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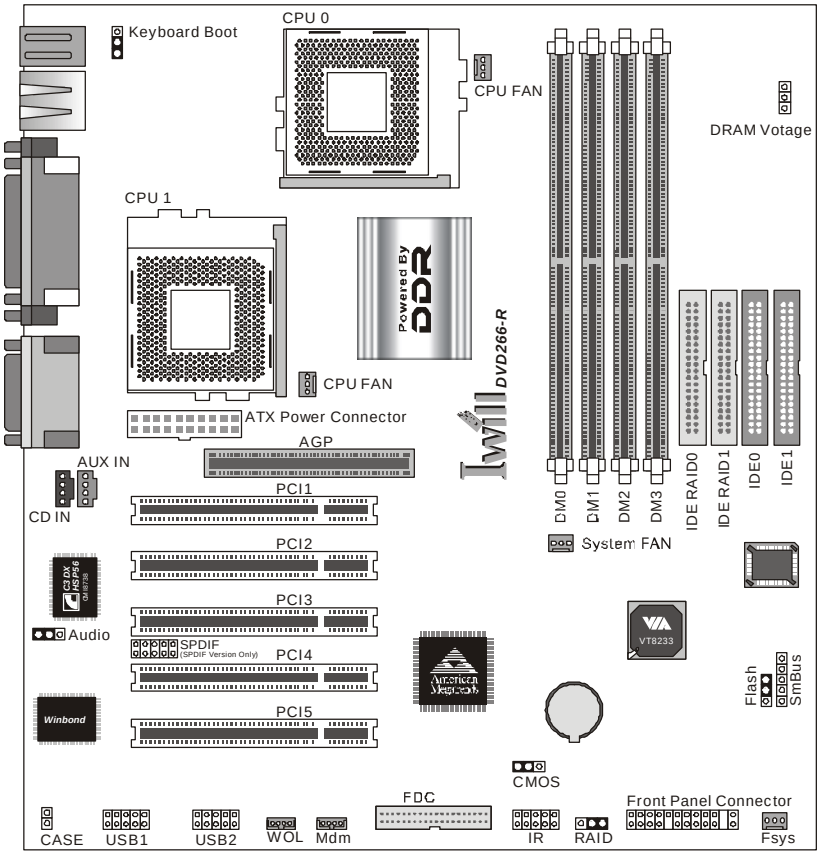
1 Quick Installation

1.1 Layout



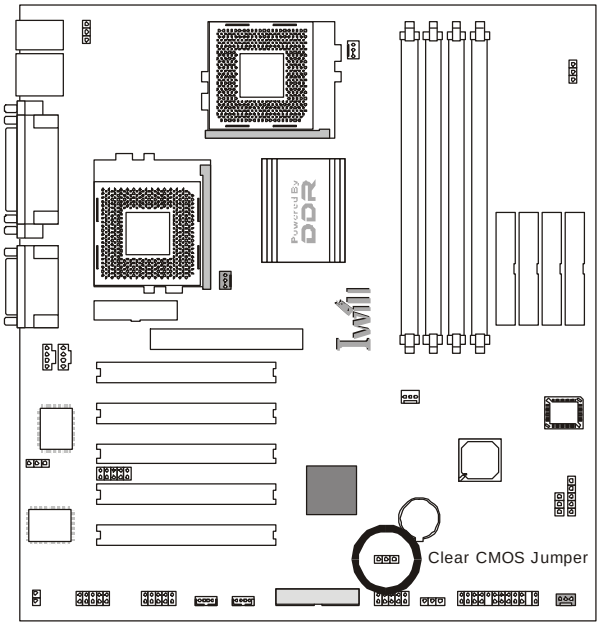
1.2 Item Checklist

The motherboard
Operation manual
ATA 66/100 cable
Floppy cable
Power Installer CD
2 x High Quality CPU Cooler

Optional
USB riser kit
Thermal Sensor for System

1.3 Jumpers

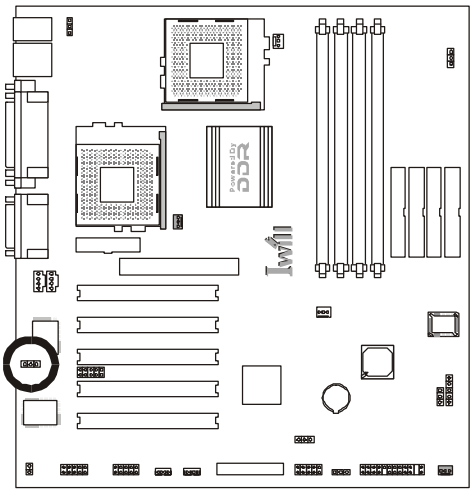
1.3.1 Clear CMOS jumper(CMOS)




Normal (Default)


Clear CMOS

Audio jumper

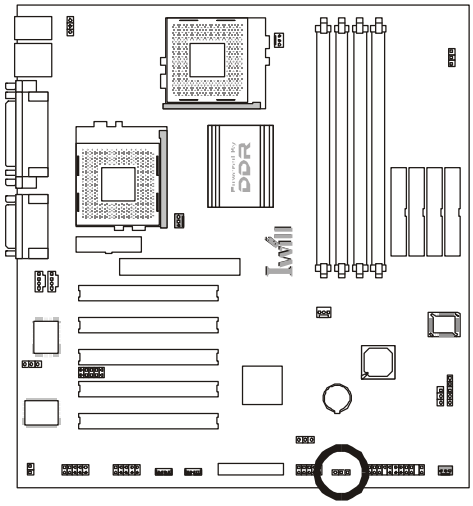


Audio

Enabled (Default)

Disabled

IDE RAID jumper (DVD266-R Only)

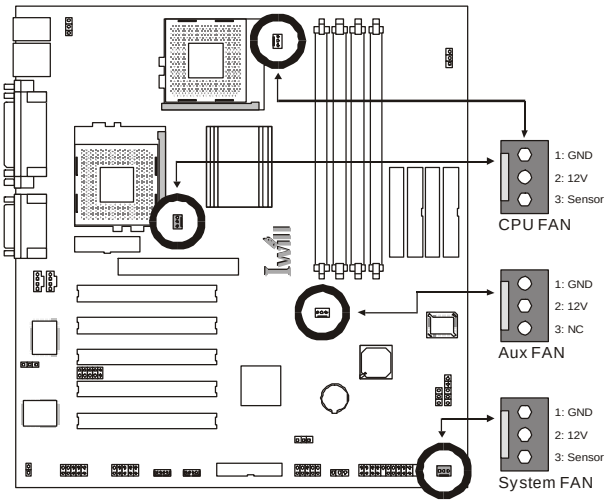


IDE RAID

Enabled (Default)

Disabled

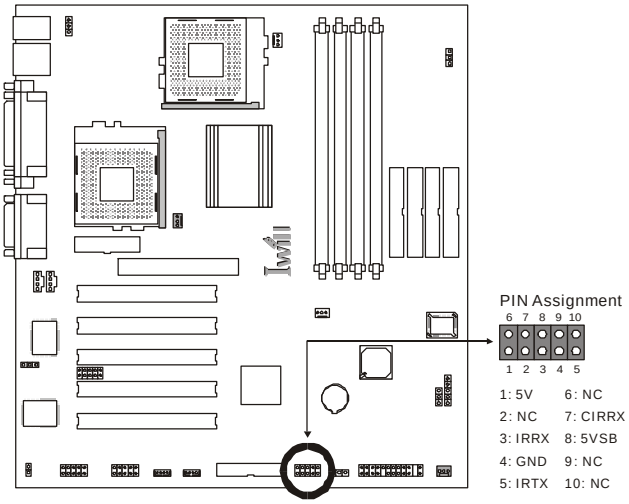
FAN Connectors



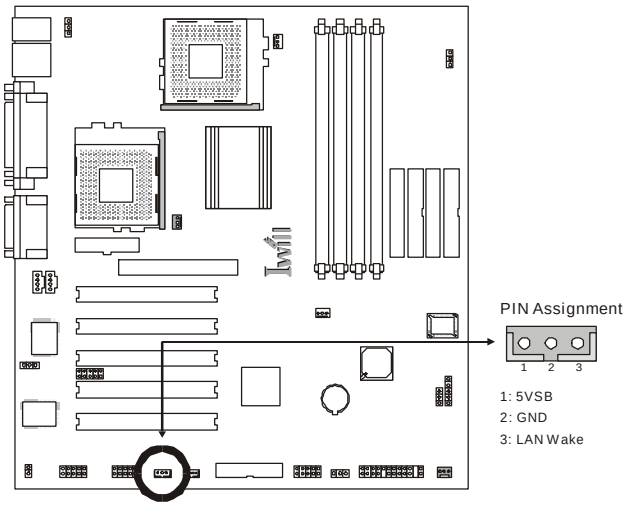
J39: CPU 0 Fan header (J39) J40: CPU 1 Fan header

J70: Auxiliary Fan header(J70) J41: System Fan header (J41)

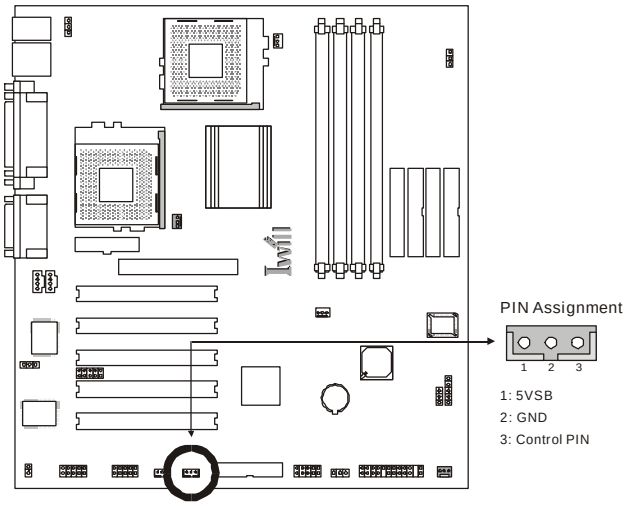
Infrared connector (IR)



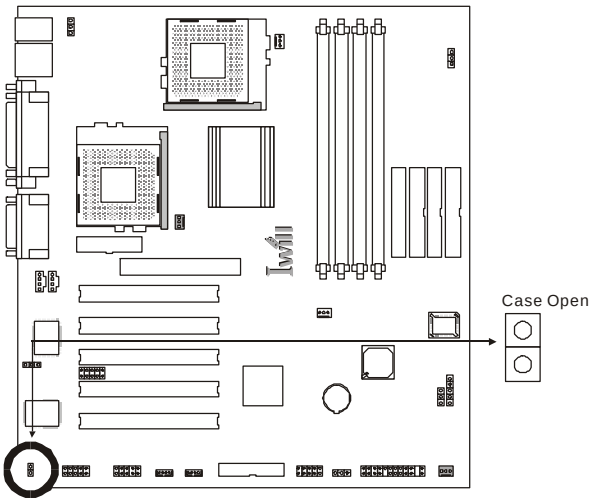
1.4.5 Wake-ON-LAN header



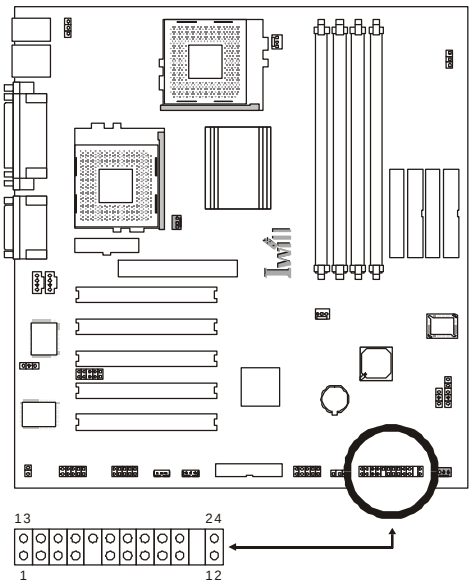
1.4.6 Wake On Modem



1.4.7 Case Open

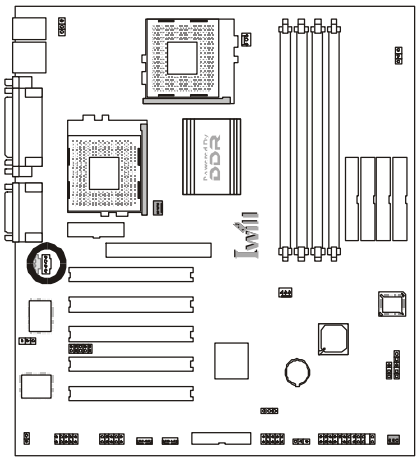


1.4.9 Front panel connector (J43)



Function	Pin No.	Definition
PWR ON (Power /Soft Off)	12, 24	
ACPI (ACPI LED)	21, 22	Pin 21: Anode Pin 22: Cathode
ALED (IDE LED)	17, 18	Pin 17: Anode Pin 18: Cathode
RST (Reset)	13, 14	Pin 13: Reset Pin 14: GND
PLED (System Power LED)	8, 9, 10	Pin 8: VCC Pin 9: NC Pin 10: GND
SPKR (System Speaker)	1, 2, 3, 4	Pin 1:VCC Pin 2: GND Pin 3: NC Pin 4: Speaker (BUZZ)
KeyLock	6, 7	

Aux-In connector(Aux_IN)

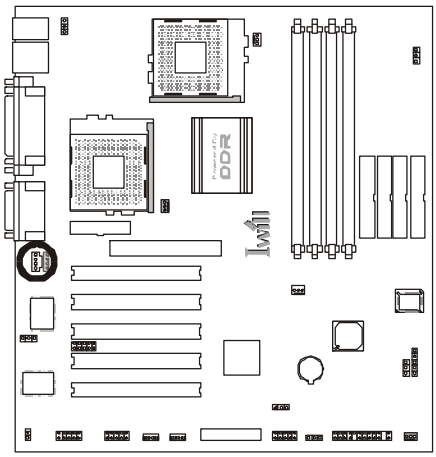


AUX_IN

Pin Assignment

1:Left channel
2-3:GND
4:Right Channel

CD_In connector(CD_IN)



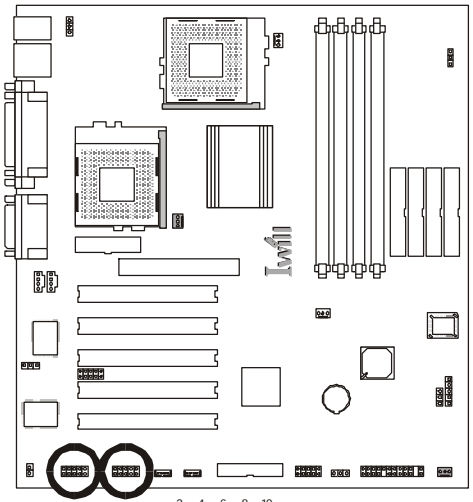
CD_IN

Pin Assignment

1:Left channel
2:GND
3:GND
4:Right Channel

1.4.11 Internal USB connector

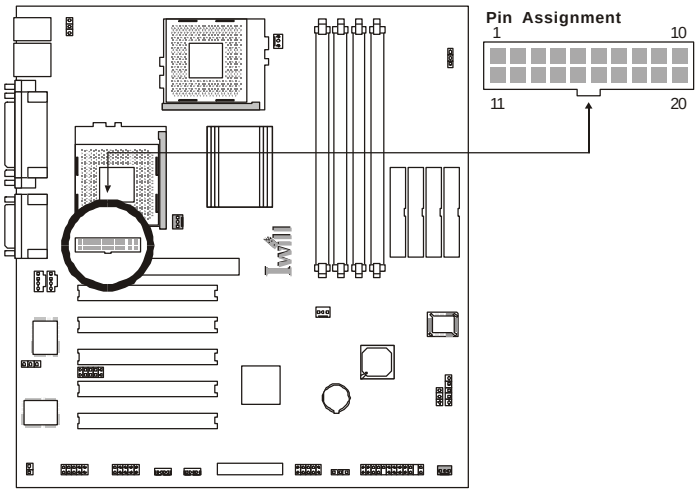
The motherboard has two USB ports onboard. The extra two USB support can only functionable with the additional USB riser kit.



Pin Assignment

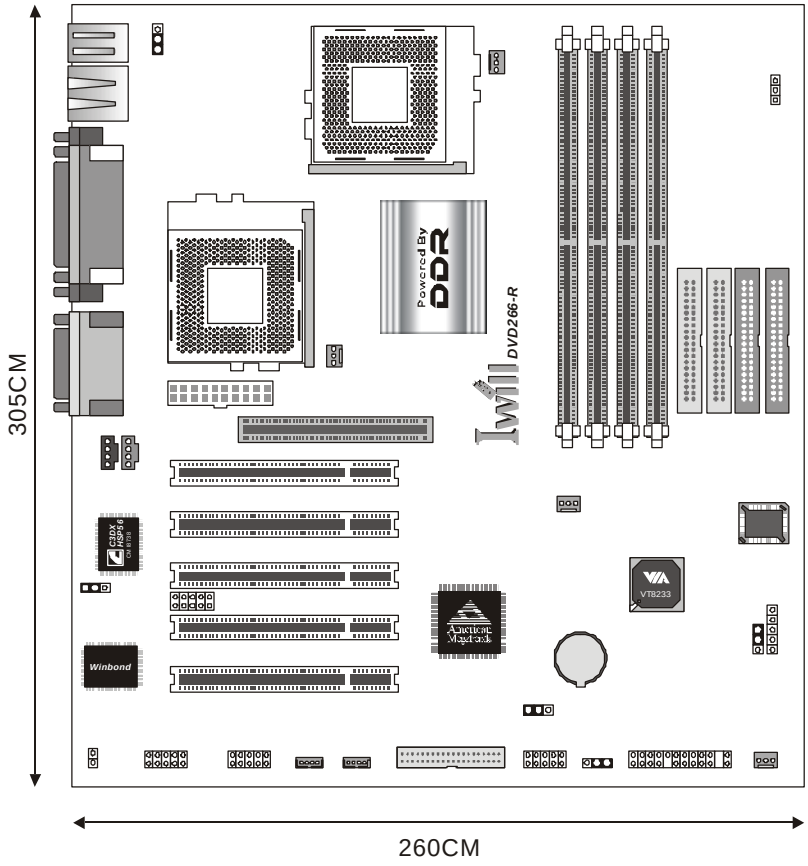
1:5V	6:USBDT3+
2:5V	7:GND
3:USBDT2-	8:GND
4:USBDT3-	9:GND
5:USBT2+	10:NC

1.4.12ATX power connector (J37)



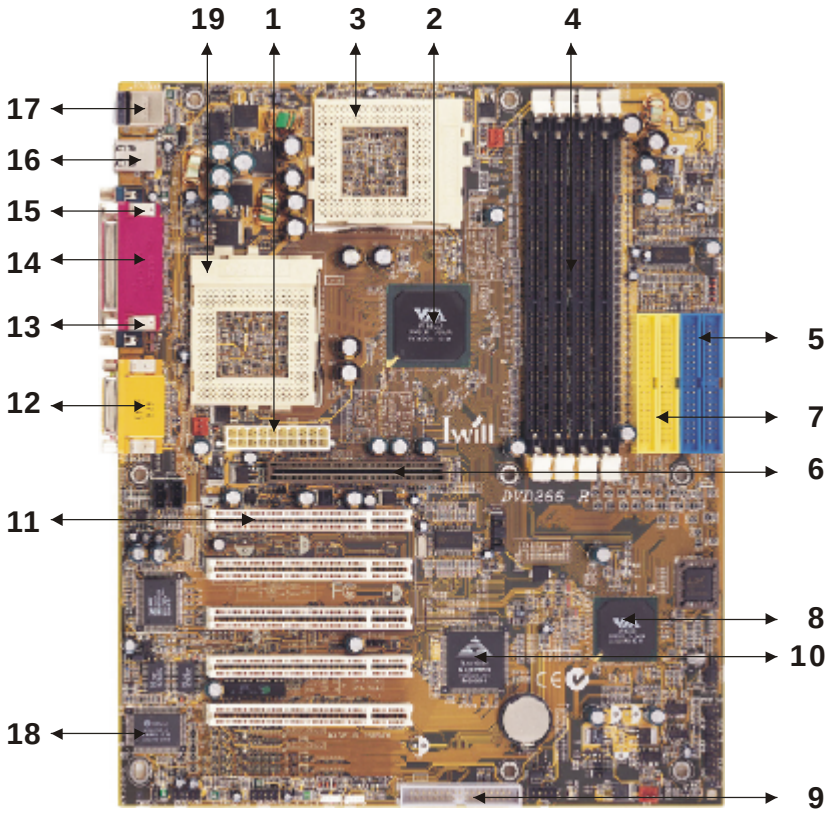
Pin No.	Definition	Pin No.	Definition
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	Ground	13	Ground
4	+5V	14	Power Supply On
5	Ground	15	Ground
6	+5V	16	Ground
7	Ground	17	Ground
8	Power Good	18	-5V
9	+5V Standby	19	+5V
10	+12V	20	+5V

1.5 Form Factor



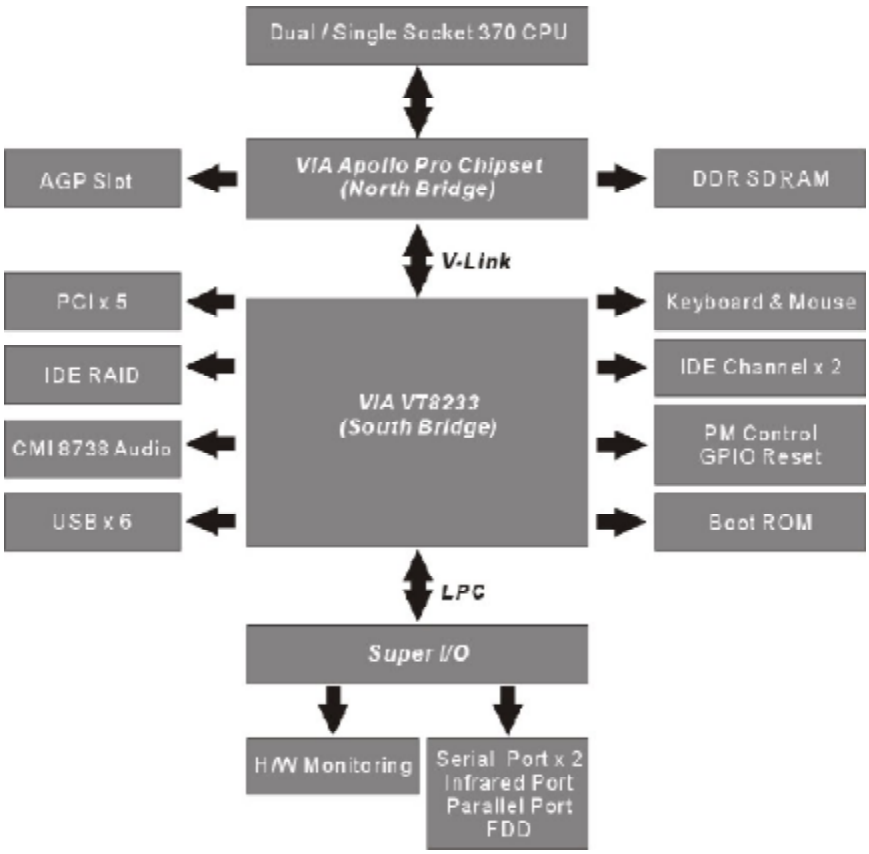
2 Features

2.1 Motherboard Components Placement



NO.	Description
1	ATX Power connector
2	VIA VT8633
3	CPU 0 Socket
4	System Memory Socket (DDR)
5	On board IDE Channels
6	AGP slot
7	IDE RAID Channels
8	VIA VT8233
9	FDC connector
10	AMI IDE RAID Chip (MG80649)
11	5 x PCI slots
12	Joystick, Midi Line In / Out, Mic In
13	COM2
14	Parallel connector
15	COM1
16	USB ports
17	PS2 Mouse / Keyboard
18	Winbond (W83627HF)
19	CPU 1 Socket

2.2 Block Diagram



2.3 Specifications

Processor/Socket 370

Supports Socket370 processors
Supports 66M/100M/133MHz Front Side Bus
Support Dual or Single Intel Pentium III (Cu-256, FCPGA) CPU from 500MHz to 1.13GHz or higher
Supports Single Intel Celeron (Cu-128, FCPGAM) CPU from 566MHz to 800MHz or higher

CPU Frequency / Voltage Selection

Supports Vcore selection from BIOS
Supports CPU Multiplier selection by BIOS (from 2X to 12X)
Supports CPU External Frequency selection by BIOS

Memory

DRAM interface may be faster/slower than CPU by 33MHz
Supports PC2100/1600 DDR Memory
Supports Unbuffered/Registered DDR memory module
Supports 16M/64M/256M/512M SDRAM
Maximum System Memory up to 4GB

Graphics

Supports AGP4x/AGP2x Mode

General I/O

PCI 2.2 compliance
Supports 32-bit/33MHz PCI interface
Supports UDMA 100/66/33
Supports LPC interface
Supports Floppy interface
Supports 16550A UART interface
Supports ECP/EPP interface
Supports PS2 interface
Supports SIR/CIR interface
Supports USB interface

RAID Support (DVD266-R only)

Supports 2 ATA66/100 channels
Supports RAID Level 0/1/0+1
Supports “SPARE” feature
Supports Win9X/WinNT/Win2k/Linx

On board PCI Audio

C-Media CM8738 4.1channel Hardware Sound on board

Management

Supports Voltage monitoring
Supports Fan control signal
Supports Temperature sensor
Supports Chassis Intrusion
Supports Power on by Ext. Modem/Int. Modem/RTC/PME
Supports Resume by LAN/Ext. Modem/Int. Modem/PS2 Keyboard/ PS2 Mouse/RTC/PME
Supports ACPI Blinking LED
Supports APM/DMI/SMBUS/PnP
Supports BIOS ROM Flash Control
Supports Manually Assign PCI IRQ

Expansion Slot

Four DDR sockets
One Universal AGP slot
Five 32bit/33MHz Bus Master PCI slots
Two IDE connectors
Two IDE RAID connectors
One FDC connector
Two Internal USBx2 connectors

Acessory

One Operation Manual
One 34-pin floppy cable
Two 40-pin ATA 100/66 IDE cables
Two High Quality CPU Coolers
One IWILL Power Installer CD
Two cpu Fans

3 Hardware Setup

3.1 Before Installation

For installation, you may need some or all of the following tools:
Medium size flat blade screwdriver
Medium size Phillips head screwdriver
A 3/16 inch nut driver or wrench

Users must follow these guidelines to ensure the motherboard is protected during installation.

1.Make sure your computer is powered-off wheneven work in with inside components

2.The motherboard, like all other electronic equipment, is sensitive to static. Please take the proper precautions when handling it. If possible, ground yourself by touching a metal table or desk. keep the board in its conductive wrapping until it is configured and ready to be installed in your system.

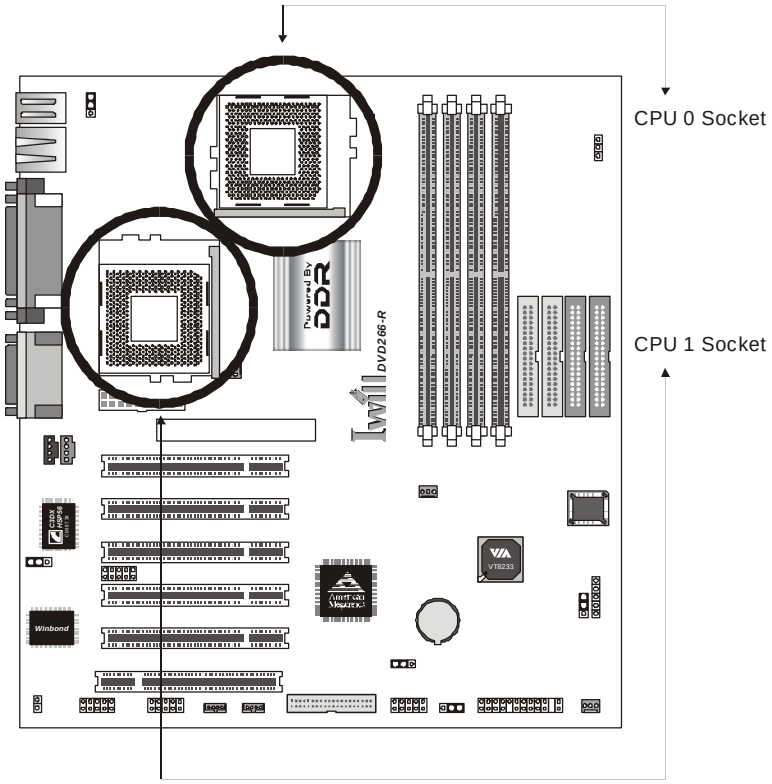
3.Keep all magnets away from both your hard and floppy disk drives, especially magnetic screwdrivers. Keep both floppy and hard disks apart if disassembled.

4.Keep water and liquids away from your computer and its components.

3.2 Install the Processor

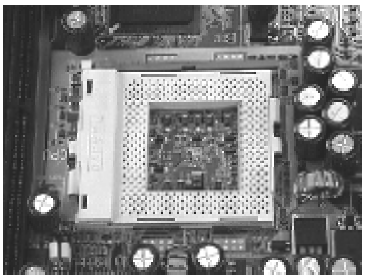
The CPU should have a fan attached to it to prevent overheating.

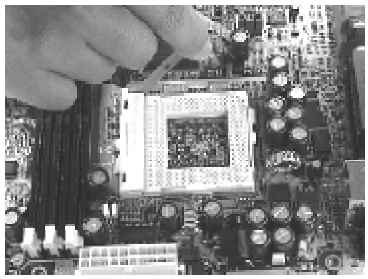
Be sure that there is sufficient air circulation across the processors heatsink by regularly checking that your CPU fan is working. Without sufficient circulation, the processor could overheat and damage both the processor and the motherboard. You may install an auxiliary fan, if necessary.



Step1:

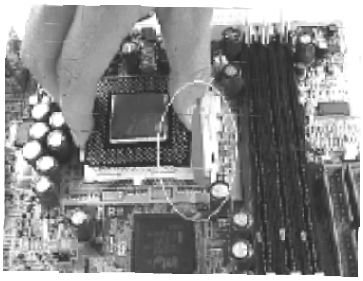
Locate the ZIF socket and open it by first pulling the lever of socket upward.





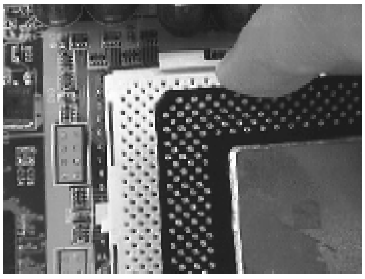
Step2:

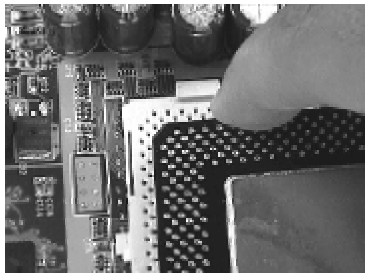
Insert the CPU into the socket. Please keep the lever right angle when inserting CPU.



Step3:

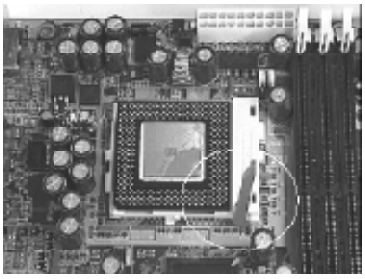
When inserting the CPU please note the correct orientation as shown. The notched corner should point toward the end of the lever.

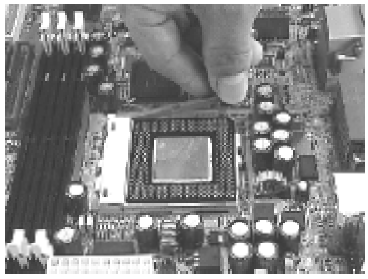


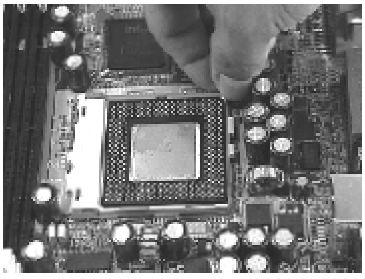


Step4:

Push the lever down to close the socket.

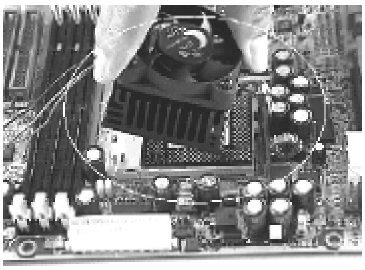
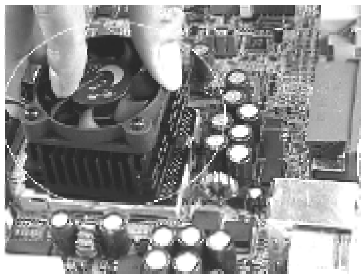






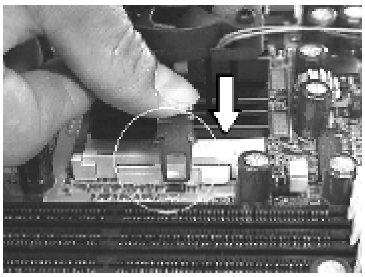
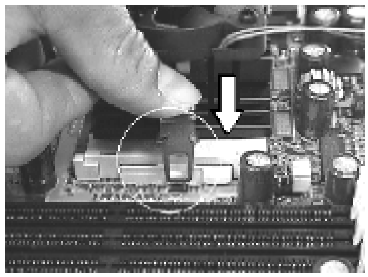
Step 5:

Attach the heatsink onto the CPU.

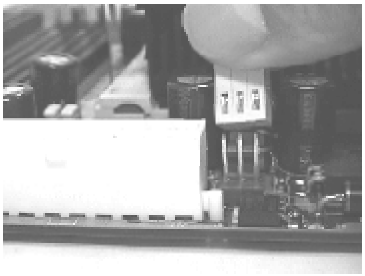
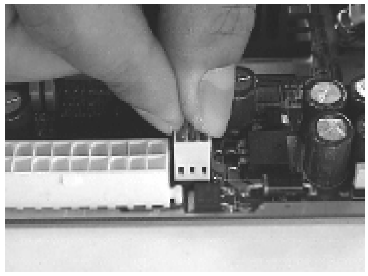
Step6:

Push the clip of heatsink downward to hock the ear of socket firmly.

Step7:

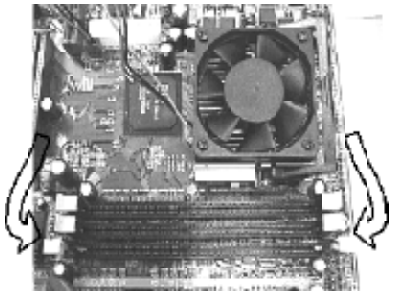
Finally, attach the fan cable to the CPU fan header FCPU.

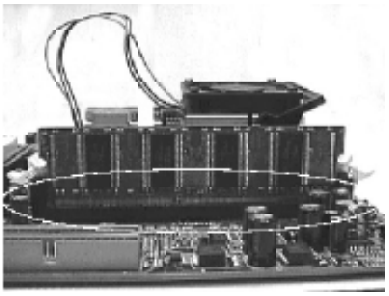
3.3 Install Memory Modules

The motherboard has four sockets for DDR memory module and supports the maximum memory capacity up to 4GB. These architecture to provide the best choice for performance.

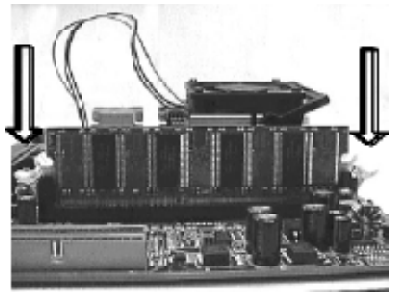
Step 1:Open latches of DIMM socket



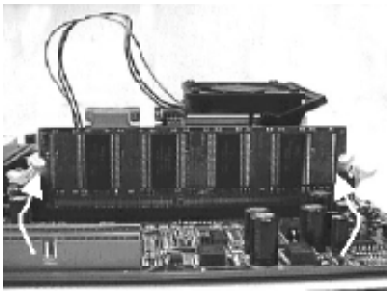
Step 2:Proofread the RAM module to the DIMM Socket.



Step 3:Insert the RAM module into the DIMM socket.



Step 4:Press the latches into the notches of the RAM module.



3.4 ATX Power Supply Connector

3.5.1 Power on procedures

STEP	Description
1	After all connections are made, close the System Case
2	Be sure that all switches are off.
3	Connect the power cord into the power suppply located on the back of your system case.
4	Connect the power coard a power outlet that is equipped with a surge protector.
5	Many of the power supply support 110V/220V by a switch setting. Switch your power supply to the correct supply voltage.
6	Turn on your system as the following steps a. The monitor b. The external devices. c. The computer system.

The power LED on the front panel of the chassis will light. After few seconds, the system will then run power-on tests. Some additional messages will appear on the screen during the test. If you do not see anything within 30 seconds from the time you turn on the power, the system may have failed a power-on test. Recheck the jumper settings and connections or call your retailer for assistance.

3.5.2 Power off procedures

STEP	Description
1	Exit from all the software applications.
2	shut down your operating system.
3	Switch off power button. If you are using Win 95/98,the power supply should turn off automatically after Windows shut down.
4	Turn off all external devices.
5	Turn off your monitor.

3.5 Back Panel

Function	color	Description
PS2/Mouse	Green	This connector can be used to support a PS/2 mouse
PS2/ keyboard	Purple	This connector can be used to support a PS/2 keyboard.
Universal Serial Bus	Black	This motherboard has two USB ports, any USB-compatible peripherals and/or hub can be connected into either USB port.
Serial port COM1& COM2	Teal	Two serial port is ready for a modem or other serial devices.
Parellel port	Burgundy	This connector is used for printers, or other parallel devices.
Joystick, Midi and Audio Port	Gold	You may connect joysticks or game pads to this connector for playing games, or connect MIDI devices for playing / editing professional audio. Line Out (Lime color) can be connected to headphones or powered speakers. Line In (Light Blue color) allows audio sources to be recorded by your computer or played through the Line Out connector. Mic (Pink color) allows microphones to be connected for inputting voice.

The PS/2 mouse and PS/2 keyboard can be auto-detected by this motherboard. That means if you plug the PS/2 keyboard into the mouse connector, it still can work without any trouble and vice versa. It is recommended that you turn off the computer before connecting or disconnecting keyboard and/or mouse.

4 BIOS Setup

4.1 PhoenixNet Introduction

PhoenixNet is a *service* that provides PC users with best-of-breed, free, software services to support their PC hardware and software and to turn their computer into a powerful tool for communication, entertainment, education and business

4.1.1 Internet Launch System

The PhoenixNet Internet Launch System (ILS) is a patent-pending technology built into the firmware to enable online PC users worldwide to communicate with PhoenixNet and to receive the free PhoenixNet services. ILS resides safely within ROM and is activated the first time a user launches a PhoenixNet-enabled PC with a Windows 98 Operating System.

4.1.2 PhoenixNet Online Services

When the PhoenixNet ILS detects an Internet connection, it makes contact with the PhoenixNet server and delivers user-selectable services from PhoenixNet's Internet Partners. These services are delivered to the user as hotlinks on the desktop and in the web browser or, as applications that **PhoenixNet automatically packages, downloads and installs.**

4.1.3 PhoenixNet Online Services

Manage & protect your computer and your files
Antivirus.com Driveway Help.com

Turn your computer into a communication tool
RocketTalk FireTalk Adobe ActiveShare

Turn your computer into an entertainment center
Real JukeBox NetRadio

Save time and money when shopping online
MySimon CNET.com

Best of the Web…
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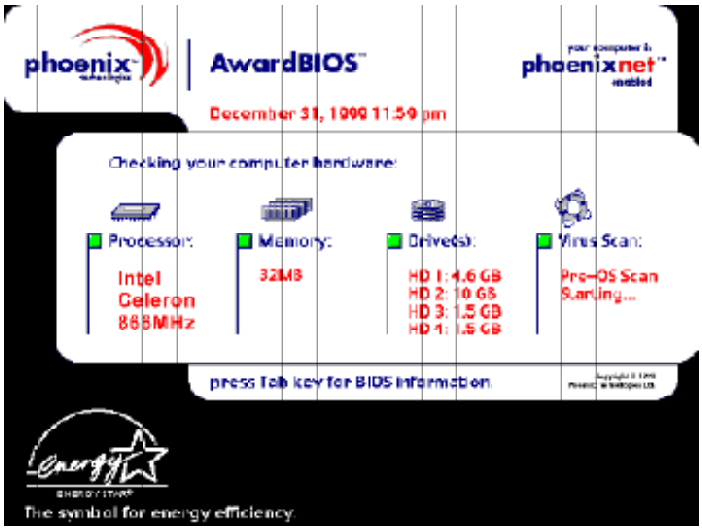


4.1.4 User Boot

1	User reads system information from graphic Launch Screen.
2	User registers MS Windows and completes MS OOBE.
3	User accepts/Rejects PhoenixNet service.
4	User accepts/Rejects PhoenixNet ISP partnery.
5	PhoenixNet and ISP icon appear on desktop.

4.1.5 Internet Access

1	PhoenixNet sets desktop icons & browser defaults.
2	New browser window appears linking to *www.phoenixnet.com*.
3	User selects Phoenixnet partner software & services.
4	User enters name, e-mail and country
5	PhoenixNet downloads and installs selected partner software in the background, with one mouse-click.
6	User receives monetary reward by e-mail.
7	User receives ongoing PhoenixNet services to enhance their PC and Internet experience.

4.2 BIOS Setup

4.2.1 Upgrade BIOS

The BIOS can be upgraded from a diskette with the Award Flash utility — AWDFLASH.EXE. The BIOS image file, and update utility are available from IWILL's WEB site:

http://suport.iwill.net

4.2.2 Enter BIOS setup program

Power-on the system by either pressing the Power-On button, or by using any of the power-on features provided by the motherboard. Then, press the <Del> key after the Power-On Self Test (POST), and before the scanning of IDE devices. Simply look for the message "Press DEL to enter SETUP" displayed at the bottom of the screen during the boot up process. If the message disappears before you've had a chance to respond, you can restart the system by

Turning off the system power then turn it on again, or

Pressing the "RESET" button on the system case, or

Pressing <Ctrl>, <Alt> and <Del> keys simultaneously.

Generally, the BIOS default settings have been carefully chosen by the system manufacturer to provide the absolute maximum performance and reliability. It is very dangerous to change any setting without full understanding. We strongly recommend that you.
DO NOT update your BIOS if the system works perfectly.
DO NOT change any setting unless you fully understand what it means.

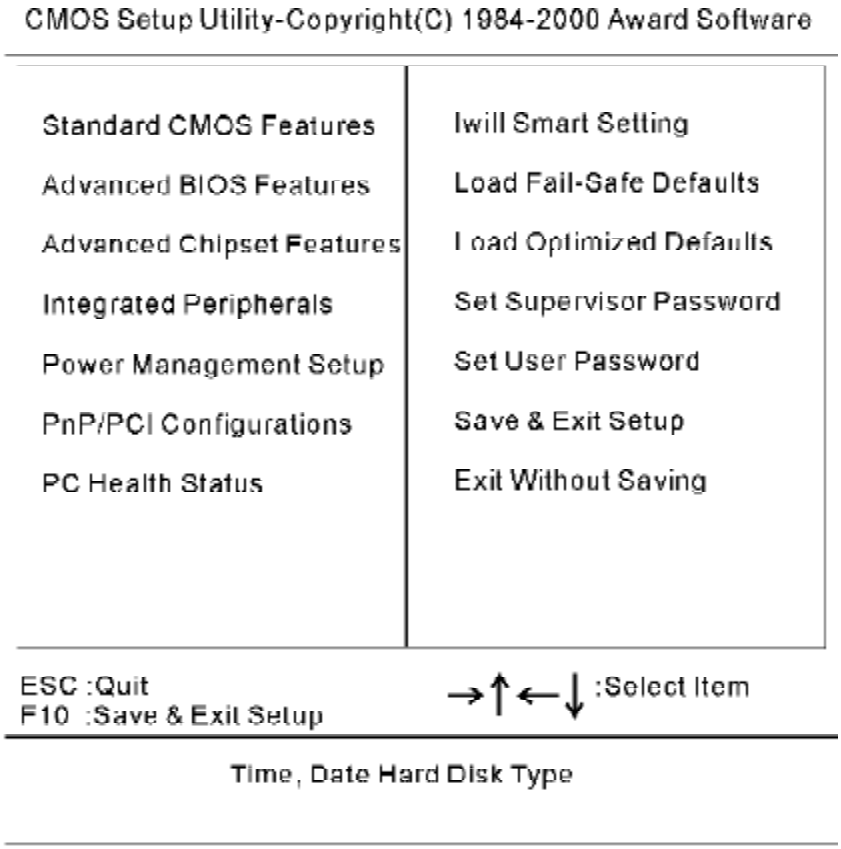
4.2.3 Using BIOS setup program

Up	Move to the previous field
Down	Move to the next field
Left	Move to the field on the left hand side
Right	Move to the field on the right hand side
<Esc>	Quit from setup program without saving changes, or Exit from current menu page and return to main menu page
<PgUp> or <+>	Select the previous value for a field
<PaDn> or <->	Select the next value for a field
<F1>	General Help
<F2>	Item Help
<F5>	Previous Values
<F6>	Fail-Safe Defaults
<F7>	Optimized Defaults
<F10>	Save the current value and exit setup program

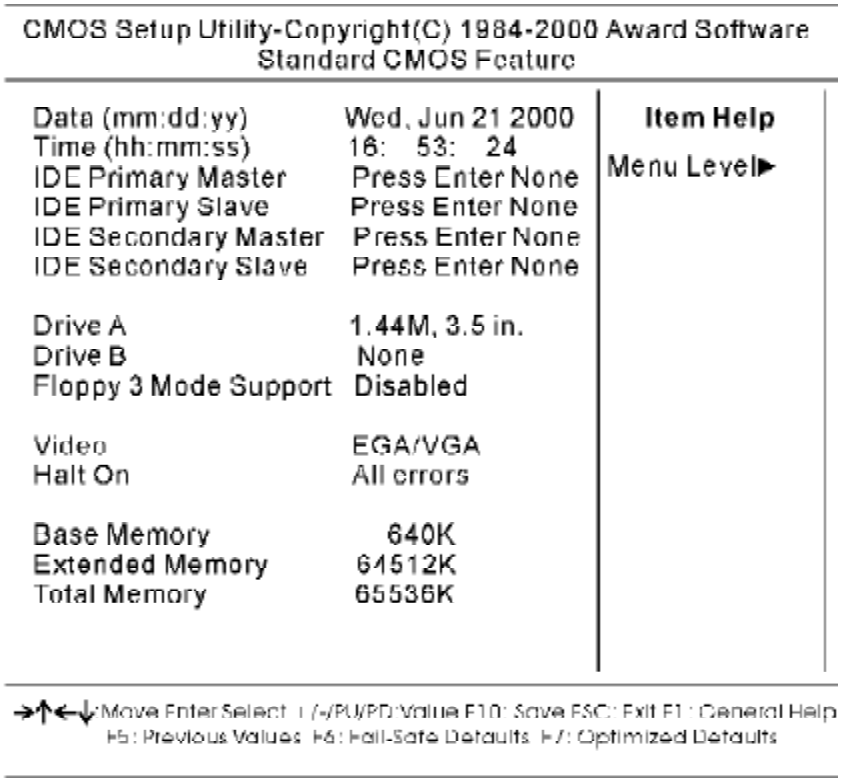
If the system is no longer able to boot after changing the settings, the only way to recover it is to clear the data stored in RTC CMOS. To reset the RTC CMOS data, take the JP1 (CMOS) jumper cap off pins 1-2, place onto pins 2-3, and then place back onto pins 1-2 again. This will return the RTC to the default setting. Then, get into the BIOS setup program , choose Load Fail-Safe Defaults ; Load Optimized Defaults, and select the original manufacturer default settings in your CMOS.

4.3 Main Menu

The main menu allows you to select from several setup pages. Use the arrow keys to select among these pages and press <Enter> key to enter the sub-menu. A brief description of each highlighted selection appears at the bottom of the screen.



4.4 Standard CMOS Features



4.4.1Date

This field specifies the current date. The date format is <month>, <day>, and <year>.

4.4.2 Time

This field specifies the current time. The time format is <hour>, <minute>, and <second>. The time is calculated based on the 24-hour (military-time) clock.

4.4.3 IDE Primary Master / Primary Slave / Secondary Master / Secondary Slave

Press “Enter” to enter next page for detail hard drive setting.

4.4.3.1 IDE HDD Auto-Detection

Auto-Detect the HDDs Capacity, and its parameters, ex: Cylinder, Head and Sector.

4.4.3.2 IDE Primary Master / Primary Slave / Secondary Master / Secondary Slave

This field specifies type of drive that corresponds to the drive installed in your system. If you select User, please specify the correct number of Cylinders, Heads, and Sectors.

Manual	Selecting Manual lets you set the remaining fields on this screen. Selects the type of fixed disk.
Auto **(Default Vaule)**	BIOS automatically fills in the values for the cylinders, heads and sectors fields.
None	Any Disk Drives are attached

4.4.3.3 Capacity Auto Display your disk drive size

4.4.3.4 Access MODE

This field specifies the IDE translation mode.

CHS	Specifies traditional CHS addressing mode.
LARGE	Specifies extended CHS translation mode
LBA	Specifies LBA translation mode.
AUTO **(Default Vaule)**	BIOS specifies translation method automatically.

4.4.3.5 Cylinders
Set the number of cylinders for this hard disk.
4.4.3.6 Heads
Set the number of read/write heads
4.4.3.7 Precomp
Setting a value of 65535 means no hard disk
4.4.3.8 Sectors
Set the number of sectors per track

4.4.4 Drive A / Drive B

This field specifies the traditional type of floppy drives.

None **(*Drive B default)**	Any Floppy drive is connected
360K, 5.25 in.	Specifies extended CHS translation mode
1.2M, 5.25 in.	A 1.2M floppy drive is connected
720K, 3.5 in.	A 720K floppy drive is connected.
1.44M, 3.5 in. **(*Drive B default)**	A 1.44M floppy drive is connected
2.88M, 3.5 in.	A 2.88M floppy drive is connected

4.4.5 Floppy 3 Mode Support

3 Mode floppy drive is a type of 3.5-inch drive used by NEC PC98 computers. It supports both 1.2M and 1.44M formats using the same drive. This field specifies which drive supports 3 Mode. When a floppy drive is specified to support 3 Mode, the respective drive setting in “Drive A / Drive B” field will be invalid.

Disabled **(Default Value)**	No 3 Mode drive is connectedd
Drive A	A 3 Mode drive is connected as drive A
Drive B	A 3 Mode drive is connected as drive B
Both	Both drive A and drive B are 3 Mode drives

4.4.6 Video

EGA/VGA **(Default Value)**	Specifies EGA or VGA adapterd
CGA 40	Specifies CGA adapter with 40 column mode
CGA 80	Specifies CGA adapter with 80 column mode
MONO	Specifies Monochrome adapter

4.4.7 Halt On

All Errors **(Default Value)**	Each time the BIOS detects a non-fatal error, the system will stop and display an error message
No Errors	The system will stop for any errors that are detected
All, But Keyboard	The system will stop for any errors except keyboard error
All, But Diskette	The system will stop for any errors except diskette error
All, But Disk/Key	The system will stop for any errors except diskette and key board errors

4.4.8 Base Memory

The POST (Power-On Self Test) determines the amount of base (conventional) memory installed in the system. The value of the base memory is typically 640K. This field has no options.

4.4.9 Extended Memory

The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1MB in the processor's memory address map. This field has no options.

4.4.10 Total Memory

Displays the total memory available in the system.

4.5 Advanced BIOS Features

4.5.1 Virus Warning

When this function is enabled, the BIOS monitor the boot sector and partition table of the hard disk drive for any attempt at modification. If an attempt is made, the BIOS will halt the system and then display an error message. Afterwards, if necessary, you can run an anti-virus program to locate and remove the problem before any damage is done.

Many disk diagnostic programs will attempt to access the boot sector table, which can cause the above warning message. If you run such a program, we recommend that you first disable the Virus Warning function beforehand.

Enable, Disabled **(Default Value)**

4.5.2 CPU Internal Cache

This field configures the CPU internal cache (L1 cache).

Enable **(Default Value)**, Disabled

4.5.3 External Cache

This field configures the system's external cache (L2 cache).

Enable **(Default Value)**, Disabled

4.5.4 CPU L2 Cache ECC Checking

This field specifies whether the CPU L2 cache supports ECC or not.

Enable, Disabled **(Default Value)**

4.5.5 Proccessor Number Feature

Enable, Disabled **(Default Value)**

4.5.6 Quick Power On Self Test

This field allows the system to skip certain tests while booting. This will decrease the time needed to boot the system.

Enable **(Default Value)**, Disabled

4.5.7 First / Secondary / Third / Other Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items.

Floppy, LS120, HDD-0, SCSI,RAID 100, CDROM, HDD-1, HDD-2, HDD-3, ZIP 100 LAN, Disabled

4.5.8 Swap Floppy Drive

When enabled, floppy drives A and B will be exchanged without the user physically changing the connection on the cable.

Enable, Disabled **(Default Value)**

4.5.9 Boot Up Floppy Seek

Seeks disk drives during boot up. Disabling speeds boot up.

Enable**(Default Value)**, Disabled

4.5.10 Boot Up NumLock Status

This field determines the configuration of the numeric keypad after system boot up. If On, the keypad uses numbers keys. If Off, the keypad uses arrow keys.

ON **(Default Value),** Off

4.5.11 Gate A20 Option

This field configures how the gate A20 is handled. The gate A20 is a device used to address memory above 1 MB. At first, the gate A20 was handled from a pin on the keyboard. While some keyboards still provide this support, it is more common, and much faster, for modern system chipsets to provide support for gate A20.

Fast	GateA20 signal supported by core logic.
Normal **(Default Vaule**)	GateA20 signal supported by keyboard controller.

4.5.12 Typematic Rate Setting

This field determines if the typematic rate is to be used. When enabled, the BIOS will report (after a moment) that the key has been depressed repeatedly. When disabled, the BIOS will report only once if a key is held down continuously. This feature is used to accelerate cursor movements using the arrow keys.

Enable, Disabled **(Default Value)**

4.5.13 Typematic Rate (Chars/Sec)

When Typematic Rate Setting enabled, this field specifies how many characters will be displayed in one second when a key is held down continuously.

6 **(Default Value)** 8,10, 12,15,20,24,30

4.5.14 Typematic Delay (Msec)

When enabled, typematic delay allows you to select the time delay between when the key is first pressed and when the acceleration begins.

250msec **(Default Value)** 500msec, 750msec, 1000msec

4.5.15 Security Option

This field configures how the system security is handled. It works conjunction with SETTING SUPERVISOR / USER PASSWORD page to control the security level of the system.

Setup **(Default Value)**	System needs a password to enter BIOS setup program
System	System needs a password to boot

4.5.16 MPS Version Control For OS

1.1, 1.4 **(Default Value)**

4.5.17 OS Select for DRAM >64MB

When enabled, this field allows you to access the memory that is over 64MB under OS/2.

OS2, Non-OS2 **(Default Value)**

4.5.18 Report No FDD For WIN 95

For a floppy diskless system that runs Windows 95, this field should be set to Yes**.**

YES, NO **(Default Value)**

4.5.19 Video BIOS Shadow

When enabled, the video BIOS will be copied to system memory and increase the video speed.

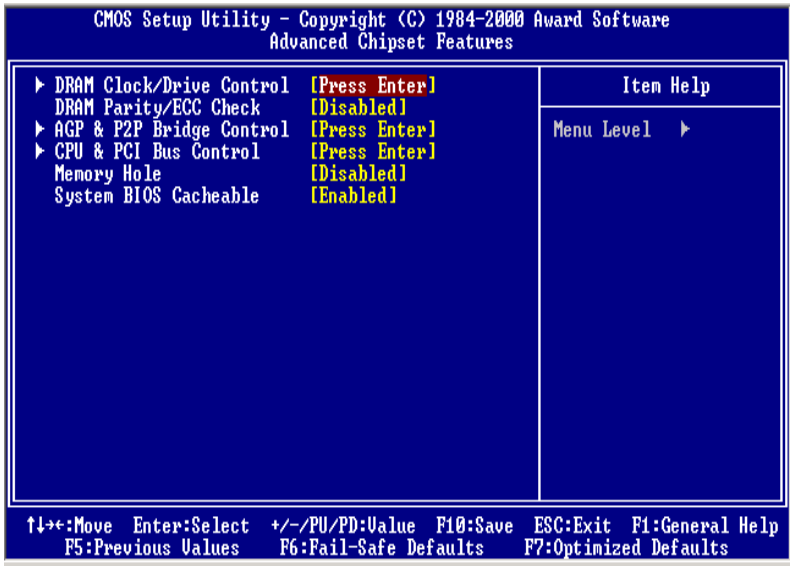
Enable**(Default Value)**, Disabled

4.5.20 C8000-CBFFF/CC000-CFFFF/D0000-D3FFF Shadow D4000-D7FFF/D8000-DBFFF/DC000-DFFFF Shadow

Enable, Disabled **(Default Value)**

4.6 Advanced Chipset Features

This setup page is used to specify advanced features available through the chipset. The default settings have been chosen carefully for most operating conditions. DO NOT change the value of any field in this setup page without full understanding.



DRAM Settings

The first chipset settings deal with CPU access to dynamic random access memory (DRAM). The default timings have been carefully chosen and should only be altered if data is being lost. Such a scenario might well occur if your system had mixed speed DRAM chips installed. Longer delays might result, however this preserves the integrity of the data held in the slower memory chips.

4.6.1 DRAM Clock

This field allows you to select the DRAM operating frequency to get better performance.

By SPD **(Default Value)**	
Host CLK	DRAM clock is the same speed as Front Side Bus
HCLK-33 MHz	DRAM clock is set 33 MHz less than the Front Side Bus
HCLK+33 MHz	DRAM clock is set 33 MHz more than the Front Side Bus

4.6.2 DRAM Timing

By SPD**(Default Value)**, Manual

4.6.3 DDR DRAM Cycle Length

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. Do not reset this field form tne default value specified by the system designer.

3**(Default Value)**, 2.5, 2

4.6.4 Bank Interleave

Select numbers of Bank to realize fast and seamless data access mode among many different pages.

Disabled **(Default Value)**, 2 Banks, 4Banks

4.6.5 VT8633 50H bit 4-0

4.6.6 DRAM Page-Mode

Disabled **(Default Value)**, Enabled

4.6.7 DRAM Parity / ECC Check

This item allows you to enable/disable the DRAM Parity/ECC Check.

Enabled, Disabled **(Default Value)**

4.6.8 AGP Aperture Size

This field specifies the size of system memory that can be used for AGP graphics aperture.

4M,8M,16M,32M,64M **(Default Value)**, 128M, 256M

4.6.9 AGP Mode

This item allows you to select the AGP Mode.

1X, 2X**(Default Value)**, 4X

4.6.10 AGP Driving Control

This item allows you to choose the AGP driving mode by Auot or manual.

Auto**(Default Value)**, Manual

4.6.11 AGP Driving Value

4.6.12 AGP Fast Write

Enable, Disabled **(Default Value)**

4.6.13 AGP Master 1 WS Write

Enable, Disabled **(Default Value)**

4.6.14 AGP Master 1 WS Read

Enable, Disabled **(Default Value)**

4.6.15 CPU IOQ Size

1 Level, 4 Level **(Default Value)**

4.6.16 CPU to PCI Write Buffer

Enable**(Default Value)**, Disabled

4.6.17 PCI Master O WS Write

Enable**(Default Value)**, Disabled

4.6.18 PCI Delay Transaction

Enable, Disabled **(Default Value)**

4.6.19 Memory Hole

In order to improve performance, certain space in memory is reserved for ISA cards. This memory must be mapped into the memory space below 16MB.

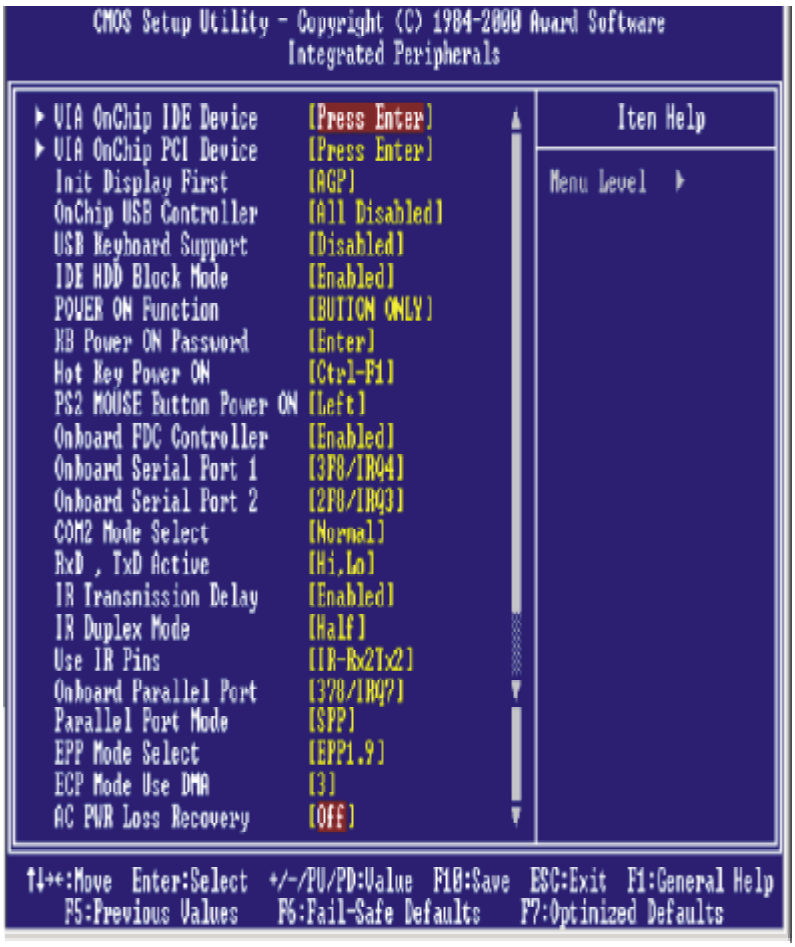
15M-16M, Disabled **(Default Value)**

4.6.20 System BIOS Cacheable

When enable accesses to the system BIOS will be cached

Enable **(Default Value)**, Disabled

4.7 Integrated Peripherals



4.7.1VIA OnChip IDE Device

4.7.1.1 On-Chip Primary IDE Channel 0

This field enables or disables the onboard IDE controller.

Enable **(Default Value)**, Disabled

4.7.1.2 On-Chip Secondary IDE Channel 1

This field enables or disables the onboard IDE controller.

Enable **(Default Value)**, Disabled

4.7.1.3Primary Master / Slave PIO

Secondary Master / Slave PIO

These fields configure the PIO (Programmable Input Output) transfer mode for each IDE devices. The maximum transfer rates of each PIO mode are listing as follow:

PIO Mode 0	3.3 MB/sec
PIO Mode 1	5.2 MB/sec
PIO Mode 2	8.3 MB/sec
PIO Mode 3	11 MB/sec
PIO Mode 4	16.6 MB/sec

Auto**(Default Value)**	Negotiated with device automatically
Mode 0	Use Mode 0 timing to access device
Mode 1	Use Mode 1 timing to access device
Mode 2	Use Mode 2 timing to access device
Mode 3	Use Mode 3 timing to access device
Mode 4	Use Mode 4 timing to access device

4.7.1.4Primary Master / Slave UDMA

Secondary Master / Slave UDMA

If you select Auto, the IDE controller uses Ultra DMA 33/66 Mode to access Ultra DMA-capable IDE devices.

Disabled, Auto **(Default Value)**

4.7.2 VIA OnChip PCI Device

4.7.2.1AC97 Audio

This item allows you to decide to enable/disable theVIA chipset family to support AC97 Audio.

Auto**(Default Value)**, Disabled

4.7.2.2AC97 Modem

This item allows you to decide to enable/disable the VIA chipset family to support AC97 Modem.

Auto , Disabled**(Default Value)**

4.7.2.3OnChip LAN

Enabled, Disabled **(Default Value)**

4.7.3 Init Display First

This item allows you to decide which slot to activate first, either PCI slot or AGP slot.

PCI Slot ,AGP **(Default Value)**

4.7.4 OnChip USB Controller

This item allows you to decide how many ports that you want to use.

All Disabled (Default Value), All Enabled, 1&2/1&3 USB Port, 1/2/3 USB Port

4.7.5 USB Keyboard Support

This item allows you to choose to support USB keyboard or not.

Enabled, Disabled **(Default Value)**

4.7.6 IDE HDD Block Mode

When enabled, the IDE controller will use the faster block mode to access devices.

Enable , Disabled**(Default Value)**

4.7.7 Power-On Functiom

Password	You can assign a password string through KB Power-On Pass word field.
Hot Key	You can assigh a hot key through the Hot Key Power-On field. Pressing this hot key will power-on our system.
Mouse / Hot Key	Double-Clicking the PS/2 mouse Left / Right button will power on tne system.
Button only **(Default Value)**	Simply power-on your system by pressing the Power-On button on the front panel of our PC case.
Keyboard 98	Enables Keyboard 98 function.This founction is good only for users of Keyboard 98.

4.7.8 KB Password Power-On

In yu wish to use this function, bring the cursor to the field writen Enter, then press <Enter>. The computer eill display the message, “Enter Password”. Type your password is displayed, re-type your password. The KBPower-On function will be in effect after you save and exit setup.

To disable a password, bring the cursor to the Enter field again, then press<Enter>. The computer will display the message, Enter Password Press <Enter>. Amessage will confirm that the password is disabled.

4.7.9 Hot Key Power-On

This field specifies key seclection for th eKeyboard-Power-On hot key.

Ctrl-F1, Ctrl-F2, Ctrl-F3, Ctrl-F4, Ctrl-F5, Ctrl-F6, Ctrl-F7, Ctrl-F8, Ctrl-F9, Ctrl-F10, Ctrl-F11, Ctrl-F12

4.7.10 Onboard FDC Controller

This field enables or disables the onboard floppy controller.

Enable **(Default Value)**, Disabled

4.7.11 Onboard Serial Port 1 / 2

These fields configure the onboard serial ports. There are several port addresses and IRQ channels to select from.

3F8 / IRQ 4 **(Default Vaule)**	Port address 3F8h, IRQ 4
2F8 / IRQ 3 **(Default Vaule)**	Port address 2F8h, IRQ 3
3E8 / IRQ 4	Port address 3E8h, IRQ 4
2E8 / IRQ 3	Port address 2E8h, IRQ 3
Auto	BIOS assigns port address and IRQ channel automatically.
Disabled.	Disables serial port

4.7.12 COM2 Mode Select

A second serial port is using a serial port bracket connected from the motherboard to an expansion slot opening.

IrDA, Normal**(Default Value)**, ASKIR

4.7.13 RxD, TxD Active

When setting the field to either IrDA or ASKIR, you must select the active level of receiving and transmission signal.

Hi, Lo **(Default Value)** /Lo, Hi/Lo, Lo/Hi, Hi

4.7.14 IR Transmission Dealy for IrDA

When setting the field to either IrDA or ASKIR , you must select whether or not you require a delay between IR transmissions.

Enable **(Default Value)**, Disabled

4.7.15 IR Duplex Mode

When setting the field t either IrDA or ASKIR , you must select th emode of receiving and transmitting signals.

Full , Half **(Default Value)**

4.7.16 Use IR Pins

IR-Rx2Tx2 **(Default Value)**, RxD_2, TxD_2

4.7.17 Onboard Parallel Port

This field configures the onboard parallel port. There are several port addresses and IRQ channels to select from.

378 / IRQ 7 **(Default Value)**	Port address 378h, IRQ 7
278 / IRQ 5	Port address 278h, IRQ 5
3BC / IRQ 7	Port address 3BCh, IRQ 7
Disabled	Disables parallel port

4.7.18 Parallel Port Mode

This field configures the operating mode of an onboard parallel port. Ensure you know the specifications of your parallel port devices before selecting field.

SPP **(Default Value)** , EPP, ECP, ECP+EPP

4.7.19 EPP Mode Select

When the Parallel Port Mode field is configured as EPP, ECP+EPP mode, the EPP version needs to be specified. Please refer to ypur peripheral document before selecting field.

EPP1.7	Use EPP 1.7 protocol
EPP1.9 **(Default Value)**	Use EPP 1.9 protocol

4.7.20 ECP Mode Use DMA

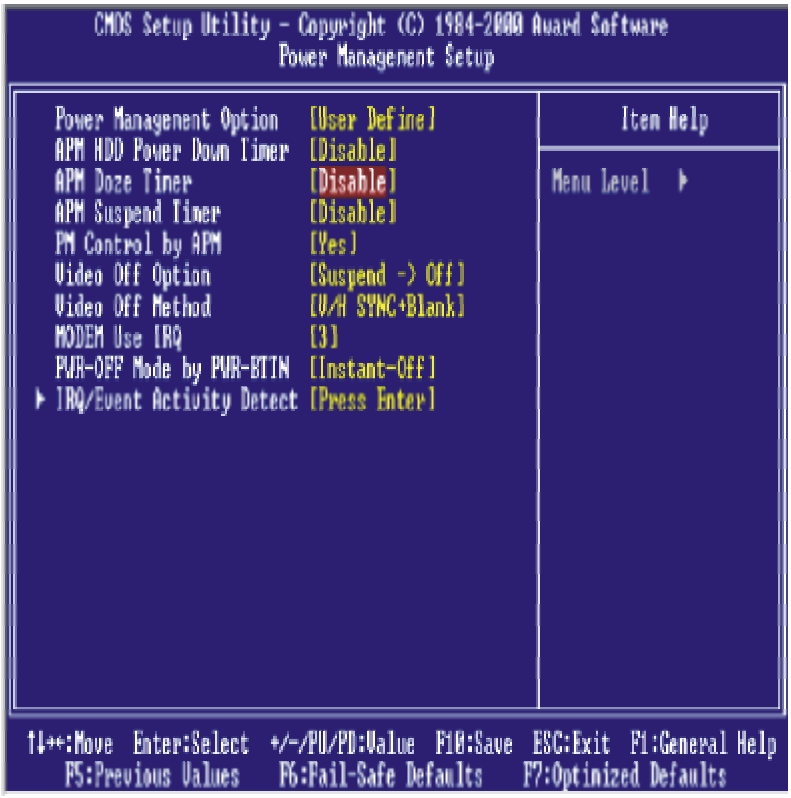
When the Parallel Port Mode field is configured as ECP, it needs a DMA channel for data transfer. This field specifies the DMA channel for ECP parallel port use.

1	Use DMA channel 1
3**(Default Value)**	Use DMA channel 1

4.7.21 AS PWR Loss Recovery

Off **(Default Value)** , Former-Sts

4.8 Power Management Setup



Each power-saving mode has a respective timer. The value of the timer can be assigned or reloaded and it will count down to zero. When the timer equals to zero, the system will be forced into the related suspend or power-saving mode. If any predefined signal or event is detected during the timer counting period, the timer restarts automatically.

4.8.1 Power Management

This feature allows the user to select the default parameters for the power-saving mode.

Min saving	When idle for one hour, the system entersuspend mode.
Max Saving	When idle for fifteen minutes, the system enters suspend mode.
User Define **(Default Vaule)**	User can specify the time the system enters suspend mode.

4.8.2 APM HDD Power Down Timer

This field specifies the time the system enters HDD power down. It is available only when the Power Management field is set to User Define.

1Min, 2Min, 3Min, 4Min, 5Min, 6Min, 7Min, 8Min, 9Min, 10Min,11Min, 12Min,13Min, 14Min, 15Min, Disable **(Default Value)**

4.8.3 APM Doze Timer Mode

This field specifies the timer value of Doze Mode. It is available only when the Power Management field set to User Define.

1Min, 2Min, 4Min, 6Min, 8Min 10Min, 20Min,30Min, 1Hour, Disable **(Default Value)**

4.8.4 APM Suspend Timer

This field specifies the time the system enters power-saving mode. It is available only when the Power Management field is set to User Define.

1Min, 2Min, 4Min, 6Min, 8Min 10Min, 20Min,30Min, 40Min, 1Hour, Disable **(Default Value)**

4.8.5 PM Control by APM

When enabled, an Advanced Power Management (APM) protocol will be activated to handle the power-saving mode.

NO, Yes **(Default Value)**

4.8.6 Video off Option

This field specifies the method that video subsystem used for power saving.

Always ON	Monitor will remain on during power saving modes.
Suspend Off	Monitor blanked when the systems enters the Suspend modes
All Modes Off	Monitor blanked when the system enters any power saving mode.

4.8.7 Video off Method

V/H SYNC+Blank **(Default Vaule)**	Turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	Writes blanks to the video buffer onlye.
DPMS	Initial display power management signaling with DPMS.

4.8.8 MODEM Use IRQ

This determines the IRQ in which the Modem can use.

3**(Default Value) ,** 4, 5, 7, 9,11, NA

4.8.9 PWR-Off Mode by PWR-BTTN

This field specifies the function of power button.

Instant-Off **(Default Vaule)**	When power button pressed, the system turns off immediately
Delay 4 Sec.	After the power button has been pressed and held for four seconds, the system turns off

4.8.10 IRQs Activity Monitoring

These are I/O events whose occurrence can prevent the system from entering a power-saving mode, or can awaken the system from such a mode. In effect, the system remains alert for anything that occurs to a device configured and recognized by the system, even when the system is in a power down mode.

4.8.10.1 VGA

When ON, your can set the VGA to awaken the system.

OFF **(Default Value)**, ON

4.8.10.2 LPT & COM

When On, any activity from one of the listed system peripheral devices or IRQs wakes up the system.

LPT/COM **(Default Value)**, COM, LPT, None

4.8.10.3 HDD & FDD

When On, any activity from either hard disk drive or floppy disk drive wakes up the system.

ON **(Default Value)**, OFF

4.8.10.4 PCI master

When On, the system can be resumed from power saving mode by any PCI / master activity signal.

OFF **(Default Value)**, ON

4.8.10.5 Wake up by PCI card

When enabled, you can “wake-up” your system using a PCI rev.2.2 card, such as a WOL card, connected in your PCI slot.

Enabled, Disabled **(Default Value)**

4.8.10.6 Wake Up by Ring/LAN

When enabled, the PC can power-on through an external modem connected to your PC. For example, you may send an e-mail message to your PC from another location, and this will power-on your PC. When using this feature, you must have a modem, and your PC must be turned off.

Enabled, Disabled **(Default)**

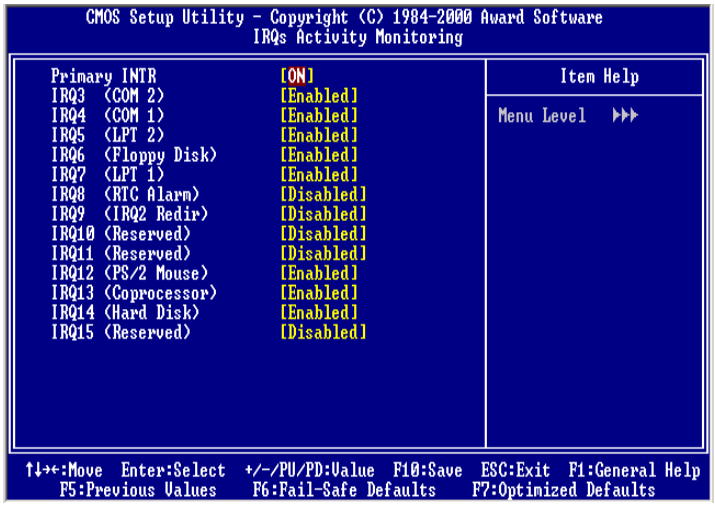
4.8.10.7 PWROn/Resume by Alarm

When enabled, you can set the date and time to automatically power-on your PC (similar to an alarm clock). The alarm from RTC (real-time clock) automatically turns on the system.

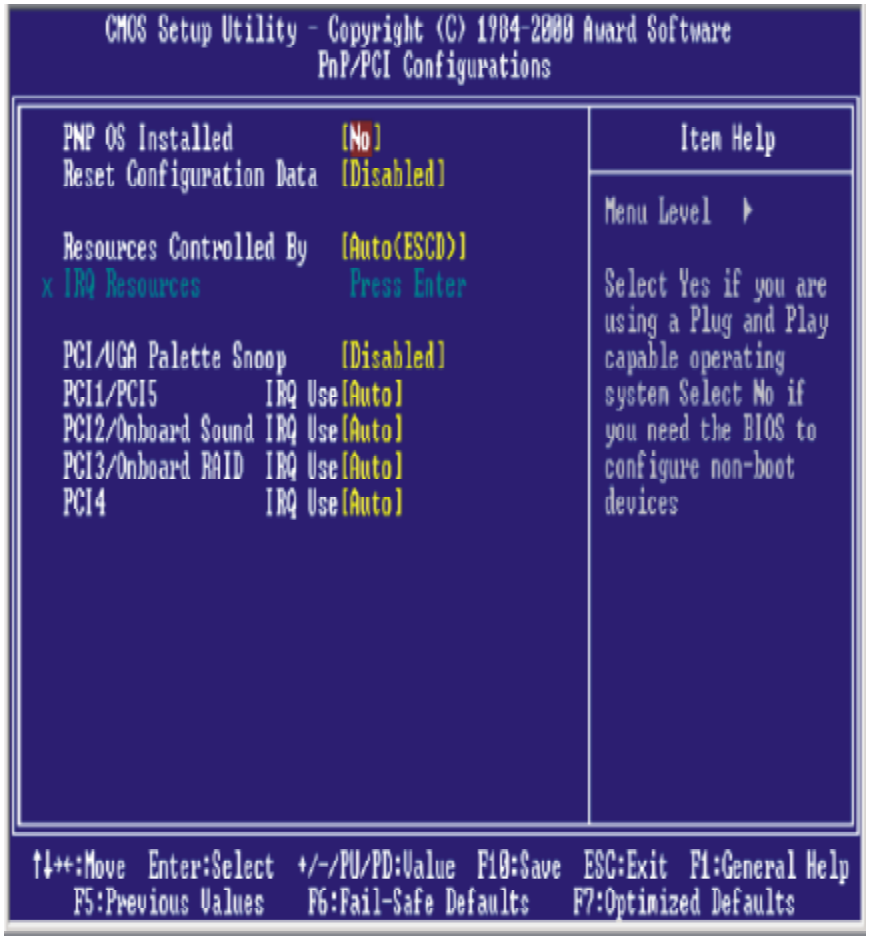
Enabled	Sets Date (0-31) and Timer (hr, min, sec) to power-on the PC. When date is set to 0, the Timer is set for every day.
Disabled **(Default Vaule)**	Disables RTC alarm function

4.8.10.8 IRQs Activity Monitoring

When On, any event that occurs will awaken the system after it has powered-down.The following is a list of IRQs, or 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.



4.9 PnP/ PCI Configurations



4.9.1 PNP OS Installed

The field specifies whether a Plug and Play operating system is installed.

Yes, NO **(Default Value)**

4.9.2 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.

Enable, Disabled **(Default Value)**

4.9.3 Resources Controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as WindowsÒ98/95/NT. If you set this field to “manual” choose specific resources by going into each of the sub menu that follows this field (a sub menu is preceded by a “Ø”).

Manual	Resources controlled by the user.
Auto(ESCD) **(Default Vaule)**	Resources controlled by BIOS automatically.

4.9.3.1 IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

4.9.3.1IRQ3/4/5/7/9/10/11/12/14/15 assigned to

PCI Device Reserved **(Default Value)**

4.9.4 PCI / VGA Palette Snoop

This field controls the ability of a primary PCI graphics controller to share a common palette with an ISA/VESA video or MPEG card.

Enabled	PCI VGA co-works with ISA MPEG card
Disabled **(Default Vaule)**	All cases except above.

4.9.5Assign IRQ For VGA

Enable **(Default Value)** , Disabled

4.9.6Assign IRQ For USB

Enable **(Default Value)** , Disabled

4.9.7Assign IRQ For PCI

PCI 1/5 IRQ

PCI 2/Onboard Sound

PCI 3/OnboardRAID

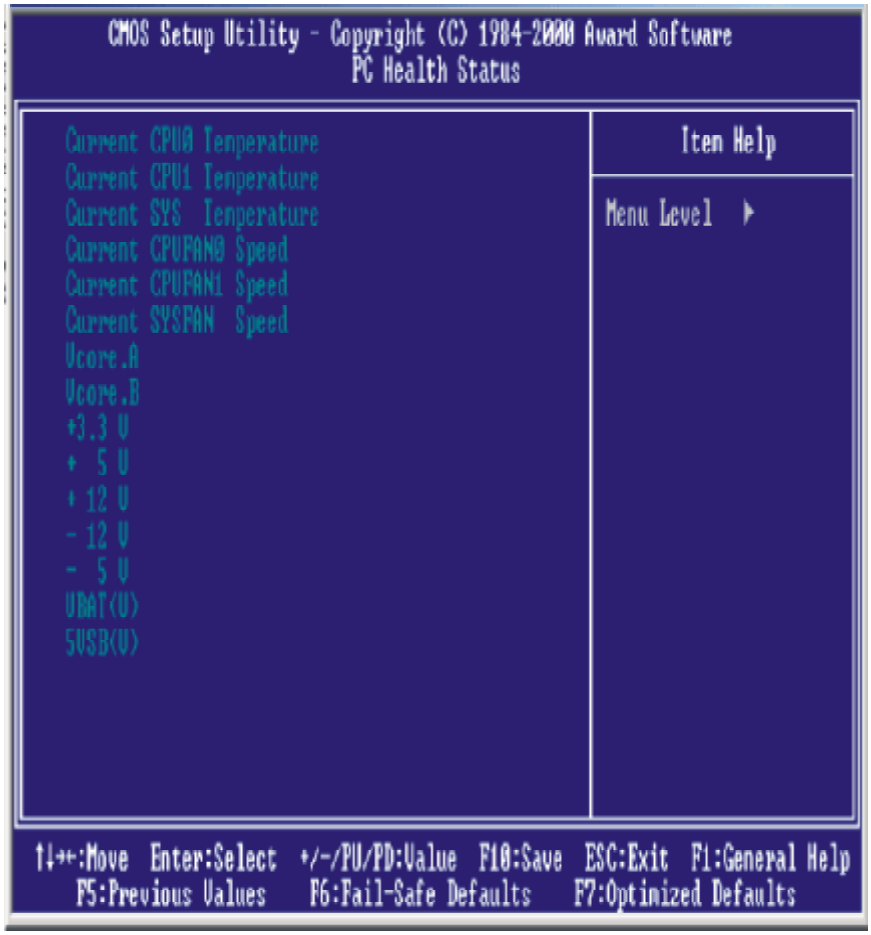
PCI 4

These fields set how IRQ use is determined for each PCI slot. The default setting for each field is Auto, which uses auto-routing to determine IRQ use.

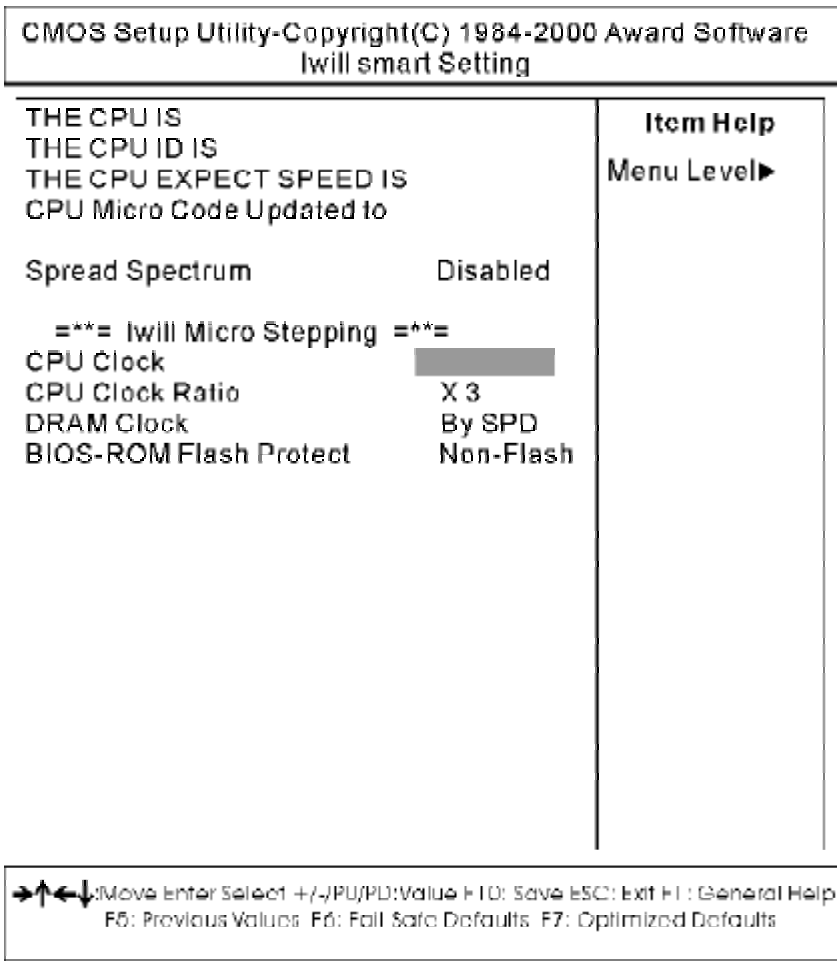
Auto **(Default Value)** 3, 4, 5, 7, 9, 10,11,12,14,15

4.10 PC Health Status

This page is monitoring your status of computer. On the screen displays CPU/System temperature, FAN speed, and voltages.



4.11 Iwill Smart Setting



Over-clocking is not guaranteed. Users must have substantial knowledge of proper CPU relative to adjusting CPU speeds. Over-clocking should be done only by experienced engineers who conduct tests.

4.11.1 Iwill MicroStepping

MicroStepping

Microstepping is Iwill's anther step forward to provides users a fuss free CPU frequency set up procedure. It contains two main functions, Auto Detecting CPUs speed and Micro Adjustable CPU FSB speed.

Auto Detecting CPU speed:

IWILL MicroStepping will auto detect the CPU's factory multiplier setting and CPU FSB to the factory default. This function provides a "fuss free" CPU set up process for the general users.

Micro Adjustable CPU FSB speed:

IWILL provides a user friendly overclocking function that allows users to experience the fun of overclocking. This function allows user to adjust CPU FSB by 1MHz interval. This is particularly useful when user wants to extract the most out of the purchased CPU. For example: you select from 100, 101, 102, 103, 104,105MHz and up to the maximum speed 200MHz that the system can sustained.

In the time should overclocking failed, MicroStepping will auto detects the CPU's factory multiplier setting and set the CPU FSB to default 100MHz, to protect the CPU installed.

Most of the CPUs sold in the market are with multiplier locked. In this case, the CPU can only function at it's factory multiplier setting even the multiplier setting is changed in the IWILL Bye Bye Jumper.

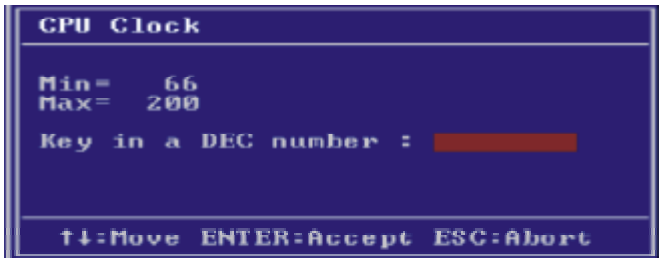
4.11.2 Spread Spectrum

This item configures radiation emitted from the system. When enabled, system will release less radiation.

Enabled, Disabled **(Default Value)**

4.11.3 CPU/DDR Clock

This field allows user to adjust the CPU external and to show the DRAM clock.



4.11.4 CPU Clock Ratio

3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5 ,8 8.5, 9, 9.5, 10, 11.5, 12

Note:BIOS will auto-detect and display your CPU Ratio

4.11.5 CPU Vcore Setting

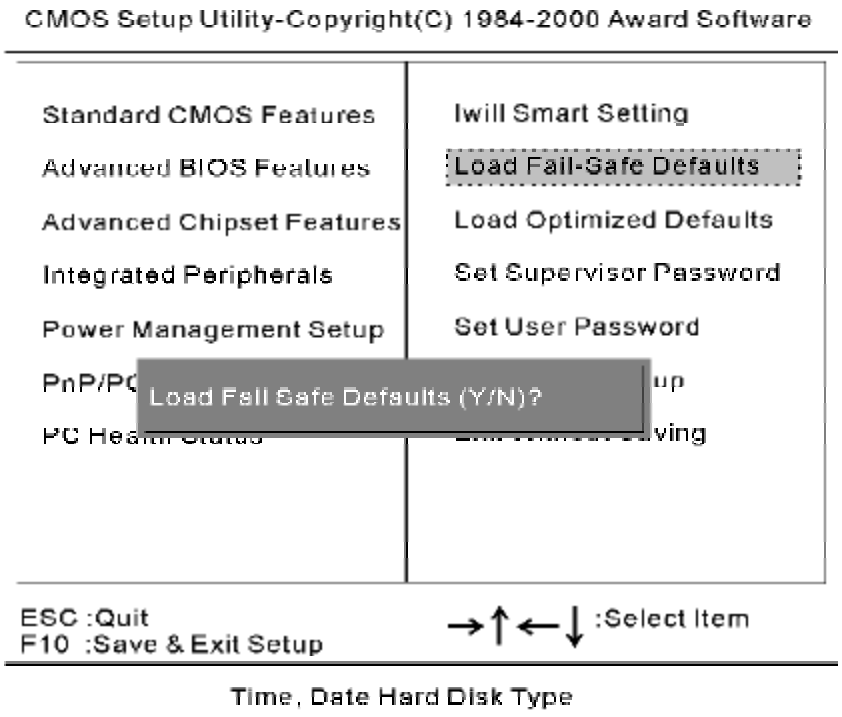
Auto **(Default Value)**, 1.60/1.65,/1.70/1.75/1.80/1.85/1.90/1.95/2.00/2.05V

4.11.6 BIOS-ROM Flash Protect

Non-Fresh	By BIOS
Freshable	By BIOS

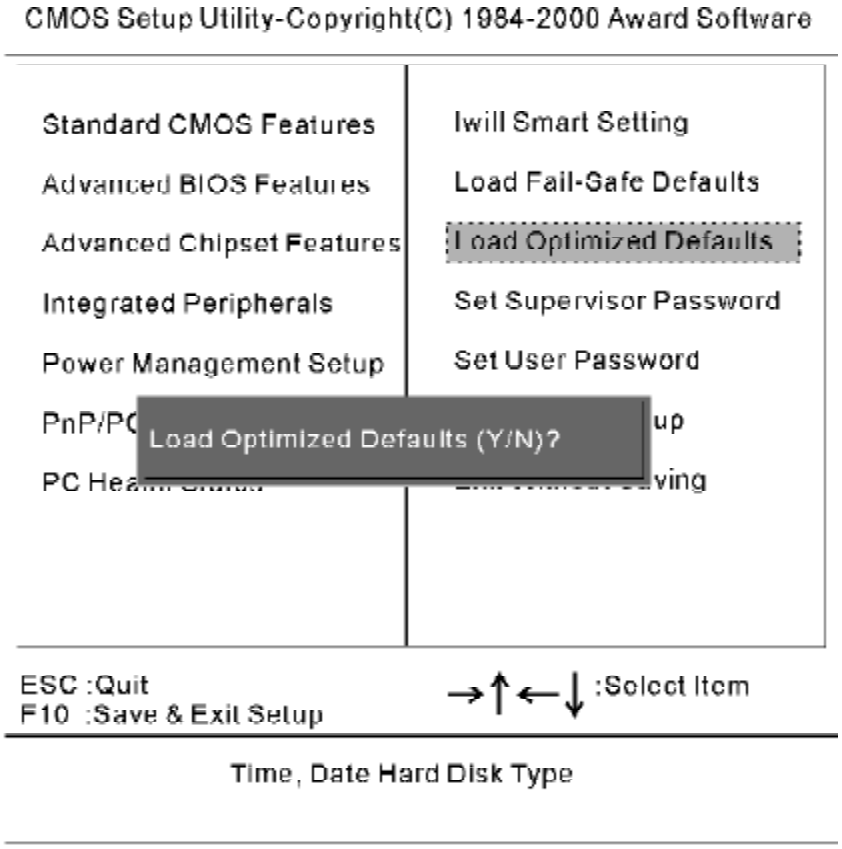
4.12 Load Fail Safe Defaults

When you press <Enter> on this item you get a confirmation dialog box with a message similar to: Pressing **'Y'** loads the BIOS default values for the most stable, minimal-performance system operations.

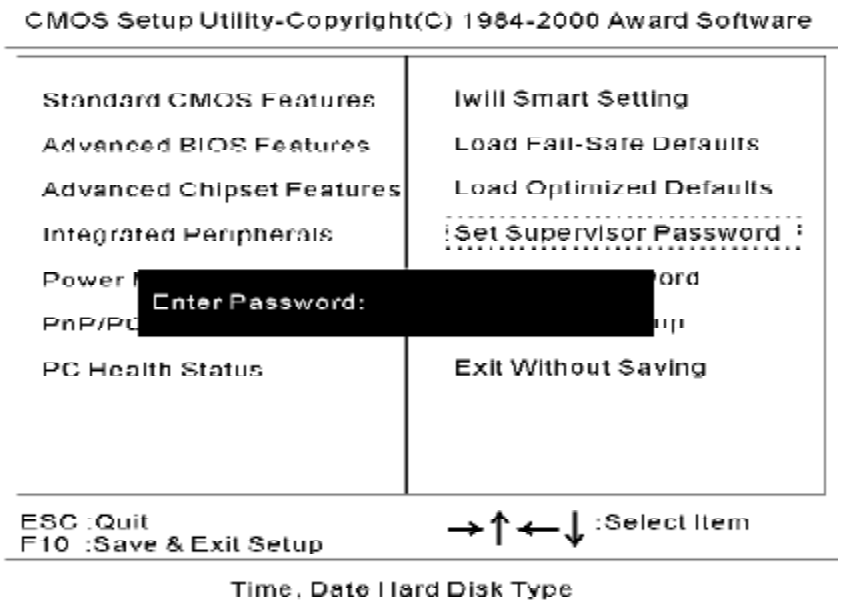


4.13 Load Optimized Defaults

When you press <Enter> on this item you get a confirmation dialog box with a message similar to:



4.14 Set Supervisor/ User Password Setting



These setup pages are used for password setting. When a password has been enabled and the Security Option field is set as Setup, you will be required to enter the password every time you try to enter BIOS Setup program. This prevents an unauthorized person from changing any part of your system configuration. Additionally, if the Security Option field is set as Boot, the BIOS will request a password every time your system boot. This would prevent unauthorized use of your computer.

In you wish to use this function, bring the cursor to this field, then press <Enter>. The computer will display the message, “Enter Password”. Type your password and press <Enter>. After the message onfirm Password” is displayed, re-type your password.

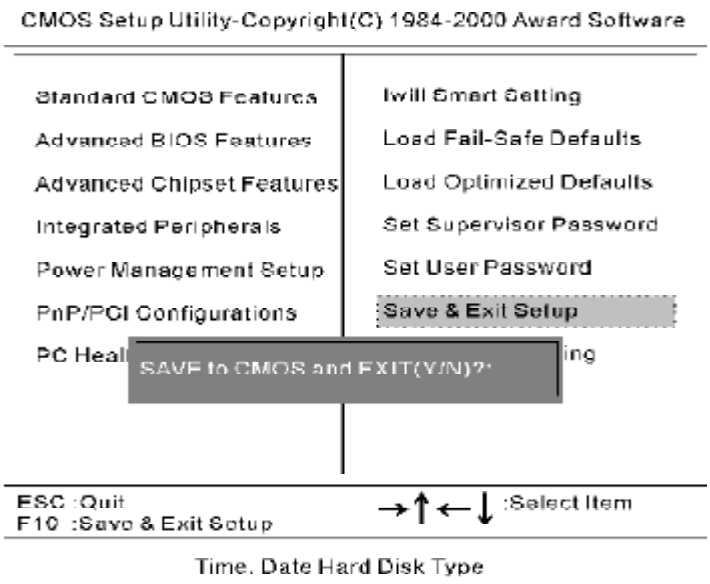
The Supervisor Password function will be in effect after you save and exit setup.

To disable a password, bring the cursor to this field, then press <Enter>. The computer will display the message, “Enter Password”. Press <Enter>. A message will confirm that the password is disabled. Once the password is disabled, the system will boot and you can enter setup program freely.

4.15 Save & Exit Setup / Exit Without Saving

Saves current CMOS value and exit BIOS setup program.

or Select “Quick Without Saving” for Abandons all CMOS value changes and exits BIOS setup program.



5 On board Audio

The on board 4.1 channel PCI Audio on Iwill motherboards offer a new generation PCI audio solution: it utilizes the state-of-the-art CRL® 3D Audio technology (HRTF 3D positional audio), and supports Microsoft® Direct Sound ® 3D and Aureal®'s A3D® interfaces. Better yet, it supports two / four speakers and DLS based (Down Loadable Sound) wave table music synthesizer which supports the Direct Music®.

5.1 Audio Features

5.1.1 Special Features

32 bit PCI bus master. Full duplex playback and recording, built-in 16 bits CODEC.

HRTF 3D positional audio, supports both Direct Sound 3D® & A3D® interfaces, supports earphones, two and four channel speakers mode.

Support Windows 95/ 98/ 2000 and Windows NT 4.0.

MPU-401 Game/Midi port and legacy audio SB16 support.

Downloadable Wave Table Synthesizer, supports Direct Music®.

5.1.2 Stereo Mixer and FM Music Synthesizer

Stereo analog mixing from CD-Audio, Line-in

Stereo digital mixing from Voice, FM/Wave-table, Digital CD-Audio

Mono mixing from MIC and software adjustable volume

OPL3 FM synthesizer (4 operators)

Up to 15 melody sounds and 5 rhythm sounds (20 voices)

5.1.3 Game and Midi Interface

Fully compatible with MPU-401 Midi UART and Sound Blaster Midi mode/ Standard IBM PC joystick/game port.

5.2 Driver Installation

5.2.1 DOS Installation

Before beginning the installation, please make sure that your hard disk has sufficient space(min. 4MB). Insert the Power Installer CD into the CD-ROM Drive.

STEP 1	Change directory to PCI audio DOS drivers folder at DOS prompt, and type: ***INSTALL [Enter]***
STEP 2	Type DOS utilities path which you want to install.
STEP 3	Program will expand the file to the path which you've specified.
STEP 4	Install program will add initial drivers.

5.2.2 Win 95/98 Installation

We recommend that you have Microsoft Windows intalled, and remove any exsisting sound drivers from your current system, before you install this PCI sound device driver.

STEP 1	Power off your system, install the audio cable, speaker, microphone, and insert the Iwill Power Installer CD into the CD-ROM drive.
STEP 2	Turn on the computer, and enter the Microsoft Windows 95 /98 /2000.
STEP 3	You will see a windows prompt like this: "New Hardware Found PCI Multimedia Audio Device Windows has found new hardware and is installing the software for it", then the dialog box shown. Click "Next" button to go on.
STEP 4	Click on "Other Locations" button to specify drivers path.
STEP 5	When CMI8738/C3Dx (SX) PCI Audio Device found, click **Finish**.
STEP 6	Now, system is installing device drivers autiomaticlly, After a while, the system will finish the installation includs the following device drivers. CMI8738/C3DX (SX) PCI Audio Device CMI8738/C3DX (SX) PCIJoystick Device CMI8738/C3DX (SX) PCI Legacy Device
STEP 7	Click **start** key
STEP 8	Select **Run**
STEP 9	Key in the drive and path for Windows application installation program.
STEP 10	Click **OK** to start the installation procedure, and follow the on-screen instructions to finish the installation. When all the application softwares have been installed, please shut down Windows 95/98/2000 system, and reboot your system.

5.2.3 Win 95/98 Un-Installation

In the cases you are experiencing some technical difficulties (the sound device is not function properly). It is suggested that you proceed with the un-install procedure:

STEP 1	Click **start** button.
STEP 2	Select **run** item.
STEP 3	Find UINSTDRV.EXE in driver disk under Win95/98 drivers folder.
STEP 4	Run it.
STEP 5	Follow the on-screen instructions to re-install the hardware.

If you want to completely remove the drivers, you can also run the un-install procedure as described previously, and then reboot the system.

5.2.4 Windows NT4.0 Installation

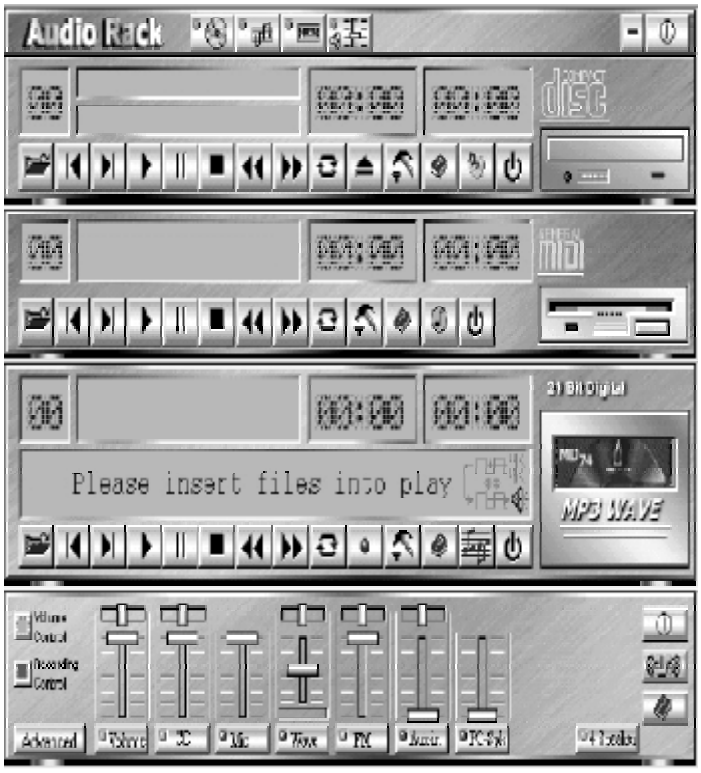
We recommend that you have Microsoft Windows NT intalled, and remove any exsisting sound drivers from your current system, before you install this PCI sound device driver.

STEP 1	Click "Start" button, move the highlight bar to "Setting" item, and select the "Control Panel".
STEP 2	Double-click "Multimedia" icon..
STEP 3	Select "Devices" page, and press "Add" button.
STEP 4	Select "Unlisted or Updated Driver" item in "List of Drivers".
STEP 5	Select "C-Media CM8738" item and press "OK" button.
STEP 6	Select proper I/O value.
STEP 7	Press "OK" button
STEP 8	Restart the system when being asked
STEP 9	Now, you have already installed the PCI Audio Adapter under Microsoft Windows NT4.0 successfully. If you want to install the Windows applications, continue the following steps:
STEP 10	Click start key
STEP 11	Select Run item
STEP 12	key in drive and path for Windows NT application installation program,
STEP 13	Click OK to start the installation procedure, and follow the on-screen instructions to finish the installation. When all of application softwares have been installed shut down the Windows NT system, and then reboot your system.

5.3 The Audio Rack

5.3.1 Introduction

By means of a user-friendly interface (as easy as operating your home stereo system), this PCI audio rack provides you with the control over your PC's audio functions, including the advantage of four speakers mode enable/ disable,



5.3.2 About Audio Rack

The Audio Rack is consisted of several major components.

5.3.2.1 Control Center

Controls the display of the PCI Audio Rack's components.

5.3.2.2 MIDI Player

Plays MIDI music files, and allows you to create your personal song playlists, and play the song files.

5.3.2.3 MP3/Wave Player

Records and plays digital audio (mp3/wave) files. Allows you to create wave file playlists, and playback the wave files.

5.3.2.4 CD Player

Plays standard audio CDs. Allows you to create your favorite song playlists.

5.3.2.5 System Mixer

Controls the volume level of your audio inputs and outputs

5.3.3 Showing or Hiding Audio Rack Components

To remove or add a component from the display, click on the component's button on the Control Center's Button Bar or toggle it off.

5.3.4 MIDI Player, Wave Player, and CD Player

CD Player(above, similar to MP3/Wave Player and MIDI Player)

5.3.4.1 Sel (or Trk) field:

If you have multiple selections in your playlist, this shows the number of the current selection or CD track.

5.3.4.2 Current File or Track:

The name of the current MIDI file, wave audio file, or CD track.

5.3.4.3 Total Length field:

Displays the total length of files or tracks in minutes and seconds.

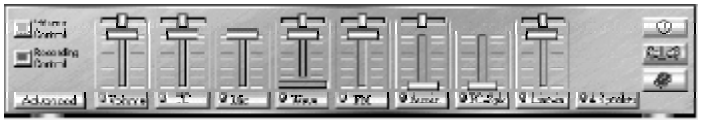
5.3.4.4 Current Time field:

Displays the current time of files or tracks in minutes and seconds when playback or recording.

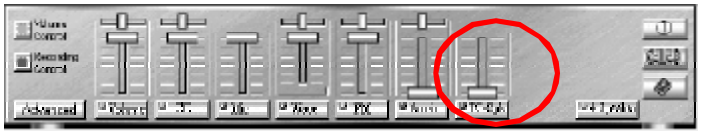
Please refer to the help screen or more detail button function descriptions.
(click on help button on the player)

5.3.5 System Mixer

System Mixer allows you to control all the audio output and input levels. System Mixer displays the volume controls which your audio drivers make available. The names for these controls may vary.



Mixer panel while the four speakers mode is enabled.



Mixer panel while the four speakers mode is disabled.

5.3.5.1 Volume Control:

Clicking on this button shows and allows you to use the output level controls.

5.3.5.2Recording Control:

Clicking on this button shows and allows you use the input level controls.

5.3.5.3 Input and Output Level Sliders and Buttons:

For each input or output signal type, the control slider controls the loudness whereas the horizontal slider controls the balance between the two speakers. The mute button temporarily stops input or output without changing slider positions.

Control types and names might vary. The common types are listed below:

a Vol:

The master control for all outputs. The strength of an output signal is determined by both the Vol slider and the slider for the individual output. To affect all outputs, move the Vol slider. To change the output of an individual output type, move its slider.

b Line-in/Rear:

Controls the audio hardware's Line In or Line Out levels. Line levels might be for an externally attached

cassette player, for instance, while the four speakers mode is enabled, this control becomes the Rear speaker volume control.

c Mic:
Controls the microphone input level.

d Wave:
Controls wave (voice) playback or the recording levels.

e FM:
Controls the FM music playback or the recording level.

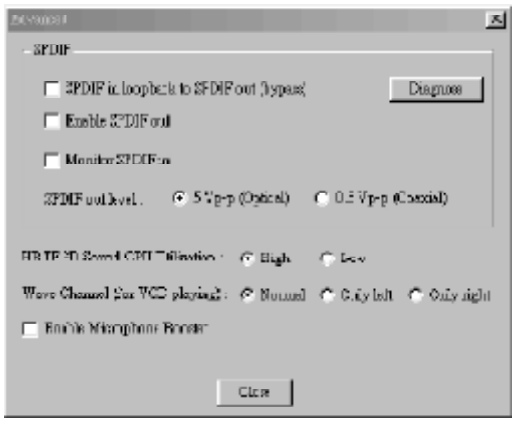
f Aux-in:
Controls the Aux-in music play or the recording level.

g PC-SPK:
Controls the external PC speaker input level.

h CD:
Controls the CD drive output level, for CD drives configured to play their audio output through the PCs audio hardware.

i 4SPK:
Turn on or turn off the Rear speakers effect.

j Surround:
Turn on or turn off the 3D surround sound effect.

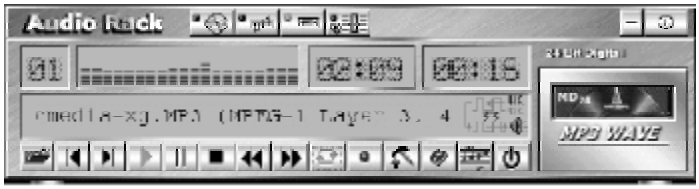


5.3.5.4 Mute Buttons:

Toggle between muting and enabling the signal. A button with a lit LED is enabled, and when it is not lit, it means it is mute. Several output signals can usually be enabled at once.

5.3.6 MP3 Player

MP3 player can play both wave files and MP3 files.



MP3 player while the loop function enables.

5.3.7 The 4 Speakers System

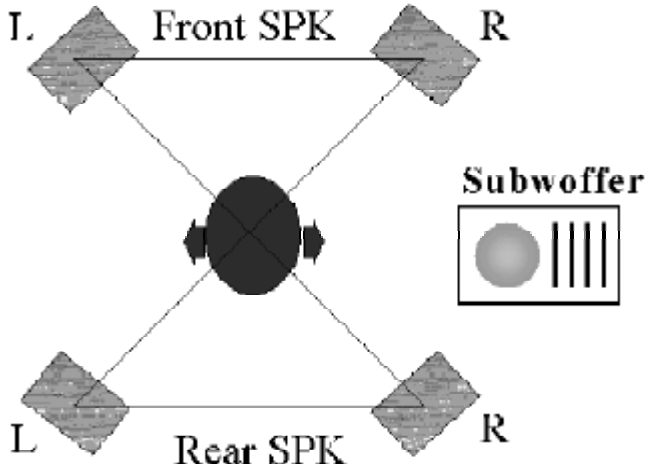
The on board audio on Iwill motherboards provide 2 wave channels (front/rear + subwoffer), known as the 4.1 speakers system. When games or application programs via DirectSound® 3D or A3D® interface locate the sound sources to the listener's back, the two rear speakers will work to enhance the rear audio positional effect, so as to complement the insufficiency of using only two front speakers to emulate the audio effect. The following is the hardware installation and the software setups:

5.3.7.1 The speaker installation.

Connect the front pair speakers to the Line-out jack of the audio adapter, and then connect rear pair speakers to Line-in/Rear jack of the audio adapter.

5.3.7.2 The positions of the speakers

Put your speakers the way the following picture suggests, to deliver the best audio result.



5.3.7.3 The mixer setup

There is a 4 speakers option in the volume control of the mixer, and when you enable this option, it means the rear speakers are connected to Line-in/Rear jack.

When Line-in/Rear jack is connected to other external Line-in sources, please DO NOT enable this option in order to avoid hardware conflicts.

Regarding rear speaker option, you can turn on or turn off the output of the back speakers, and adjust the volume, to have the rear/front speakers have the same volume.

5.3.7.4 The demo

Execute the Helicopter demo within the C3D HRTF Positional Audio Demos of this audio adapter. When the helicopter flies behind you, the rear speakers will work.

6 Power Installer CD

6.1 Software Installation

The attached Power Installer CD contains all the necessary drivers, utilities. It provides an easy way for users to install the needed drivers without going through a complicated process. The Power Installer CD is able to auto-detect and display the drivers, utilities needed for your motherboard.

6.1.1 What's inside Power Installer CD for this motherboard

Driver	**Software Utility**
Service Pack Driver	*PC-Cillin Anti-Virus*
Onboard Audio Driver	*Hardware Monitor Utility*
High Point XStore Pro	*Suspend To Disk Guide*
Award Patch File	*Adobe Acrobat Reader*
User's Manual	*Audio Application Utility (For Windows 98/NT only)*
	Make Driver
	Exit

6.2 How to use the Power installer CD

The Power Installer CD supports the Auto Run program under Windows 98/95/2000 and Windows NT operating systems. All the necessary drivers, utilities and manual for this motherboard will

show on the screen.

Power Installer does not support a keyboard at this moment. You must use a mouse to install it.

6.2.1 How to view manual

This Power Installer CD includes detailed information of all manuals for every motherboard manufactured. Please insert the Power Installer CD into the CD-ROM drive; Click the "View Manual" item, and select the product that you want to view.

6.3 How to make driver diskette

6.3.1 Without O.S. installed

This bootable Power Installer CD also allows you to boot up your system, even when the OS has not been installed. During the boot-up process, you can perform Diskette Creator, which will automatically make the driver diskettes you need. Follow the instructions below to make your own device driver floppy diskettes if you have a CD-ROM with IDE interface. If you have already installed SCSI CD-OM, please make sure your SCSI host adapter supports bootable CD-ROM, and then proceed directly to step 8 ,and then finish the procedure.

STEP 1	First, power-on or **boot** your system.
STEP 2	Press <**Del**> key during boot sequence to enter **CMOS Setup Utility**.
STEP 3	Use arrow keys to select **ADVANCED BIOS FEATURES** on the menu, then press **Ente**r.
STEP 4	Select **First Boot Device** and change the default setting to **CDROM** using Page Up /Page Down key.
STEP 5	Press <**Esc**> key to go back to CMOS SETUP Utility menu.
STEP 6	Press <**F10**> to select Save and Exit Setup.
STEP 7	Press **Y** then Enter to complete. Now you are able to boot up the system from the CD-ROM.
STEP 8	Insert the Power Installer CD into the CD-ROM drive and re-start the computer.
STEP 9	The Diskette Creator will now execute automatically for making your own driver disketes.
STEP10	Make the desired driver diskettes according to the instructions displayed on screen.

6.3.2Under windows 98/95/NT

You may just click on the software **Make Driver Diskettes Utility** shown on screen, then select the driver you need, follow the messages shown on screen to complete.

6.4 Install driver

6.4.1 How to install Service Pack Driver

You may just click on the Service Pack Driver shown on screen that needs to be installed, then follow the prompts to complete setup.

6.4.2 How to install Onboard Audio Driver File

You may just click on the Onboard Audio Driver shown on screen that needs to be installed, then follow the prompts to complete setup.

6.4.3 How to install Award Patch Driver

You may just click on the **Award Patch Driver** shown on screen that needs to be installed, then follow the prompts to complete setup.

6.5 Install Software Utility

6.5.1 How to use PC-Cillin Anti-Virus program

Simply click on the **PC-Cillin Anti-Virus** shown on screen that be installed, then follow the prompts to complete setup.

6.5.2 How to use Hardware Monitoring Utility

You may just click on the **Hardware Monitor Utility** shown on screen then follow the prompts to complete setup.

6.5.3 How to use Suspend To Disk Guide

Please follow the steps on the document to complete setup.

6.5.4 How to use Adobe Acrobat Reader

You may just click on the **Adobe Acrobat Reader** shown on screen then follow the prompts to complete setup.

6.5.5 Audio Application Utility (For Windows 98/NT)

Please follow the steps on section of Audio Application Utility to complete setup.