RS586 ALL-IN-ONE PC BOX
USER’ s MANUAL

RS586 ALL-IN-ONE PC BOX

SiS 530,5595 Socket 7 Motherboard
Onboard VGA, Sound, LAN, USB, TV-Out
Watch Dog, Disk On Chip

- **NOTICE !!! :**

1. **RS586** supports the voltage of 110V and 220V, so please check the backside of PC BOX.

2. **TV-Out :** User can get TV-Out by insert AV or S-Video line to RS586' s AV or S-Video, but can not insert them at the same time. Regarding the TV mode, user can change the mode by "BIOS SETUP – INTEGRATED PERIPHERALS – TV mode selection (+/-/PU/PD to modify: CRT+NTSC U, CRT+NTSC O, CRT+PAL U, CRT+PAL O, CRT Only." (press "DEL" into BIOS SETUP when system boot up).

3. **Sound** output by "SPK OUT" in the backside.

4. User must read each **"Readme.txt"** in sub-directories before installing required drivers(VGA, Sound, LAN, IDE). IDE can support DMA66 by install SiS IDE dirver.

Manual, version 1.2
Motherboard, version B2
CD Driver, version B1
Modified in 2002.03.25

Introduction

RS586 is an ALL-IN-ONE PC (3 IN 1) SYSTEM

1. LAN STATION : Compose into Internet (Intranet) by linking with server based on low cast.
2. BOOK PC : 30.5cm x 23.5cm x 5cm (Case Dimension)
3. SET-TOP BOX : Provide TV-Out function to be family internet station.

About This User's Guide

This User's Guide is for assisting system manufacturers and end user in setting up and installing the mainboard. Information in this guide has been carefully checked for reliability; however, there may still be inaccuracies and information in this document is subject to change without notice.

DISCLAIMER

The information in this manual has been carefully checked and is believed to be accurate. We assume no responsibility for any inaccuracies that may still be contained in this manual. We reserve the right to make changes to this material at any time without notice.

REMARK

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RS586 Website (http://www.rise.com.tw)

Table of Contents

1. INTRODUCTION

1.1 Preface

Thanks for choosing the RS586 ALL-IN-ONE PC BOX. This manual explains how to use this product and install upgrades. It has an overview of the design and features of the board and provides useful information on the configuration of the board, or the system in which, it is installed.

1.2 Key Features

Processor :	Supports Socket 7 processors, AMD K6-2/3, Cyrix MII, Intel Pentium.
Chipset :	SiS 530, 5595 Chipset.
Expansion Slot :	One 32-bit PCI Bus Master Mode Slot (Support two PCI slots on Riser card).
Cache Memory :	512K cache.
System Memory :	Supports 2 x 168-pin DIMM Sockets (2 Banks) -The Memory from 32MB up to 512MB (SDRAM)
On Board IDE :	2 x IDE Connectors for up to 4 IDE Drives. -PIO Mode 4 transfers -Support Ultra DMA 33/66
On Board I/O :	2 Serial Port Connectors (16550 Fast UART compatible). -1 Parallel Port Connectors (EPP/ECP capability). -1 Floppy Disk Connector. -1 PS/2 Mouse Connector. -1 PS/2 Keyboard Connector. -1 IrDA Connector.
On Board VGA :	Built-in SiS 530 AGP 3D-Graphics shared memory to 2/4/8MB.
On Board TV-Out :	Built-in Chrontel 7003 chip (S-VIDEO & RCA jack output).
On Board Sound :	Built-in ForteMedia FM801-AS PCI 3D Sound chip.
On Board LAN :	Built-in RTL8139C 100BASE-TX PCI Lan chip.

Watch Dog :	Can be set by 500ms, 1, 2, 4 seconds period. RESET or NMI was generated when CPU did not periodically trigger the timer.
Disk On Chip :	100% Hard Disk and DOS compatible, no need extra software utility. One 32-pin socket.
On Board USB :	Universal Serial Bus Controller. -Host / HUB Controller. -Two USB Port connectors.
BIOS :	Flash ROM BIOS with Green, Plug and Play Features.
Dimension :	Special Form Factor Size. 23cm x 22cm or 9.1" x 8.7" (4 Layers)
CASE Dimension :	30.5cm x 23.5cm x 5cm

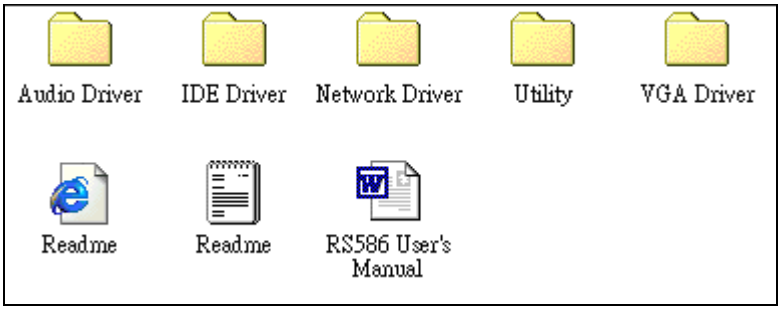
1-3 Unpacking :

The system package should contain the following:

- The RS586 ALL-IN-ONE PC BOX.
- USER'S MANUAL for RS586 system.
- Cable for IDE, I/O device.
- Power Line x 1
- Driver for IDE,VGA, Audio, LAN(CD) .
- Components for PCBOX.

1-4 Notice of CD Driver Installation

This CD contains the following drivers. The user must read each **"Readme.txt"** in sub-directories before installing required drivers.



[Audio Driver] : ForteMedia FM801 Driver.
[IDE Driver] : SiS 530/5595 IDE Driver for DMA 33/66.
[Network Driver] : Realtek 8139B Driver.
[VGA Driver] : SiS 530 VGA Driver.
[Utility] : SiS chipset utility.

Company Website (download latest driver.....)

SiS 530/5595 : www.sis.com.tw (VGA & IDE Driver)

REALTEK Rtl8139B : www.realtek.com.tw (Network Driver)

ForteMedia FM801 : www.fortemedia.com (Audio Driver)

DirectX : www.microsoft.com

BIOS Download : ***www.rise.com.tw***

2. HARDWARE INSTALLATION

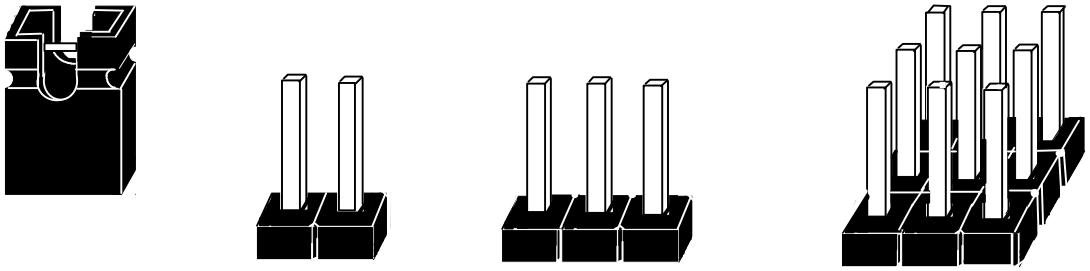
This chapter explains how to configure the system hardware.
Refer to this chapter whenever you upgrade or reconfigure your system.

2.1 Jumper Setting Summary :

Regarding hardware settings on the board. They specify configuration options for various features. The settings are made using something called a "Jumper". A jumper is a set of two or more metal pins in a plastic base attached to the mainboard. A plastic jumper "cap" with a metal plate inside fits over two pins to create an electrical contact between them. The contact establishes a hardware setting.

Some jumpers have two pins, other have three or more. The jumper are sometimes combined into sets called jumper "blocks", where all the jumpers
in the block must be set together to establish a hardware setting.
The next figures show how this locks.

Jumpers and caps



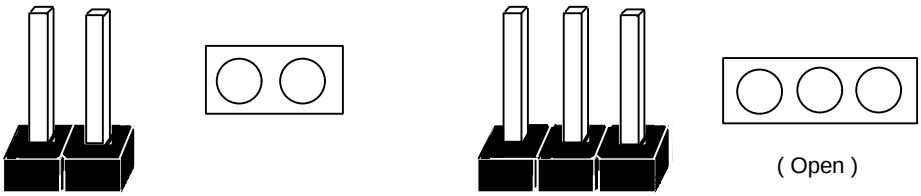
Jumper cap **2-Pin Jumper** **3-Pin Jumper** **Jumper block**

【2】

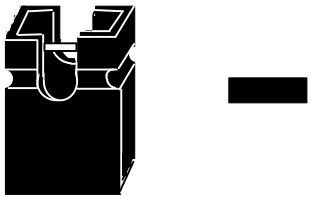
Most jumper setting are printed on the board in a stylized bird's-eye view, with which pins to connect for each setting marked by a bar connecting two pins. For example, if a jumper has three pins, connecting or "closing", the first and second pins creates one setting and closing the second and third pins creates another. The same type of diagrams are used in this manual. The jumpers are always shown from the same point of view as shown in the whole board diagram in this chapter.

Jumpers diagrams

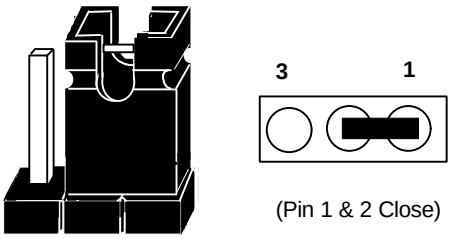
Jumpers are shown like this



Jumper caps like this



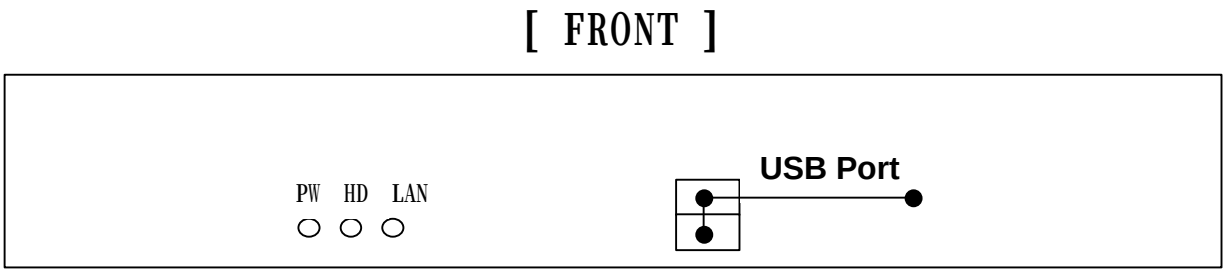
Jumper settings like this



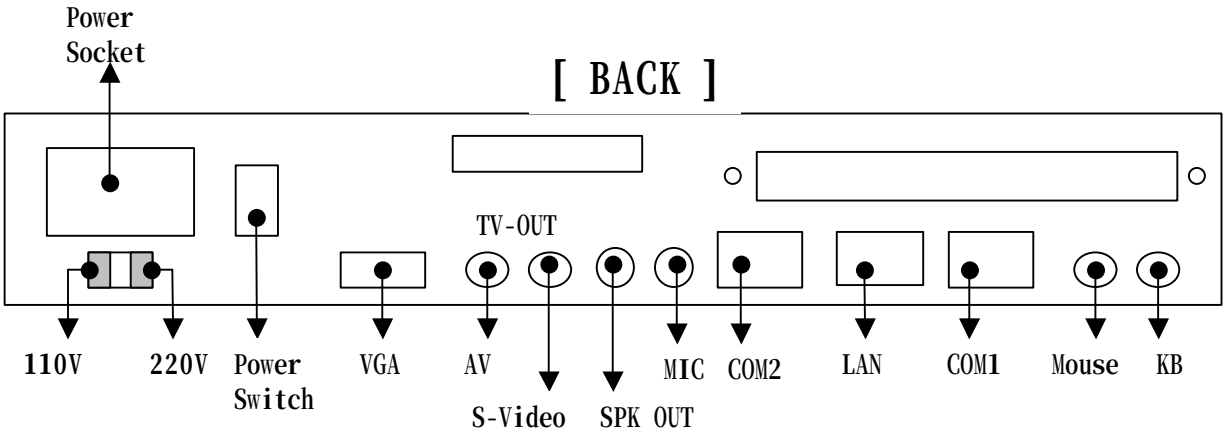
※ The Red colors Jumper for system Voltage setting, please careful to change it.

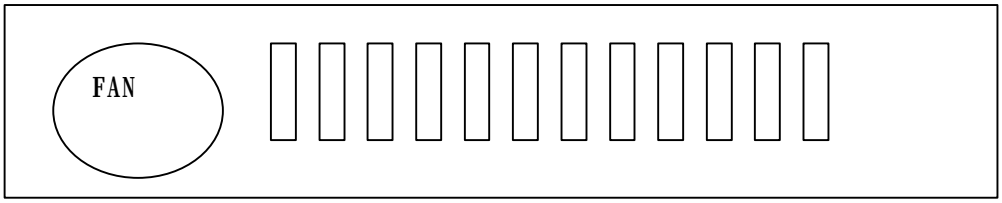
2.2 System & Motherboard Layout :

RS586 System Layout



LED
PW : Green color. **HD :** Red color. **LAN :** Yellow color.





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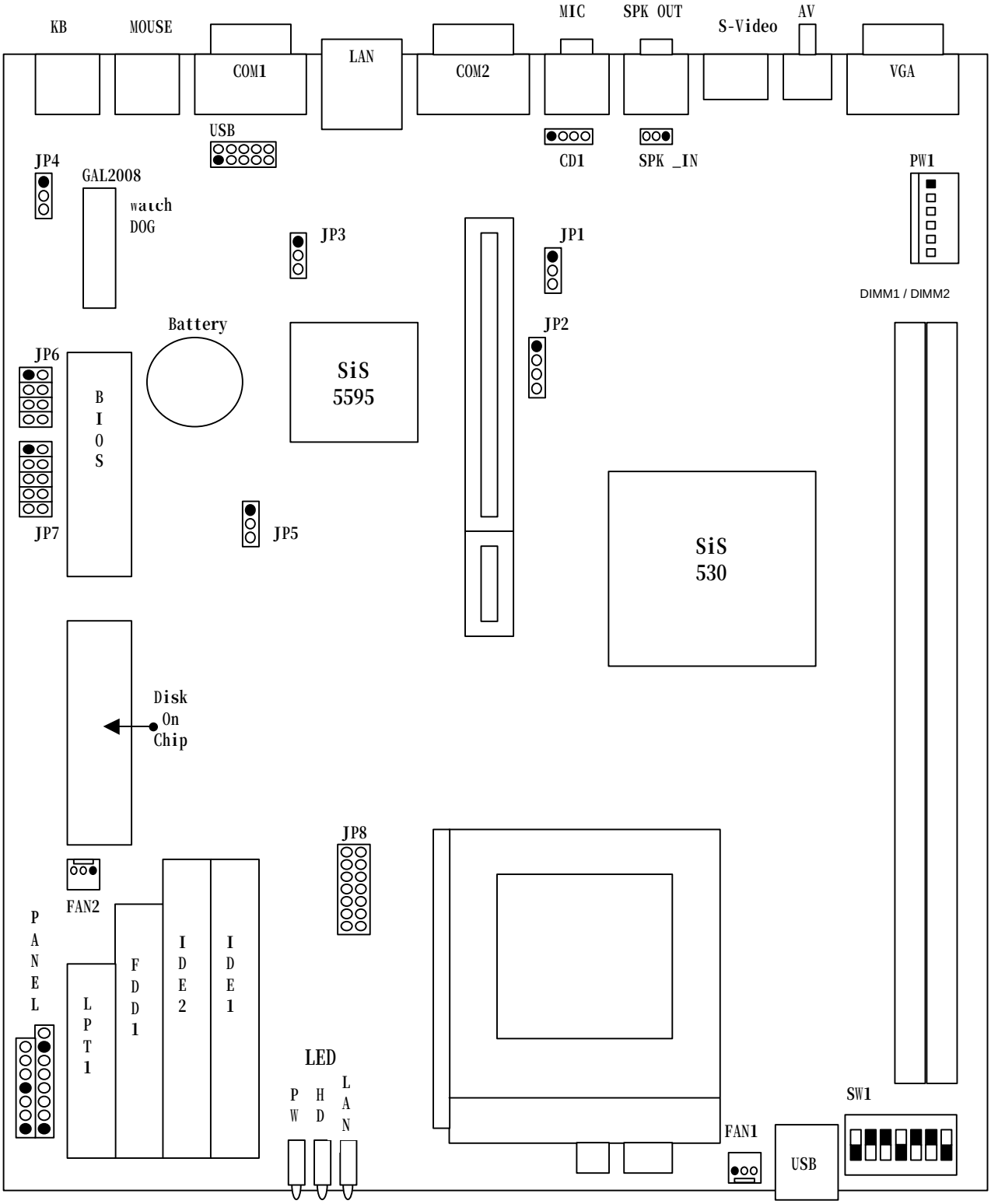
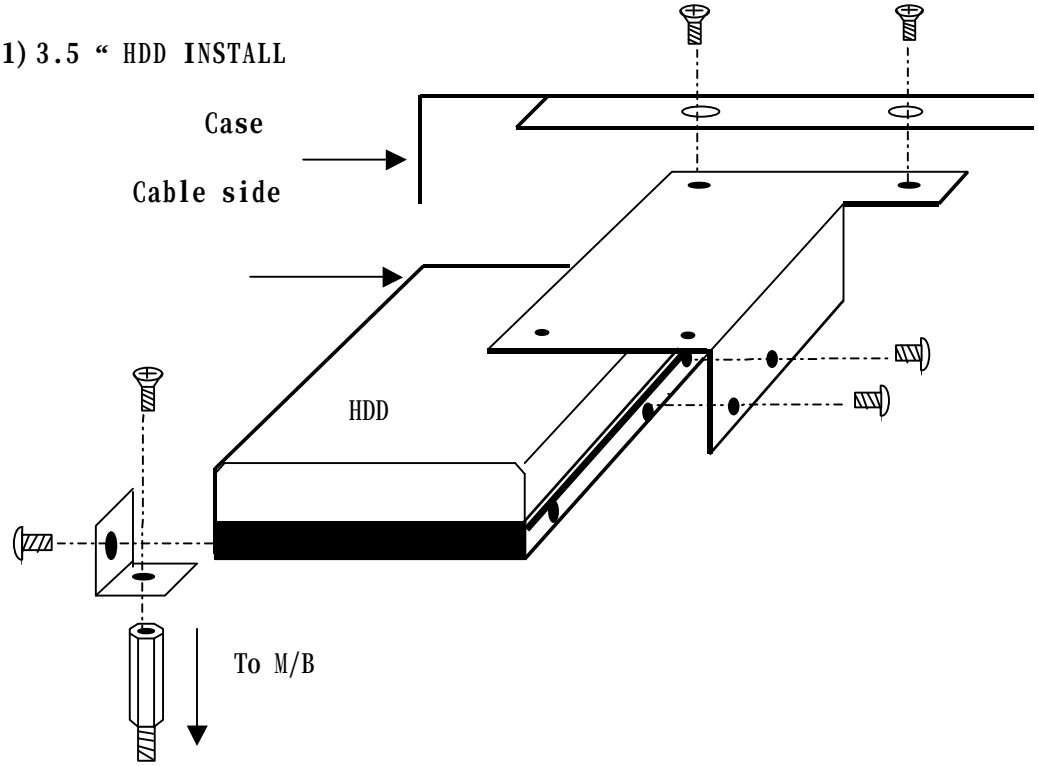
RS586 Motherboard Layout

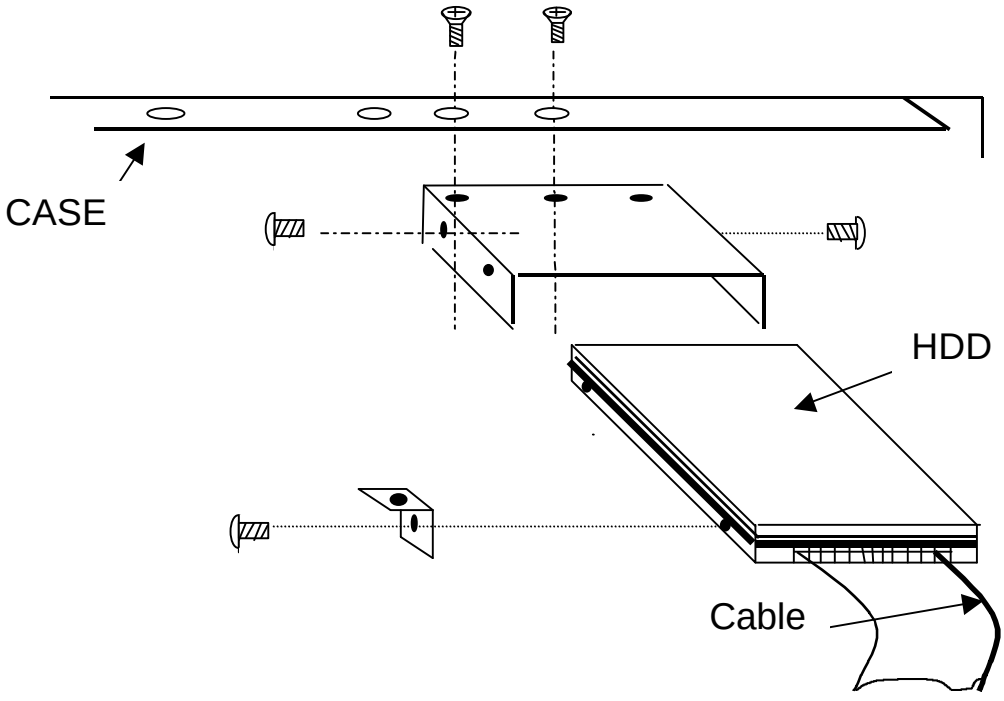


2.3 RS-586 Serial Hard Disk Installation

(1) 3.5 " HDD INSTALL

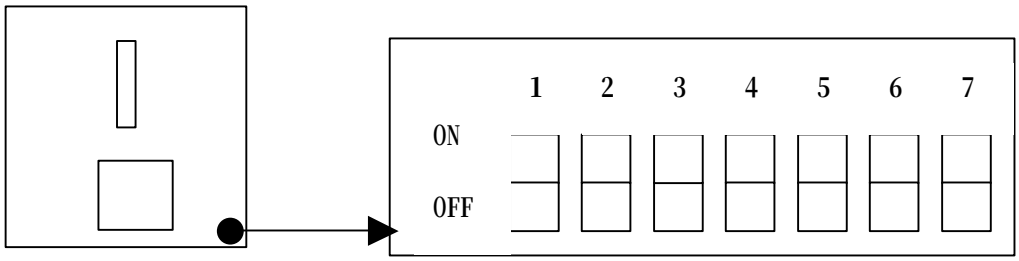


(2) 2.5" HDD INSTALL



2.4 Jumper Setting :

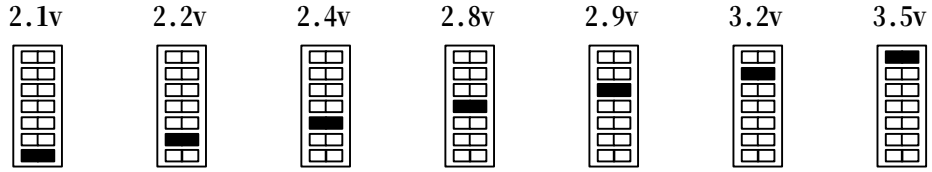
CPU Clock Selector : SW1



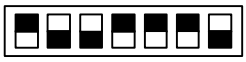
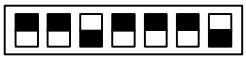
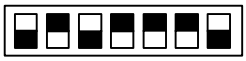
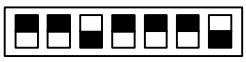
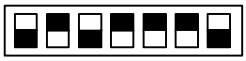
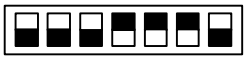
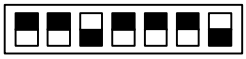
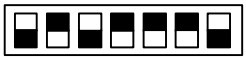
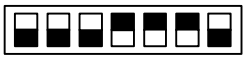
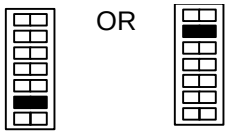
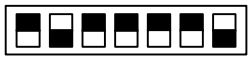
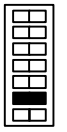
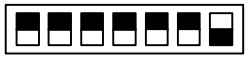
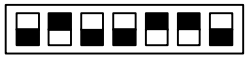
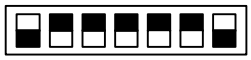
CPU Type	SW1		
	1	2	3
X 2.0	ON	OFF	OFF
X 2.5	ON	ON	OFF
X 3.0	OFF	ON	OFF
X 3.5	OFF	OFF	OFF
X 4.0	ON	OFF	ON
X 4.5	ON	ON	ON
X 5.0	OFF	ON	ON
X 5.5	OFF	OFF	ON

CPU Bus Clock	SW1			
	4	5	6	7
66 MHz	ON	ON	ON	OFF
75 MHz	ON	ON	OFF	OFF
83 MHz	ON	OFF	ON	OFF
90 MHz	ON	ON	OFF	ON
95 MHz	ON	OFF	OFF	OFF
100 MHz	OFF	ON	ON	OFF

CPU Power Voltage Selector : JP8



Quick Installation Guide :

CPU	SW1	Voltage
Intel Pentium®133MHz 66MHz x 2		
Intel Pentium®166MHz 66MHz x 2.5		
Intel Pentium®200MHz 66MHz x 3		
Intel MMX 166MHz 66MHz x 2.5		
Intel MMX 200MHz 66MHz x 3		
Intel MMX 233MHz 66MHz x 3.5		
AMD K6 166MHz 66MHz x 2.5		
AMD K6 200MHz 66MHz x 3		
AMD K6 233MHz 66MHz x 3.5		
AMD K6/K6-2 266MHz 66MHz x 4		
AMD K6 300MHz 66MHz x 4.5		
AMD K6/K6-2 300MHz 100MHz x 3		
AMD K6-2 333MHz 66MHz x 5		

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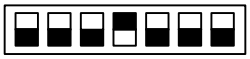
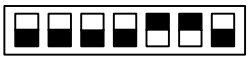
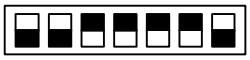
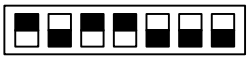
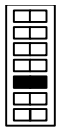
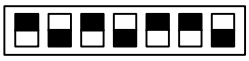
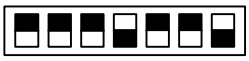
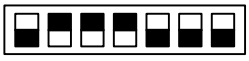
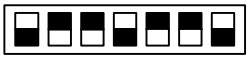
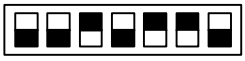
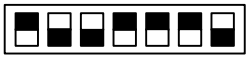
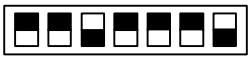
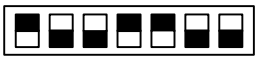
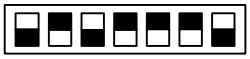
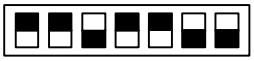
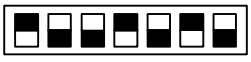
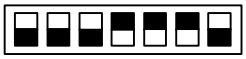
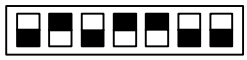
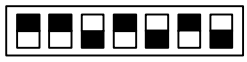
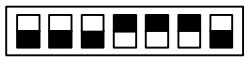
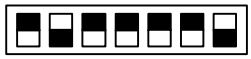
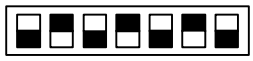
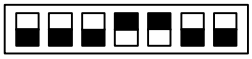
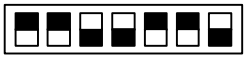
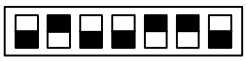
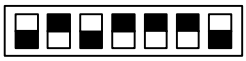
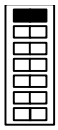
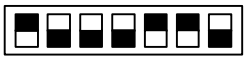
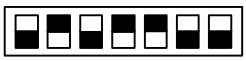
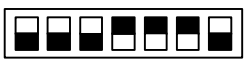
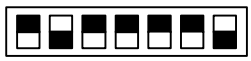
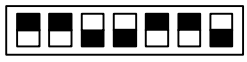
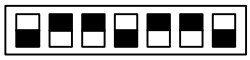
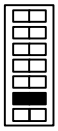
CPU	SW1	Voltage
AMD K6-2 333MHz 95MHz x 3.5		2.2v 
AMD K6-2 350MHz 100MHz x 3.5		
AMD K6-2 366MHz 66MHz x 5.5		
AMD K6-2 380MHz 95MHz x 4		2.2v 2.4v OR   Power Voltage Request on CPU's Surface.
AMD K6-2/3 400MHz 100MHz x 4		
AMD K6-2/3 450MHz 100MHz x 4.5		
AMD K6-2/3 475MHz 95MHz x 5		
AMD K6-2/3 500MHz 100MHz x 5		
AMD K6-2/3 550MHz 100MHz x 5.5		
Cyrix/IBM PR 166MHz 66MHz x 2		2.9v 
Cyrix/IBM PR 200MHz 66MHz x 2.5		
Cyrix/IBM PR 200MHz 75MHz x 2		
Cyrix/IBM PR 233MHz 66MHz x 3		
Cyrix/IBM PR 233MHz 75MHz x 2.5		
Cyrix/IBM PR 233MHz 83MHz x 2		

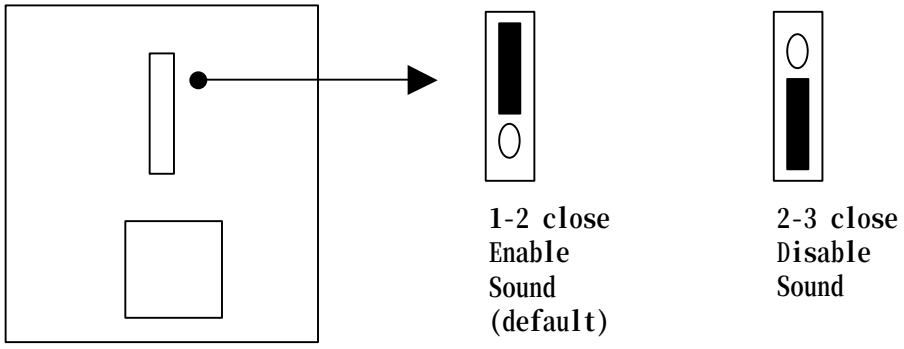
CPU	SW1	Voltage
Cyrix/IBM PR 266MHz 66MHz x 3.5		2.9v 
Cyrix/IBM PR 266MHz 75MHz x 3		
Cyrix/IBM PR 266MHz 83MHz x 2.5		
Cyrix MII PR 300MHz 66MHz x 3.5		
Cyrix MII PR 333MHz 66MHz x 4		
Cyrix MII PR 333MHz 83MHz x 3		
Cyrix MII PR 333MHz 75MHz x 3.5		
Cyrix MII PR 366MHz 100MHz x 2.5		
Cyrix MII PR 400MHz 100MHz x 3		
IDT Winchip 2 200MHz 66MHz x 3		3.5v 
IDT Winchip 2 200MHz 100MHz x 2		
IDT Winchip 2 225MHz 75MHz x 3		
IDT Winchip 2 233MHz 66MHz x 3.5		
IDT Winchip 2 266MHz 66MHz x 4		
IDT Winchip 2 300MHz 100MHz x 2.5		

【2】

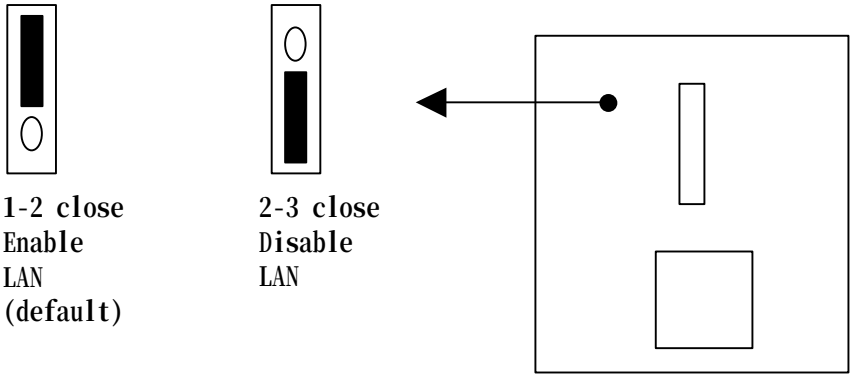
The Default (include CPU) setting is* 100MHz *x 5 at 2.2v for AMD K6-2* 500MHz*.

CPU	SW1	Voltage
AMD K6-2 500MHz		 2.2v

Onboard Sound Selector : JP1



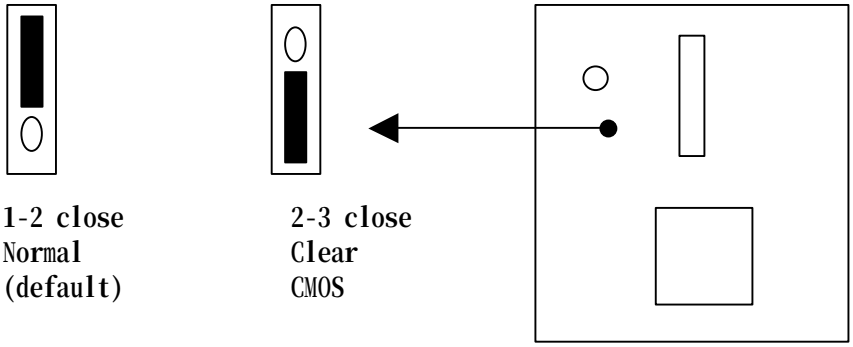
Onboard LAN Selector : JP3



1-2 close
Enable
LAN
(default)

2-3 close
Disable
LAN

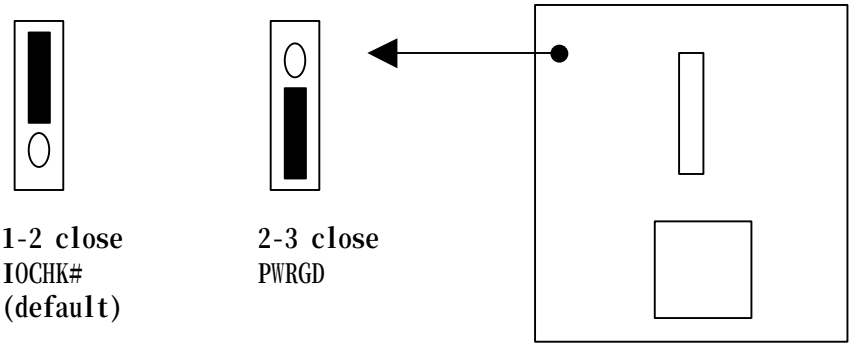
CMOS Selector : JP5 (Clear CMOS : 2-3 short 5 seconds then 1-2 short)



1-2 close
Normal
(default)

2-3 close
Clear
CMOS

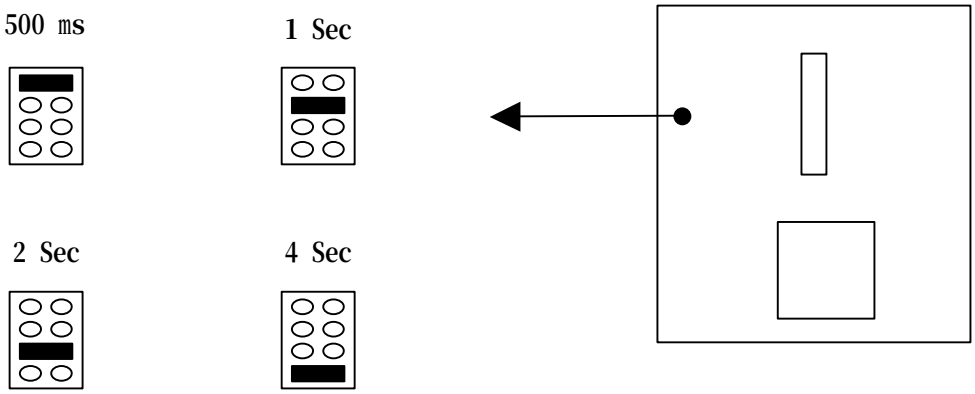
Watch-DOG Time out Selector : JP4



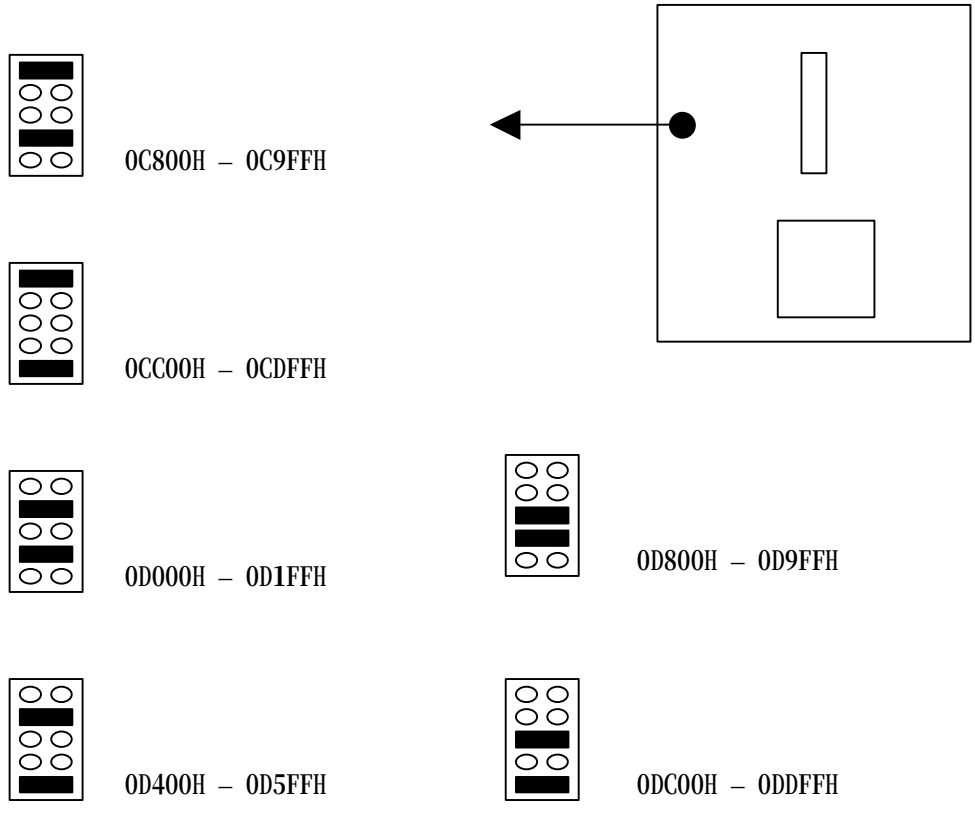
1-2 close
IOCHK#
(default)

2-3 close
PWRGD

Watch-DOG Timing Selector : JP6



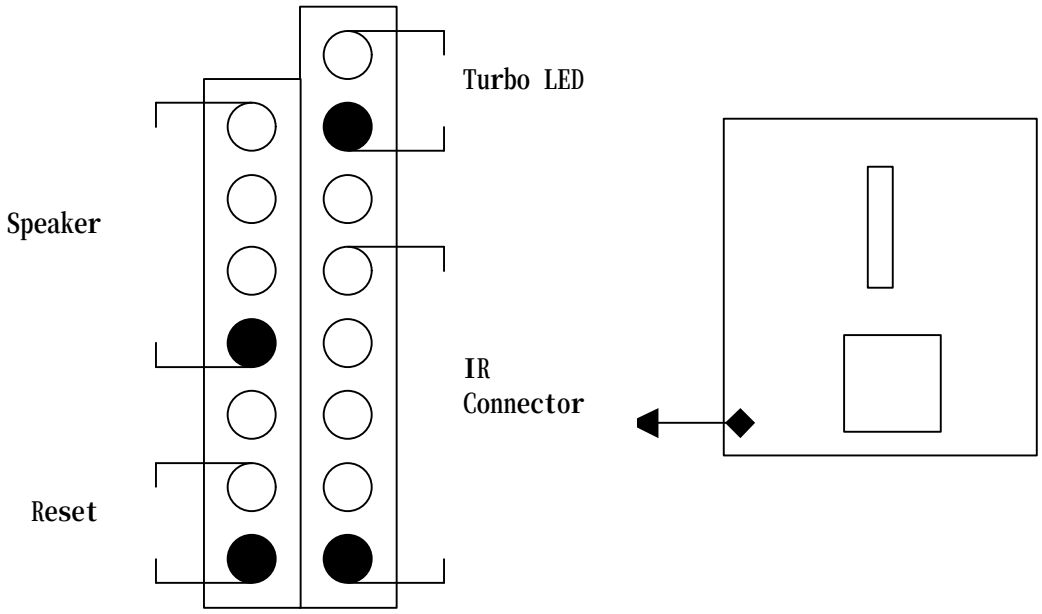
Disk On Chip Address Selector : JP7



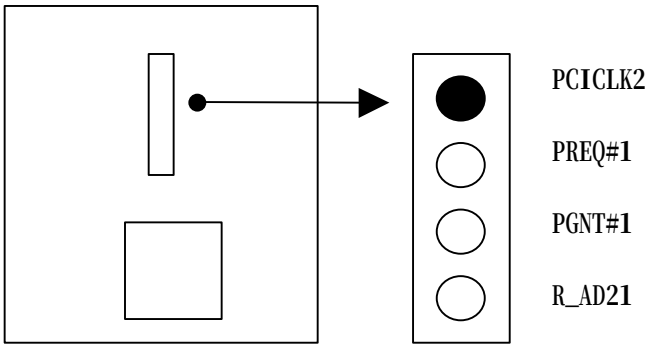
2.5 Connectors (PANEL):

● = *Pin 1 or " + "*

Connector : J2, J3



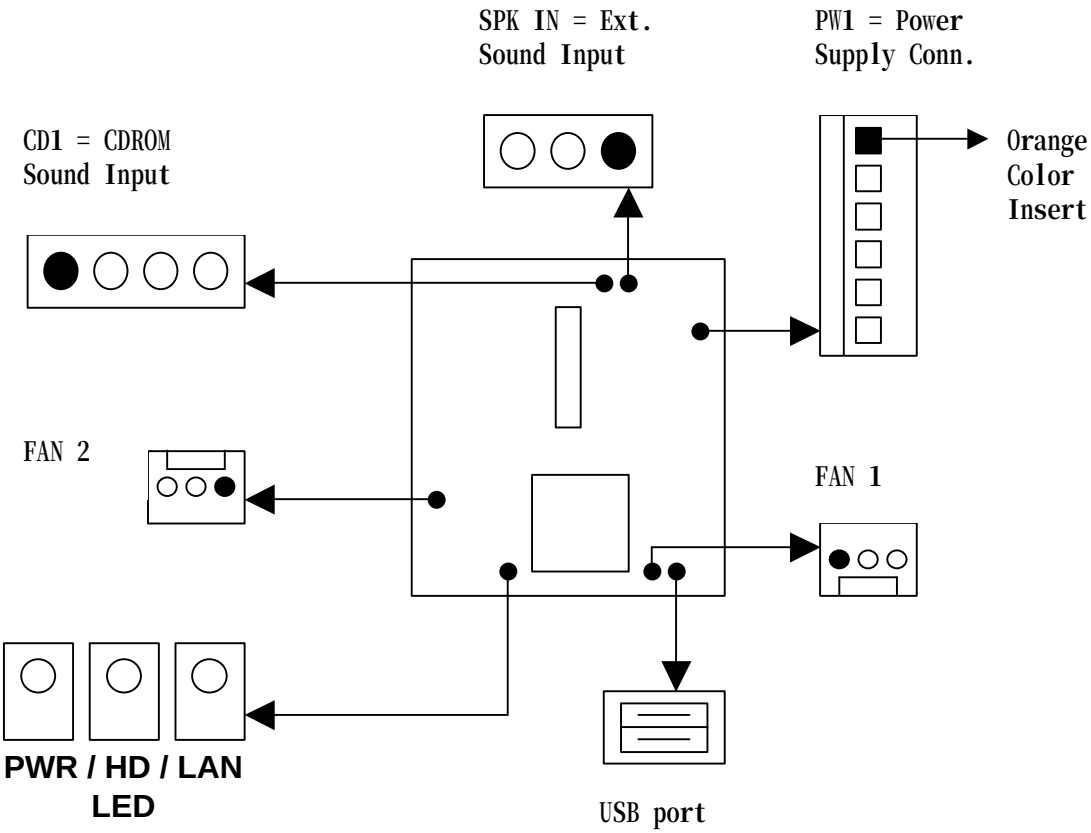
Connector JP2 : 2nd PCI Riser Card Conn.



【2】

Others :

● = *Pin 1 or " + "*



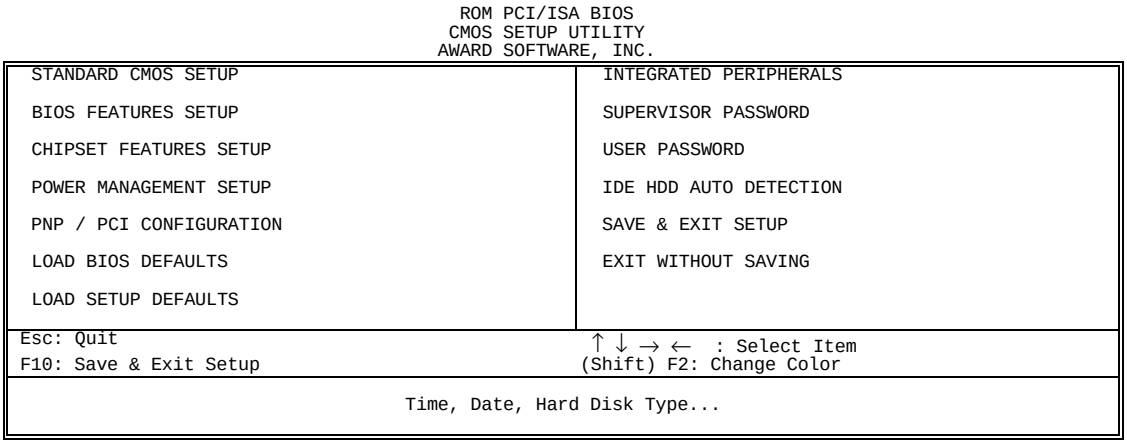
3. BIOS Setup

This motherboard comes with the AWARD BIOS from Award Software Inc. To enter the Award BIOS program's Main Menu:

1. Turn on or reboot the system. After a series of diagnostic checks, the following message will appear:

   PRESS <DEL> TO ENTER SETUP

2. Press the <DEL> key, and the main program screen appears as in the following page.



3. Using the arrows on your keyboard to select and option and press <Enter>. Modify the system parameters to reflect the options installed in the system.

4. You may return to the Main Menu anytime by press <ESC>.

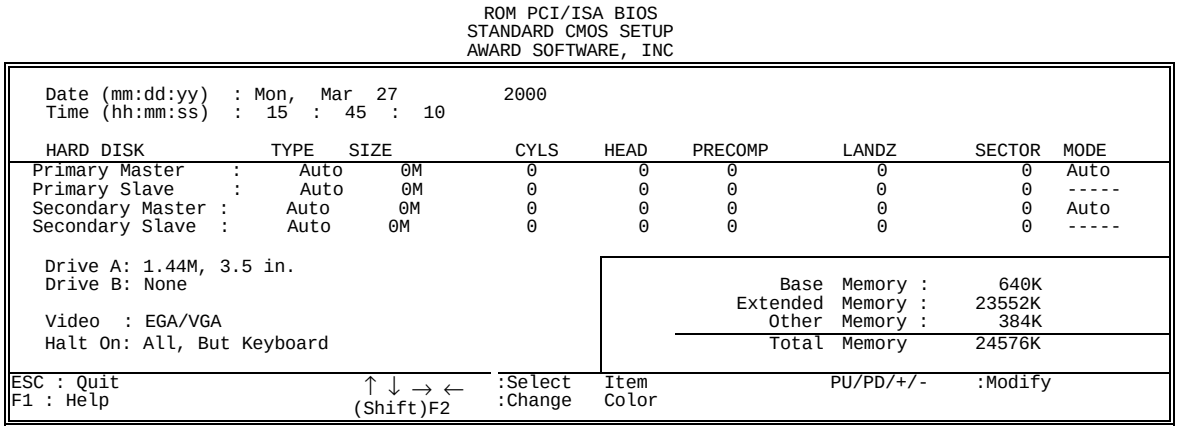
5. In the Main Menu, "SAVE AND EXIT SETUP" saves your changes and reboots the system, and "EXIT WITHOUT SAVING" ignores your changes and exits the program.

3.1 Standard CMOS Setup

Standard CMOS Setup allows you to record some basic system hardware configuration and set the system clock and error handling. You only need to modify the configuration values of this option when you change your system hardware configuration or the configuration stored in the CMOS memory got lost or damaged.

Run the Standard CMOS Setup as follows:

1. Choose "STANDARD CMOS SETUP" from the Main Menu, and a screen with a list of options appears.



2. Use the arrow keys to move between options and modify the selected options by using PgUp/PgDn or +/- keys.

   A short description of screen options follows:

Date (mm/dd/yy)	Type the current date.
Time (hh/mm/ss)	Type the current time.
Primary (Secondary) Master & Slave	Auto, User, None. If a hard disk is not installed choose “None”.
Drive A & B	The choices are: 360KB, 5.25 in., 1.2MB, 5.25 in., 720KB, 3.5 in., 1.44M, 3.5 in. (default), 2.88MB, 3.5 in., or None.
Video	The choice are: Monochrome; Color 40x25; VGA/EGA (default); or Color 80x25.
Halt On	Set this field to the type of errors that will cause the system to halt. The choices are: All Errors (default); No Errors; All, But Keyboard; All, But Diskette; or All, but Disk/Key

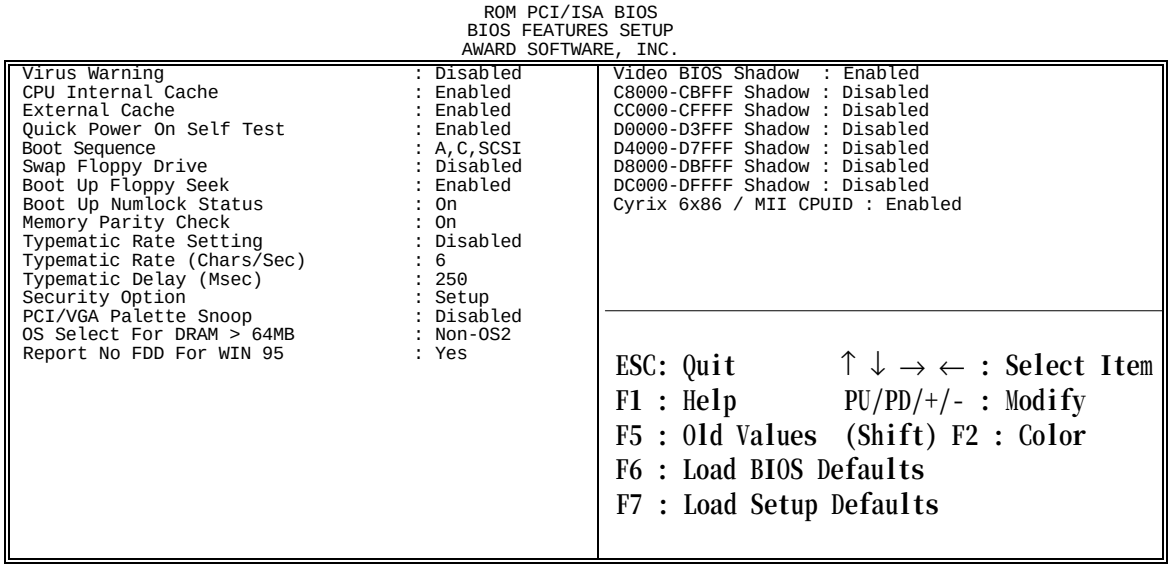
3. Press <Esc> to return the Main Menu when you finish setting up in the "Standard CMOS Setup".

3.2 BIOS Features Setup

BIOS Features Setup allows you to improve your system performance or set up some system features according to your preference.

Run the BIOS Features Setup as follows:

1. Choose "BIOS FEATURES SETUP" from the Main Menu and a screen with a list of items appears.



2. Use the arrow keys to move between options and modify the selected options by using PgUp/PgDn or +/- keys. An explanation of the <F> keys follows:

   <F1>: "Help" gives options available for each item.

   Shift<F2>: Change color.

   <F5>: Get the previous values. These values are the values with which the user started the current session.

   <F6>: Load all options with the BIOS default values.

   <F7>: Load all options with the Setup default values.

A short description of screen options follows:

【3】

Virus Warning

Enabled:
Activates automatically when the system boots up causing a warning message to appear if there is anything attempting to access the boot sector or hard disk partition table.
Disabled:
No warning message will appear when there is something attempting to access the boot sector or hard disk partition

Cache

table
Note: *Many diagnostic (or boot manager) programs which attempt to access the boot sector table can cause the above warning message. If you will be running such a program, we recommend that you disable the virus protection first.*

CPU Internal Cache — Choose Enabled (default) or Disabled. This option allows you to enable or disable the CPU's internal cache.

External Cache — Choose Enabled (default) or Disabled. This option allows you to enable or disable the external cache memory.

Quick Power On Self Test — Choose Enabled (default) or Disabled. This option allows you to speed up the Power On Self Test routine.

Boot Sequence — Default is "A, C, SCSI". This option determines which drive to look for first for an operating system.

Swap Floppy Drive — Choose Enabled or Disabled (default). This option swaps floppy drive assignments when it is enabled.

Boot Up Floppy Seek — Enabled (default): During POST, BIOS checks the track number of the floppy disk drive to see whether it is 40 or 80 tracks.

Boot Up Num Lock Status — Choose On (default) or Off. This option lets user to activate the NumLock function at boot-up.

Typematic Rate Setting — Choose Enabled or Disabled (default). Enable this option to adjust the keystroke repeat rate.

Typematic Rate (Chars/Sec) — Range between 6 (default) and 30 characters per second. This option controls the speed of repeating keystrokes.

Typematic Delay (Msec)	Choose 250 (default), 500, 750, and 1000. This option sets the time interval for displaying the first and the second characters.
Security Option	Choose System or Setup (default). This option is to prevent unauthorized system boot-up or use of BIOS Setup.
PCI/VGA Palette Snoop	Choose Enabled or Disabled (default). It determines whether the MPEG ISA cards can work with PCI/VGA or not.
OS Select for DRAM > 64MB	Non-OS2 (default): For Non-OS/2 system. OS: For OS/2 system.
Report No FDD for WIN 95	Yes: BIOS reports "NO FDD" to Win95. No (default): BIOS will not report "NO FDD" to Win95.
Video BIOS Shadow	Enabled (default): Map the VGA BIOS to system RAM. Disabled: Don't map the VGA BIOS to system RAM.
C8000-CBFFF to DC000-DFFFF Shadow	These options are used to shadow other expansion card ROMs.

Cyrix 6x86/MII CPUID : Enabled(default), Disabled.

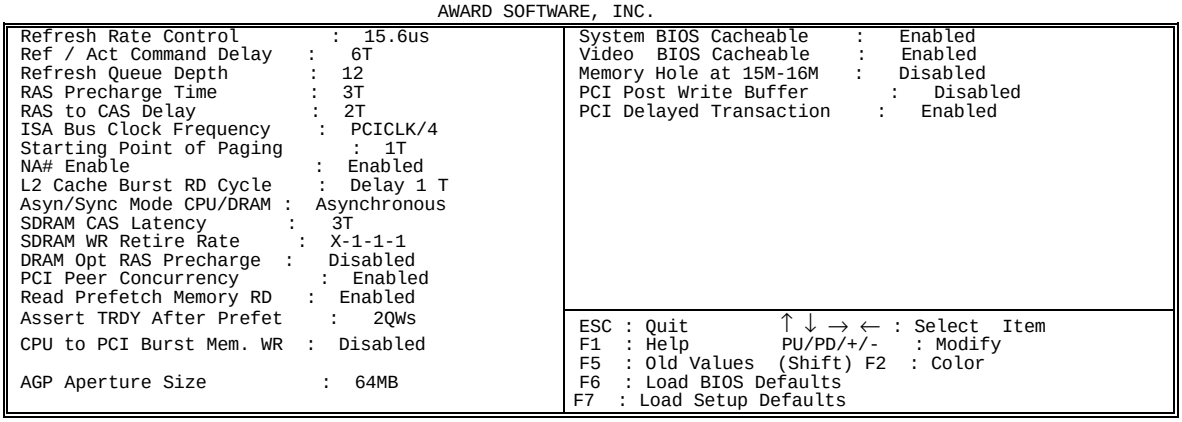
3. Press <ESC> and follow the screen instructions to save or disregard your settings.

【3】

3.3 Chipset Features Setup

Chipset Features Setup changes the values of the chipset registers. These registers control the system options.

Run the Chipset Features Setup as follows:



2. Use the arrow keys to move between options and modify the selected options by using PgUp/PgDn or +/- keys.

A short description of screen options follows:

Refresh Rate Control 15.6us / 7.8us / 3.9us

Ref/Act Command Delay 6T, 5T, 8T, 7T.

Refresh Queue Depth 12, 0, 4, 8

RAS Precharge Time The precharge time is the number of cycles it takes for the RAS to accumulate its charge before DRAM refresh. If insufficient time is allowed, refresh may be incomplete and the DRAM may fail to retain data.

Choices: 3T, 4T, 5T, 2T.

RAS to CAS Delay When DRAM is refreshed, both rows and columns are addressed separately. This setup item allows you to determine the timing of the transition from RAS (row address strobe) to CAS (column address strobe).

Choices: 3T, 4T, 5T, 2T.

ISA Bus Clock Frequency **PCICLK/4, PCICLK/3, 7.159MHz**

Starting Point of Paging This value controls the start timing of memory paging operations.

Choices: 1T, 2T, 4T, 8T.

NA# Enable Enabled / Disabled

L2 Cache Burst RD Delay 1 T / Normal

Cycle

Asyn/Sync Mode CPU /DRAM Asynchronous, Synchronous

SDRAM CAS Latency When synchronous DRAM is installed, the number of cycles of CAS latency depends on the DRAM timing.

Choices: 2T, 3T.

SDRAM WR Retire Rate Select the correct timing for data transfers from the write buffer to memory, according to DRAM specifications.

Choices: X-1-1-1, X-2-2-2.

DRAM Opt RAS Precharge Disabled / Enabled

PCI Peer Concurrency Enabled / Disabled

Read Prefetch Memory RD Enabled / Disabled

Assert TRDY After Prefet 2QWs, 1QWs

CPU to PCI Burst Mem. WR Enabled / Disabled

CPU to PCI Post Write Enabled / Disabled

AGP Aperture Size Select the size of the Accelerated Graphics Port(AGP) aperture. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation. See www.agpforum.org for AGP information.

Choices: 4M, 8M, 16M, 32M, 64M, 128M, 256M.

【3】

System BIOS Cacheable Selecting Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.
Choices: Enabled, Disabled.

Video BIOS Cacheable Selecting Enabled allows caching of the VGA BIOS ROM at C0000h-CFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Choices: Enabled, Disabled.

Memory Hole at 15M - 16M You can reserve this area of system memory for ISA adapter ROM. When this area is reserved, it cannot be cached. The user information of peripherals that need to use this area of system memory usually discusses their memory requirements.
Choices: Enabled, Disabled.

PCI Post Write Buffer Disabled / Enabled

PCI Delayed Transaction Enabled / Disabled

3. Press <ESC> and follow the screen instructions to save or disregard your settings.

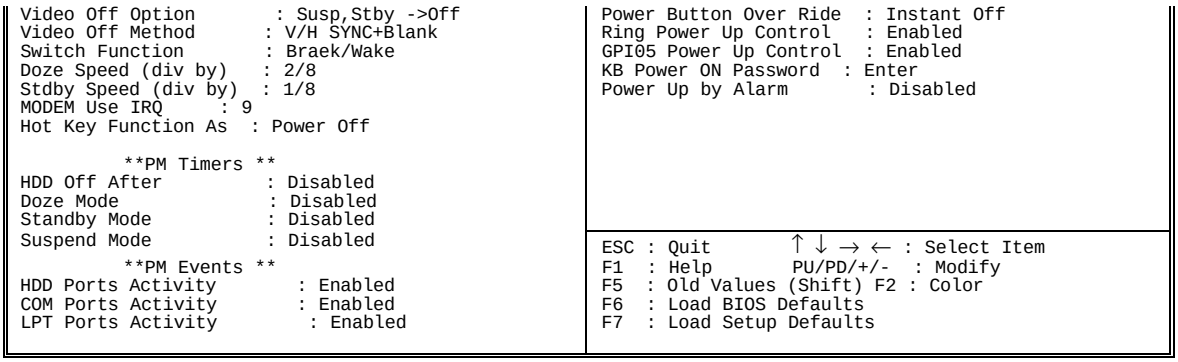
3.4 Power Management Setup

The Power Management Setup sets the system's power saving functions.

1. Choose "POWER MANAGEMENT SETUP" from the Main Menu and a screen with a list of options appears.

ROM PCI/ISA BIOS
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC.

ACPI function : Enabled	VGA Activity : Enabled
Power Management : User Define	IRQ [3-7, 9-15], NMI : Enabled
	IRQ 8 Break Suspend : Disabled



2. Use the arrow keys to move between options and modify the selected options by using PgUp/PgDn or +/- keys.

A short description of screen options follows:

Power Management This option allows you to select the type (or degree) of power saving for Doze, Standby, and Suspend modes. See the section PM Timers for a brief description of each mode.

【3】

This table describes each power management mode:

Disable (default)	No power management. Disables four modes
Min. Power Saving	Minimum power management. Doze Mode=4 hr. Standby Mode =4 hr., Suspend Mode =4 hr.
Max. Power Saving	Maximum power management . Doze Mode=10 sec. Standby Mode= 10 sec., Suspend Mode=10 sec.
User Defined	Allows you to set each mode individually. When not disabled, each of the ranges are from 1 min. to hr. except for HDD Power Down which ranges from 1 min. to 4 hr. and disable.

PM Control by APM When enabled, an Advanced Power Management device

will be activated to enhance to Max. Power Saving mode and stop the CPU internal clock. If Advance Power Management (APM) is installed on your system, selecting Yes gives better power savings.

If the Max. Power Saving is not enabled, this will be preset to No.

Video Off Option When enabled, this feature allows the VGA adapter to operate in a power saving mode.

Always On	Monitor will remain on during power saving modes.
Suspend -- > Off	Monitor blanked when the systems enters the Suspend mode.
Susp, Stby --> Off	Monitor blanked when the system enters either Suspend or Standby modes.
All Modes --> Off	Monitor blanked when the system enters any power saving mode.

Video Off Method This determines the manner in which the monitor is blanked.

V/H SYNC + Blank	This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS	Select this option if your monitor supports the Display Power Management Signaling (DPMS) standard of the Video Electronics Standards to select video power management values.

Switch Function You can choose whether or not to permit your system to enter complete Suspend mode. Suspend mode offers greater power savings, with a correspondingly longer

awakening period..

Choices: Break/Wake, Disabled.

Doze Speed (Div by) Sets the CPU's speed during Doze mode. The speed is reduced to a fraction of the CPU's normal speed. The divisors range from 1 to 8

Choices: 1~8.

Stdby Speed(Div by) Select a divisor to reduce the CPU speed during Standby mode to a fraction of the full CPU speed. The speed is reduced to a fraction of the CPU's normal speed. The divisors range from 1 to 8-0.

Choices: 1~8.

MODEM Use IRQ Name the interrupt request (IRQ) line assigned to the modem (if any) on your system. Activity of the selected IRQ always awakens the system.

Choices: 3,4,5,7,9,10,11,NA.

【3】

Hot Key Function As Power Off: When you use ATX power, use hot key to power off computer.
Suspend : Use hot key enter the Suspend Mode.
(** Hot Key : Ctrl + Alt + ←Backspace)

Choices: Suspend, Power Off, Disabled.

PM Timers

The following four modes are Green PC power saving functions which are only user configurable when User Defined Power Management has been selected. See above for available selections.

HDD Off After By default, this item is Disabled, meaning that no matter

	the mode the rest of the system, the hard drive will remain ready. Otherwise, you have a range of choices from 1 to 15 minutes. This means that you can elect to have your hard disk drive be turned off after a selected number of minutes or when the rest of the system goes into a Suspend mode.
Doze Mode	When enabled and after the set time of system inactivity, the CPU clock will run at slower speed while all other devices still operate at full speed.
Standby Mode	When enabled and after the set time of system inactivity, the fixed disk drive and the video would be shut off while all other devices still operate at full speed.
Suspend Mode	When enabled and after the set time of system inactivity, all devices except the CPU will be shut off.

PM Events

You may disable activity monitoring of some common I/O events and interrupt requests so they do not wake up the system. The default wake-up event is keyboard activity.

HDD Ports Activity	When set to On (default), any event occurring at a HDD (serial) port will awaken a system which has been powered down.
COM Ports Activity	When set to On (default), any event occurring at a hard or floppy drive port will awaken a system which has been powered down.
LPT Ports Activity	When set to On (default), any event occurring at a LPT (printer) port will awaken a system which has been powered down.
VGA Activity	When set to On (default), any event occurring in VGA will awaken a sytem which has been powered down.

The following is a list of IRQ's, Interrupt ReQuests, which can be exempted much as the COM ports and LPT ports above can. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service.

As above, the choices are On and Off.

When set On, activity will neither prevent the system from going into a power management mode nor awaken it.

- **IRQ [3-7, 9-15], NMI**

- **IRQ 8 Break Suspend:** You can Enable or Disable monitoring of IRQ 8 (the Real Time Clock) so it does not awaken the system from Suspend mode.

Power Button Over Ride

When you select "Delay 4 sec.", pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system "hangs".

Choices: Delay 4 sec., Instant off, Disabled.

【3】

Ring Power Up Control

When you select Enabled, a signal from ring returns the system to Full On state.

Choices: Enabled, Disabled.

GPI05 Power Up Control

For future use.

KB Power On Password

Hit "Enter", key in your password, and confirm it. It will "Disable", if your re-confirmed password is not correct or if you just press Enter directly.) Then, you have to save it. After that , under the power off condition, you can key in the password to power on directly.

re-open the computer directly to key in the password.

Power Up by Alarm	When you select Enabled, the following fields appear. Select the alarm that returns the system to Full On state. Choices: Enabled, Disabled.
Month Alarm	Select a month (1-12) or NA if you want the alarm active during all months.
Day of Month Alarm	Select a date in the month. Select 0(zero) if you prefer to set a weekly alarm (below)
Week Alarm	Turn the alarm On and Off on specific days.
Time (hh:mm:ss) Alarm	Set the time you want the alarm to go off on the days when it's activated.

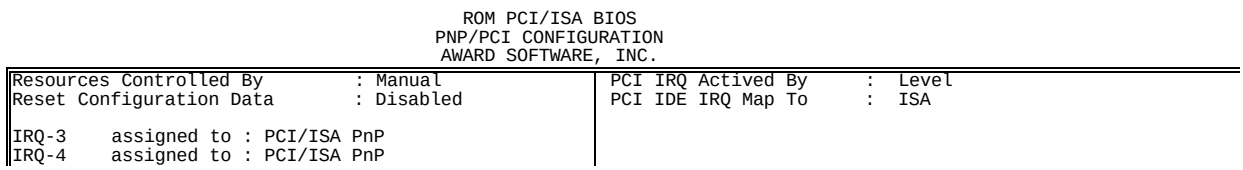
3. Press <ESC> and follow the screen instructions to save or disregard your settings.

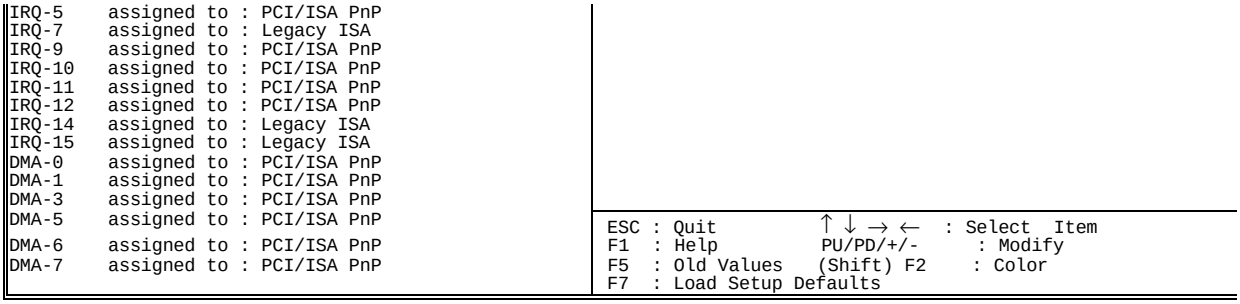
3.5 PnP/PCI Configuration Setup

PnP/PCI Configuration Setup configures the PCI bus slots.

Run the Chipset Features Setup as follows:

1. Choose "PnP/PCI CONFIGURATION SETUP" from the Main Menu and a screen with a list of options appears.





2. Use the arrow keys to move between option and modify the selected options by using PgUp/PgDn or +/- keys.

A short description of screen options follows:

Resource controlled by The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. To use this capability, you must use a plug and play operating system, such as Windows®95.

Choices: Auto, Manual.

【3】

Reset Configuration Data Normally, you leave this field Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system can not boot.

Choices: Enabled, Disabled.

IRQ n Assigned to When resources are controlled manually, assign each system interrupt as one of the following types, depending on the type of device using the interrupt:

Legacy ISA Devices compliant with the original PC AT bus specification, requiring a specific interrupt (such as IRQ4 for serial port 1).

PCI/ISA PnP Devices compliant with the Plug and Play standard, whether designed for PCI or ISA bus architecture.

Choices: Legacy ISA, PCI/ISA PnP.

DMA n Assigned to

When resources are controlled manually, assign each system DMA channel as one of the following types, depending on the type of device using the interrupt:

Legacy ISA Devices compliant with the original PC AT bus specification, requiring a specific DMA channel

PCI/ISA PnP Devices compliant with the Plug and Play standard, whether designed for PCI or ISA bus architecture.

Choices: Legacy ISA, PCI/ISA PnP.

PCI IRQ Activated by

This sets the method by which the PCI bus recognizes that an IRQ service is being requested by a device. You should retain the default configuration unless advised otherwise by your system's manufacturer.

Choices: Level, Edge.

PCI IDE IRQ Map to

This allows you to configure your system to the type of IDE disk controller in use. By default, Setup assumes that your controller is an ISA (Industry Standard Architecture)device rather than a PCI controller. The more apparent difference is the type of slot being used.

If you have equipped your system with a PCI controller, changing this allows you to specify which slot has the controller and which PCI interrupt (A, B, C or D) is associated with the connected hard drives.

Remember that this setting refers to the hard disk drive itself, rather than individual partitions. Since each IDE controller supports two separate hard drives, you can select the INT# for each. Again, you will note that the primary has a lower interrupt than the secondary as described in "Slot x Using INT#" above.

Selecting "PCI Auto" allows the system to automatically determine how your IDE disk system is configured.

3. Press <ESC> and follow the screen instructions to save or disregard your settings.

【3】

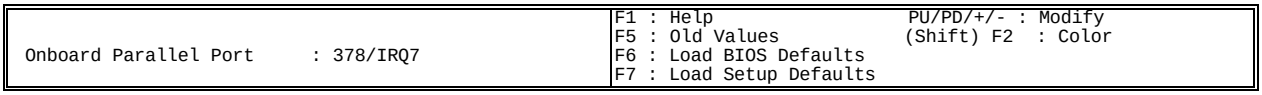
3.6 Integrated Peripherals

The Integrated Peripherals option changes the values of the Chipset registers. These registers control system options in the computer.

1. Choose "INTEGRATED PERIPHERALS" from the Main Menu and a screen with a list of options appears.

ROM PCI/ISA BIOS
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

Internal PCI/IDE : Both	Onboard Parallel Mode : ECP / EPP
IDE Primary Master PIO : Auto	ECP Mode Use DMA : 3
IDE Primary Slave PIO : Auto	Parallel Port EPP Type : EPP1.9
IDE Secondary Master PIO : Auto	PS/2 mouse function : Enabled
IDE Secondary Slave PIO : Auto	USB Controller : Enabled
Primary Master UltraDMA : Auto	USB Keyboard Support : Disabled
Primary Slave UltraDMA : Auto	Init Display First : PCI Slot
Secondary Master UltraDMA : Auto	VGA Shared Memory Size : 8MB
Secondary Slave UltraDMA : Auto	VGA Memory Clock (MHz) : 66
IDE Burst Mode : Enabled	TV mode selection : CRT+NTSC U
IDE Data Port Post Write : Disabled	Current System Temp. :
IDE HDD Block Mode : Enabled	Current SYSFAN1 Speed :
Onboard FDD Controller : Enabled	Current CPUFAN2 Speed :
Onboard Serial Port 1 : 3F8/IRQ4	IN0(V) : 5.18 V IN1(V) : 3.27 V
Onboard Serial Port 2 : 2F8/IRQ3	IN2(V) : 2.46 V IN3(V) : 1.95 V
UART 2 Mode : Standard	



2. Use the arrow keys to move between options and modify the selected options by using PgUp/PgDn or +/- keys.

A short description of screen options follows:

Internal PCI/IDE

This chipset contains an internal PCI IDE interface with support for two IDE channels.

Choices: Primary, Secondary, Both.

IDE Primary/ Secondary/Master/ Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

Choices: Auto, Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

IDE Primary/ Secondary/Master/ Slave UDMA

UDMA (Ultra DMA) is a DMA data transfer protocol that utilizes ATA commands and the ATA bus to allow DMA commands to transfer data at a maximum burst rate of 66MB/s. When you select Auto in the four IDE devices that the internal PCI IDE interface supports), the system automatically determines the optimal data transfer rate for each IDE device.

Choices: Auto, Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

IDE Burst Mode

Selecting Enabled reduces latency between each drive read/write cycle but may cause instability in IDE subsystems that cannot support such fast performance.

If you are getting disk drive errors, try setting this value to Disabled. This field does not appear when the Internal PCI/IDE field, above, is Disabled.

Choices: Enabled, Disabled.

IDE HDD Block Mode

The chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the primary and/or secondary IDE interface. Select Disabled to deactivate this interface, if you installed a primary and/or secondary add-in IDE interface IDE interface.

Enabled	Secondary HDD controller used
Disabled	Secondary HDD controller not used

【3】

Onboard FDD Controller

This should be enabled if your system has a floppy disk drive (FDD) installed on the system board and you wish to use it. Even so, if you add a higher performance controller, you will need to disable this feature.

Choices: Enabled, Disabled.

Onboard Serial Port1/Port2

This item allows you to determine access onboard serial port 1/port 2 controller with which I/O address.

Choices: 3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4,2E8/IRQ3, Disabled, Auto.

UART 2 Mode

This item allows you to determine which Infra Red (IR) function of onboard I/O chip.

Choices: Standard, ASKIR, HPSIR.

USB Controller

Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have USB peripherals.

Choices: Enabled, Disabled.

USB Keyboard Support

Support legacy USB Keyboard

Choices: Enabled, Disabled.

Onboard Parallel Port

This item allows you to determine access onboard parallel port controller with which I/O address.

Choices: 378H/IRQ7, 278H/IRQ5, 3BCH/IRQ7, Disabled.

Onboard Parallel Mode

Select an operating mode for the onboard parallel (printer) port. Normal EPP (Extended Parallel Port) ECP (Extended Capabilities Port) CEP+EPP PC AT parallel port Bidirectional port Fast, buffered port Fast, buffered, bidirectional port.

Select Normal unless you are certain your hardware and software both support EPP or ECP mode.

Choices: SPP, ECP/EPP, ECP, EPP/SPP.

ECP Mode Use DMA

Select DMA channel for the parallel port for use during ECP mode.

Choices: 3, 1.

Parallel Port EPP Type

Select EPP port type 1.7 or 1.9

Choices: EPP1.9, EPP1.7.

PS/2 Mouse function

If your system has a PS/2 mouse port and you install a serial pointing device, select Disabled.

Choices: Enabled, Disabled.

Init Display First

PCI Slot

VGA Shared Memory Size

8 MB(default support to 1600x1200 Hi-Color) / 2MB /4MB /None.

VGA Memory Clock (MHz)

66 / 75 / 83 / 100 MHz. = SDRAM Clock(Shared Memory)

TV mode selection

CRT+NTSC U / CRT+PAL O / CRT+PAL U / CRT Only / CRT+NTSC O.

Current System Temp.

Detect the System temperature.

Current SYSFAN1 Speed

Detect the System Fan Speed if the System has a Fan.

Current CPUFAN2 Speed Detect the CPU Fan Speed.

IN0 (V)~ IN3 (V) IN0 (V) : System +12 Voltage
IN1 (V) : System +5 Voltage
IN2 (V) : +5 Voltage
IN3 (V) : Current CPU Vcore Voltage

3. Press <ESC> and follow the screen instructions to save or disregard your settings.

【3】

3.7 Load BIOS / Setup Defaults

Load Setup Defaults option loads the default system values to the system configuration fields. If the CMOS is corrupted the defaults are loaded automatically. Choose this option and the following message appears:

"Load BIOS Defaults (Y/N)? N"
"Load SETUP Defaults (Y/N)? N"

To use the SETUP defaults, change the prompt to "Y" and press <Enter>.

3.8 Supervisor / User Password

These two options allow you to set your system passwords. Normally, supervisors have a higher right to change this CMOS setup option than the users. The way to set up the passwords for both Supervisors and Users are as follows:

1. Choose "Change Password" in the Main Menu and press <Enter>. The following message appears:

"Enter Password:"

2. The first time you run this option, enter your password up to only 8 characters and press <Enter>. The screen does not display the entered characters.

3. After you enter your password, the following message appears prompting you to confirm the new passward:

"Confirm Password"

4. Enter exact the same password you just typed again to confirm the passwod and press <Enter>.

5. Move the cursor to Save & Exit Setup to save the password.

6. If you need to delete the password you entered before, choose the Supervisor Password and press <Enter>. It will delete the password that you had before.

7. Move the cursor to Save & Exit Setup to save the option you did, otherwise the old password will still be there when you turn on your machine next time.

8. Press <ESC> to exit to the Main Menu.

Note: *If you forget or lose the password, the only way to access the system is to clear the CMOS RAM by setting JP5. All setup information will be lost and you need to run the BIOS setup program again.*

3.9 IDE HDD Auto Detection

IDE HDD Auto Detection detects the parameters of an IDE hard disk drive and automatically enters them to the Standard CMOS Setup screen.

The screen will ask you to select a specific hard disk for Primary Master after you select this option. If you accept a hard disk detected by the BIOS, you can enter "Y" to confirm and then press <Enter> to check next hard disk. This function allows you to check four hard disks and you may press the <ESC> after the <Enter> to skip this function and to back to the Main Menu.

3.10 Save & Exit Setup

Save & Exit Setup allows you to save all modifications you have specified into the CMOS memory. Highlight this option on the Main Menu and the following message appears:

"SAVE to CMOS and EXIT (Y/N)? Y"

Press <Enter> key to save the configuration changes.

3.11 Exit Without Saving

Exit Without Saving allows you to exit the Setup utility without saving the modifications that you have specified. Highlight this option on the Main Menu and the following message appears:

"Quit Without Saving (Y/N) ? N"

You may change the prompt to "Y" and press <Enter> key to leave this option.

3.12 Flash BIOS

1. Copy the Flash Utility & new BIOS file to a bootable diskette.
   Awdflash.exe (Flash Utility) & *.BIN (new BIOS)

2. Turn the system on, Boot from drive A: and run the Flash utility.
   A:\awdflash Rxxx.bin /cc (Rxxx is new BIOS filename, /cc is clear CMOS)

3. Follow the prompt, save the old BIOS and when prompt to program hit " Y"

4. After the BIOS is Flash, reboot system then setup CMOS again.
   (Setup CMOS, press " DEL" into BIOS SETUP, set the date and time for system)