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Rev.1.1

SETUP GUIDE

MAIN BOARD FEATURE INTRODUCTION

SPECIFICATIONS

Chipset	ALI – V M1542	
SUPER I/O	ALI M1543	
CPU Support	One321-pin Socket 7 for INTEL P54C/MMX, AMD K5/ K6/K6-2, CYRIX 6x86/L/M2 and WINCHIP IDT C6 Processors	
CPU Host Clock	60 , 66 , 75 , 83.3 , 95 , 100 MHz	
From Factor	AT	
BIOS Vendor	AWARD GREEN , Plug & Play	
Voltage	2.0V ~ 3.5V	
CACHE	On board PBSRAM 64K x 64 (512K)	
Memory	Three 168-pin DIMMs [support FPM/EDO(3.3V)/ SDRAM(support PC-100MHz)]	
Slots	ISA	Two 16-Bit ISA
	PCI	Three 32-Bit PCI
	AGP	One AGP(Accelerated Graphics Port) for high performance, component level interconnect targeted at 3D graphical display application
I/O		<ol style="list-style-type: none">1. Two high speed 16550 compatible serial ports.2. One Multi-Mode Parallel port fixed (SPP/EPP/ECP standard).3. Two Universal Serial Bus ports (USB).4. Keyboard and PS/2 mouse.5. Two IDE ports ,supports four IDE devices (PIO mode 4, DMA mode 2, Ultra DMA 33), and LS-120/ZIP disk driver6. Two720KB/1.2MB/1.44MB/2.88MB Floppy disk controller.
Other		<ol style="list-style-type: none">1. Auto Temperature Sensor Monitor & Music Alarm (OPTION).2. CPU FAN control in Suspend ON/OFF .3. LAN wake-up . Modem Ring wake-up .
Dimension		Four-Layer PCB , AT size (220mm X 230mm)
New Function		Trend ChipAwayVirus In BIOS & Pc-cillin 95 in diskette

SETUP GUIDE

MAINBOARD LAYOUT DRAWING:

SETUP GUIDE

MEMORY INSTALLATION

Three by **168-pin DIMM** sockets (DIMM1, DIMM2, DIMM3) to support 8MB, 16MB, 32MB, 64MB, 128MB or 256MB to from a memory size between 8MB to 768MB , support **FAST PAGE MODE (FPM)** , **EXTENDED DATA OUTPUT (EDO/3.3V)** and **SYNCHRONOUS DYNAMIC RANDOM ACCESS MEMORY (SDRAM/PC-100MHz)** DIMMs .

SETUP GUIDE

CPU QUICK INSTALLED TABLE

INTEL CPU	CPU CLK			CPU RATIO (JB1)			CPU VOLT (JV1)			
	JC1	JC2	JC3	1-2	3-4	5-6	1-2	3-4	5-6	7-8
P (MMX) – 266MHz	O	S	S	S	O	S	O	O	O	S
P (MMX) – 233MHz	O	S	S	O	O	O	O	O	O	S
P (MMX) – 200MHz	O	S	S	O	S	O	O	O	O	S
P (MMX) – 166MHz	O	S	S	S	S	O	O	O	O	S
PENTIUM – 200MHz	O	S	S	O	S	O	O	S	S	S
PENTIUM – 166MHz	O	S	S	S	S	O	O	S	S	S
PENTIUM – 150MHz	S	S	S	S	S	O	O	S	S	S
PENTIUM – 133MHz	O	S	S	S	O	O	O	S	S	S
AMD CPU	CPU CLK			CPU RATIO (JB1)			CPU VOLT (JV1)			
	JC1	JC2	JC3	1-2	3-4	5-6	1-2	3-4	5-6	7-8
K6 – 2/350MHz ①	O	O	O	O	O	O	O	S	O	O
K6 – 2/333MHz ②	S	O	O	O	O	O	O	S	O	O
K6 – 2/300MHz ①	O	O	O	O	S	O	O	S	O	O
K6 – 2/266MHz	O	S	S	S	O	S	O	S	O	O
K6 – 2/250MHz ①	O	O	O	S	S	O	O	S	O	O
K6 – 300MHz	O	S	S	S	S	S	O	S	O	O
K6 – 266MHz	O	S	S	S	O	S	O	S	O	O
K6 – 233MHz	O	S	S	O	O	O	O	S	O	O
K6 – 200MHz	O	S	S	O	S	O	S	O	O	S
K6 – 166MHz	O	S	S	S	S	O	S	O	O	S
CYRIX CPU	CPU CLK			CPU RATIO (JB1)			CPU VOLT (JV1)			
	JC1	JC2	JC3	1-2	3-4	5-6	1-2	3-4	5-6	7-8
6x86M ^c – 300MHz	S	S	O	O	S	O	S	O	O	S
6x86M ^c – 233MHz	S	S	O	S	S	O	S	O	O	S
6x86M ^c – 200MHz	S	S	O	S	O	O	O	O	O	S
6x86M ^c – 200MHz	O	S	S	S	S	O	S	O	O	S
6x86M ^c – 166MHz	O	S	S	S	O	O	S	O	O	S
6x86L – P200 (150MHz)	S	S	O	S	O	O	O	O	O	S
6x86L – P166 (133MHz)	O	S	S	S	O	O	O	O	O	S
6x86L – P150 (120MHz)	S	S	S	S	O	O	O	O	O	S

Note : O – OPEN S – SHORT

For AMD K6-300MHz JV2: OPEN (3.45V).

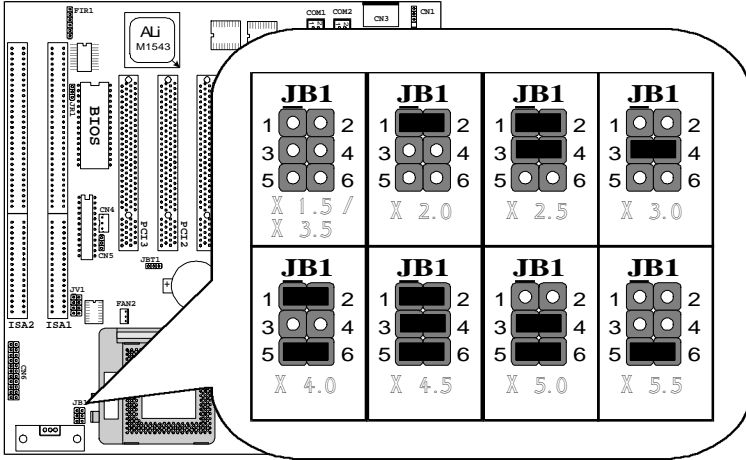
① : 100MHz ② : 95MHz

* This "CPU Quick INSTALLED TABLE" at present market condition, thereafter new CPU installed, please reference material CPU or write on CPU setting speak.

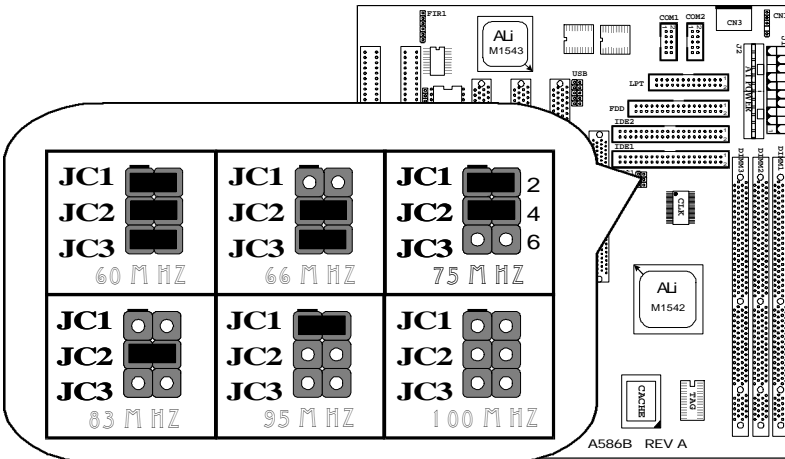
SETUP GUIDE

JUMPER SETTING

1. CPU TO BUS FREQUENCY RATIO JUMPER SETTING (JB1) :

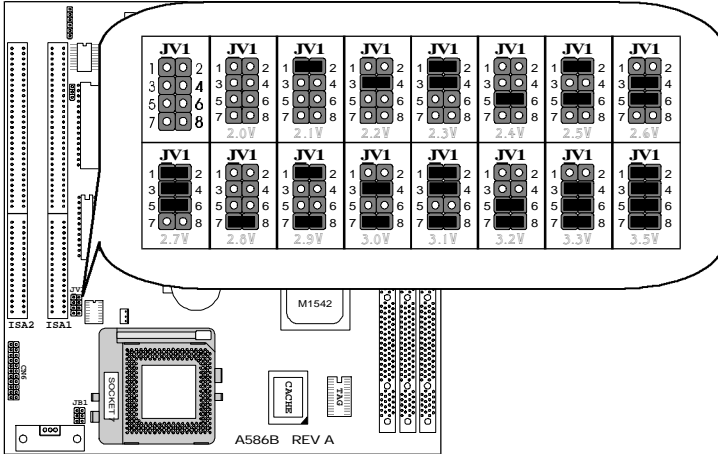


2. CPU CLOCK JUMPER SETTING (JC1,JC2,JC3) :

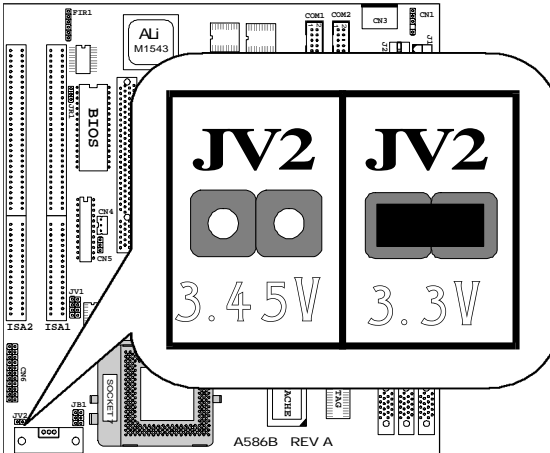


SETUP GUIDE

3. CPU VOLTAGE JUMPER SETTING 1 (JV1) :

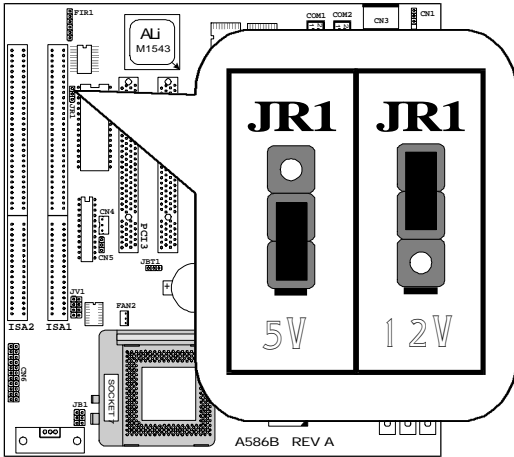


4. CPU VOLTAGE JUMPER SETTING 2 (JV2) :

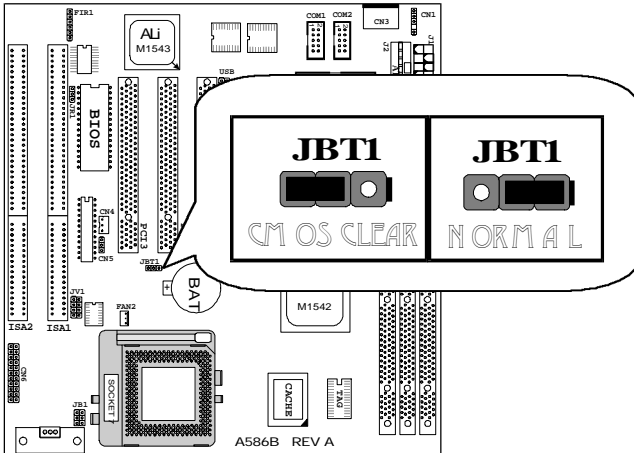


SETUP GUIDE

5. BIOS VOLTAGE JUMPER SETTING (JR1) :

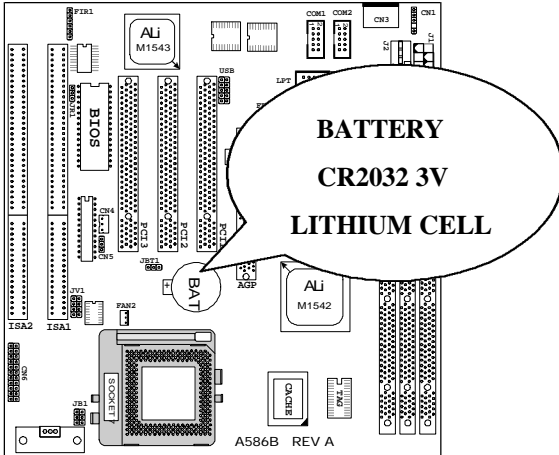


6. CMOS CLEAR (JBT1) :

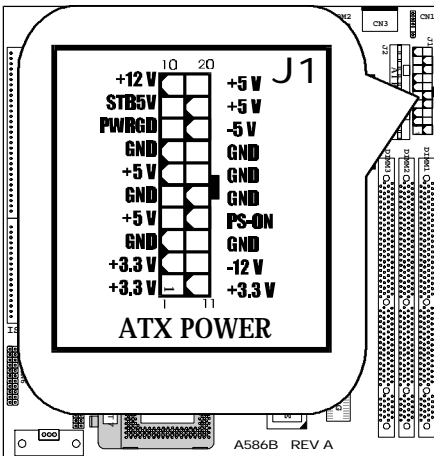


SETUP GUIDE

7. BATTERY :

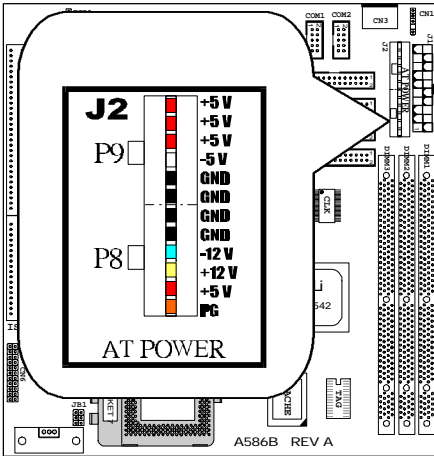


8. ATX POWER SUPPLY CONNECTOR (J1) :

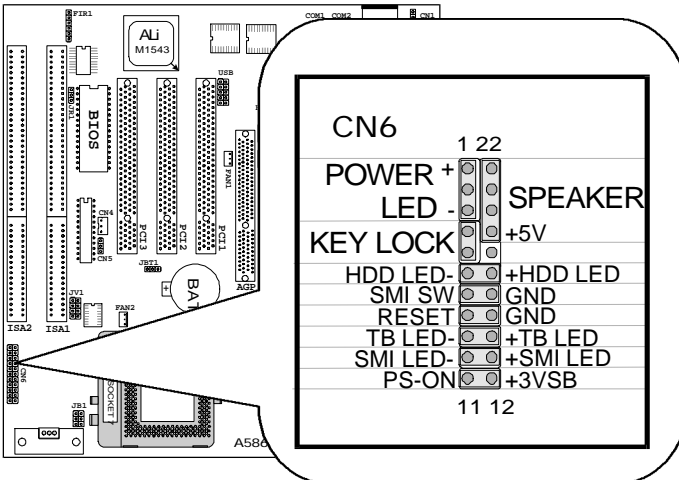


SETUP GUIDE

9. AT POWER SUPPLY CONNECTOR (J2) :

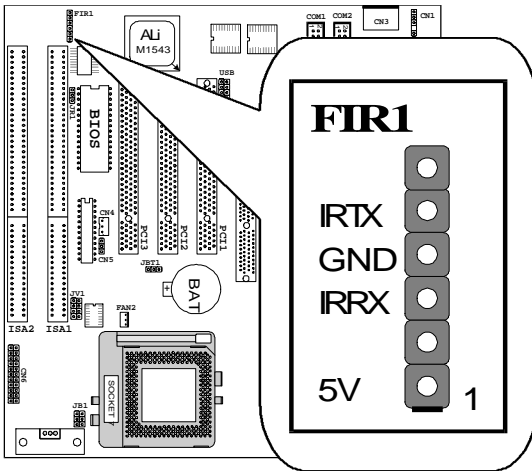


10. SYSTEM PANEL CONNECTORS (CN6) :

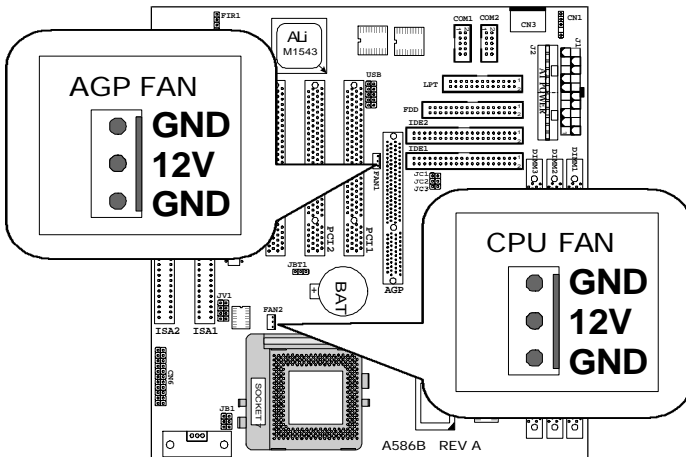


SETUP GUIDE

11. IR CONNECTOR (FIR1) :

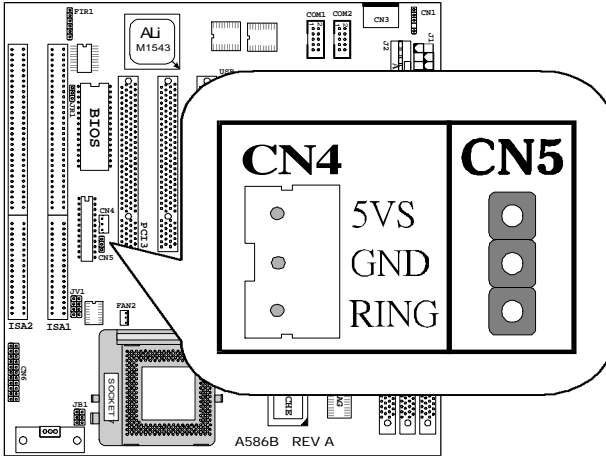


12. FAN CONNECTORS (CPU FAN2, AGP FAN1) :



SETUP GUIDE

13. LAN WAKE-UP CONNECTOR (CN4 or CN5) :



LAN Wake-up require 5V stand-by voltage > 600mA for your ATX power.

SETUP GUIDE

BIOS SETTING

Introduction

This manual discusses Award's Setup program built into the ROM BIOS. The Setup program allows users to modify the basic system configuration. This special information is then stored in battery back-up RAM so that it retains the Setup information when the power is turned off.

The Award BIOS installed in your computer system ROM (Read Only Memory) is a custom version of an industry standard BIOS. This means that it supports Intel/Cyrix/AMD/ C6 processors in a standard IBM-AT compatible input/output system. The BIOS provides critical low-level support for standard devices such as disk drives, serial and parallel ports.

The Award BIOS has been customized by adding important, but non-standard, features such as virus and password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

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

Starting Setup

The Award BIOS is immediately activated when you first power on the computer. The BIOS reads the system information contained in the CMOS and begins the process of checking out the system and configuring it. When it finishes, the BIOS will seek an operating system on one of the disks and then launch and turn control over to the operating system.

While the BIOS is in control, the Setup program can be activated in one of two ways:

1. By pressing immediately after switching the system on, or
2. by pressing the key when the following message appears briefly at the bottom of the screen during the POST (Power On Self Test).

Press to enter SETUP.

If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing

SETUP GUIDE

<Ctrl>, <Alt>, and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to...

PRESS <F1> TO CONTINUE, TO ENTER SETUP

Using Setup

In general, you use the arrow keys to highlight items, press <Enter> to select, use the PageUp and PageDown keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more detail about how to navigate in the Setup program using the keyboard.

Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item in the left hand
Right arrow	Move to the item in the right hand
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
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
F1 key	General help, only for Status Page Setup Menu and Option Page Setup Menu
(Shift)F2 key	Change color from total 16 colors. F2 to select color forward, (Shift) F2 to select color backward
F3 key	Calendar, only for Status Page Setup Menu
F4 key	Reserved
F5 key	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
F6 key	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
F7 key	Load the default
F8 key	Reserved
F9 key	Reserved
F10 key	Save all the CMOS changes, only for Main Menu

SETUP GUIDE

Getting Help

Press <F1> to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window press <Esc> or the <F1> key again.

In Case of Problems

If, after making and saving system changes with Setup, you discover that your computer no longer is able to boot, the Award BIOS supports an override to the CMOS settings which resets your system to its defaults.

The best advice is to only alter settings which you thoroughly understand. To this end, we strongly recommend that you avoid making any changes to the chipset defaults. These defaults have been carefully chosen by both Award and your systems manufacturer to provide the absolute maximum performance and reliability. Even a seemingly small change to the chipset setup has the potential for causing you to use the override.

A Final Note About Setup

Not all systems have the same Setup. While the basic look and function of the Setup program remains the same for all systems, individual motherboard and chipset combinations require custom configurations. For example, you may find that your Setup main menu has a different number of entries from the main menu displayed in this manual. These are simply features not supported (or not user configurable) on your system.

The final appearance of the Setup program also depends on the Original Equipment Manufacturer (OEM) who built your system. If your OEM has decided that certain items should only be available to their technicians, those items may very well be removed from the Setup program.

SETUP GUIDE

1. MAIN MENU

Once you enter the Award BIOS CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions and two exit choices. Use the arrow keys to select among the items and press <Enter> to accept and enter the sub-menu.

**ROM PCI / ISA BIOS
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.**

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

Note that a brief description of each highlighted selection appears at the bottom of the screen.

Setup Items

The main menu includes the following main setup categories. Recall that some systems may not include all entries.

SETUP GUIDE

Standard CMOS Setup

This setup page includes all the items in a standard, AT-compatible BIOS.

BIOS FEATURES SETUP

This setup page includes all the items of Award special enhanced features.

Super / User Password Setting

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

Chipset Features Setup

This setup page includes all the items of chipset special features.

Power Management Setup

This entry only appears if your system supports Power Management, "Green PC", standards.

PNP / PCI Configuration Setup

This entry appears if your system supports PNP / PCI.

Load BIOS Defaults

The BIOS defaults have been set by the manufacturer and represent settings which provide the minimum requirements for your system to operate.

Load Setup Defaults

The chipset defaults are settings which provide for maximum system performance. While Award has designed the custom BIOS to maximize performance, the manufacturer has the right to change these defaults to meet their needs.

Integrated Peripherals

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

SETUP GUIDE

IDE HDD Auto Detection

Automatically detect and configure hard disk parameters. The Award BIOS includes this ability in the event you are uncertain of your hard disk parameters.

HDD Low Level Format

If supported by your system, this provides a hard disk low level format utility.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Save

Abandon all CMOS value changes and exit setup.

SETUP GUIDE

2. STANDARD CMOS SETUP

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. 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.

**ROM PCI / ISA BIOS
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.**

Date (mm:dd:yy) : Wed, Jul, 29, 1998/7/29								
Time (hh:mm:ss) : 9 : 25 : 5								
HARD DISK	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	: Auto	0	0	0	0	0	0	Auto
Primary Slave	: Auto	0	0	0	0	0	0	Auto
Secondary Master	: Auto	0	0	0	0	0	0	Auto
Secondary Slave	: Auto	0	0	0	0	0	0	Auto
Drive A	: 1.44M, 3.5in.							
Drive B	: None							
Video	: EGA/VGA							
Halt On	: All Errors							
				Base Memory : 640K				
				Extended Memory : 261120K				
				Other Memory : 384K				

				Total Memory : 262144K				
Ecs	: Quit	↑↓→← : Select Item			PU/PD/+/- : Modify			
F1	: Help	(Shift)F2 : Change Color						

DATE

The date format is <day>, <date> <month> <year>. Press <F3> to show the calendar.

day	The day, from Sun to Sat, determined by the BIOS and is display-only
date	The date, from 1 to 31 (or the maximum allowed in the month)
month	The month, Jan through Dec.
year	The year, from 1994 through 2079

SETUP GUIDE

TIME

The time format is <hour> <minute> <second>. The time is calculated based on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

DAYLIGHT SAVING

The category adds one hour to the clock when daylight-saving time begins. It also subtracts one hour when standard time returns.

Enabled	Enable daylight-saving
Disabled	Disable daylight-saving

SETUP GUIDE

Primary Master/Primary Slave/Secondary Master/Secondary Slave

The categories identify the types of 2 channels that have been installed in the computer. There are 45 predefined types and 4 user definable types are for Enhanced IDE BIOS. Type 1 to Type 45 are predefined. Type user is user-definable.

Press PgUp or PgDn to select a numbered hard disk type or type the number and press <Enter>. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use Type "User" to define your own drive type manually.

If you select Type "User", you will need to know the information listed below. Enter the information directly from the keyboard and press <Enter>. This information should be included in the documentation from your hard disk vendor or the system manufacturer.

If the controller of HDD interface is ESDI, the selection shall be "Type 1".

If the controller of HDD interface is SCSI, the selection shall be "None".

If you select Type "Auto", BIOS will Auto-Detect the HDD & CD-ROM Drive at the POST stage and showing the IDE for HDD & CD-ROM Drive.

TYPE	drive type
CYLS.	number of cylinders
HEADS	number of heads
PRECOMP	write precom
LANDZONE	landing zone
SECTORS	number of sectors
MODE	mode type

If a hard disk has not been installed select NONE and press <Enter>.

Drive A Type / Drive B Type

The category identifies the types of floppy disk drive A or drive B that have been installed in the computer.

The choice: None, 360K(5.25in), 1.2M(5.25in), 720K(3.5in), 1.44M(3.5in), 2.88M(3.5in) .

SETUP GUIDE

VIDEO

The category selects the type of video adapter used for the primary system monitor. Although secondary monitors are supported, you do not have to select the type in Setup.

The choice: EGA/VGA, CGA 40, CGA 80, MONO .

HALT ON

The category determines whether the computer will stop if an error is detected during power up.

The choice: No errors, All errors; All, But Keyboard; All, But Diskette; All, But Disk/Key .

MEMORY

The category is display-only which is determined by POST (Power On Self Test) of the BIOS.

Base Memory

The POST will determine the amount of base (or conventional) memory installed in the system. The value of the base memory is typically 512K for systems with 512K memory installed on the motherboard, or 640K for systems with 640K or more memory installed on the motherboard.

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 CPU's memory address map.

Other Memory

This refers to the memory located in the 640K to 1024K address space. This is memory that can be used for different applications. DOS uses this area to load device drivers in an effort to keep as much base memory free for application programs. The BIOS is the most frequent user of this RAM area since this is where it shadows RAM

SETUP GUIDE

3. BIOS FEATURES SETUP

This section allows you to configure your system for basic operation. You have the opportunity to select the system default speed, boot-up sequence, keyboard operation, shadowing and security.

**ROM PCI / ISA BIOS
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.**

ChipAwayVirus on Guard	: Enabled	Video BIOS	Shadow	: Enabled
CPU Internal Cache	: Enabled	C8000-CBFFF	Shadow	: Disabled
External cache	: Enabled	CC000-CFFFF	Shadow	: Disabled
Quick Power On Self Test	: Enabled	D0000-D3FFF	Shadow	: Disabled
Boot Sequence	: A, C, SCSI	D4000-D7FFF	Shadow	: Disabled
Swap Floppy Drive	: Disabled	D8000-DBFFF	Shadow	: Disabled
Boot Up Floppy Seek	: Enabled	DC000-DFFFF	Shadow	: Disabled
Boot Up Numlock Status	: On			
Gate A20 Option	: Fast			
Typematic Rate Setting	: Disabled			
Typematic Rate (Chars/Sec)	: 6			
Typematic Delay (Msec)	: 250			
Security Option	: Setup			
IDE Second Channel Control	: Disabled			
PS/2 mouse function control	: Disabled			
PCI/VGA Palette Snoop	: Disabled			
OS Select For DRAM > 64MB	: Non-OS2			
Report No FDD For WIN 95	: No			
		Esc : Quit	↑↓→← : Select Item	
		F1 : Help	PU/PD/+/- : Modify	
		F5 : Old Values	(Shift)F2 : Color	
		F6 : Load BIOS Defaults		
		F7 : Load Setup Defaults		

SETUP GUIDE

ChipAwayVirus on Guard

When this item is *Trend ChipAwayVirus (TCAV) on Guard*. Boot Viruses pose the most severe threat because they can move from a floppy diskette to your hard drive in less than a second. And it all happens during the loading of the boot sector. Provides a virus-free boot and operating system, experience peace of mind through hardware-based virus protection, detects known and unknown boot viruses with rule-based technology, receive immediate protection! Already installed on this board!.

The Choice: Enabled, Disabled .

CPU Internal Cache/External Cache

These two categories speed up memory access. However, it depends on CPU /Chipset design. The default value is enable.

The Choice: Enabled, 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.

The Choice: Enabled, Disabled .

Boot Sequence

This category determines which driver to search first for the disk operating system (i.e.,DOS). Default value is A,C.

The Choice: A,C,SCSI ; C,A,SCSI ; C,CDROM,A ; CDROM,C,A ; D,A,SCSI ; SCSI,A,C ; SCSI,C,A ; C only ; LS/ZIP,C .

SETUP GUIDE

Swap Floppy Driver

This item allows you to determine whether enable the swap floppy driver or not.

The Choice: Enabled, Disabled .

Boot up Floppy Seek

During POST , BIOS will determine if the floppy disk driver installed is 40 or 80 tracks. 360K type is 40 tracks while 720K, 1.2M and 1.44M are all 80 tracks.

The Choice: Enabled, Disabled .

Boot Up NumLock Status

This allows you to determine the default status of the numeric keypad. By default, the system boots up with NumLock on .

The Choice: On , Off .

Boot Up System Speed

Selects the default system speed – the normal operating speed at power up.

The Choice: High , Low .

Gate A20 Option

This entry allows you to select how the gate A20 is handled. The gate A20 is a device used to address memory above 1 Mbytes. Initially, the gate A20 was handled via a pin on the keyboard. Today, while keyboards still provide this support, it is more common, and much faster, for the system chipset to provide support for gate A20.

The Choice: Normal , Fast .

SETUP GUIDE

Typematic Rate Setting

This determines if the typematic rate is to be used. When disabled, continually holding down a key on your keyboard will generate only one instance. In other words, the BIOS will only report that the key is down. When the typematic rate is enabled, the BIOS will report as before, but it will then wait a moment, and, if the key is still down, it will begin the report that the key has been depressed repeatedly. For example, you would use such a feature to accelerate cursor movements with the arrow keys.

The Choice: Enabled, Disabled .

Typematic Rate (Chars/Sec)

When the typematic rate is enabled, this selection allows you select the rate at which the keys are accelerated.

The Choice: 6, 8, 10, 12, 15, 20, 24, 30 .

Typematic Delay (Msec)

When the typematic rate is enabled, this selection allows you to select the delay between when the key was depressed and when the acceleration begins .

The Choice: 250, 500, 750, 1000 .

Security Option

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

The Choice: System, Setup .

Note: To disable security, select PASSWORD SETTING at Main Menu and then you will be asked to enter password. Do not type anything and just press <Enter>, it will disable security. Once the security is disabled, the system will boot and you can enter setup freely .

SETUP GUIDE

OS Select for DRAM > 64MB

This item allows you to access the memory that over 64MB in OS/2 .

The Choice: Non-OS2 , OS2 .

PCI / VGA Palette Snoop

It determines whether the MPEG ISA / VESA VGA Cards can work with PCI / VGA or not .

The Choice: Enabled, Disabled .

Video BIOS Shadow

Determines whether video BIOS will be copied to RAM. However, it is optional depending on chipset design. Video Shadow will increase the video speed .

The Choice: Enabled, Disabled .

C8000 – CBFFF Shadow / DC000 – DFFFF Shadow

These categories determine whether option ROMs will be copied to RAM. An example of such option ROM would be support of on-board SCSI.

The Choice: Enabled, Disabled .

SETUP GUIDE

4. INTEGRATED PERIPHERALS :

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

On-Chip Primary IDE	: Enabled	Onboard FDC Controller	: Enabled
Master PIO	: Auto	Onboard Serial Port 1	: 3F8/IRQ4
Slave PIO	: Auto	Onboard Serial Port 2	: 2F8/IRQ3
Master Ultra DMA	: Auto	UR2 Mode	: Normal
Slave Ultra DMA	: Auto		
On-Chip Secondary IDE	: Enabled	Onboard Parallel Port	: 378/IRQ7
Master PIO	: Auto	Parallel Port Mode	: SPP
Slave PIO	: Auto		
Master Ultra DMA	: Auto		
Slave Ultra DMA	: Auto		
IDE HDD Block Mode	: Enabled		
On-Chip USB Controller	: Disabled		
Init Display First	: PCI Slot	Esc : Quit	↑↓→← : Select Item
Ring/Wake On LAN Control	: Disabled	F1 : Help	PU/PD/+/- : Modify
RTC Alarm Controller	: Disabled	F5 : Old Values	(Shift)F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

On-Chip First Channel

This chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the first and/or second IDE interface. Select Disabled to deactivate this interface, if you install a first and/or second add-in IDE interface IDE interface.

The choice: Enabled, Disabled.

On-Chip Second Channel

This chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the first and/or second IDE interface. Select Disabled to deactivate this interface, if you install a first and/or second add-in IDE interface IDE interface.

The choice: Enabled, Disabled.

SETUP GUIDE

IDE HDD Block Mode

This item allows your hard disk controller to use the fast block mode to transfer data to and from your hard disk drive (HDD). Select Enabled only if your hard drives support block mode.

The choice: Enabled, Disabled.

IDE Primary/ Secondary Master/ Slave PIO

The four IDE PIO (Programmed Input/ Output) fields let you set a PIO mode

(0-4) for each of the four IDE devices that the onboard IDE interface supports.

Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

IDE Primary/ Secondary Master/ Slave UDMA

Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/33, select Auto to enable BIOS support.

The Choice: Auto, Disabled

Onboard FDD Controller

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

The choice: Enabled, Disabled.

Onboard Serial Port 1/Port 2

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

The choice: 3F8/IRQ4, 2E8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled.

UART 2 Mode

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

The choice: Normal, ASK IR, IrDA.

SETUP GUIDE

IR Function Duplex

This item allows you to select the IR function when you select the UART 2 Mode is ASKIR

The choice: Half, Full.

Onboard Parallel Port

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

The choice: 378/IRQ7,278/IRQ5, 3BC/IRQ7, Disabled.

Onboard Parallel Mode

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

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

The choice: SPP, ECP/EPP, ECP, EPP/SPP.

ECP Mode Use DMA

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

The choice: 3, 1.

Parallel Port EPP Type

This item allows you to determine the IR transfer mode of onboard I/O chip.

The choice: EPP1.9, EPP1.7.

SETUP GUIDE

Supervisor/User Password Setting

You can set either supervisor or user password, or both of them. The differences between are:

supervisor password : can enter and change the options of the setup menus.
user password : just can only enter but do not have the right to change the options of the setup menus.

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 the password, up to eight characters in length, and press <Enter>. The password typed 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 a password, just press <Enter> when you are prompted to enter the password. A message will confirm the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

PASSWORD DISABLED.

When a password has been enabled, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Additionally, when a password is enabled, you can also require the BIOS to request a password every time your system is rebooted. This would prevent unauthorized use of your computer.

You determine when the password is required within the BIOS Features Setup Menu and its Security option (see Section 3). If the Security option is set to "System", the password will be required both at boot and at entry to Setup. If set to "Setup", prompting only occurs when trying to enter Setup.

SETUP GUIDE

5. CHIPSET FEATURES SETUP :

**ROM PCI / ISA BIOS
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.**

Auto Configuration	: Enabled	Spread Spectrum	: Disabled
L2 TAG RAM Size	: 8	CPU Warning Temperature	: Disabled
AT Bus Clock	: CLK 2/4	Current CPU Temperature	: 46°C J114C
DRAM Timing	: Normal		
SDRAM CAS Latency	: 3		
Pipelined Function	: Enabled		
Graphics Aperture Size	: 64MB		
SDRAM Burst X-1-1-1-1-1-1-1	: Enabled		
DRAM Date Integrity Mode	: Disabled		
Memory Hole At 15-16M	: Disabled		
Host Read DRAM Com Mode	: Syn.		
AGP Read Burst	: Enabled		
ISA Line Buffer	: Enabled		
Passive Release	: Enabled		
Delay Transaction	: Disabled		
Primary Frame Buffer	: All	Esc : Quit	↑↓→← : Select Item
VGA Frame Buffer	: Enabled	F1 : Help	PU/PD/+/- : Modify
Data Merge	: Disabled	F5 : Old Values	(Shift)F2 : Color
IO Recovery Period	: 1 us	F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

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 the external cache. It also coordinates communications between the conventional ISA bus and 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 being lost while using your system.

SETUP GUIDE

DRAM Setting

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 so that greater delays may be required to preserve the integrity of the data held in the slower memory chips.

Auto Configuration

This item allows you select pre-determined optimal values for DRAM, cache, timing according to CPU type & system clock.

The Choice: Enabled, Disabled.

Note: When this item is enabled, the pre-defined items will become SHOW-ONLY.

L2 TAG RAM Size

The system uses tag bits to determine the status of data in the L2 cache. Set this field to match the specifications (8 or 10 bits) of the installed tag RAM chip.

The Choice: 8,10.

AT Bus Clock

You can set the speed of the AT bus in terms of a fraction of the CPU clock speed (PCLK2), or at the fixed speed of 7.16 MHz.

The Choice: 7.16 MHz, CLK2/2, CLK2/3, CLK2/4, CLK2/5, and CLK2/6

DRAM Timing

The value in this field depends on performance parameters of the installed memory chips (DRAM). Do not change the value from the factory setting unless you install new memory that has a different performance rating than the original DRAMs.

The Choice: Normal, Fast, Slow.

SETUP GUIDE

SDRAM CAS Latency

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

The Choice: 2, 3.

Pipelined Function

When *Enabled*, the controller signals the CPU for a new memory address before all data transfers for the current cycles are complete, resulting in faster performance.

The Choice: Enabled, Disabled.

DRAM Data Integrity Mode

You can reserve this area of system memory for ISA adapter ROM. When this area is reserved, it cannot be cached. The user information of peripherals that need to use this area of system memory usually discusses their memory requirements.

The choice : Enabled, Disabled.

Host Read DRAM Command Mode

This item allows you to select the type of Host Read DRAM Command Mode.

The choice : Syn., Bypass.

ISA Line Buffer

The PCI to ISA Bridge has an 8-byte bi-directional line buffer for ISA or DMA bus master memory reads from or writes to the PCI bus. When *Enabled*, an ISA or DMA bus master can prefetch two doublewords to the line buffer for a read cycle.

The choice : Enabled, Disabled

SETUP GUIDE

Passive Release

When *Enabled*, CPU to PCI bus accesses is allowed during passive release. Otherwise, the arbiter only accepts another PCI master access to local DRAM.

The choice : Enabled , Disabled.

Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select *Enabled* to support compliance with PCI specification version 2.1.

The choice: Enabled, Disabled.

Primary Frame Buffer

Select a size for the PCI frame buffer. The size of the buffer should not impinge on local memory.

The choice : Disabled, 2MB 4MB, 8MB, 16MB.

VGA Frame Buffer

When *Enabled*, a fixed VGA frame buffer from A000h to BFFFh and a CPU-to-PCI write buffer are implemented.

The choice: Enabled , Disabled.

Primary Frame Buffer

Select a size for the PCI frame buffer. The size of the buffer should not impinge on local memory.

The choice: 1M, 2M, 4M, 8M, 16M, Disabled.

VGA Frame Buffer

When Enabled, a fixed VGA frame buffer from A000h to BFFFh and a CPU-to-PCI write buffer are implemented.

The choice: Enabled , Disabled.

SETUP GUIDE

Data Merge

This field controls the word-merge feature for frame buffer cycles. When Enabled, this controller checks the eight CPU Byte Enable signals to determine if data words read from the PCI bus by the CPU can be merged.

The choice: Enabled , Disabled.

6. POWER MANAGEMENT SETUP :

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

Power Management	: Use Define	** External Switch **	Power Button	: Power Off
PM Control by APM	: Yes			
MODEM Use IRQ	: 3			
Video Off Option	: Susp,Stby->Off			
Video Off Method	: DPMS Support			
** PM Monitor **				
HDD Power Down	: Disabled			
Doze Mode	: Disabled			
Standby Mode	: Disabled			
Suspend Mode	: 8 Min			
Throtte Duty Cycle	: Disabled			
** PM Events **				
Primary HDD	: Disabled			
Floppy	: Disabled	Esc : Quit	↑↓→← : Select Item	
COM Port	: Disabled	F1 : Help	PU/PD/+/- : Modify	
Keyboard	: Enabled	F5 : Old Values	(Shift)F2 : Color	
LPT Port	: Disabled	F6 : Load BIOS Defaults		
		F7 : Load Setup Defaults		

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

SETUP GUIDE

Power Management

Its category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. Doze Mode
2. Suspend Mode
3. HDD Power Down

There are four selections for Power Management, three of which have fixed mode settings.

Disable (default)	No power management. Disables all four modes
Min. Power Saving	Minimum power management. Doze Mode = 1 hr. Standby Mode = 1 hr., Suspend Mode = 1 hr., and HDD Power Down = 15 min.
Max. Power Saving	Maximum power management -- ONLY AVAILABLE FOR SL CPU . Doze Mode = 1 min., Standby Mode = 1 min., Suspend Mode = 1 min., and HDD Power Down = 1 min.
User Defined	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.

PM Control APM

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

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

Video Off Option

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

SETUP GUIDE

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

Video Off Method

This determines the manner in which the monitor is blanked.

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

PM Timers

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

SETUP GUIDE

HDD Power Down

When enabled and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active.

Doze Mode

When enabled and after the set time of system inactivity, the CPU clock will run at slower speed while all other devices still operate at full speed.

Standby Mode

When enabled and after the set time of system inactivity, the fixed disk drive and the video would be shut off while all other devices still operate at full speed.

Suspend Mode

When enabled and after the set time of system inactivity, all devices except the CPU will be shut off.

When Enabled, an event occurring on each device listed below restarts the global time for Standby mode.

- Primary HDD
- Floppy Disk
- Serial Port
- Keyboard
- Parallel Port

External Switch

This wake-up optional is special for M/B manufacturers' desingn.

Power Button

This item allows you select the function of power button.

The choice : Disabled, Green Mode, Power Off.

SETUP GUIDE

7. PnP / PCI CONFIGURATION SETUP :

ROM PCI / ISA BIOS
PNP / PCI CONFIGURATION
AWARD SOFTWARE, INC.

PNP OS Installed	: No	PCI IDE 2 nd Channel	: Disabled
Resources Controlled by	: Auto	PCI IRQ Activated By	: Level
Reset Configuration Data	: Disabled	PCI IDE IRQ Map To	: ISA
		Esc : Quit	↑↓→← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift)F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

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

PCI Slot Configuration

PNP OS Installed

Select Yes if the system operating environment is Plug-and-Play aware (e.g., Windows 95).

The Choice: Yes and No.

SETUP GUIDE

Resource Controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows®95.

The choice: Auto and Manual.

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.

The choice: Enabled and Disabled .

IRQ3/4/5/7/9/10/11/ 12/14/15 Assigned To

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

Legacy ISA Devices compliant with the original PC AT bus specification, requiring a specific interrupt (such as IRQ4 for serial port 1). PCI/ISA PnP Devices compliant with the Plug and Play standard, whether designed for PCI or ISA bus architecture.

The choice: Legacy ISA and PCI/ISA PnP.

SETUP GUIDE

DMA0/1/3/5/6/7 Assigned To

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

Legacy ISA Devices compliant with the original PC AT bus specification, requiring a specific interrupt (such as IRQ4 for serial port 1). PCI/ISA PnP Devices compliant with the Plug and Play standard, whether designed for PCI or ISA bus architecture.

The choice: Legacy ISA and PCI/ISA PnP.

PCI IRQ Activated By

This sets the method by which the PCI bus recognizes that an IRQ service is being requested by a device. Under all circumstances, you should retain the default configuration unless advised otherwise by your system manufacturer.

The choice: *Level* (default) and *Edge*.

SETUP GUIDE

PCI IDE IRQ Map To

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

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

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

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

SETUP GUIDE

8. LOAD BIOS SETUP :

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

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	FORMAT
LOAD BIOS DEFAULTS	LOAD BIOS DEFAULTS (Y/N)? Y
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING
Esc : Quit F5 : Menu in BIOS →←↓↑ Select Item F10 : Save & Exit Setup (Shift)F2 : Change Color	

This *Load BIOS Defaults* option allows you to load the troubleshooting default values permanently stored in the BIOS ROM . These default setting are non-optimal and disable all high performance features. To load these default setting, highlight *Load BIOS Defaults* on the main screen and then press the <Enter> key. The system displays a confirmation message on the screen. Press the <Y> key and then the <Enter> key to confirm. Press the <N> key and then the <Enter> key to abort. This feature does not affect the fields on the Standard CMOS Setup screen.

SETUP GUIDE

9. LOAD SETUP DEFAULTS :

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

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	DRMATIC
LOAD BIOS DEFAULTS	LOAD SETUP DEFAULTS(Y / N) ? Y
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING
Esc : Quit F5 : Manu in BIOS →←↓↑ : Select Item	
F10 : Save & Exit Setup (Shift)F2 : Change Color	

This *Load Setup Defaults* option allows you to load the default values to the system configuration fields. These default values are the optimized configuration settings for the system. To load these default values, highlight *Load Setup Defaults* on the main screen and then press the <Enter> key. The system displays a confirmation message on the screen. Press the <Y> key and then the <Enter> key to confirm. Press the <N> key and then the <Enter> key to abort. This feature does not affect the fields on the Standard CMOS Setup screen.

SETUP GUIDE

10. SAVE AND EXIT SETUP :

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

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	DRMATIC
LOAD BIOS DEFAULTS	SAVE to CMOS and EXIT(Y/ N) ? Y
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING
Esc : Quit bios F5 : Menu in BIOS →←-↓↑ : Select Item	
F10 : Save & Exit Setup (Shift)F2 : Change Color	

Select this option to save into the CMOS memory all modifications you specify during the current session. To save the configuration changes, highlight the *Save & Exit Setup* option on the main screen and then press the <Enter> key.

SETUP GUIDE

11. LOW-LEVEL FORMAT UTILITY :

formatting your hard disk. The Utility automatically looks for the necessary This Award Low-Level-Format Utility is designed as a tool to save your time information of the drive you selected. The Utility also searches for bad tracks and lists them for your reference.

Shown below is the Main Menu after you enter into the Award Low-Level-Format Utility.

Hard disk Low-level-format		BAD TRACKS TABLE				
SELECT DRIVE		NO. CYLS HEAD				
BAD TRACK LIST						
PREFORMAT						
Current select drive is : C						
DRIVE : C CYLINDER : 0 HEAD : 0						
	CYLINDERS	HEADS	SECTORS	PRECOMP	LANDZOMP	
Drive C :	40Mb	977	5	17	300	977
Drive D :	None	0	0	0	0	0
UP/DOWN-Select item		Enter-Accept		ESC-Exit/Abort		
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Control Key

Use the Up and Down arrow keys to move around the selections displayed on the upper screen. Press <Enter> to accept the selection. Press <Esc> to abort the selection or exit the Utility.

SELECT DRIVE

Select from installed hard disk drive C or D. Listed at the bottom of the screen is the drive automatically detected by the utility.

SETUP GUIDE

BAD TRACK LIST

Auto Scan Bad Track

The utility will automatically scan bad tracks and list the bad tracks in the window at the right side of the screen.

Add Bad Track

Directly type in any information about known bad tracks in the window at the right side of the screen.

Modify Bad Track

Modify information about the added bad tracks in the window at the right side of the screen.

Delete Bad Track

Delete the added bad tracks in the window at the right side of the screen.

Clear Bad Track Table

Clear the whole bad track list in the window at the right side of the screen.

PREFORMAT

Interleave

Select the interleave number of the hard disk drive you wish to perform low level format. You may select from 1 to 8. Check the documentation that came with the drive for the correct interleave number, or select 0 for utility automatic detection.

Auto Scan Bad Track

This allows the utility to scan for bad sectors first then format by each track.

Start

Press <Y> to start low level format.

SETUP GUIDE

12. UPGRADE BIOS

The upgrade process requires two files from SUPERPOWER , the new BIOS file (*newbios.bin*) and the upgrade utility (*awdf flash.exe*).

RUNNING THE UPGRADE PROGRAM:

1. Boot system from the bootable floppy diskette you created. Booting from the diskette bypasses loading drivers from the **CONFIG.SYS** and **AUTOEXE.BAT** files on the hard drive, eliminating the possibility of loading a program (*a.g., a memory manager*) that conflicts with the AWARD flash utility.

NOTE : The Award flash utility cannot run when **EMM386** or **QEMM** are loaded. If you try, an error message appears.

2. At the **DOS** command line, type **AWDFLASH** and press <Enter>.
3. The cursor should be opposite **“FILE NAME to PROGRAM”**
4. Type the name of the new BIOS file (*e.g., newbios.bin*), and press <Enter>.
5. At the bottom of the menu, this prompt appears:

Do you Want to Save BIOS (Y/N)?

6. If you **DO NOT** wish to save the old BIOS, type <**N**> and press <Enter>. Then move to step 8.
If you **DO** wish to save the old BIOS, respond <**Y**>, and press <Enter>.
7. In the **“File Name to Save”** field, type a file name for the old BIOS (*for example, oldbios.bin*), and press <Enter>.
Your old BIOS is saved in a file as named, in the default drive and directory (*in this example, on the A drive*).
8. Then the program prompts you

Do You Want to Update? (Y/N)

9. If you **DO NOT** wish to update the BIOS, type <**N**> and press <Enter>. The program exits to the command line. Skip the remainder of this section and go directly to the next section.
If you **DO** wish to update the BIOS, respond <**Y**> and press <Enter>. When the updating is finished, the following message appears:

Programming Flash Memory – 1FF00 OK

Please Power off or Reset System

10. Restart you system. You BIOS should be successfully update.

SETUP GUIDE

This Board is Protected by Trend ChipAwayVirus Here's
Why it Makes a Better Board:



Provides a virus-free boot and operating system

Experience peace of mind through hardware-base virus protection

Detects known and unknown boot viruses with rule-based technology

Receive immediate protection! Already installed on this board!

You're right to be concerned about viruses. With over 2600 in existence, they pose a very real threat to any PC user. They can strike in an instant, without warning or prejudice – and erase gigabytes of data.

Boot Viruses pose the most severe threat because they can move from a floppy diskette to your hard drive in less than a second. And it all happens during the loading of the boot sector, making anti-virus programs that load through the **config.sys** and **autoexec.bat** files worthless.

Finally, a Solution from Anti-virus expert*

Anti-virus software alone can't do the job. But **Trend ChipAwayVirus** can make up this deficiency. It's a hardware-base anti-virus solution that stops virus damage and infection through a proven **rule-base** anti-virus technology – meaning it watches for virus **behaviors** rather than virus code.

So Trend ChipAwayVirus can catch both known and unknown viruses, including mutation-engine viruses, both boot sector viruses, stealth viruses and general viruses! For today and tomorrow.

And thanks to **JumpLoading™** technology, **Trend ChipAwayVirus** takes control early in the boot cycle, before boot viruses have a chance to load. So the entire boot process is virus-free and your computer boots to a clean operating system.

SETUP GUIDE

Peace of Mind For Your Customers

Best of all **Trend ChipAwayVirus** is here – on this board. So you can offer your customers all the protection of Trend ChipAwayVirus just by choosing this board. So choose **Trend ChipAwayVirus**. The same technology chosen for Intel mother boards. You'll be providing a quality board and peace of mind. That's always a great combination!

See how **Trend ChipAway Virus** protect your computer during the boot-up procedure :

