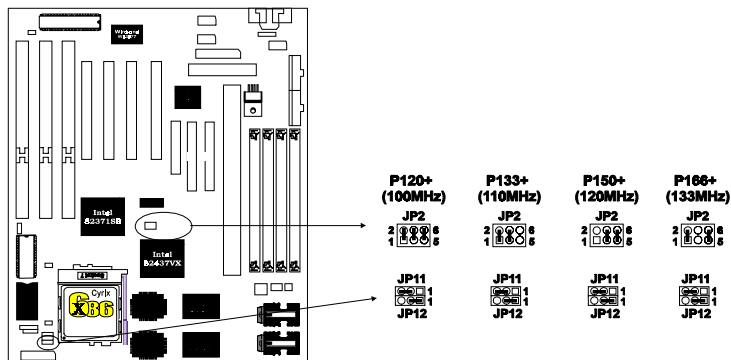
Installation

Cyrix or IBM 6x86 CPU :



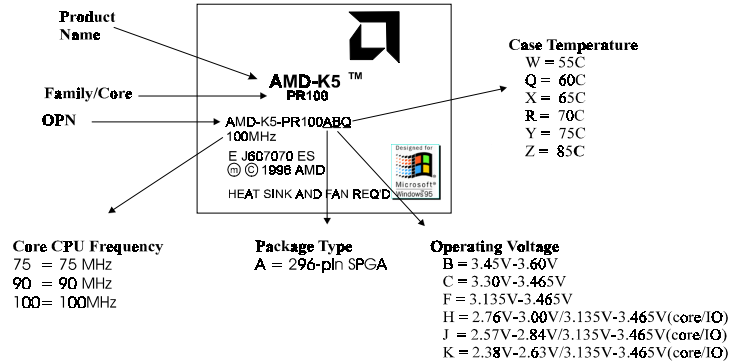
6x86	Core CPU Freq. (MHz)	Host Clock (MHz)	JP2 (Jumper short)	Clock Multiplier	JP11 (Jumper short)	JP12 (Jumper short)
P120+	100	50	1-2, 3-4, 5-6	2	2-3	1-2
P133+	110	55	1-2, 3-4	2	2-3	1-2
P150+	120	60	3-4, 5-6	2	2-3	1-2
P166+	133	66	1-2, 5-6	2	2-3	1-2

Table 2 -3. Cyrix or IBM 6x86 CPU Frequency and Bus Frequency



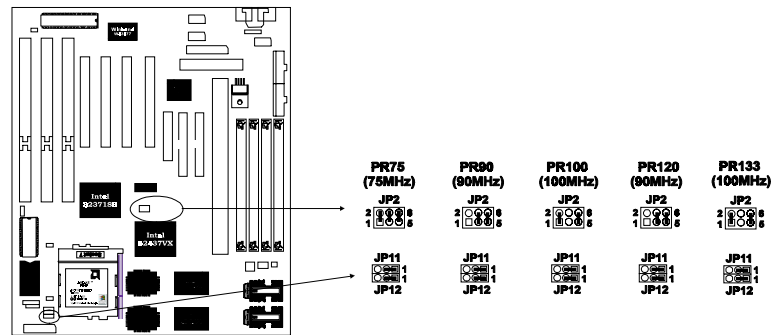
Installation

AMD K5 CPU :



AMD K5	Core CPU Freq. (MHz)	Host Clock (MHz)	JP2 (Jumper short)	Clock Multiplier	JP11 (Jumper short)	JP12 (Jumper short)
PR75	75	50	1-2, 3-4, 5-6	1.5	1-2	1-2
PR90	90	60	3-4, 5-6	1.5	1-2	1-2
PR100	100	66	1-2, 5-6	1.5	1-2	1-2
PR120	90	60	3-4, 5-6	1.5	1-2	1-2
PR133	100	66	1-2, 5-6	1.5	1-2	1-2

Table 2-4. AMD K5 CPU Frequency and Bus Frequency



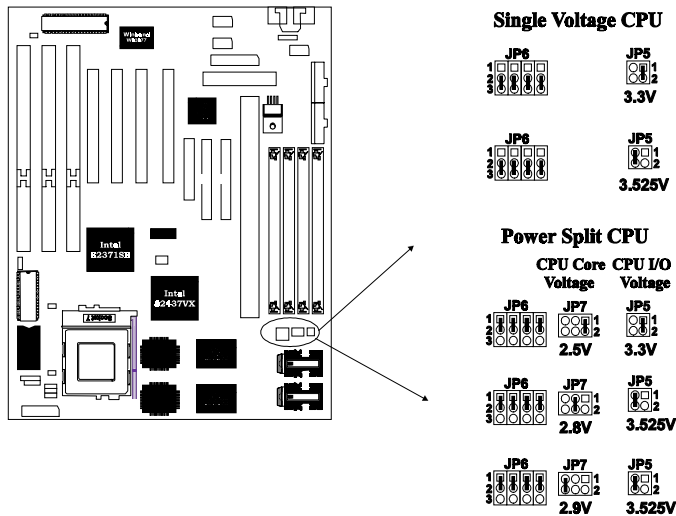
Installation

Set the Jumpers for CPU Voltage:

The CPU voltage depends on different CPU level need to install the jumper setting for correct voltage as follows:

CPU Type	JP6 (Jumper Short)	CPU I/O voltage	JP5 (Jumper Short)		
Single Voltage CPU: Intel Pentium® processor ,Pentium® Overdrive® processor Cyrix 6x86, IBM 6x86 AMD K5 ABQ	2-3	3.3V	1-2		
		3.525V	3-4		
CPU Type	JP6 (Jumper Short)	CPU I/O voltage	JP5 (Jumper Short)	CPU Core Voltage	JP7 (Jumper Short)
Power Split CPU : Intel Pentium® processor with MMX™ technology Cyrix 6x86L, IBM 6x86L AMD K5 AHQ... ,etc.	1-2	3.3V	1-2	2.5V	1-2
		3.525V	3-4	2.8V	3-4
				2.9V	5-6

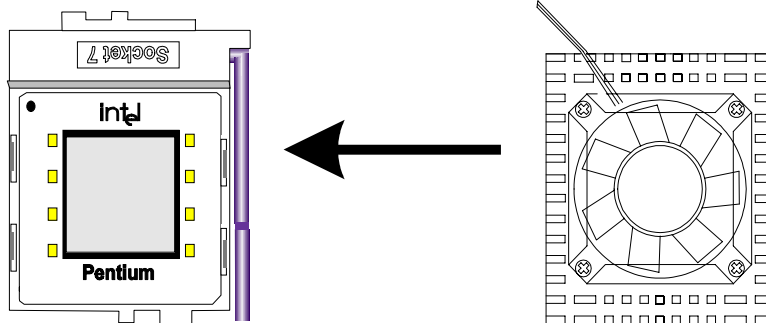
Table 2 -5. the Jumpers for CPU Voltage



Installation

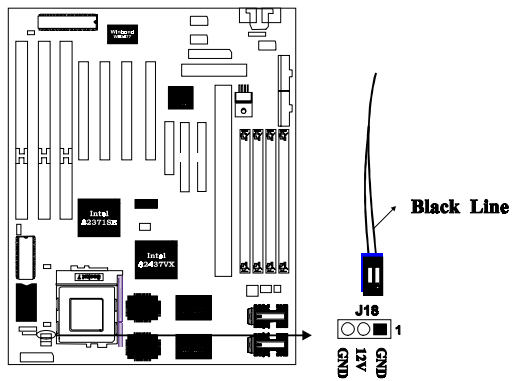
CPU Fan :

The installed CPU needs one fan / heatsink installed on to help heat dissipation. **Do not** install the CPU without the fan/ heatsink.



Install Fan Power On-board:

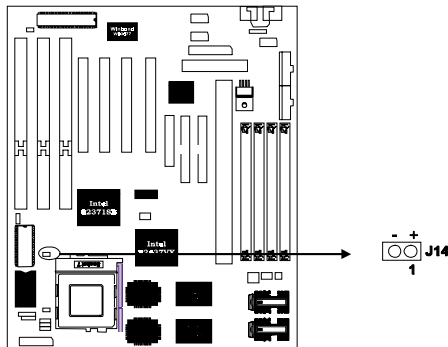
P5VX-Be provides the ability to turn the CPU cooling fan off while the system is in low-power suspend mode. If the fan has 2-pin power-cord, please connect the CPU cooling fan power to J18 and enable "CPU Fan Power Green" function in BIOS "Power Management Setup" in order to make it work.



Installation

Green LED: (J14)

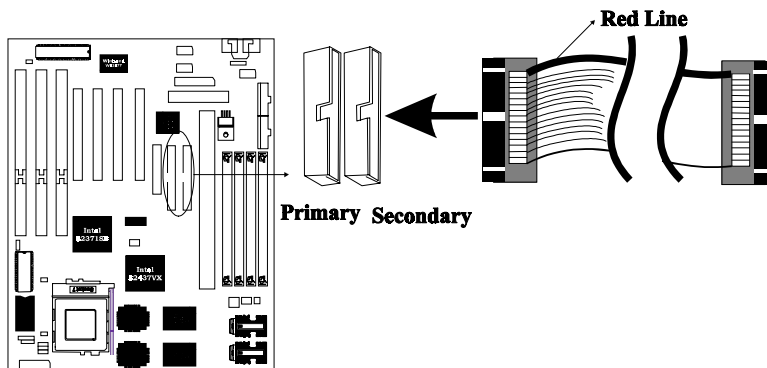
Install Green Function Indicator (Green LED) connect the front panel power LED or green LED to J14. The LED blinking indicates the system in low-power suspend mode.



Install Cables

IDE Connector:

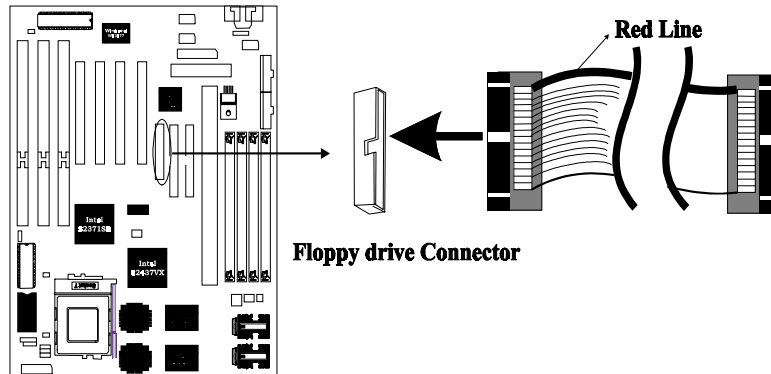
P5VX-Be provides 2 PCI IDE connectors which supports 2 ATAPI IDE devices (for example, Hard Drive and CD-ROM) on each connector. Use 40-pin IDE cable to connect IDE devices and IDE connector.



Installation

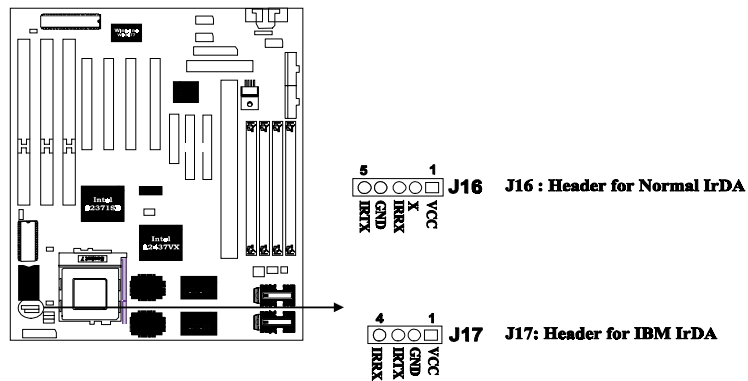
Floppy Cable:

P5VX-Be provides one floppy drive connector with one 34-pin floppy cable. It can support 2 floppy drivers with type : 360KB/ 720KB/ 1.2 MB / 1.44MB or 3 mode.



IrDA :

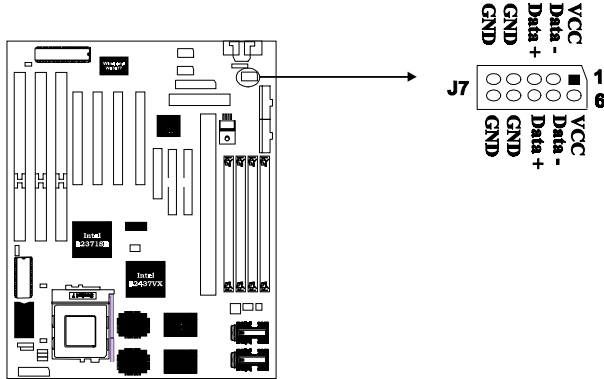
P5VX-Be is an IrDA-capable mainboard. It gives users IR wireless data exchange directly from mobile computers, printers and PDAs,.....etc. Optional IrDA cable/ bracket provides connector with IrDA module.



Installation

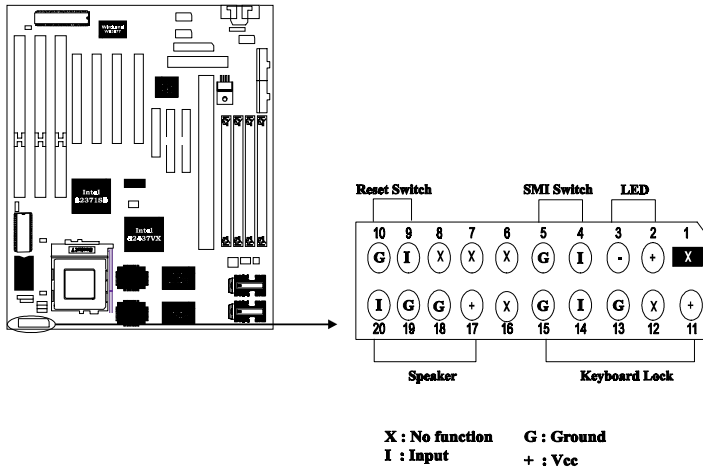
USB Header:

Universal Serial Bus (USB) is a new industry standard interface for ease use of PC peripheral expansion. Optional USB cable / bracket provides two USB connectors with USB devices.



20-pin Front Panel Switch Connector: (J20)

In order to help quick install front panel switch, these headers are integrated in 20-pin header set.



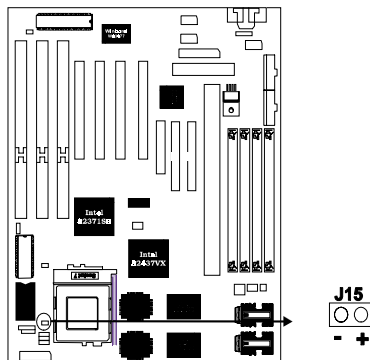
Installation

Connector	Feature / Connect to
SMI Switch	Suspend / Resume
Reset Switch	Reset System
Keyboard Lock	Front Panel Keylock & 3-pin power LED
Speaker	Front Panel Speaker
Power LED	Front Panel 2-pin Power LED

Table 錯誤! 所指定的樣式的文字不存在文件中。 -1. Front Panel Switch Connector

H.D.D. LED:

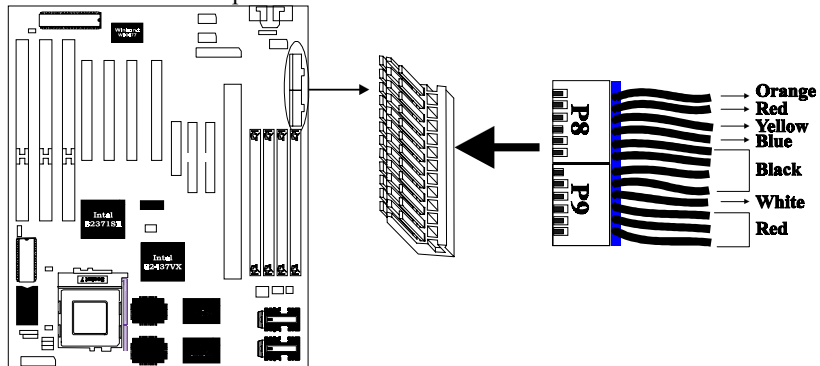
P5VX-Be provides one set of IDE HDD LED headers to connect the front panel HDD LED. When the IDE devices are accessed, the LED will indicate the activity.



Installation

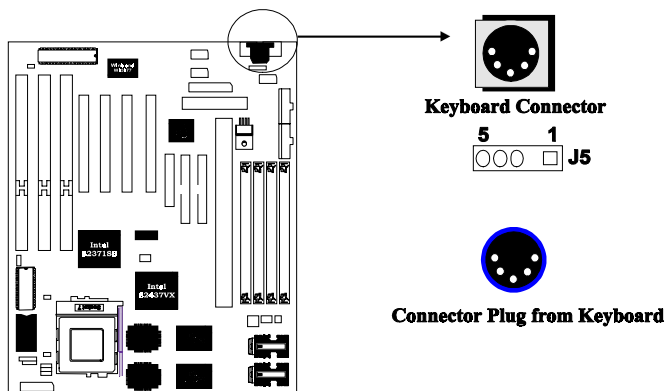
Power Supply Connector:

P5VX-Be provides one set of J10 power supply connectors. Follow the direction to install the power cable on connectors.



AT Keyboard Connector:

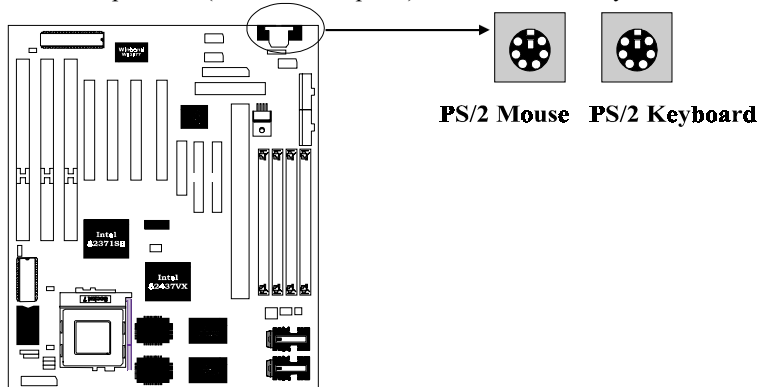
P5VX-Be provides one AT keyboard connector. Follow the direction of keyboard cable to install on keyboard connector. If users want to install PS/2 mouse, P5VX-Be provides one set of headers with PS/2 cable mouse/bracket to install on the back panel of your chassis.



Installation

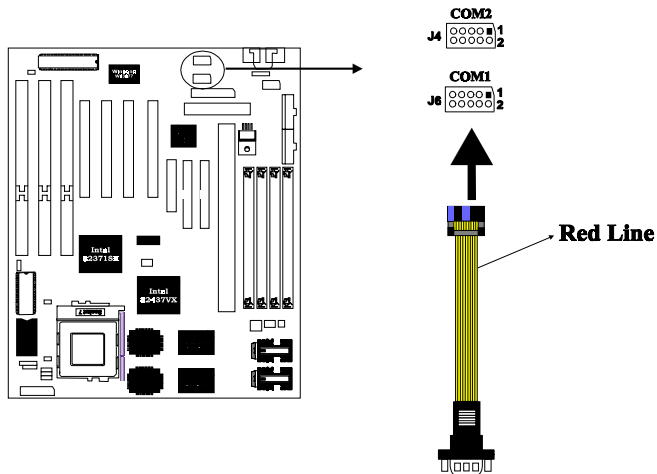
PS/2 Mouse & Keyboard Connector:

P5VX-Be provides (manufacture option) PS/2 mouse and keyboard set.



Serial Port COM1 and COM2 :

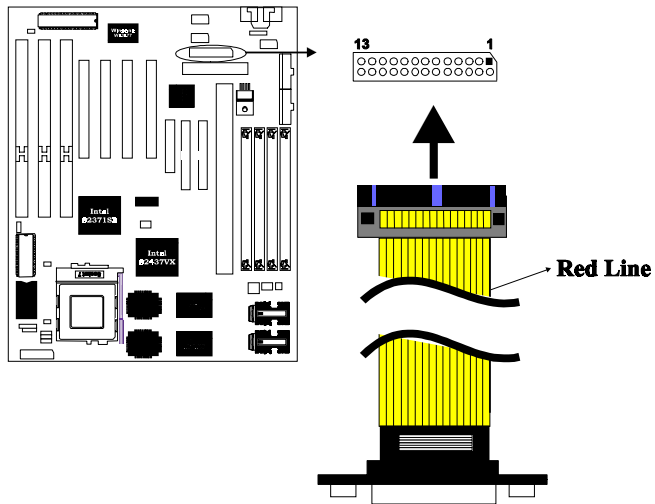
P5VX-Be provides two sets of high speed serial port heads and cables. Each serial port is 16550 UART compatible.



Installation

Parallel Port Printer Connector :

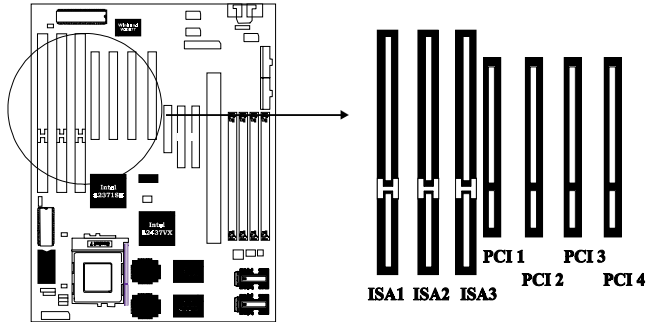
P5VX-Be provides one set of high speed parallel port headers and cable. The parallel port can support bidirection / EPP / ECP mode.



The serial port and parallel port cable are mounted on two bracket, and also can be seperated.

Install Add-on Card

P5VX-Be provides three ISA slots and four PCI slots. ISA 3 and PCI 1 slots are shared and can not be installed at the same time.

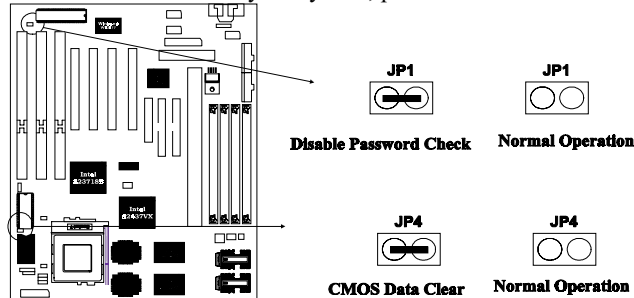


Other Jumpers

Clear CMOS (JP4) and Password Check Switch (JP1)

BIOS setting values and password are stored in CMOS RAM. To clear CMOS Data of your computer, please open the computer chassis; short JP4 with short jumper ; power on your system carefully; power off your system; then CMOS data will be cleared. For normal operation, please remove the short jumper from JP4 and close your computer chassis.

To disable Password of your system, please short 1-2 of JP1.



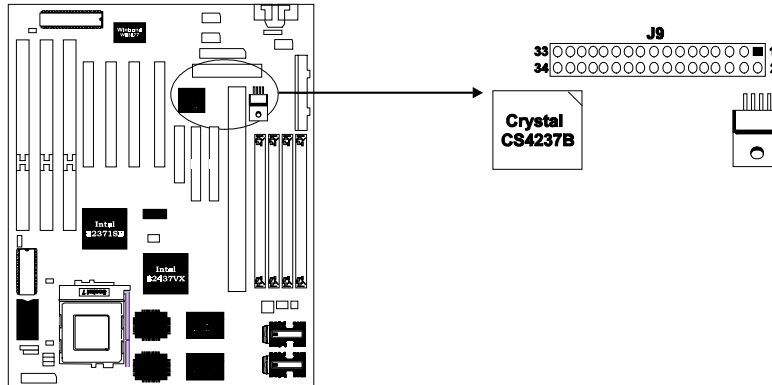
Audio Solution (Manufacture Option)

** There are two versions for PCB of P5VX-Be :

P5VX-Be without sound and P5VX-Be with Sound.

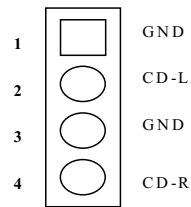
Please skip this section if your P5VX-Be is not equipped with Crystal CS4237B 3D SRS Sound, J9 and AJC Audio cable.

J9 Audio Header (Manufacture option with audio chip)



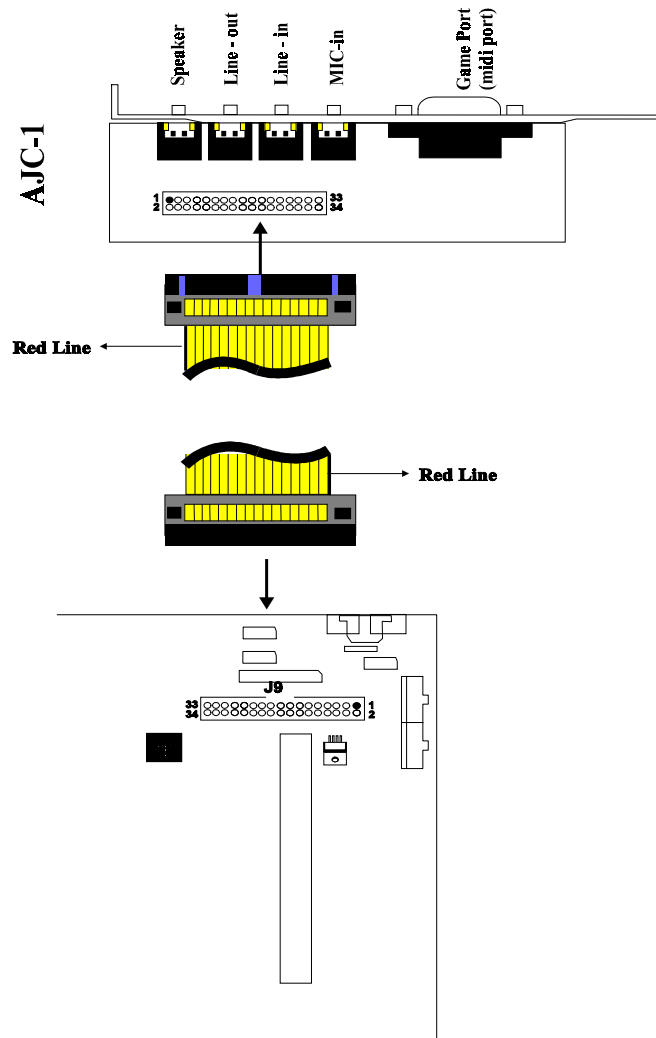
J100 CD-IN Header

Connect CD-ROM 4-pin Audio out cable. The sound of playing Audio CD or CD plus can output from AJC speaker out or line-out.



Installation

Audio Connector Bracket



Summary

Jumper Setting: (☆: Default configuration)

Jumper Block	Function	Configuration (Jumper short)
JP1	Password Check	short : Disable open : Normal Operation☆
JP4	Clear CMOS	short : Clear CMOS open : Normal Operaion ☆

Table 錯誤! 所指定的樣式的文字不存在文件中。-2. Jumper Settings

Host Clock Setting:

The table below presents the detailed Jumper Settings for different CPU Clock. Users can refer to this table for the reference if you cannot find out the proper CPU type on “ **Table 2-2 , 2-3, 2-5. Jumper Settings**” .

Host Clock	50 MHz	JP2 short 1-2, short 3-4, short 5-6
	55 MHz	JP2 short 1-2, short 3-4
	60 MHz	JP2 short 3-4, short 5-6
	66 MHz	JP2 short 1-2, short 5-6
CPU Core Clock	Host Clock * 1.5	JP11 short 1-2 JP12 short 1-2
	Host Clock * 2	JP11 short 2-3 JP12 short 1-2
	Host Clock *2.5	JP11 short 2-3 JP12 short 2-3
	Host Clock *3	JP11 short 1-2 JP12 short 2-3

Table 錯誤! 所指定的樣式的文字不存在文件中。-3. Host Clock Settings

Installation

Voltage Setting:

Single Voltage CPU		JP6	short 2-3
Power Splie CPU		JP6	short 1-2
CPU I/O Voltage	3.3V	JP5	short 1-2
	3.525V	JP5	short 3-4
CPU Core Voltage	2.5V	JP7	short 1-2
	2.8V	JP7	short 3-4
	2.9V	JP7	short 5-6

Table 錯誤! 所指定的樣式的文字不存在文件中。 -4. Voltage Settings

Connector Table:

Connector	Function	Description
J1	PS/2 Keyboard Connector (Optional)	Connect to PS/2 Keyboard
J2	AT Keyboard Connector	Connect to AT Keyboard
J3	PS/2 Mouse Connector (Optional)	Connect to PS/2 Mouse
J4	COM2 / COM4 Connector	Connect to serial port 2 bracket
J5	5-pin Header with PS/2 Mouse	Connect to PS/2 cable mouse / bracket
J6	COM1 / COM3 Connector	Connect to serial port 1 bracket
J7	USB Port 1 & Port 2 Connector	Connect to 2 channel of USB cable
J8	Printer Connector	Connect to parallel port 1 bracket
J10	12-pin Power Connector	Connect to power supply P8 and P9
J11	Floppy Disk Connector	Connect to floppy drive cable

Continued.....

Installation

Connector	Function	Description
J12	Secondary Hard Disk Connector	Connect to the 2nd IDE channel for 1 or 2 IDE drives
J13	Primary Hard Disk Connector	Connect to the 1st IDE channel for 1 or 2 IDE drives
J14	Green LED	Connect the LED to J14. The LED blinking indicates the low-power suspend mode.
J15	Hard Disk LED Connector	Connect to chassis front panel HDD indicator
J16	Infrared (IR) Connector for HP	Connect to Infra-red cable/bracket
J17	Infrared (IR) Connector for IBM	Connect to Infra-red cable/bracket
J18	CPU Fan Connector	Connect to 2 or 3-pin power cord
J20	Front Panel Switch Connector	Connect to several purpose of front panel function of indicator: Reset, SMI switch, Speaker power-on LED, Keyboard Lock....etc.

Table 錯誤! 所指定的樣式的文字不存在文件中。 -5. Connectors

Installation

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3 Built-in BIOS Setup Program

SETUP Program

This chapter describes the Award BIOS setup for P5VX-Be. The setup program uses a number of menus that you can specify changes to your hardware and turn the special features on or off.

To enter the BIOS setup program, users can turn on or reboot the system. Press the key when the system displays "Press DEL to enter SETUP".

The following screen will be displayed.

```

ROM PCI/ISA BIOS (P5VX-Be)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

```

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP4
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING
LOAD SETUP DEFAULTS	
Esc : Quit	
↑ ↓ → ← : Select Item	
F10 : Save & Exit Setup (Shift)F2 : Change Color	
Time, Date, Hard Disk Type ...	

Figure 3 -1. SETUP Main Menu



The instructions at the bottom of Main Menu Screen show the items of each option.

- STANDARD CMOS SETUP** - This option allows users to check or modify the basic system configuration.
- BIOS FEATURES SETUP** - This option is used to set the various system options for the users, including the virus warning, external cache, security option, boot operations, and video BIOS shadow, etc.
- CHIPSET FEATURES SETUP** - This option allows users to control the features of chipset.
- POWER MANAGEMENT SETUP** - This option allows users to set the power saving status for reducing the power consumption.

BIOS

- ❑ **PNP/PCI CONFIGURATION SETUP** - This option is used to set the various system function and internal addresses of the PCI devices. Allows users to configure system IRQ and DMA to **PCI/ISA PnP** or **Legacy ISA** .
- ❑ **LOAD BIOS DEFAULTS** - Users can load the BIOS default values to boot the system safely.
- ❑ **LOAD SETUP DEFAULTS** - This option supports the better performance for the system. It is recommended to choose **SETUP Defaults** for the setup.
- ❑ **INTEGRATED PERIPHERALS** - This option allows users to decide how many kinds peripherals need to change their I/O type , mode and used or not . This options also allows user to set the various system function and onboard PCI IDE controller.
- ❑ **SUPERVISOR PASSWORD** - Password is required when entering and changing all of the SETUP option or booting your system. Users can change the current password stored in the CMOS by accessing this option.
- ❑ **USER PASSWORD** - Password is required when booting your system and entering to change only the USER PASSWORD . Users can change the current password stored in the CMOS by accessing this option.
- ❑ **IDE HDD AUTO DETECTION** - This option can automatic detect the hard disk drive type(s) including the number of cylinders and heads, write pre-compensation time, read/write head landing zone, and number of sectors per track.
- ❑ **SAVE & EXIT SETUP** - After saving the changes what you have made in the SETUP program, then exit and reboot the system.
- ❑ **EXIT WITHOUT SAVING** - Abandon all previous settings, then exit and reboot the system.

After choosing an item from the SETUP main menu, move the cursor by using the ↑,↓,→,← arrow keys and press <Enter>. To modify the setting of an option, simply press the <PgUp> or <+> and the <PgDn> or <-> keys. Press the <F2> key when changing the color setting, <F1> for a context sensitive help function, and the <ESC> key when quitting SETUP.

Standard CMOS Setup

ROM PCI/ISA BIOS (P5VX-Be)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC

Data (mm:dd:yy) : Thu, November 12 1996								
Time (hh:mm:ss) : 17 : 58 : 42								
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	: Auto	0	0	0	0	0	0	Auto
Primary Slave	: Auto	0	0	0	0	0	0	Auto
Secondary Master	: Auto	0	0	0	0	0	0	Auto
Secondary Slave	: Auto	0	0	0	0	0	0	Auto
Drive A	: 1.44M, 3.5 in.							
Drive B	: None							
Floppy 3 Mode Support	: Disabled							
Video	: EGA/VGA							
Halt On	: All Errors							
				Base Memory: 640K				
				Extended Memory: 7168K				
				Other Memory: 384K				
				Total Memory: 8192K				
Esc	: Quit	↑ ↓ → ←		: Select Item	PU/PD/+/-			: Modify
F1	: Help	(Shift)F2		: Change Color				

Figure 3-2. Standard CMOS SETUP Screen

Date - Allows manual setting of the electronic calendar on the mainboard.

Time - Sets the system's internal clock which includes hour, minutes, and seconds.

Primary Master - Specifies the physical and electronic properties of the standard hard disk drives installed. Relevant specifications include the type, number of cylinders (CYLS), heads (HEAD), write pre-compensation time (PRECOMP), read/write head landing zone (LANDZ), number of sectors per track (SECTOR), and HDD mode (MODE). Selecting "**AUTO**" in the hard disk type item avoids the necessity of loading the HDD specifications and the function of the IDE HDD Auto Detection option in the main menu. The system BIOS will automatically detect the hard drive installed on the system upon bootup.

Drive A/B: - Specifies the capacity and format of the floppy drive installed in your system.

Floppy 3 Mode Support - If 3 mode floppy is installed, enable this item make floppy diskette only compatible to the Floppy Diskette Format of Japan Spec. : **1.2MB, 3.5inch**. Otherwise, it is compatible to Floppy Diskette Format of IBM PC.

Video - Specifies the display adapter installed.

Halt On - Enables the system to halt on several conditions/options. The default value is set at "**All Errors**."

BIOS

Base/Extended/Other Memory - A small section in the lower right corner of the screen displays important information about your system which includes the base, extended, and other memory sizes. They are updated automatically by the SETUP program according to the status detected by the BIOS self-test. This section of the Standard CMOS SETUP screen is for viewing purpose only and manual modifications are not allowed.

BIOS Features Setup

ROM PCI/ISA BIOS (P5VX-Be)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU Internal Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
External Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
Quick Power On Self Test	: Enabled	D0000-D3FFF Shadow	: Disabled
Boot Sequence	: A,C	D4000-D7FFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	D8000-DBFFF Shadow	: Disabled
Boot Up NumLock Status	: On	DC000-DFFFF Shadow	: Disabled
Gate A20 Option	: Fast		
Security Option	: Setup		
PCI/VGA Palette Snoop	: Disabled		
OS Select For DRAM > 64MB	: Non-OS2		
		ESC : Quit	↑↓←→ : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values (Shift)	F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Figure 3 -3. BIOS Features Setup Screen

Virus Warning - Allows the virus warning feature for the hard disk boot sector to display a warning message and produce a beep sound whenever an attempt is made to write on the hard disk's boot sector. The default value for this option is "**Disabled**."

CPU Internal Cache -Enables the internal code/data cache of CPU when set to "**Enabled**" (default).

External Cache - Enables the on-board secondary cache when set to "**Enabled**" (default).

Quick Power On Self Test - Allows the power on self test to run at either a fast or a normal speed. The available options are:

- Enabled (default)
- Disabled

BIOS

Boot Sequence - Selects the drive where the system would search for the operating system to run with. The available options are:

- A,C (default)
- C,A
- C,CDROM, A
- CDROM,C,A

Swap Floppy Drive - "**Enabled**" will effectively change the A: drive to B: and the B: to A: drive. "**Disabled**" (default) sets the floppy drives in their default states.

Boot Up NumLock Status - Sets the <Num Lock> key to either on or off during system boot-up. The available options are:

- On (default)
- Off

Gate A20 Option - Boosts the performance of system with software using the 80286 protected mode such as OS/2 or UNIX. This option determines the accessibility of the extended memory. The available options are:

- Fast (default)
- Normal

Security Option - Determines whether the password will be asked for in every boot (**System**), or when entering into the SETUP program (**Setup** - default). Refer to the section entitled SUPERVISOR PASSWORD for the password setting procedure.

PCI/VGA Palette Snoop -Selects "Enabled" to solve the abnormal color in Windows while using ISA MPEG and PCI VGA card. The available options are:

- Disabled (default)
- Enabled

OS Select For DRAM > 64MB - Selects the OS if DRAM > 64MB. The available options are:

- Non-OS2 (default)
- OS2

Video BIOS Shadow - Enables the system shadowing and achieve the best performance of the system. The available options are:

- Enabled (default)
- Disabled

C8000-CBFFF, CC000-CFFFF, D0000-D3FFF, D4000-D7FFF, D8000-DBFFF, DC000-DFFFF Shadow - If you have a shadowing of the BIOS at any of the above segments, you may set the appropriate memory cacheable function to "**Enabled**". Otherwise, select "**Disabled**" (default).

BIOS

Chipset Features Setup

ROM PCI/ISA BIOS (P5VX-Be)
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.

Auto Configuration : Enabled	System BIOS Cacheable : Enabled
DRAM Timing : 60ns	Video BIOS Cacheable : Enabled
DRAM RAS# Precharge Time : 3	Memory Hole At 15M-16M : Disabled
DRAM R/W Leadoff Timing : R10/W6	Chipset NA# Asserted : Enabled
Fast RAS To CAS Delay : 3	Peer Concurrency : Enabled
DRAM Read Burst <EDO/FP> : x222/x333	
DRAM Write Burst Timing : x222	
Fast MA to RAS# Delay CLK: 1	
Fast EDO Path Select : Disabled	
Refresh RAS# Assertion : 4 Clks	
ISA Bus Clock : PCICLK/4	
	ESC : Quit ↑↓←→ : Select Item
	F1 : Help PU/PD/+/- : Modify
	F5 : Old Values (Shift) F2 : Color
	F6 : Load BIOS Defaults
	F7 : Load Setup Defaults

Figure 3 -4. Chipset Features Setup Screen

Auto Configuration - Loads the default values, if “**Enabled**” (default), for the following DRAM and cache options. Otherwise, “**Disabled**” allows you to program each option as required.

- Enabled (default)
- Disabled



The following items are controlled by Auto Configuration when users select “Enabled”. For this reason, their default values will be changed by the speed of CPU. These items are :

“DRAM RAS# Precharge Time”, “Fast RAS to CAS Delay”, “DRAM Read Burst <EDO/FP>”, “DRAM Write Burst Timing” “Fast MA to RAS# Delay CLK”, “Fast EDO Path Select”, “Refresh RAS# Assertion” and “ISA Clock”.

DRAM Timing - Configures the DRAM read/write timing for the maximum performance. The available options are:

- 60ns (default)
- 70ns

DRAM RAS# Precharge Time - Selects RAS# precharge time for DRAM access. The available options are:

- 3 (default)
- 4

DRAM R/W Leadoff Timing - Determines the leadoff time for R/W to the Cache. The available options are:

- R10/W6 (default)
- R11/W7

Fast RAS To CAS Delay - Selects the RAS-to-CAS delay time for DRAM access. The available options are:

BIOS

- 3 (default)
- 2

DRAM Read Burst <EDO/FP> - Determines the timing for burst read to the cache . If your DRAM type is EDO DRAM, we suggest you select x222 (EDO) timing to get a better performance. The available options are:

- x222/ x333 (default)
- x322/ x333
- x444/ x444
- x333/ x444

DRAM Write Burst Timing - Determines the timing for burst write to the cache. If your DRAM type is EDO DRAM , we suggest you select x222 (EDO)timing to get a better performance. The available options are:

- x222 (default)
- x333
- x444

Fast MA to RAS# Delay CLK - Selects the option for DRAM access. The available options are:

- 1 (default)
- 2

Fast EDO Path Select -The selection of the EDO fast path for read cycles. The available options are:

- Disabled (default)
- Enabled

Refresh RAS# Assertion -Determines the number of clocks RAS# is asserted for Refresh cycles. The available options are:

- 4 Clks (default)
- 5 Clks

ISA Bus Clock - ISA clock divide by 4 or 3 depending on PCI bus clock. Users can refer to the formula for clear figure. (**ISA Clock = PCI Clock / 3** or **ISA Clock = PCI Clock / 4**). The available options are:

- PCICLK/4 (default)
- PCICLK/3

SDRAM (CAS Lat/RAS-to-CAS) - Configs the SDARM CAS latency time / RAS to CAS delay. The available options are:

- 3/3 (default)
- 2/3
- 3/2



“SDRAM (CAS Lat /RAS-to-CAS) “ will be shown only when users plug the SDRAM Module.

System BIOS Cacheable - Allows caching of the different segments where there is system BIOS shadowing. The available options are:

- Enabled (default)
- Disabled

Video BIOS Cacheable - Allows caching of the different segments where there is video BIOS shadowing. The available options are:

- Enabled (default)
- Disabled

BIOS

Memory Hole At 15M-16M - Enables this option to reserve the certain space in memory for ISA cards. The available options are:

- Disabled (default)
- Enabled

Chipset NA# Asserted - Determines whether enable the Next Address (NA#) cycle. The available options are:

- Enabled (default)
- Disabled

Peer Concurrency - Determines whether or not the CPU allowed to run DRAM/L2 cycles when non-PHLD PCI master devices are targeting peer device. The available options are:

- Enabled (default)
- Disabled

Power Management Setup

```
ROM PCI/ISA BIOS (P5VX-Be)
Power MANAGEMENT SETUP
AWARD SOFTWARE, INC.
```

Power Management	: Disabled	** Power Down & Resume Events **	
PM Control by APM	: Yes	IRQ3 (COM 2)	: ON
Video Off Method	: DPMS	IRQ4 (COM 1)	: ON
MODEM Use IRQ	: NA	IRQ5 (LPT 2)	: ON
CPU Fan Power Green	: Disabled	IRQ6 (Floppy Disk)	: ON
		IRQ7 (LPT 1)	: ON
Doze Mode	: Disabled	IRQ8 (RTC Alarm)	: OFF
Standby Mode	: Disabled	IRQ9 (IRQ2 Redir)	: ON
Suspend Mode	: Disabled	IRQ10 (Reserved)	: ON
HDD Power Down	: Disabled	IRQ11 (Reserved)	: ON
		IRQ12 (PS/2 Mouse)	: ON
**Wake Up Events In Doze & Standby **		IRQ13 (Coprocessor)	: ON
IRQ3 (Wake-Up Event)	: ON	IRQ14 (Hard Disk)	: ON
IRQ4 (Wake-Up Event)	: ON	IRQ15 (Reserved)	: ON
IRQ8 (Wake-Up Event)	: OFF		
IRQ12 (Wake-Up Event)	: ON		
		ESC : Quit	↑↓←→: Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values (Shift)	F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Figure 3 -5. Power Management Setup Screen

Power Management - Allows user determine how often the Power Saving activating . The available options are:

- Disable (default)
- Min Saving
- Max Saving
- User Define

PM Control by APM - Sets the power management (PM) control by the APM. The available options are:

- Yes (default)
- No

Video Off Method - Sets the video power green method . The available options are:

- DPMS (default)
- Blank Screen
- V/H SYNC+Blank

BIOS

MODEM Use IRQ - In order to support resume on ring and to be compliant with APM 1.2, this option is required to be set same IRQ as the modem add-in-card used. The available options are:

- NA (default)
- 3/4/5/7/9/10/11

CPU Fan Power Green - Determines whether CPU Fan Green support or not . The available options are:

- Disabled (default)
- Enabled

Doze Mode - Sets the time interval after system inactivity when the system enters DOZE mode. The available options are:

- Disabled (default)
- 1 Hour
- 1/2/4/6/8/10/20/30/40 Min

Standby Mode -Sets the timer interval after system inactivity when the system enters STANDBY mode. The available options are:

- Disabled (default)
- 1 Hour
- 1/2/4/6/8/10/20/30/40 Min

Suspend Mode -Sets the time interval after system inactivity when the system enters SUSPEND mode. The available options are:

- Disabled (default)
- 1 Hour
- 1/2/4/6/8/10/20/30/40 Min

HDD Power Down - Sets the time to power down HDD is standby mode. The available options are:

- Disabled (default)
- 1....15 Min

Wake Up Events In Doze & Standby

IRQ 3/4/8/12 (Wake-Up Event) - Sets the wake-up event to “ON” or “OFF” while system enters the suspend mode.

Power Down & Resume Events

Power Down Activities - The manual also lists the Power Management SETUP (PM) events by which the system wakes up from STANDBY or SUSPEND modes. Switch the following parameters to “ON” or “OFF”:

- COM Ports Accessed
- LPT Ports Accessed
- Drive Ports Accessed
- IRQ3 (COM2)
- IRQ4 (COM1)
- IRQ5 (LPT2)
- IRQ6 (Floppy Disk)
- IRQ7 (LPT 1)
- IRQ8 (RTC Alarm)
- IRQ9 (IRQ2 Redir)
- IRQ10 (Reserved)
- IRQ11 (Reserved)
- IRQ12 (PS/2 Mouse)
- IRQ13 (Coprocessor)
- IRQ14 (Hard Disk)
- IRQ15 (Reserved)

BIOS

PNP/PCI CONFIGURATION Setup

ROM PCI/ISA BIOS (P5VX-Be)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

Resources Controlled By : Auto	PCI IRQ Activied By : Level
Reset Configuration Data : Disabled	PCI IDE IRQ Map To : PCI-AUTO
	Primary IDE INT# : A
	Secondary IDE INT# : B
ESC : Quit ↑↓→←: Select Item	
F1 : Help PU/PD/+/- : Modify	
F5 : Old Values (Shift)F2 : Color	
F6 : Load BIOS Defaults	
F7 : Load Setup Defaults	

Figure 3 -6. PNP/PCI CONFIGURATION SETUP Screen

Resources Controlled By - Allows user what kind IRQs assignment to be used .
“Manual” or “Automatic” definition . The available options are:

- Auto (default)
- Manual



The default of “Resources Controlled By” is Auto. If users set Manual option for the setting, “IRQ-3 / IRQ-4 / IRQ-5 / IRQ-7 / IRQ-9 / IRQ-10 / IRQ-11 / IRQ-12 / IRQ-14 / IRQ-15 / DMA-0 / DMA-1 / DMA-3 / DMA-5 / DMA-6 / DMA-7 assigned to” options below will be shown on the screen.

Reset Configuration Data - To clear the ESCD data which is stored in flash ROM, please set “Enable”. This is a one shot switch . After clearing the ESCD, the BIOS will change the value back to “Disabled”. The available options are:

- Disabled (default)
- Enabled

IRQ-3 / IRQ-4 / IRQ-5 / IRQ-7 / IRQ-9 / IRQ-10 / IRQ-11 / IRQ-12 / IRQ-14 / IRQ-15 / DMA-0 / DMA-1 / DMA-3 / DMA-5 / DMA-6 / DMA-7 assigned to -

Users can select resources controlled by “manual” method to fix legacy ISA card IRQ & DMA in Plug & Play problem . Legacy card has the highest priority to use someone IRQ# & DMA# which one assigned by manual. The available options are:

- PCI/ISA PnP (default)
- Legacy ISA

PCI IRQ Activied By - Programs the PCI IRQ to single edge or logic level. Level/Edge sensitivity is programmed per controller. Every IRQ input for a given bank is either “EDGE” or “LEVEL” (default) triggered.

PCI IDE IRQ Map To - Most of PCI IDE cards are non-PCI compliant . Defines the IRQ Routing to make them work properly. The available options are:

- PCI-AUTO (default)
- PCI-SLOT1
- PCI-SLOT3
- ISA
- PCI-SLOT2
- PCI-SLOT4



If user sets this option to "ISA", both the "Primary IDE INT#" and "Secondary IDE INT#" options below will not be shown on the screen.

Primary/Secondary IDE INT# - Defines the primary/secondary IDE INT# of the PCI IDE card. The available options are:

- A (default of Primary IDE INT#)
- B (default of Secondary IDE INT#)
- C
- D

Load BIOS Defaults

In the event of a loss in memory on the configuration SETUP, the user can restore the information on the BIOS by loading its default values. Loading the BIOS defaults provides safety booting of the system.

Load Setup Defaults

SETUP defaults are considered default values with which the system will be enabled to perform better. This is due to the enabling of some options within the SETUP program. However, if problems are encountered after loading the SETUP defaults, reboot the system and load the BIOS defaults instead.

BIOS

INTEGRATED PERIPHERALS

ROM PCI/ISA BIOS (P5VX-Be)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

IDE HDD Block Mode	: Enabled	
On-Chip Primary PCI IDE	: Enabled	
On-Chip Secondary PCI IDE	: Enabled	
IDE Primary Master PIO	: Auto	
IDE Primary Slave PIO	: Auto	
IDE Secondary Master PIO	: Auto	
IDE Secondary Slave PIO	: Auto	
USB Controller	: Disabled	
Onboard FDD Controller	: Enabled	
Onboard Serial Port 1	: 3F8/IRQ4	
Onboard Serial Port 2	: 2F8/IRQ3	
UART 2 Mode	: Standard	
Onboard Parallel Port	: 378H/IRQ7	
Onboard Parallel Mode	: SPP	
		ESC : Quit ↑↓←→ : Select Item
		F1 : Help PU/PD/+/- : Modify
		F5 : Old Values (Shift)F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

Figure 3 -7. Integrated Peripherals SETUP Screen

IDE HDD Block Mode - Determines whether block transfer mode want to use or not . The available options are:

- Enabled (default)
- Disabled

On-Chip Primary/Secondary PCI IDE - Enables or Disables the primary/secondary PCI IDE of IDE controller. Selecting “**Disabled**” can release IRQ14.

- Enabled (default)
- Disabled

IDE Primary/Secondary Master/ Slave PIO - Sets the advanced hard disk PIO transfer mode which effects your hard disk transfer rate. The program will auto detect the mode of this option you select “**Auto**”. Otherwise, you must set this option by yourself. The available options are:

- Auto (default)
- Mode 0
- Mode 1
- Mode 2
- Mode 3
- Mode 4

USB Controller - Enables or Disables the USB function of on-board chip. The available options are:

- Disabled (default)
- Enabled

Onboard FDD Controller - Enables or Disables the FDD on-board controller. The available options are:

- Enabled (default)
- Disabled

BIOS

Onboard Serial Port 1/2 - Sets the I/O address for serial port 1/2.

- 3F8/IRQ4 (default of Onboard serial Port 1)
- 2F8/IRQ3 (default of Onboard serial Port 2)
- 3E8/IRQ4
- Disabled
- 2E8/IRQ3

UART 2 Mode - Determines which type IR module want to use . The available options are:

- Standard (default)
- HPSIR
- ASKIR

Onboard Parallel Port - Sets the I/O address for the parallel port. The available options are:

- 378H/IRQ7 (default)
- 278H/IRQ5
- Disabled
- 3BCH/IRQ7



If users set this option to "Disabled", the "Onboard Parallel Mode" option below will not be shown on the screen.

Onboard Parallel Mode - Selects the working mode of parallel port. The available options are:

- SPP (default)
- EPP/SPP
- ECP/EPP
- ECP



1. *If users set this option to "SPP" and "EPP/SPP", the "ECP Mode Use DMA" option below will not be shown on the screen.*
2. *If users set this option to "SPP" and "ECP", the "Parallel Port EPP Type" option below will not be shown on the screen.*

ECP Mode Use DMA - Selects the DMA channel of ECP Mode to transfer your data. The available options are:

- 3 (default)
- 1

Parallel Port EPP Type - Determines what version EPP protocol support. The available options are:

- EPP 1.7 (default)
- EPP 1.9

BIOS

SUPERVISOR PASSWORD

The SUPERVISOR PASSWORD utility allows you to set, change, and disable the password which is stored in the BIOS. To change the password setting, press <Enter> on the SUPERVISOR PASSWORD option of the main menu and then type the new password.

Configure the Security Option within the BIOS Features Setup corresponding to the setting in this utility. SUPERVISOR PASSWORD access right is higher than USER PASSWORD .

The password can be at most 8 characters long. The program will require you to confirm the new password before it exits and will enable the utility. To disable the SUPERVISOR PASSWORD, press the <F1> when the program asks you to enter the new password.

USER PASSWORD

USER PASSWORD only can be used when the system is booting . Users only can enter SETUP screen to change the USER PASSWORD.

The password can be at most 8 characters long. The program will require you to confirm the new password before it exits and enables the utility. To disable the USER PASSWORD, press the <F1> as the program asks you to enter the new password.

IDE HDD Auto Detection

The IDE HDD Auto Detection provides auto configuration of the hard drive installed in the system. It supports LBA, Large, and Normal modes. If the system's hard disk drive has a capacity of over 528MB and supports LBA functions, you may enable either the LBA mode or the Large mode. On the other hand, if the hard disk drive's capacity is over 528MB but does not support LBA functions, you may enable the Large mode in order to use over 528MB.



- a. *The LBA and Large modes will only appear on the screen when the installed hard disk drive is specified to support the LBA mode.*
- b. *In the case when a hard disk drive's cylinder specification exceeds 1024, and does not support the LBA functions, only the Large mode will be displayed on the screen.*
- c. *With a hard disk drive supporting cylinders below 1024, only the*

BIOS

Normal mode will appear on the screen. The Normal mode will also be shown on the screen under conditions a & b above.

- d. Hard disk drives with less than 528MB total capacity must be set to Normal mode when combined with either old BIOS versions or the Award BIOS.



LBA and Large modes are new specifications which may not be fully supported by all operating systems. An example of which is the current version of UNIX System (R3.2.4) which is still unable to support the LBA function. Therefore, determine the specifications of your hard disk drive and operating system before selecting the drive's mode.

After pressing the <Enter> key on this item of the main menu, the display screen will show the following screen.

```
ROM PCI/ISA BIOS (P5VX-Be)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

HARD DISKS      TYPE  SIZE  CYLS HEAD PRECOMP LANDZ SECTOR  MODE
-----
Primary Master :

          Select Primary Master  Option (N=Skip) : N
          -----
          OPTIONS  SIZE  CYLS HEAD PRECOMP LANDZ SECTOR  MODE
          -----
          1        0    0    0    0    0    0  NORMAL

Note: Some OSes (like SCO-UNIX) must use "NORMAL" for installation
      Esc : Skip
```

Figure 3-8. IDE HDD Auto Detection Screen

Once the program detects the type of hard disk installed, it will display the relative information such as the type, cylinders, heads, write pre-compensation, landing zone, number of sectors per track, size and mode. A message asking you to accept the IDE HDD detected will also be flashed on the screen.

BIOS

Quitting SETUP

After making all modifications in the SETUP program, go to the option "Save & Exit SETUP" then press the <Enter> key. The program will display the following screen.

Press <Y> to confirm the changes made, and the <N> or the <ESC> keys if further modifications are still necessary before exiting the SETUP program. Once the <Y> key is pressed, the system will automatically exit the program and reboot. However, if you want to cancel all changes made under the SETUP program, go to the option "Exit Without Saving".

Press <Y> and the system will exit the SETUP program then reboot without saving any of the changes made.



You may also use the <F10> key to save the new settings.