7KTA

User's Manual Version 1.0

The information presented in this publication has been carefully prepared to ensure reliability ; however, no responsibility is assumed for inaccuracies. Specifications are subject to change without notice.

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1. Motherboard Description

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Introduction

System Overview

This manual was written to help you start using this product as quickly and smoothly as possbile. Inside, you will find the answers to solve most problem. In order for this reference material to be of greatest use, refer to the "expanded table of contents" to find relevant topics.

This board provides a total PC solution by incorporating the System I/O , and PCI IDE. The mainboard, AMD Athlon / Duron processors base PC ATX system support single processors with ISA Bus, PCI Local Bus, and AGP Bus to support upgrades to your system performance. It is ideal for multi-tasking and fully supports MS-DOS, Windows, Windows NT , Windows ME, Windows 2000 , Novell, OS/2, Windows95/98 , Windows98SE, UNIX , SCO UNIX etc.

This manual also explains how to install the mainboard for operation, and how to setup your CMOS configuration with the BIOS setup program

1.Motherboard Description

1.1 Features

1.1.1 Hardware

CPU

-Single AMD Socket 462 Athlon/Duron.

-200MHz/266MHz System Interface speed.

Speed

-Supports 33MHz PCI Bus speed.

-Supports 4X AGP Bus.

DRAM Memory

-Supports 8/16/32/64....MB DIMM module socket.

-Supports Synchronous DRAM(3.3V)

-Supports a maximum memory size of 1.536GB with SDRAM.

Shadow RAM

-A memory controller provide shadow RAM and supports

8-bit ROM BIOS.

Green Function

-Support power management operation via BIOS.

-Power down timer from 1 to 15 mins.

-Wakes from power saving sleep mode at the press of

any key or any mouse activity.

Bus Slots

-Provide one AGP slot and one AMR.

-Five 32-bit PCI bus and one 16-bit ISA.

Universal Serial Bus

-Supports two back Universal Serial Bus(USB)Ports

and two front Universal serial Bus(USB)Ports.

Hardware Monitor Function

-CPU Fan Speed Monitor.

-System and CPU Temperature Monitor.

-System Voltage Monitor.

Flash Memory

-Support flash memory.

-support ESCD Function.

IDE Built-in On Board

-Supports four IDE hard disk drives.

-Supports PIO Mode 4, Master Mode,high performance hard disk drives.

-Support Ultra DMA 33/66/100 Bus Master Mode.

-Supports IDE interface with CD-ROM.

-Supports high capacity hard disk drives.

-Support LBA mode.

PCI-Based AC 97 Digital Audio Processor (Optional)

-AC 97 2.1 interface.

-16 channels of high-quality sample rate conversion.

-16x8 channel digital mixer.

-Stereo 10 band graphic equalizer.

-Sound Blaster and Sound Blaster Pro emulation.

-64-voice wavetable.

I/O Built-in On Board

-Supports one multi-mode Parallel Port.

 (1)Standard & Bidirection Parallel Port

 (2)Enhanced Parallel Port(EPP)

 (3)Extended Capabilities Port

-Supports two serial ports, 16550 UART.

-Supports one Infrared transmission(IR).

-Supports PS/2 mouse and PS/2 Keyboard.

-Supports 360KB, 720KB, 1.2MB, 1.44MB, and 2.88MB floppy disk drivers.

1.1.2 Software

BIOS

-AWARD legal BIOS.

-Supports APM 1.2.

-Supports USB Function.

-Supports ACPI

Operation System

-Offers the highest performance for MS-DOS, Windows,

Windows NT, Windows 2000, Novell, OS/2,

Windows95/98, Windows98SE, UNIX, SCO UNIX etc.

1.1.3 Attachments

-HDD UDMA66/100 Cable.

-FDD Cable.

-Flash Memory Written for BIOS Update.

-USB2 Cable **(Optional)** .

-COM2 Cable.

-Fully Setup CD Driver (Ghost, Anitivirus,

Adobe Acrobat).

-This manual.

1.2 Motherboard Installation

1.2.1 Layout of Motherboard
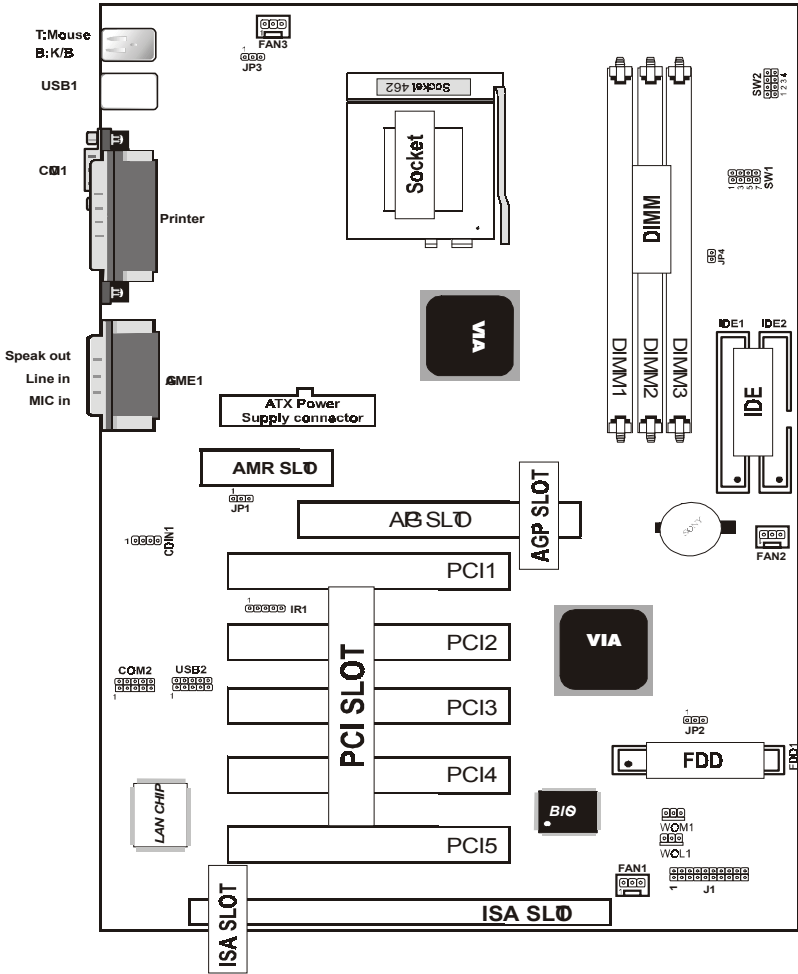
1.3 Motherboard Connectors
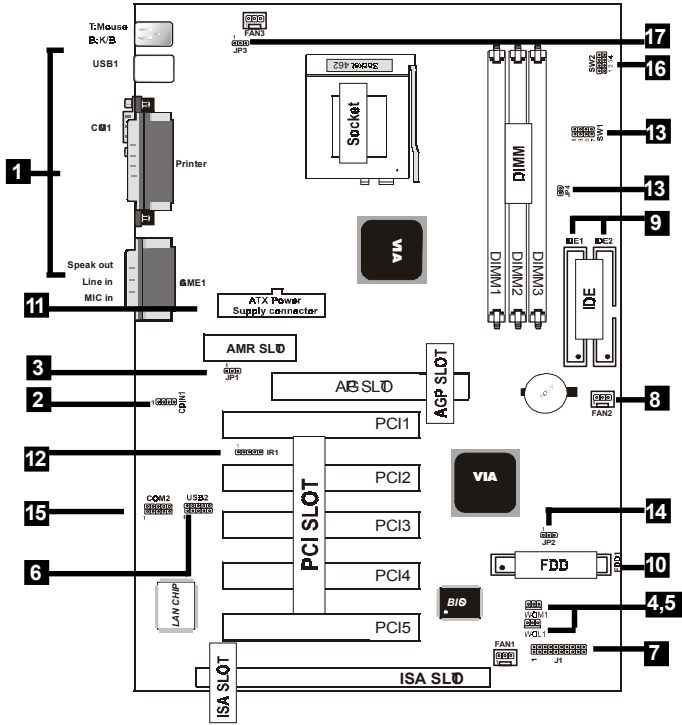
1.Back Panel I/O Connectors   2.CD Audio-In Connector
3.AMR CODEC Function(JP1)   4.Wake-On MODEM Connector
5.Wake-On-LAN Connector   6.Front USB2 Connector
7.Front Panel Connector   8.Fan connectors(Fan1/2/3)
9.IDE Connectors   10.Floppy Connector
11.ATX Power Connector   12.IR Connector
13.CPU Clock Selection(SW1/JP4)
14.CMOS Function Select(JP2)
15.Front COM2 Connector(COM2)
16.CPU Ratio Selection(SW2)
17.Keyboard Wake up Setting(JP3)

1.3.1 Front Panel Connector(J1)

J1 PANEL Connector

RST HD_LED   PW_LED   PW_BN

G_LED   EXTSMI   SPKR
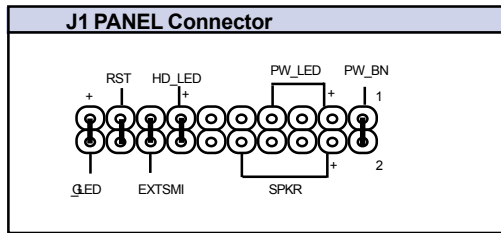
Speaker Connector (SPKR)

An offboard speaker can be installed onto the motherboard as a manufacturing option. An offboard speaker can be connected to the motherboard at the front pannel connector. The speaker (onboard or offboard) provides error beep code information during the Power Self-Test when the computer cannot use the video interface. The speaker is not connected to the audio subsystem and does not receive output from the audio subsystem

Hard Drive LED Connector (HD_LED)

This connector supplies power to the cabinet IDE activity LED. Read and write activity by devices connected to the Primary or Secondary IDE connectors will cause the LED to light up.

SMI Suspend Switch Lead (EXTSMI)

This allows the user to manually place the system into a suspend mode of Green mode. System activity will be instantly decreased to save electricity and expand the life of certain components when the system is not in use. This 2-pin connector (see the figure) connects to the case-mounted suspend switch. If you do not have a switch for the connector, you may use the "Turbo Switch" instead since it does not have a function. SMI is activated when it detects a short. It may require one or two pushes depending on the position of the switch. Wake-up can be controlled by settings in the BIOS but the keyboard will always allow wake-up (the SMI Suspend Switch Lead cannot wake-up the system. If you want to use this connector, the "Suspend Switch" in the Power Management Setup of the BIOS SOFT-WARE section should be on the default setting of Enable.

ATX Power Switch (PW_BN)
The system power is controlled by a momentary switch connected to this lead. Pushing the button once will switch the system ON. The system power LED lights when the system power is on .

Power LED Lead (PW_LED)
The system power LED lights when the system power is on.

SMI LED Lead (GLED)
The system SMI LED lights when the system suspend is on.

Reset Switch Lead (RST)
The connector can be connected to a momentary SPST type switch that is normally open. When the switch is closed, the motherboard resets and runs the POST.

1.3.2 Floppy Disk Connector (FDD1)

This connector supports the provided floppy drive ribbon cable. After connecting the single end to the board, connect the two plugs on the other end to the floppy drives.

1.3.3 Hard Disk Connectors (IDE1/IDE2)

These connectors support the provided IDE hard disk ribbon cable. After connecting the single end to the board, connect the two plugs at the other end to your hard disk .

If you install two hard disks, you must configure the second drive to Slave mode by setting its jumper settings. BIOS now supports SCSI device or IDE CD-ROM boot up (see "HDD Sequence SCSI/IDE First" & "Boot Sequence" in the BIOS Features Setup of the BIOS SOFTWARE) (Pin 20 is removed to prevent inserting in the wrong orientation when using ribbon cables with pin 20 plugged) .

1.3.4 ATX 20-pin Power Connector (PW1)

This connector supports the power button on-board. Using
the ATX power supply, functions such as Modem Ring Wake-
Up and Soft Power Off are supported on this motherboard .
This power connector supports instant power-on
functionality, which means that the system will boot up
instantly when the power connector is inserted on the board.

Pin	Signal	Pin	Signal
1	3.3V	11	3.3V
2	3.3V	12	-12V
3	GND	13	GND
4	5V	14	PS-ON
5	GND	15	GND
6	5V	16	GND
7	GND	17	GND
8	PW-OK	18	-5V
9	5V_SB	19	5V
10	12V	20	5V

1.3.5 Infrared Connector (IR1)

After the IrDA interface is configured, files can be
transferred from or to portable devices such as laptops,
PDAs, and printers using application software.

1.4 Back Panel Connectors

Parallel (Printer) Port (25-pin Female)

MIDI/(GAME) Port (15-pin Female)

PS/2 Mouse

USB1

PS/2 Keyboard (6-pin Female)

COM1

Serial Port(9-pin Male)

SPEAKER

LINE IN

MIC
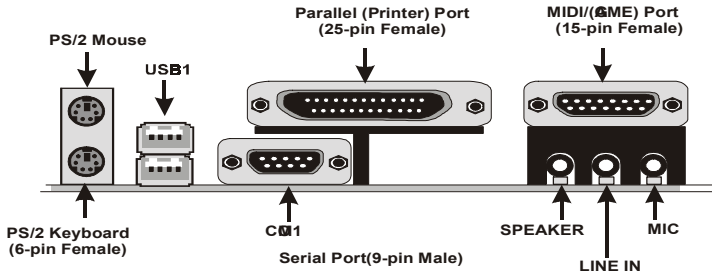
1.4.1 PS/2 Mouse /Keyboard CON.

The motherboard provides a standard PS/2 mouse / Keyboard
mini DIN connector for attaching a PS/2 mouse. You can
plug a PS/2 mouse / Keyboard directly into this connector.

1.4.2 USB Connectors: USB1(RJ45+USB)

The motherboard provides a OHCI(Open Host Controller
Interface)Universal Serial Bus Roots for attaching USB
devices such as a keyboard, mouse and other USB devices.
You can plug the USB devices directly into this connector.

1 2 3 4

Pin	Signal
1	+5V_SB
2	USBP0-(USBP1-)
3	USBP0+(USBP1+)
4	GND

RJ-45

Pin	Signal
1	+5v
2	USBP0-(USBP1-)
3	USBP0+(USBP1+)
4	GND
RJ45	10/100M LAN Port (option)

1 2 3 4

Front Two USB Connectors: USB2

USB 2

VCC	1	6	GND
P2-	2	7	GND
P2+	3	8	P3+
GND	4	9	P3-
GND	5	10	VCC
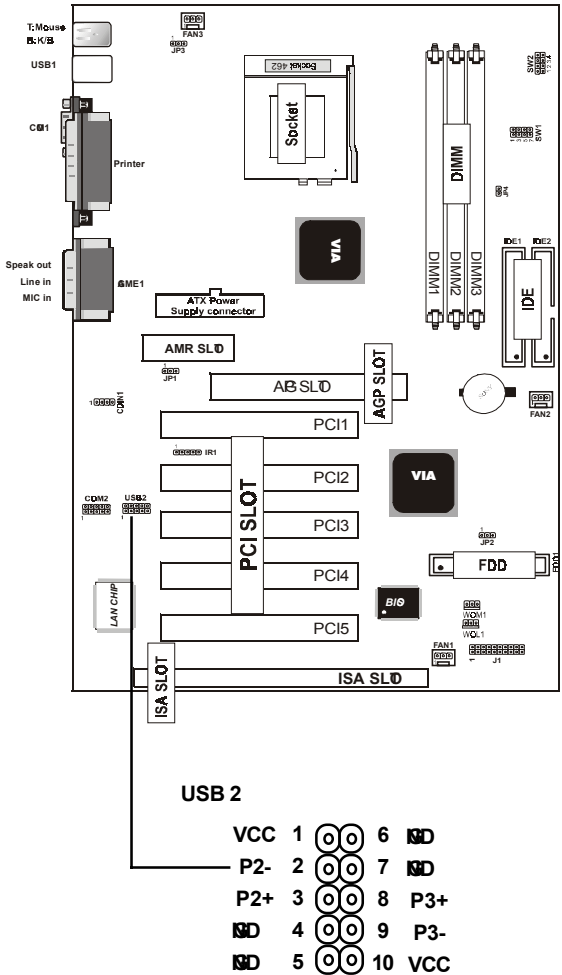
1.5 Serial and Parallel Interface Ports

This system is equipped with two serial ports and one parallel port. Both types of interface ports will be explained in this chapter.

The Serial Interfaces: COM1/COM2

The serial interface port is sometimes refered to as an RS-232 port or an asynchronous comication port. Mice, printers, modems and other peripheral devices can be connected to a serial port. The serial port can also be used to connect your computer system. If you wish to transfer the contents of your hard disk to another system it can be accoplished by using each machine's serial port.

COM1

COM2

1
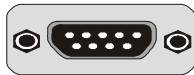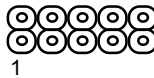
The serial port on this system has one 9-pin connector. Some older computer systems and peripherals used to be equipped with only a 25-pin connector. Should you need to connect your 9-pin serial port to an older 25-pin serial port, you can purchase a 9-to-25 pin adapter.

Signal	DB9 Pin	DB25 Pin
DCD	1	8
RX	2	3
TX	3	2
DTR	4	20
GND	5	7
DSR	6	6
RTS	7	4
CTS	8	5
RI	9	22
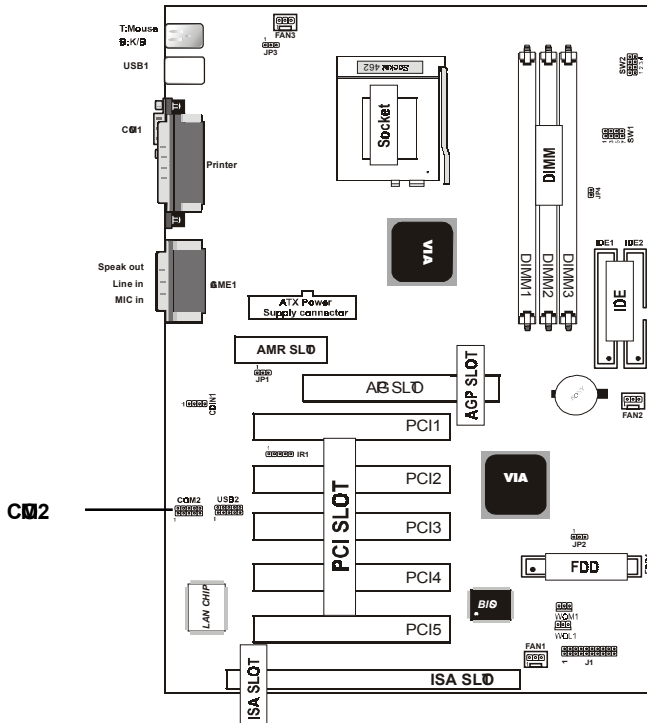
Parallel Interface Port

Unlike serial ports, parallel interface ports have been standardized and should not present any difficulty interfacing peripherals to your system. Sometimes called a Centronics port, the parallel port is almost exclusively used with printers. The parallel port on your system has a 25-pin, DB 25 connector (see picture below).
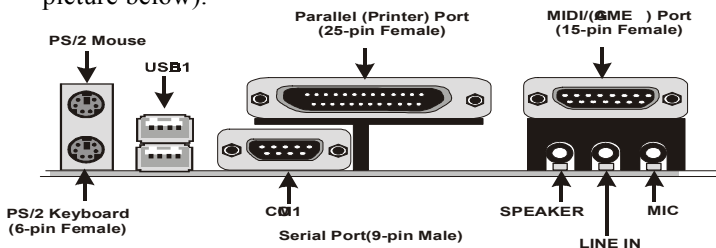
1.6 CPU Installation

1.6.1 CPU Installation Procedure: Socket 462

1. Pull the lever sideways away from the socket then raise the lever to a 90-degree angle.

2. Locate Pin 1 in the socket and look for the white dot or cut edge in the CPU. Match Pin 1 with the white dot/cut edge then insert the CPU.

3. Press the lever down to complete the installation.

4. Make sure the spec of the heatsink is good enough.
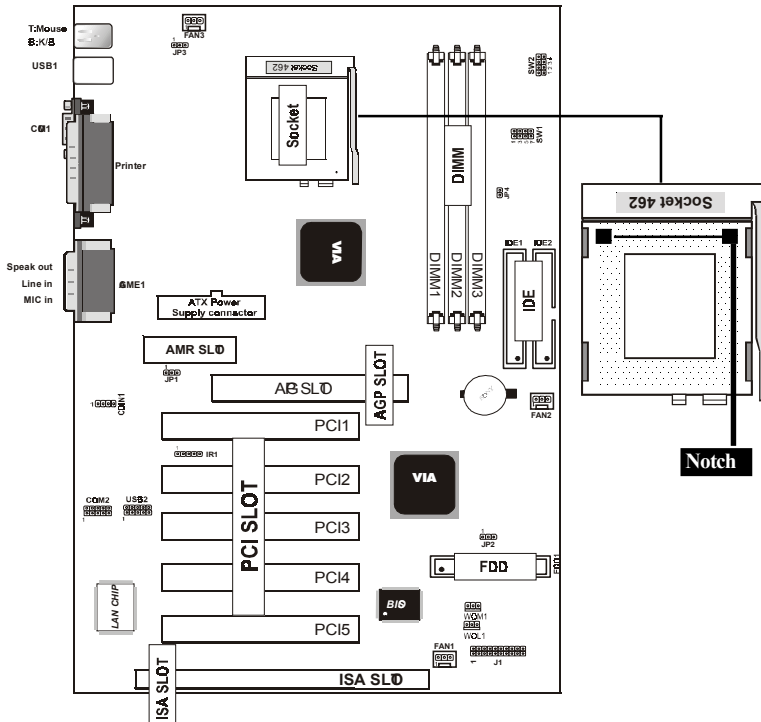
1.6.2 CPU Clock Selection: SW1/JP4
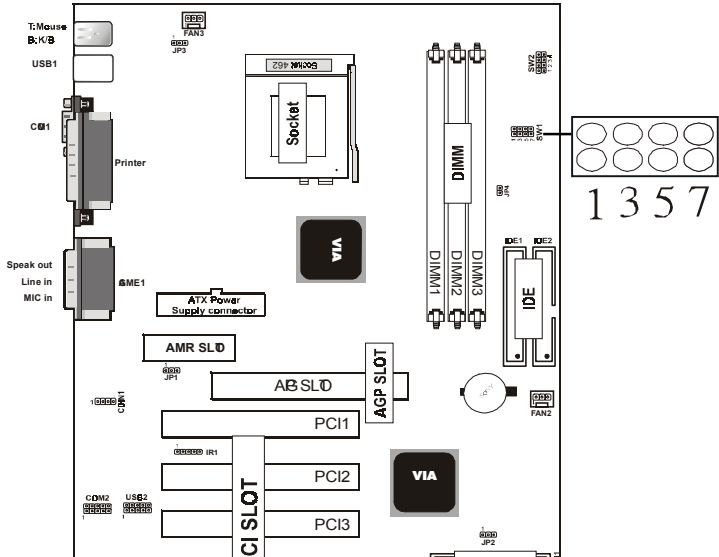
SW1	1	3	5	7	CPU (MHz)	PCI (MHz)
1 3 5 7	0	1	0	0	100	33.33
1 3 5 7	0	0	0	0	133.3	33.33

JP4 Pin	Assignment
Close	100MHz(Default)
Open	133MHz

1
0: Open

1
1: Close
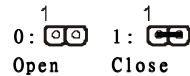
CPU 100MHz JP4 Close, SW1 3-4 Close

CPU 133MHz JP4 Open, SW1 3-4 Open

NOTES:CPU clock speed over spec is not recommended.

1.6.3 CPU Ratio Selection: SW2
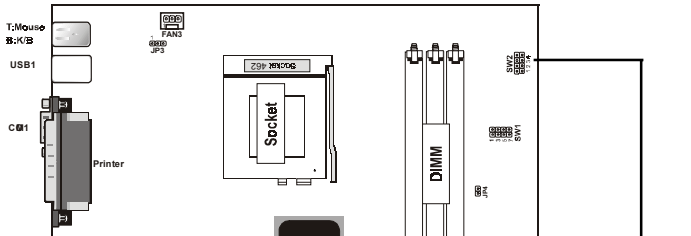
Clock Multiplier	SW2	1	2	3	4
5.0	1234	1	1	0	1
5.5	1234	0	1	0	1
6.0	1234	1	0	0	1
6.5	1234	0	0	0	1
7.0	1234	1	1	1	0
7.5	1234	0	1	1	0
8.0	1234	1	0	1	0
8.5	1234	0	0	1	0
9.0	1234	1	1	0	0
9.5	1234	0	1	0	0
10.0	1234	1	0	0	0
10.5	1234	0	0	0	0
11.0	1234	1	1	1	1
11.5	1234	0	1	1	1
12.0	1234	1	0	1	1
12.5	1234	0	0	1	1

1 2 3 4

0: Open

1: Close

1.7 Jumper Setting
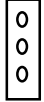
A jumper has two or more pins that can be covered by a
plastic jumper cap, allowing you to select different system
options.
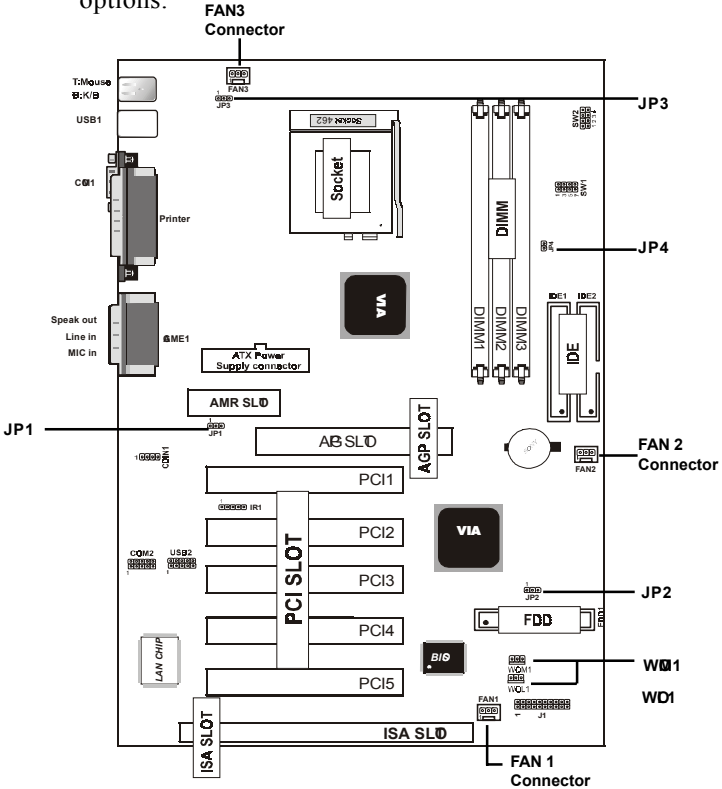
1.7.1 CPU/System Fan Connectors: Fan1/3

Pin	Assignment
1	Ground
2	+12VDC
3	Signal

1.7.1 CPU/System Fan Connectors: Fan2

Pin	Assignment
1	Ground
2	+12VDC
3	Ground

1.7.2 Wake-On Modem Header: WM1

Pin	Assignment
1	5VSB
2	Ground
3	Signal

1.7.3 Wake-On LAN Header: WL1

Pin	Assignment
1	5VSB
2	Ground
3	Signal

1.7.4 AMR Code Function: JP1

Pin	Assignment
1-2	On board CODEC
2-3	AMR Primary CODEC

1.7.5 CMOS Function Select: JP2

Pin	Assignment
1-2	Normal (Default)
2-3	Clear CMOS

NOTE:

(Please follow the procedure below to clear CMOS data.)
(1)Remove the AC power line.(2)JP2(2-3)Closed.(3)Wait five seconds.(4)JP2(1-2) Closed.(5)AC Power on.(6)Reset your desired password or clear CMOS data.

1.7.6 Keyboard Wake up Setting: JP3

The JP3 Jumper is for setting keyboard power.This function is provided by keyboard Wake-up function.

Pin	Assignment
1-2	Enabled
2-3	Disabled(Default)

1.8 DRAM Installation

1.8.1 DIMM

DRAM Access Tim 3.3V Unbuffered SDRAM/ PC66/
PC100 and PC133 Type required.

DRAM Type: 8MB, 16MB, 32MB, 64MB,128MB,
256MB, 512MB DIMM Module.(168 pin)

Bank	Memory module
DIMM 1	16MB, 32MB, 64MB, 128MB, 256MB,512MB
(Bank 0-1)	168 pin, 3.3v SDRAM
DIMM 2	16MB, 32MB, 64MB, 128MB, 256MB,512MB
(Bank 2-3)	168 pin, 3.3v SDRAM
DIMM 3	16MB, 32MB, 64MB, 128MB, 256MB,512MB
(Bank 4-5)	168 pin, 3.3v SDRAM
	Total System Memory(Max 1.536MB)

1.8.2 How to install a DIMM Module

1. The DIMM socket has a "Plastic Safety Tab" and the DIMM
emory module has an asymetrical notch", so the DIMM
emory module can only fit into the slot in one direction.
2. Push the tabs out. Insert the DIMM emory modules
into the socket at a 90-degree angle then push down
vertically so that it will fit into place.
3. The Mounting Holes and plastic tabs should fit over the
edge and hold the DIMM emory modules in place.

168Pin DIMM Socket

88 pins   60 pins   20 pins
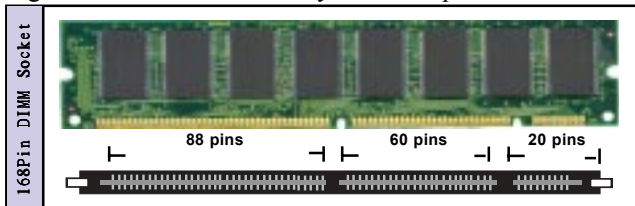
1.9 Audio Subsystem
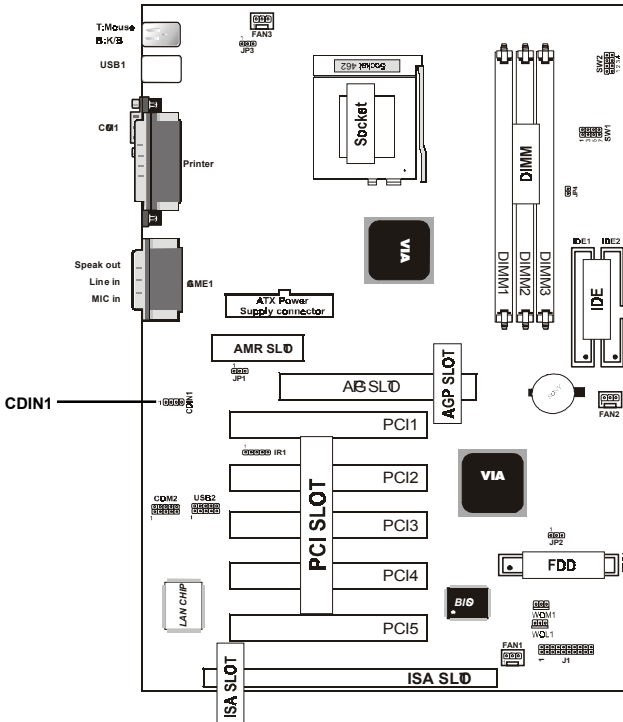
1.9.1 CD Audio-In Connectors: CDIN1

Pin CDIN1	Assignment
1	CD-R
2	GND
3	GND
4	CD-L

2. BIOS Setup

Introduction

This manual discussed the Award Setup program built into the ROM BIOS. The Setup program allows user to modify the basic system configuration. This special information is then stored in battery-backed RAM so that it retains the setup information when the power is turned off.

The Award BIOS installed in your computer system's ROM (Read Only Memory) is a custom version of an industry standard BIOS. This means that it supports AMD-Athlon / Duron processors input/output system. The BIOS provides critical low-level support for standard devices such as disk drives and serial and parallel ports.

The rest of this manual is intended to guide you through the process of configuring your system using Setup.

Plug and Play Support

These AWARD BIOS supports the Plug and Play Version 1.0A specification. ESCD(Extended System Configuration Data) write is supported.

EPA Green PC Support

This AWARD BIOS supports Version 1.03 of the EPA Green PC specification.

PCI Bus Support

This AWARD BIOS also supports Version 2.1 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

APM Support

This AWARD BIOS supports Version 1.1&2 of the Advanced Power Managemnt(APM) specification.Power managemnt features are iplemnted via the System Managemnt Interrupt(SMI). Sleep and Suspend power managemnt mdes are supported. Power to the hard disk drives and video mnitors can be mnaged by this AWARD BIOS.

DRAM Support

SDRAM (Synchronous DRAM) are supported.

Support CPU

This AWARD BIOS supports the AMD Athlon/Duron CPU.

Using Setup

In general,you use the arrow keys to highlight itempress <Enter>to select, use the <PgUp>and <PgDn>keys to change entries, press<F1>for help and press <Esc>to quit. The following table provides mre detail about how to navigate in the Setup prograby using the keyboard.

Note:

(BIS version 1.0 is for reference only. If there is a change in BIS version, please use the actual version on the BIS)

Keystroke	Function
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left(menu bar)
Right arrow	Move to the item on the right(menu bar)
Esc	Main Menu: Quit without saving changes
	Submenus: Exit Current page to the next higher
	level menu
Move Enter	Move to item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+Key	Increase the numeric value or make changes
-Key	Decrease the numeric value or make changes
Esc Key	Main menu-Quit and not save changes into
	CMOS
	Status Page Setup Menu and option Page Setup
	Menu-Exit Current page and return to Main
	Menu
F1 Key	General help on Setup navigation keys.
F5 Key	Load previous values from CMOS
F6 Key	Load the fail-safe defaults from BIOS default
	table
F7 Key	Load the optimized defaults
F10 Key	Save all the CMOS changes and exit

2.1 Main Menu

Once you enter AWARD BIOS CMOS Set up Utility, the Main
Menu will appear on the screen. The Main Menu allows you
to select from several setup function. Use the arrow keys to
select among the items and press<Enter> to accept and
enter the sub-menu.

"WARNING"

*The information about BIOS defaults on manual (Figure
1,2,3,4,5,6,7,8,9,10,11,12,13,14)is just for reference, please
refer to the BIOS installed on the board for updated
information.*

◎ Figure 1. Main Menu

CMOS Setup Utility-Copyright(C) 1984-2001 Award Software

STANDARD CMOS FEATURES	FREQENCY/VOTAGE CONTROL
ADVANCED BIOS FEATURES	LOAD FAIL-SAFE DEFAULTS
ADVANCED CHIPSET FEATURES	LOAD OPTIMIZED DEFAULTS
INTEGRATED PERIPHERALS	SET SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	SET USER PASSWORD
PNP/PCI CONFIGRATIONS	SAVE & EXIT SETUP
PC HEALTH STATUS	EXIT WITHOUT SAVING

Esc : Qit F9 : Menu in BIOS   ←→↑↓: Select Item
F10 : Save & Exit Setup
Time , Date , Hard Disk Type ...

Standard CMOS Features

This setup page includes all the items in standard compatible
BIOS.

Advanced BIOS Features

    This setup page includes all the items of the BIOS special enchanced features.

Advanced Chipset Features

    This setup page includes all the items of the Chipset special enchanced features.

Integrated Peripherals

    This selection page includes all the items of the IDE hard drive and Program Input/Output features.

Power Management Setup

    This setup page includes all the items of the power manage ment features.

PnP/PCI Configuration

    This setup page includes the user defined or default IRQ Setting.

PC Health Status

    This page shows the hardware Monitor information of the system

Frequency / Voltage Control

    This setup page controls the CPU's clock and frequency ratio.

Load Fail-Safe Defaults

    Use this menu to load the BIOS default values for the minial/stable performance for your system to operate.

Load Optimized Defaults

> These settings are more likely to configure a workable computer when something is wrong. If you cannot boot the computer successfully, select the BIOS Setup options and try to diagnose the problem after the computer boots. These settings do not provide optional performance.

Set Supervisor Password

> Change, set, or, disable password. It allows you to limit access to the system and Setup, or just to Setup.

Set User Password

> You can specify both a User and a Supervisor password. When you select either password option, you are prompted for a 1-6 character password. Enter the password and then retype the password when prompted.

Save & Exit Setup

> Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

> Abandon all CMOS value changes and exit setup.

2.2 Standard CMOS Features

This item in the Standard CMOS Setup Menu is divided into 10 categories. Each category includes no, one or more than one setup item. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item

◎ **Figure 2. Standard CMOS Features**

CMOS Setup Utility-Copyright(C) 1984-2001 Award Software

Standard CMOS Features

```
┌─────────────────────────────────────────────────────┬──────────────────┐
│ Date(mm:dd:yy)          Tue,Jun 6 2000               │ Item Help        │
│ Time (hh:mm:ss)         11:26:10                      │                  │
│                                                       │ Menu Level       │
│ IDE Primary Master      Press Enter None             │                  │
│ IDE Primary Slave       Press Enter None             │ Change the day,  │
│ IDE Secondary  Master   Press Enter None             │ month,year       │
│ IDE Secondary Master    Press Enter None             │ and century.     │
│                                                       │                  │
│ Drive A                 1.44M,3.5 in                 │                  │
│ Drive B                 None                          │                  │
│                                                       │                  │
│ Video                   EGA/VGA                       │                  │
│ Halt On                 All,But Keyboard             │                  │
│                                                       │                  │
│ Base Memory             xxxx                          │                  │
│ Extended Memory         xxxx                          │                  │
│ Total                   xxxx                          │                  │
└─────────────────────────────────────────────────────┴──────────────────┘
```

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

Main Menu Selections

This table shows the selections that you can make on the Main Menu.

Item	Options	Description
Date	Month DD YYYY	Set the system date. Note that the 'Day' automically changes when you set the data.
IDE Primary Master	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Primary Slave	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Secondary Master	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Secondary Slave	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
Drive A Drive B	None 360K,5.25in 1.2M,5.25in 720K,3.5in 1.44M,3.5in 2.88M,3.5in	Select the type of floppy disk drive installed in your system
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.

Item	Options	Description
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/Key	Select the situation in which you want the BIOS to stop the POST process and notify.
Base Memry	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memry	N/A	Displays the amount of conventional memory detected during boot up.
Total Memry	N/A	Displays the total memory available in the system

2.3 Advanced BIOS Features

◎ **Figure 3. Advanced BIOS Features**

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Advanced BIOS Features

```
┌─────────────────────────────────────────────────────┬──────────────────┐
│ Anti-Virus Protection            Disabled            │ Item Help        │
│ CPU Internal Cache               Enabled             ├──────────────────┤
│ External Cache                   Enabled             │ Menu Level       │
│ CPU L2 Cache ECC Checking        Enabled             │                  │
│ Quick Power On Self Test         Enabled             │ Allows you to    │
│ First Boot Device                Floopy              │ choose the       │
│ Second Boot Device               HDD-0               │ VIRUS warning    │
│ Third Boot Device                CD-ROM              │ feature for IDE  │
│ Boot Other Device                Enabled             │ Hard Disk boot   │
│ Swap Floppy Drive                Disabled            │ sector protection.│
│ Boot Up Floppy Seek              Disabled            │ If this function │
│ Boot Up NumLock Status           On            is    │  enabled and     │
│ Gate A20 Option                  Fast                │ someone attempts │
│ Typematic Rate Setting           Disabled            │ to write data into│
│ Typematic Rate (Chars/Sec)       6                   │ this area,BIOS   │
│ Typematic Delay (Msec)           250                 │ will show a      │
│ Security Option                  Setup               │ warning message  │
│ Report No FDD For Win95          No                  │ on screen and    │
│ OS Select For DRAM               Non-OS2             │ alarm beep       │
│ Video BIOS Shadow                Enabled             │                  │
└─────────────────────────────────────────────────────┴──────────────────┘
```

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

Anti-Virus Protection

This option allows you to choose the VIRUS Warning
feature for IDE Hard Disk boot sector protection. If this
function is enabled and someone attempts to write data into
this area, BIOS will show a warning message on screen and
alarm beep.

The Choices: Disabled(default), Enabled.

CPU Internal Cache

These two categories speed up memory access. However, it depends on CPU/chipset design.

Enabled(default)   Enabled cache.
Disabled   Disabled cache.

External Cache

This fields allow you to Enable or Disable the CPU'S "Level 2" secondary cache. Caching allows better performance.

Enabled(default)   Enabled cache.
Disabled   Disabled cache.

CPU L2 Cache ECC Checking

The item allows you to enable/disable CPU L2 Cache ECC Checking.

The Choices: Enabled(default), Disabled.

Quick Power On Self Test

This category speeds up Power on Self-Test(POST) after you power up the computer. If it is set to Enable, BIOS will shorten or skip some check items during POST.

Enabled(default)   Enabled quick POST.
Disabled   Normal POST.

First/Secondary/Third/Boot Other Device

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

The Choices: Floppy, LS120, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, USB-HDD, LAN, Disabled.

Boot Other Device

The Choices: Enabled(default), Disabled.

Swap Floppy Drive

If the system has two floppy drives, you can swap the logical drive name assignments.
The Choices: Enabled, Disabled(default).

Boot Up Floppy Seek

Seek disk drives during boot up. Disabled speeds boot-up.
The Choices: Enabled(default), Disabled.

Boot Up NumLock Status

Select power on state for NumLock.

On(default)	Numpad is number keys.
Off	Numpad is arrow keys.

Gate A20 Option

Select if chipset or keyboard controller should control Gate A20.

Normal	A pin in the keyboard controller controls Gate A20.
Fast(default)	Lets chipset control Gate A20.

Typematic Rate Setting

Enabled	Enabled this option to adjust the keystroke repeat rate.
Disabled(default)	Disabled.

Typematic Rate (Char/Sec)

Range between 6**(default)** and 30 characters per second.
This option controls the speed of repeating keystrokes.

Typematic Delay (Msec)

This option sets the time interval for displaying the first and the second characters.
The Choices: 250(default), 500, 750, 1000

Security Option

> This category allows you to limit access to the system and Setup, or just to Setup.

> | | |
> |---|---|
> | **System** | The system will not boot and access to Setup will be denied if the correct password is not entered in prompt. |
> | **Setup(default)** | The system will boot, but access to Setup will be denied if the correct password is not entered in prompt. |

Report No FDD For Win95

> | | |
> |---|---|
> | **No(default)** | Assign IRQ6 For FDD. |
> | **Yes** | FDD Detect IRQ6 Automatically. |

OS Select For DRAM

> Select the operating system that is running with greater than 64MB of RAM on the system
>
> **The Choices: Non-OS2(default), OS2**

Video BIOS Shadow

> Determines whether video BIOS will be copied to RAM for faster execution.
>
> | | |
> |---|---|
> | **Enabled(default)** | Optional ROM is enabled. |
> | **Disabled** | Optional ROM is disabled. |
>
> C8000-CFFFF Shadow / D0000-DFFFF Shadow
> Determines whether video BIOS will be copied to RAM for faster execution.
>
> | | |
> |---|---|
> | **Enabled** | Optional ROM is Shadowed. |
> | **Disabled(default)** | Optional ROM is not Shadowed. |
>
> **Note:**For C8000-DFFFF option-ROM on PCI BIOS,BIOS will automatically enable the shadow RAM.User does not have to select the item

2.4 Advanced Chipset Features

This section allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds and access to system memory resources, such as DRAM and external cache. It also coordinates communications of the PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for your system. The only time you might consider making any changes would be if you discovered that data was lost while using your system

◎ **Figure 4. Advanced Chipset Features**

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Advanced Chipset Features

```
┌─────────────────────────────────────────────────────────────────────┐
│  DRAM Timary By SPD           Enabled      │ Item Help             │
│  DRAM Clock                   100          │                       │
│  SDRAM Cycle Length           3            ├───────────────────────┤
│  Bank Interleave              Disabled     │                       │
│  Memory Hole                  Disabled     │ Menu Level            │
│  PCI Master Pipeline Req      Enabled      │                       │
│  P2C/C2P Concurrency          Enabled      │                       │
│  Fast R-W Turn Around         Disabled     │                       │
│  System BIOS Cacheable        Disabled     │                       │
│  Video RAM Cacheable          Disabled     │                       │
│  AGP Aperture Size            64M          │                       │
│  AGP-4X Mode                  Enabled      │                       │
│  AGP Driving Control          Auto         │                       │
│  AGP Driving Value            DA           │                       │
│  K7 CLK_CTL Select            Optimal      │                       │
│  OnChip USB                   Enabled      │                       │
│  OnChip USB2                  Enabled      │                       │
│  USB Keyboard Support         Disabled     │                       │
│  OnChip Sound                 Auto         │                       │
│  OnChip Modem                 Auto         │                       │
│  CPU to PCI Write Buffer      Enabled      │                       │
│  PCI Dynamic Bursting         Enabled      │                       │
│  PCI Master 0 WS Write        Enabled      │                       │
│  PCI Delay Transaction        Enabled      │                       │
│  PCI #2 Access #1 Retry       Enabled      │                       │
│  AGP Master 1WS Write         Disabled     │                       │
│  AGP Master 1WS Read          Disabled     │                       │
└─────────────────────────────────────────────────────────────────────┘
←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults
```

DRAM Timary by SPD
The Choices: Enabled(default), Disabled

DRAM Clock
> This item determines DRAM Clock following the CPU
> host clock .
> **The Choices: 100**(default), 133.

SDRAM Cycle Length
> When synchronous DRAM is installed, the number of
> clock cycle of CAS latency depends on the DRAM timing.
> Do not reset this field from the default value specified by
> the system designer.
> **The Choices: 3**(default), 2, Auto.

Memory Hole
> In order to improve performace, certain space in memory
> can be reserved for ISA cards. This memory must be
> mapped into the memory's space below 16MB.
> **The Choices: Diasbled**(default), Enabled.

P2C/C2P Concurrency
> The item allows you to enable/disable the PCI to CPU to
> PCI concurrency.
> **The Choices: Enabled**(default), Disabled.

Fast R-W Turn Around
> The item controls the DRAM timing.It allows you to
> enable/disable the fast read/write turn around.
> **The Choices: Disabled**(default), Enabled.

System BIOS Cacheable
> When enabled, the access to the system BIOS ROM
> address at F0000H-FFFFFFH is cached.
> **The Choices: Diasbled**(default), Enabled.

Video RAM Cacheable

When enabled, the access to the system VGA RAM address is cached.

The Choices: Diasbled (default), Enabled.

AGP Aperture Size

Select the size of the Accelerated Graphic Port(AGP) aperture. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycle that hit the aperture range are forwarded to the AGP without any translation.

The Choices: 64MB (default), 32M, 16M, 8M, 4M, 128M.

AGP-4X Mode

The item allows you to enable/disable the AGP-4X Mode.

The Choices: Enabled (default), Disabled.

AGP Driving Control

By choosing "Auto" the system BIOS will the AGP output Buffer Drive strength that were defined by AGP Card. By choosing "Manual", it allows user to set AGP output Buffer Drive strength by manual.

The Choices: Auto (default), Manual.

KCLK_CTL Select

Use this item specify the clock control for ram rate. Select default for a defaulted time value, and optimum time value which depends on different CPU ratio.

The Choices: Optimal (default).

Onchip USB/USB2

This should be enabled if your system has a USB installed on the system board and you whish to use it. Even when so equipped, if you add a higher performance controller, you will need to disable this feature.

The Choices: Enabled (default), Disabled.

USB Keyboard Support

Select Enabled if your system contains a Universal Serial
Bus(USB) controller and you have a USB keyboard.
The Choices: Disabled(default), Enabled.

Onchip Sound

The default setting of this item utilizes an onboard sound
chip for audio output. There is no need to buy and insert a
sound card. If a sound card is installed, disable this item
The Choices: Auto(default), Disabled

Onchip Modem

The item allows you to control the onboard MC97
Modem controller.
The Choices: Auto(default), Disabled.

CPU to PCI Write Buffer

When this field is Enabled, write from the CPU to the PCI
bus are buffered, to compensate for the speed differences
between the CPU and the PCI bus. When Disabled, the are
not buffered and the CPU must wait until the write is
complete before starting another write cycle.
The Choices: Enabled(default), Disabled.

PCI Dynamic Bursting

The Choices: Enabled(default), Disabled.

PCI Master 0 WS Write

When this field is Enabled, write data to the PCI bus are
executed with zero wait states.
The Choices: Enabled(default), Disabled.

PCI Delay Transaction

The Choices: Disabled(default), Enabled.

PCI #2 Access #1 Retry
> The Choices: **Enabled**(default), Disabled.

AGP Master 1WS Write
> When Enabled, write data to the AGP (Accelerated
> Graphic Port) that will be executed with one wait states.
> **The Choices: Disabled**(default), Enabled.

AGP Master 1WS Read
> When Enabled, read data to the AGP (Accelerated Graphic
> Port) that will be executed with one wait states.
> **The Choices: Disabled**(default), Enabled.

2.5 Integrated Peripherals

◎ **Figure 5. Integrated Peripherals**

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Integrated Peripherals

On-Chip IDE Channel 0	Enabled	Item Help
On-Chip IDE Channel 1	Enabled	
IDE Prefetch Mode	Enabled	Menu Level
Primary Master PIO	Auto	
Primary Slave PIO	Auto	
Secondary Master PIO	Auto	
Secondary Slave PIO	Auto	
Primary Master UDMA	Auto	
Primary Slave UDMA	Auto	
Secondary Master UDMA	Auto	
Secondary Slave UDMA	Auto	
Init Display First	PCI Solt	
IDE HDD Block Mode	Enabled	
Onboard FDC Controller	Enabled	
Onboard Serial Port 1	Auto	
Onboard Serial Port 2	Auto	
UART 2 Mode	Standard	
IR Function Duplex	Half	
RxD,TxD Active	No,Yes	
Onboard Parallel Port	378/IRQ7	
Parallel Onboard Mode	ECP/EPP	
ECP Mode Use DMA	3	
EPP Mode Type	EPP1.9	
Onboard Legacy Audio	Enabled	
Sound Blaster	Disabled	
SB I/O Base Address	220H	
SB IRQ Select	IRQ5	
SB DMA Select	DMA1	
MPU - 401	Disabled	
MPU - 401 I/O Address	330-333H	
Game Port (200-270H)	Enabled	

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

On-Chip IDE Channel 0

Enabled(default)	Enabled onboard 1st channel IDE port.
Disabled	Disabled onboard 1st channel IDE port.

On-Chip IDE Channel 1

Enabled(default)	Enabled onboard 2nd channel IDE port.
Disabled	Disabled onboard 2nd channel IDE port.

IDE Prefetch Mode

　　The Choices: Enabled (default), Disabled.

Primary Master PIO (for onboard IDE 1st channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

Primary Slave PIO (for onboard IDE 2nd channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

Secondary Master PIO (for onboard IDE 1st channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

Secondary Slave PIO (for onboard IDE 2nd channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

Primary Master UDMA
> **Auto(default)**   BIOS will automatically detect
> the IDE HDD Accessing mode.
> **Disabled**   Disabled.

Primary Slave UDMA
> **Auto(default)**   BIOS will automatically detect
> the IDE HDD Accessing mode.
> **Disabled**   Disabled.

Secondary Master UDMA
> **Auto(default)**   BIOS will automatically detect
> the IDE HDD Accessing mode.
> **Disabled**   Disabled.

Secondary Slave UDMA
> **Auto(default)**   BIOS will automatically detect
> the IDE HDD Accessing mode.
> **Disabled**   Disabled.

Init Display First
> **PCI Slot(default)**   Set Init Display First to PCI
> Slot.
> **Onboard AGP**   Set Init Display First to
> onboard AGP.

IDE HDD Block Mode
> **Enabled(default)**   Enabled.
> **Disabled**   Disabled.

Onboard FDC Controller
> **Enabled(default)**   Enabled.
> **Disabled**   Disabled.

Onboard Serial Port1/Port2
> Select an address and corresponding interrupt for the first
> and second serial ports.
> **The Choices: Auto(default)**, (3F8/IRQ4), (2F8/IRQ3),
> (3E8/IRQ4), (2E8/IRQ3).

UART 2 Mode

This item allows you to select which Infra Red(IR)
function of the onboard I/O chip you wish to use.
The Choices: Standard (default), SCR, ASKIR.

IR Function Duplex

This item allows you to select which Infra Red(IR)
function of the onboard I/O chip you wish to use.
The Choices: Half (default), Full.

Parallel Port Mode

SPP	Using Parallel port as Standard Parallel Port.
EPP	Using Parallel port as Ex-hanced Parallel Port.
ECP	Using Parallel port as Ex-tended Capabilites Port.
ECP+EPP(default)	Using Parallel port as ECP+EPP mode.

Onboard Parallel Port

This item allows you to select the I/O address with which
to access the onboard parallel port controller.
The Choices: 378/IRQ7 (default), Disabled, 278/IR5,
3BC/IR7.

Onboard Legacy Audio

The Choices: Enabled(default), Disabled.

Sound Blaster

The Choices: Disabled(default), Enabled.

MPU -401

The Choices: Disabled(default), Enabled.

MPU -401 I/O Address(330-333H)

Change the SoundBlaster Pro MPU-401 I/O address.

Game Port (200-270H)

Change the joystick connect address.
The Choices: Enabled(default), Disabled.

2.6 Power Management Setup

The Power Management Setup allows you to configure your
system to most effectively save energy while operating in a
manner consistent with your own style of computer use.

◎ **Figure 6. Power Management Setup**

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Power Management Setup

```
┌─────────────────────────────────────────────────────┬──────────────┐
│ ACPI Function              Enabled              │ Item Help    │
│ Power Management           Press Enter          │              │
│ ACPI Suspend Type          S1(POS)              │ Menu  Level  │
│ PM Control by APM          Yes                  │              │
│ Video Off Option           Suspend->Off         │              │
│ Video Off Method           V/H SYNC+Blank       │              │
│ Modem Use IRQ              3                     │              │
│ Soft-Off by PWRBTN         Instant-Off          │              │
│ State After Power Failure  Off                   │              │
│ Wake Up Events             Press Enter          │              │
└─────────────────────────────────────────────────┴──────────────┘
```

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

ACPI Function

This item display status of the Advanced Configuration and
Power Management (ACPI).

Power Management

This category allows you to select the type (or degree) of
power saving and is directly related to the following
modes.
1.HDD Power Down.
2.Doze Mode.
3.Suspend Mode.
If you highlight "Press Enter" next to the "Power
Management" label and then press the enter key, it will
take you a submenu with the following options:

Power Management

This option allows you to set each mode individually. When not disabled, each of the ranges are from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min. and disable.

The Choices: User Define (default), Min Saving, Max Saving.

HDD Power Down

By default, this is "Disabled", meaning that no matter the mode of the rest of system, the hard drive will remain ready. Otherwise, you have a range of choices from 1 to 15 minutes or Suspend. This means that you can select to have your hard disk drive be turned off after a selected number of minutes or when the rest or the system goes into a suspend mode.

Disabled(default).

Doze Mode/Suspend Mode

The **Doze Mode**, and **Suspend Mode** fields set the Period of time after each of these modes activates. At Max Saving, these modes activate sequentially (in the given order) after one minute; at Min Saving after one hour.

ACPI Suspend Type

The item allows you to select the suspend type under ACPI operating system

S1(PS) (default)	Power on Suspend.
S3(STR)	Suspend to RAM.

PM Control by APM

No	System BIOS will ignore APM when Power Management is on.
Yes(default)	System BIOS will wait for APM'S prompt before it enters any PM mode.

Video Off Option

This field determines when to activate the vedio off feature for monitor power management.

Video Off Method

This determines the manner in which the monitor is blanked.

V/HSYNC+Blank (default)	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 Support	Initial display power management signaling.

Modem Use IRQ

This determines the IRQ, which can be applied in Modem use.

3 (default)

4/5/7/9/10/11/NA

Soft-Off by PWRBTN

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has "hung".

The Choices: Instant-Off (default), Delay 4 Sec.

State After Power Failure

This option will determine how the system will power on after a power failure.

The Choices: Off (default), On, Auto.

Wake Up Events

If you highlight the "Press Enter" next to the "Wake Up Events" label and then press the enter key, it will take you to a submenu with the following options:

VGA

When set to On, any event occurring at a VGA port will awaken a system which has been powered down.

LPT & COM

When set to On, any event occurring at a COM(serial) / LPT (printer) port will awaken a system which has been powered down.

HDD & FDD

When set to On(default), any event occurring at a hard or floppy drive will awaken a system which has been powered down.

PCI Master

When set to On, any event occurring at a PCI port will awaken a system which has been powered down.

Modem Ring Resume

To use this function, you need a LAN add-on card which supports power on function. It should also support the wake-up on LAN jump. **The Choices: Disabled**(default).

RTC Alarm Resume

When "Enabled", you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.

Primary INTR

When set to On(default), any event occurring at Primary INTR will awaken a system which has been powered down.

The following is a list of IRQ, Interrupt ReQuests, which can be exepted such 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. Off is the default. When set On, activity will neither prevent the system from going into a power management mode nor awaken it.

IRQ3	(COM1)
IRQ4	(COM2)
IRQ5	(LPT2)
IRQ6	(Floppy Disk)
IRQ7	(LPT1)
IRQ8	(RTC Alarm)
IRQ9	(IRQ2 Redir)
IRQ10	(Reserved)
IRQ11	(Reserved)
IRQ12	(PS/2 Mouse)
IRQ13	(Coprocessor)
IRQ14	(Hard Disk)
IRQ15	(Reserved)

2.7 PnP/PCI Configurations

This section describes configuring the PCI bus system. PCI or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed of the CPU itself when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced uses make any changes to the default settings.

◎ **Figure 7. PnP/PCI Configurations**

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PnP/PCI Configurations

```
┌─────────────────────────────────────────────────┬──────────────────┐
│ PNP OS Installed              No                 │ Item Help        │
│ Reset Configuration Data          Disabled       │ Menu Level  ▶    │
│                                                  │                  │
│ Resources Controlled By        Auto(ESCD)        │ Select Yes if    │
│ IRQ Resources              Press Enter           │ you are using a  │
│ DMA Resources                Press Enter         │ Plug and Play    │
│                                                  │ capable          │
│                                                  │ operating system │
│ PCI/VGA Palette Snoop          Disabled          │ select No if you │
│ Assign IRQ For VGA             Enabled           │ need the BIOS    │
│ Assign IRQ For USB             Enabled           │ to configure non-│
│                                                  │ boot devices     │
└─────────────────────────────────────────────────┴──────────────────┘
```

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

PNP OS Installed

When set to YES, BIOS will only initialize the PnP cards used for booting (VGA, IDE, SCSI). The rest of the cards will be initialized by the PnP operating system like Windows 95. When set to No, BIOS will initialize all the PnP cards. Therefore for non-PnP operating system (DOS, Netware), this option must be set to No.

Reset Configuration Data

The system BIOS supports the PnP feature so the system needs to record which resource is assigned and proceeds resources from conflict. Every peripheral device has a node, which is called ESCD. This node records which resources are assigned to it. The system needs to record and update ESCD to the memory locations. These locations (4K) are reserved at the system BIOS.

If Disabled (Default) is chosen, the system ESCD will update only when the new configuration varies from the last one. If Enabled is chosen, the system is forced to update ESCDs and then is automatically set to the "Disabled" mode.

IRQ3	assigned to:PCI/ISA PnP
IRQ4	assigned to:PCI/ISA PnP
IRQ5	assigned to:PCI/ISA PnP
IRQ6	assigned to:PCI/ISA PnP
IRQ7	assigned to:PCI/ISA PnP
IRQ8	assigned to:PCI/ISA PnP
IRQ9	assigned to:PCI/ISA PnP
IRQ10	assigned to:PCI/ISA PnP
IRQ11	assigned to:PCI/ISA PnP
IRQ12	assigned to:PCI/ISA PnP
IRQ13	assigned to:PCI/ISA PnP
IRQ14	assigned to:PCI/ISA PnP
IRQ15	assigned to:PCI/ISA PnP
DMA-0	assigned to:PCI/ISA PnP
DMA-1	assigned to:PCI/ISA PnP
DMA-2	assigned to:PCI/ISA PnP
DMA-3	assigned to:PCI/ISA PnP
DMA-4	assigned to:PCI/ISA PnP
DMA-5	assigned to:PCI/ISA PnP
DMA-6	assigned to:PCI/ISA PnP
DMA-7	assigned to:PCI/ISA PnP

The above settings will be shown on the screen only if "Manual" is chosen for the resources controlled by function.

Legacy is the term which signifies that a resource is assigned to the ISA Bus and provides for non-PnP ISA add-on cards. PCI/ISA PnP signifies that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

Resources Controlled By

By Choosing "Auto" (default), the system BIOS will detect the system resources and automatically assign the relative IRQ and DMA channel for each peripheral. By Choosing "Manual", the user will need to assign IRQ & DMA for add-on cards. Be sure that there are no IRQ/DMA and I/O port conflicts.

IRQ Resources

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

DMA Resources

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

PCI / VGA Palette Snoop

> Choose Disabled or Enabled. Some graphic controllers which are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.

> However, the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the write access to the VGA palette and registers the snoop data. In PCI based systems the Write Access to the palette will not show up on the ISA bus if the PCI VGA controller responds to the Write.

> In this case, the PCI VGA controller should not respond to the Write, it should only snoop the data and permit the access to be forwarded to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above situation, you should disable this option.

> **Disabled** (default)   Function disabled.
> **Enabled**   Function enabled.

Assign IRQ For VGA

> Lets the user choose which IRQ to assign for the VGA.

Assign IRQ For USB

> Lets the user choose which IRQ to assign for the USB.

2.8 PC Health Status

◎ **Figure 8. PC Health Status**

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PC Health Status

```
┌─────────────────────────────────────────────┬──────────────┐
│  Current CPU Temp.                           │ Item Help    │
│  Current System Temp.                        │              │
│  Current CPU Fan Speed                       │ Menu Level   │
│  Current Sys Fan Speed                       │              │
│  Vcore                                       │              │
│  VDDQ                                        │              │
│  +3.3V                                       │              │
│  +5.0V                                       │              │
│  +12.0V                                      │              │
│                                              │              │
│                                              │              │
│                                              │              │
└─────────────────────────────────────────────┴──────────────┘
```

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

Current CPU Temp.

This field displays the current CPU temperature, if your computer contains a monitoring system

Current System Temp.

This field displays the current system temperature, if your computer contains a monitoring system

Current CPU Fan Speed

These field displays the current speed of up to CPU Fans, if your computer contains a monitoring system

Current System Fan Speed

These field displays the current speed of the System Fans, if your computer contains a monitoring system

Current CPU Vcore VDDQ(AGP Voltage), 3.3V, 5V, 12V

Detect system's voltage status automatically.

2.9 Frequency / Voltage Control

◎ **Figure 9. Frequency / Voltage Control**

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Frequency / Voltage Control

```
┌─────────────────────────────────────────────────┬──────────────┐
│  Auto Detect DIMM / PCI CLK        Disabled      │  Item Help   │
│  Spread Spectrum Modulated         Disabled      │              │
│  Clock By Slight Adjust            100           │  Menu Level  │
│                                                  │              │
│                                                  │              │
│                                                  │              │
│                                                  │              │
│                                                  │              │
│                                                  │              │
│                                                  │              │
│                                                  │              │
└─────────────────────────────────────────────────┴──────────────┘
```

←→↑↓: Move   Enter:Select   +/-/PU/PD:Value   F10:Save   ESC:Exit
F1:General Help   F5:Previous Values   F6:Fail-Safe Defaults
F7:Optimized Defaults

Auto Detect DIMM / PCI CLK

This item allows you to enable/disable auto detect DIMM /
PCI CLOCK.
The Choices: Disabled(default), Enabled.

Clock By Slight Adjust 100

This item allows you to select the CPU clock from
133MHz to 166MHz, 100MHz to 132MHz depending on
the CPU Host Clock .

Spread Spectrum Modulated

This function id designed to EMI test only.
The Choices: Disabled(default), Enabled.

2.10 Load Fail-Safe Defaults

When you press <Enter> on this item you get a

confirmation dialog box with a message similar to:

◎ **Figure 10. Load Fail-Safe Defaults**

CMOS Setup Utility-Copyright(C) 1984-2001 Award Software
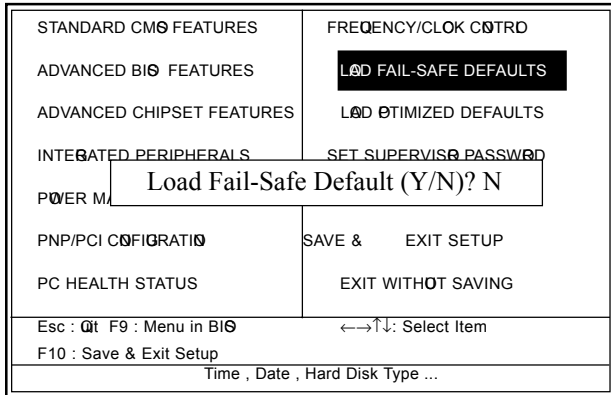
STANDARD CMOS FEATURES	FREQUENCY/CLOCK CONTROL
ADVANCED BIOS FEATURES	LOAD FAIL-SAFE DEFAULTS
ADVANCED CHIPSET FEATURES	LOAD OPTIMIZED DEFAULTS
INTEGRATED PERIPHERALS	SET SUPERVISOR PASSWORD
POWER MA	Load Fail-Safe Default (Y/N)? N
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP
PC HEALTH STATUS	EXIT WITHOUT SAVING
Esc : Quit F9 : Menu in BIOS	←→↑↓: Select Item
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Pressing 'Y' loads the default values that are factory settings
for optimal performance to system operations.

2.11 Load Optimized Defaults

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

◎ **Figure 11. Load Optimized Defaults**

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```
┌─────────────────────────────────────────────────────────────┐
│  STANDARD CMOS FEATURES        FREQENCY/CLOK CONTROL         │
│                                                              │
│  ADVANCED BIOS FEATURES        LOAD FAIL-SAFE DEFAULTS       │
│                                                              │
│  ADVANCED CHIPSET FEATURES     LOAD OPTIMIZED DEFAULTS       │
│                                                              │
│  INTEGRATED PERIPHERALS        SET SUPERVISOR PASSWORD       │
│                    ┌──────────────────────────────┐          │
│  POWER MA          │ Load Optimized Default (Y/N)? N │        │
│                    └──────────────────────────────┘          │
│  PNP/PCI CONFIGRATION          SAVE &    EXIT SETUP          │
│                                                              │
│  PC HEALTH STATUS              EXIT WITHOUT SAVING           │
│ ──────────────────────────────────────────────────────────  │
│  Esc : Qit  F9 : Menu in BIOS      ←→↑↓: Select Item        │
│  F10 : Save & Exit Setup                                    │
│ ──────────────────────────────────────────────────────────  │
│             Time , Date , Hard Disk Type ...                 │
└─────────────────────────────────────────────────────────────┘
```

Pressing 'Y' loads the default values that are factory settings
for optimal performance to system operations.

2.12 Set Supervisor / User Password

◎ **Figure 12. Set Supervisor / User Password**

CMOS Setup Utility-Copyright(C) 1984-2001 Award Software

```
┌──────────────────────────────────────────────────────────────┐
│  STANDARD CMOS FEATURES        FREQENCY/CLOK CONTRO           │
│                                                                │
│  ADVANCED BIOS FEATURES        LOAD FAIL-SAFE DEFAULTS        │
│                                                                │
│  ADVANCED CHIPSET FEATURES      LOAD OTIMIZED DEFAULTS        │
│                                                                │
│  INTEGRATED PERIPHERALS        ▐SET SUPERVISO PASSWOD▌        │
│                                                                │
│  POWER MANAGMENT SETUP   ┌─────────────────────────┐         │
│                          │   Enter Password:        │         │
│  PNP/PCI CONFIGRATIO     │         SAVE &  EXIT SETUP         │
│                          └─────────────────────────┘         │
│  PC HEALTH STATUS              EXIT WITHOT SAVING            │
│                                                                │
├──────────────────────────────────────────────────────────────┤
│  Esc : Qit  F9 : Menu in BIOS      ←→↑↓: Select Item          │
│  F10 : Save & Exit Setup                                      │
├──────────────────────────────────────────────────────────────┤
│              Time , Date , Hard Disk Type ...                 │
└──────────────────────────────────────────────────────────────┘
```
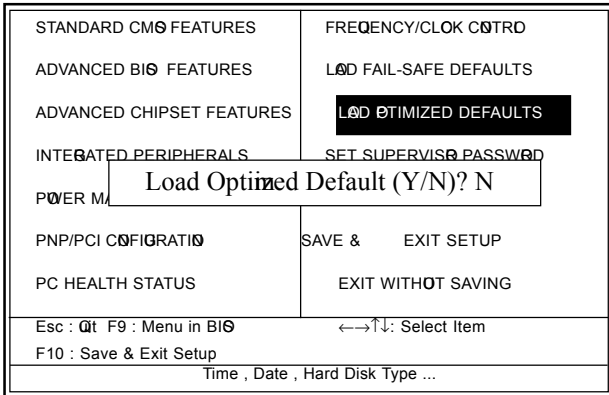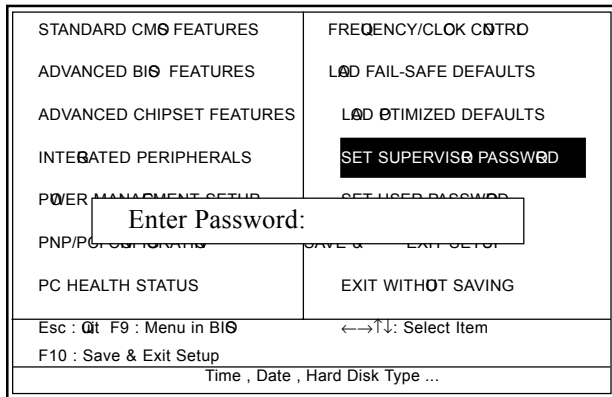
When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Enter Password

Type a password, up to eight characters, and press <Enter>. The password you type now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <ESC> to abort the selection and not enter a password. To disable the password, just press <Enter> when you are prompted to enter a password. A message will confirm that you wish to disable the password. Once the password is disabled, the system will boot and you can enter setup freely.

Password Disabled

If you select "System" at the Security Option of BIOS Features Setup Menu, you will be prompted for the password every time when the system is rebooted, or any time when you try to enter Setup. If you select "Setup" at the Security Option of BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

2.13 Save & Exit Setup

◎ **Figure 13. Save & Exit Setup**

CMOS Setup Utility-Copyright(C) 1984-2001 Award Software

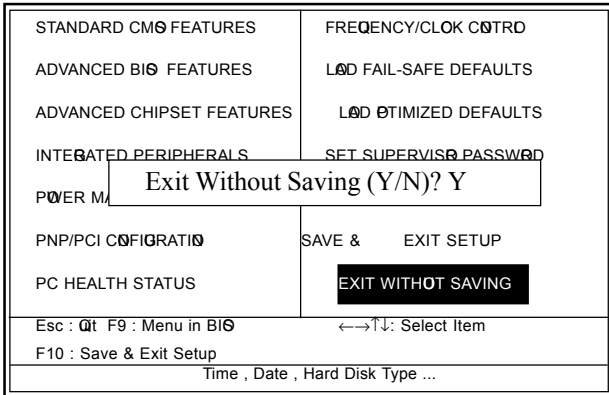|	
STANDARD CMOS FEATURES	FREQUENCY/CLOK CONTROL
ADVANCED BIOS FEATURES	LOAD FAIL-SAFE DEFAULTS
ADVANCED CHIPSET FEATURES	LOAD OTIMIZED DEFAULTS
INTEGRATED PERIPHERALS	SET SUPERVISOR PASSWORD
POWER MA... Save & Exit Setup (Y/N)? Y	
PNP/PCI CONFIGRATION	SAVE & EXIT SETUP
PC HEALTH STATUS	EXIT WITHOT SAVING
Esc : Qit F9 : Menu in BIOS	←→↑↓: Select Item
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Typing "Y" will quit the Setup Utility and save the user setup
value to RTC CMOS RAM.

Typing "N" will return to the Setup Utility.

2.14 Exit Without Saving

◎ **Figure 14. Exit Without Saving**

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```
┌─────────────────────────────────────────────────────────────┐
│  STANDARD CMOS FEATURES        FREQUENCY/CLOK CONTROL         │
│                                                               │
│  ADVANCED BIOS FEATURES        LOAD FAIL-SAFE DEFAULTS        │
│                                                               │
│  ADVANCED CHIPSET FEATURES       LOAD OPTIMIZED DEFAULTS      │
│                                                               │
│  INTEGRATED PERIPHERALS        SET SUPERVISOR PASSWORD        │
│             ┌───────────────────────────────────────┐        │
│  POWER MA   │     Exit Without Saving (Y/N)? Y      │        │
│             └───────────────────────────────────────┘        │
│  PNP/PCI CONFIGRATION          SAVE &      EXIT SETUP         │
│                                                               │
│  PC HEALTH STATUS              ▌EXIT WITHOT SAVING▐           │
│  ─────────────────────────────────────────────────────────── │
│  Esc : Quit  F9 : Menu in BIOS        ←→↑↓: Select Item       │
│  F10 : Save & Exit Setup                                      │
│  ─────────────────────────────────────────────────────────── │
│              Time , Date , Hard Disk Type ...                 │
└─────────────────────────────────────────────────────────────┘
```

Typing "Y" will quit the Setup Utility without saving to RTC CMOS RAM.

Typing "N" will return to the Setup Utility.

Date :   /   /

Warranty Card/Technical Fault Report

M/B Model No.:_____   Vender

Serial No.   :_____

Date of Purchase:_____

Hardware Configuration Used :

CPU	
RAM (Brand,MB)	
Video Card	
Hard Drive	
Other Card	

Diagnostic Software Used :

Fault Description :

The 7KTA1 Mainboard layout

J1 PANEL Connector

RST HD_LED PW_LED PW_BN

GLED EXTSMI SPEAK