P5SV-B Mainboard

User's Manual

FCC & DOC Compliance

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and , if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and of, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio

Warning!! The use of shielded cables for the connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit nor expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Version 2.0a

Table of Contents

3.Bios Setup

4.Reference Information

Package & Product Information

P5SV-B Package & Product Information

This manual contains all the information you'll need to use the mainboard . Please take a moment to familiarize yourself with the design and organization of the manual.

Manual Features

This manual also uses some icons to call your attention to important information. The icons appear in the sidebar and represent the following.


Important Information


A recommendation or good idea


A warning or bad idea


Danger warning

Component Information

The standard P5SV-B package will include:

- P5SV-B mainboard
- 1 IDE controller ribbon cable
- 1 Floppy controller ribbon cable
- 1 Com1& Com2 port
- 1 heat sink
- User's Manual
- Support Disk

IDE bus Master Drivers for Windows95, Windows 3.x, Windows NT, OS2, Novell Netware.

Intel CPUs Supported:

Pentium P54C, P54CTB, P54CTB,P54CT, P55C

This mainboard supports the Intel Pentium CPU running at any of the following clock speeds 90MHz,100 MHz, 120 MHz,133 MHz, 150 MHz,166 MHz,200 MHz, 233MHz

Cyrix & IBM CPUs Supported:

6X86 (PR166+/PR200+), 6X86MX(PR166+ / PR200+ / PR233+)

AMD CPUs Supported:

K5, K6, PR166 / PR200 / PR233 / PR266

System Memory Specifications

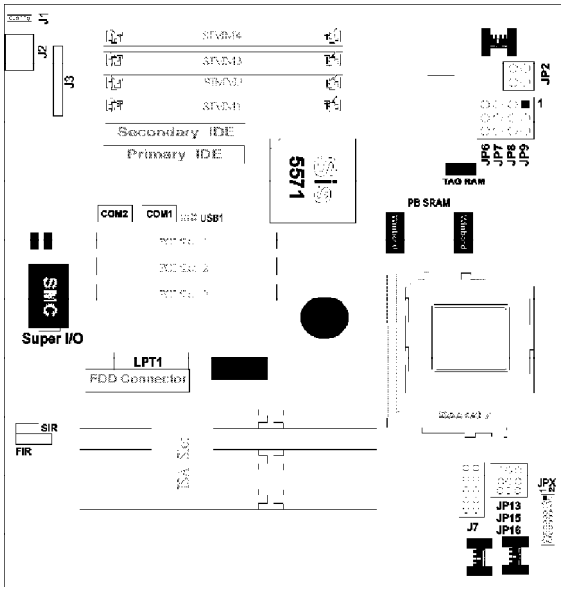
- Four SIMM sockets
- Use 5Volt EDO or FPM SIMM modules
- Any combination of specified modules allowed
- Maximum supported memory 256MB
- 66Mhz or faster bus clock recommend 60ns or faster DRAM

Expansion Slots

- 3 ISA slots (ISA1, ISA2,ISA3)
- 3 PCI slots (PCI1, PCI2, PCI3)
- PCI1 & ISA3 share external access position

Layout

The illustration as the followings shows the connectors, sockets and parts of the mainboard.



Chapter 2.Jumper Setting

CPU Jumper Settings

FUNCTION	Jumper		Settings				
External Speed	JP7		50MHz	JP7:2-3, JP8: 2-3, JP9:2-3			
	JP8		55MHz	JP7:1-2, JP8: 2-3, JP9:2-3			
	JP9		60MHz	JP7:2-3, JP8: 2-3, JP9:1-2			
		(Default)	66.6MHz	JP7:2-3, JP8: 1-2, JP9:2-3			
			75MHz	JP7:1-2, JP8: 2-3, JP9:1-2			
Internal Clock Factor	JP13	1.5X/3.5X(K6, M2,P55C)		JP13:1-2, JP15:1-2, JP16:X			
	JP15	(Default)	2.0X	JP13:2-3, JP15:1-2, JP16:X			
	JP16		2.5X	JP13:2-3, JP15:2-3, JP16:X			
			3.0X	JP13:1-2, JP15:2-3, JP16:X			
CPU IO Voltage	JP2		3.3V	JP2: 1-2			
			3.54V	JP2: 3-4			
CPU Core Voltage	J7	1-2	3-4	5-6	7-8	9-10	
On= Cap On	*Single (Default)		ON	ON	ON	ON	
	3.34V		ON	ON	ON		
	3.24V		ON	ON			
	2.94V		ON			ON	
	2.84V		ON				
	2.54V			ON		ON	
	1.8V	ON	ON		ON		

*Single: Single Voltage CPU

Other Jumper Settings

FUNCTION	Jumper	Settings		
Clear CMOS	JP11	Clear	2-3	
		Normal	1-2	(Default)
Flash ROM Support	JP12	Disable	1-2	
		Enable	2-3	(Default)

Onboard Connectors

Name	Function	Description
J1	PS/2 Mouse	PS/2 Mouse Port
J2	Keyboard	Onboard 5-pin Port
J3	Power	Onboard 12-pin Port
COM1	Serial Port One	Onboard 10-pin serial port is COM1, can be set to COM3
COM2	Serial Port Two	Onboard 10-pin serial port is COM2, can be set to COM4
USB1	USB	Dual stacked external USB ports
USB2	USB	Dual stacked external USB ports
FDD1	Floppy Drive Controller	Dual stacked external USB ports
LPT1	Parallel Port	Standard 26-pin parallel Printer port supports enhanced models
FIR	FIR Connector	Connects to optional Fast IR infrared module cable
SIR	SIR header	Connects to optional IrDA or ASKIR infrared module cable
IDE	Primary IDE	40-pin connector connects to supplied 2-device cable; End device is Primary Master, middle is Slave
IDE	Secondary IDE	40-pin connector connects to 2-devices cable; End device is Primary Master, middle is Slave.

Hardware Controls & Indicators

There are some control features and status indicators that connect from the mainboard to your system case, which is sometimes called the “Enclosure” of “Chassis” These are:

- Power Switch
- Power Status Indicator
- Suspend Switch
- Suspend Status Indicator
- Reset Switch
- Hard Disk Drive Activity Indicator
- Keyboard

All of these case features connect to the mainboard via connector JPX. Not all system cases have all of these feasures, so your system may not have all of them. The functions and options for these are shown in the table as the following.

Hardware Controls & Indicators

Feature	JPX Pins	Function
HDD Activity LED	2-3	Flashes when hard disk drive is active.
SMI	4-5	System Management Interrupt
Reset Switch	9-10	Pressing the Reset Switch restarts the system
Power Status LED	11-13	When lighted indicates that system is turned
Keyboard Lock	14-16	Disables keyboard via a lock mounted on front panel of the case
Speaker	17-20	Connects to the PC speaker mounted on the system case

CMOS Setup Utility -

Two sections of the CMOS Setup Utility allow you to configure how some of your system features work. These are:

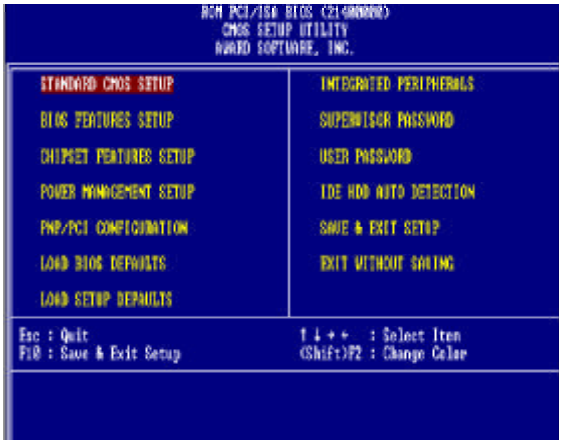
- BIOS Features Setup
- Power Management Setup

The CMOS Setup Utility is a program that is permanently stored in the BIOS chip on the mainboard. The utility creats a system hardware configuration record that it stores in a small amount of battry-supported memory on the board. The BIOS uses this record to function as an interface between the system hardware and the operating system. Most of the setting is the CMOS Setup Utility are made automatically, so you won't normally need to use this program. The screen illustrations on the next pages show the Setup Default settings for these two sections of the utility.

To run the CMOS Setup Utility, press the Del or Delete key while the computer is starting, before the operating starts to load.

CMOS Setup Utility-

This is the main screen for the setup utility from which you access its various sections.



There are six main sections to the Setup program:

· Standard CMOS Setup

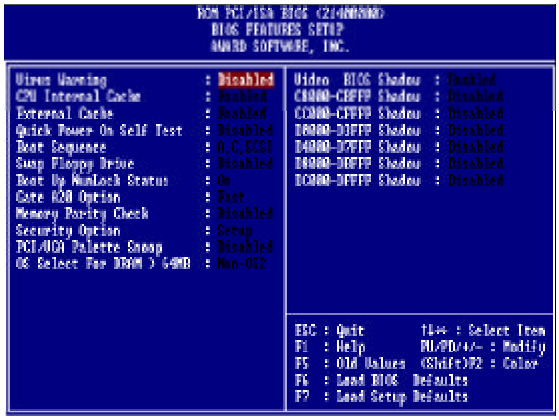
Date, time, disk, drive,video display and error handling

- BIOS Features Setup: System customization features and video display settings
- Chipset Features Setup: Chipset settings, memory configuration feature for specialized add -on cards and VGA memory configuration
- Power Managemnet Setup: Sets up the "green"″ power management features
- PNP/PCI Configuration:PCI expansion slot and system resource settings
- Intergrated Peripherals:IDE channels and onboard port settings, the other main menu items interact with these main sections.
- Load BIOS Defaults: Load minimum settings from the BIOX ROM.
- Load Setup Defaults: Loads standard settings from the BIOS ROM.
- Password Setting: Sets system password which is configured by the Security Option item in BIOS Features Setup.

· IDE HDD Auto Detection: Automatically detects the drive parameters of any installed IDE hard disk drives and enters them automatically in the Standard CMOS Setup.
· HDD Low Level Format: Hard disk drive low level format program. See the warning in the section about using this.
· Save & Exit Setup: Saves the current settings and exit the program.
· Exit Without Saving: Discard any changes made during the current session and exits the program.

BIOS Features Setup

To enter this section of the Setup program, highlight this menu item in the main item in the main menu and press the Enter key. The following screen will appear.



Auto Configuration

Everything on this screen except for the Memory Hole item is set automatically when auto-configuration is active. If you disable it you can set the values manually, although we recommend against this. Don't disable automatic configuration unless you know what you are doing. The default setting is Enabled.

Chipset Features Setup

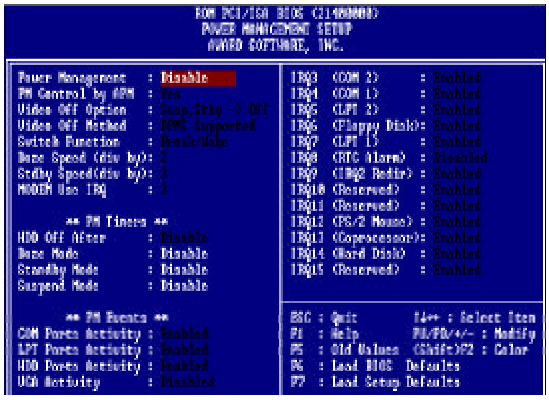
To enter this section of the Setup program, highlight this menu item in the main menu and press the Enter key. The following screen will appear.

Menu Commands

The menu commands for this screen are th same as for the BIOS Features Setup screen.

The Power Management Setup

To enter this section of the Setup program, highlight this menu item in the menu and press the Enter key. The following screen will appear.



Menu Commands

The menu commands for this screen are the same as for the BIOS Features Setup screen.

What Power Management Does

Power management lets you set up your computer to save electricity when it is not actively in use by putting the system into progressively greater power saving modes. In the power management scheme there are four system states which proceed in the following sequence: Normal, Doze, Standby, Suspend.

Power Mangement

This controls the entire power management scheme. There are four settings:

User Defined:you set the power saving options manually.

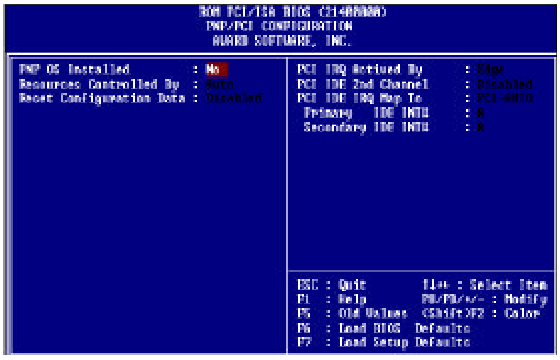
Disable :Turns off all power management

Max Saving :Maximum power saving by activating maximum power saving settings after one minute of system inactivity.

Min Saving: Produces less power saving by activating moderate power saving settings after one hour of system inactivity.

PNP/PCI Configuration

To enter this section of the Setup porgram, highlight this menu item in the main menu and press the Enter key. The following screen will appear.



Menu Commands

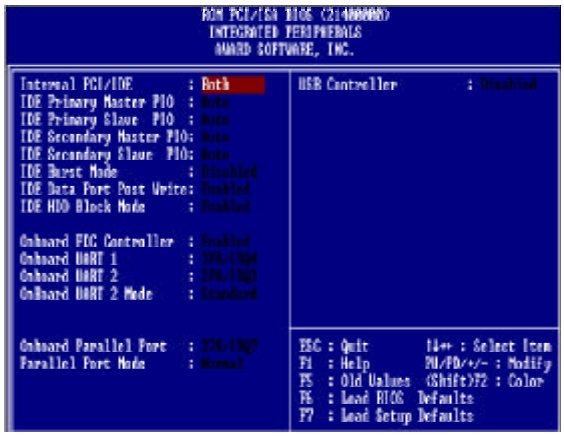
The menu commands for this screen are th e same as for the BIOX Features Setup screen.

Resources Controlled By

When this line is set to Auto the BIOS will automatically configure IRQ and DMA resources. This is the recommended setting. If you set this line to Manual, the screen changes as shown above and allows manual configuration. In general you should only need to do this if you are installing an ISA card that requires manual configuration.

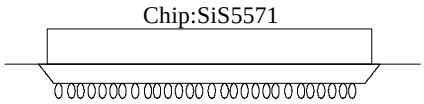
Integrated Peripherals

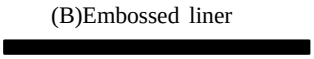
The illustration shows the Setup Defaults settings for this screen. You can install IDE devices under these setting and the system will automatically detect and set the best mode for reach device. You can also set the transfer mode for each device manually, although we recommend using the default settings unless you have a reason not to and you know what you are doing.

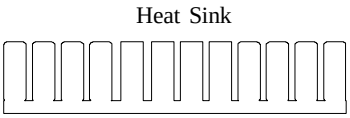


Instructions of Bonding Heat Sink To SiS5571

¡´ The illustration of component

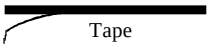




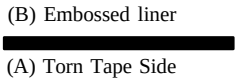


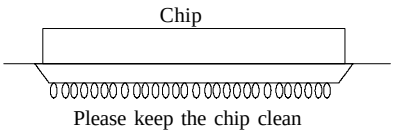
¡´The instructions of bonding heat sink

1.Remove (A) Embossed linear.

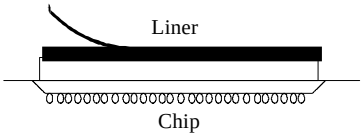


2. Put the removed tape on the center of SiS5571 chip symmetrically. Use your hand to keep the tape on the left edge, and then use the other hand to press the remaining area conformly to the right. Be sure to get rid of air pockets.





3. Remove (B) embossed liner



4. Put the heat sink on the center of SiS5571 by pressing with about 5Kg force evenly and verically to achieve the maximum conformability.