

## BIOS Setup

The mainboard comes with the Award BIOS chip that contains the ROM Setup information of your system. This chip serves as an interface between the processor and the rest of the mainboard's components. This section explains the information contained in the Setup program and tells you how to modify the settings according to your system configuration.

### CMOS Setup Utility

ROM PCI/ISA BIOS (2A5LEF0A) 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

A Setup program, built into the system BIOS, is stored in the CMOS RAM. This Setup utility program allows changes to the mainboard configuration settings. It is executed when the user changes system configuration; user changes system backup battery; or the system detects a configuration error and asks the user to run the Setup program. Use the arrow keys to select and press Enter to run the selected program.

## Standard CMOS Setup

ROM PCI/ISA BIOS (2A5LEF0A)  
STANDARD CMOS SETUP  
AWARD SOFTWARE, INC.

Date (mm:dd:yy) : Wed, Feb 3 1999  
Time (hh:mm:ss) : 15 : 37 : 55

HARD DISKS	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 : None  
Drive B : None  
Floppy 3 Mode Support : Disabled

Base Memroy: 640K  
Extended Meory: 31744K  
Other Memory: 384K  
Total Memory: 32768K

Video : EGA/VGA  
Halt On : All Errors

Esc : Quit  
F1 : Save & Exit Setup

↑ ↓ → ← : Select Item  
(Shift)F2 : Change Color

PU/PD/+/- : Modify

The Standard CMOS Setup screen is displayed above. Each item may have one or more option settings. The system BIOS automatically detects memory size, thus no changes are necessary. 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.

## Hard Disk Configurations

**TYPE:** Select User to fill the remaining fields. Select Auto to detect the HDD type automatically (recommended).

**SIZE:** The hard disk size. The unit is Mega Bytes.

**CYLS:** The cylinder number of the hard disk.

**HEAD:** The read/write head number of hard disk.

**PRECOMP:** The cylinder number at which the disk drive changes the write current.

**LANDZ:** The cylinder number that the disk drive heads (read/write) are seated when the disk drive is parked.

**SECTOR:** The sector number of each track defined on the hard disk.

**MODE:** Select Auto to detect the mode type automatically. If your hard disk supports the LBA mode, select LBA or Large. However, if your hard disk cylinder is more than 1024 and does not support the LBA function, set at Large. Select Normal if your hard disk supporting cylinders is below 1024.

## Software Turbo Speed

The BIOS supports Software Turbo Speed feature. Instead of pressing the Turbo Speed Button on the front panel, simply press the **Alt, Ctrl, and +** keys at the same time to enable the Turbo Speed feature; and press the **Alt, Ctrl, and -** keys at the same time to disable the feature.

## BIOS Features Setup

ROM PCI/ISA BIOS (2A5LEF0A) BIOS FEATURES SETUP AWARD SOFTWARE, INC.	
Anti-Virus Protection	: Enabled
CPU Internal Cache	: Enabled
External Cache	: Enabled
Quick Power On Self Test	: Enabled
Boot From LAN First	: Enabled
Boot Sequence	: A, C, SCSI
Boot Up Floppy Seek	: Enabled
Boot Up NumLock Status	: On
Gate A20 Option	: Fast
Memory Parity / ECC Check	: Disabled
Typeomatic Rate Setting	: Disabled
Typeomatic Rate (Chars/Sec)	: 8
Typeomatic Delay (Msec)	: 250
Security Option	: Setup
PCI/VGA Palette Snoop	: Disabled
OS Select For DRAM > 64MB	: Non-OS2
HDD S.M.A.R.T. Capability	: Disabled
Report No FDD For WIN 95	: Yes
Video BIOS Shadow	: Enabled
Esc: Quit      ↑↓ →← : Select Item F1 : Help      PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults	

### Anti-Virus Protection

This feature starts the virus scan tool to detect if boot virus in boot sector of the first hard disk drive when booting up.

The options are: Enabled (Default), Disabled.

### CPU Internal Cache

When enabled, improves the system performance. Disable this item when testing or trouble-shooting. The options are: Enabled (Default), Disabled.

### External Cache

When enabled, supports an optional cache SRAM. This feature allows you to disable the cache function when the system performance is unstable to run some software. The options are: Enabled (Default), Disabled.

### Quick Power On Self Test

When enabled, allows the BIOS to bypass the extensive memory test. The options are: Enabled (Default), Disabled.

### Boot From LAN First

This feature makes the system bootable by the remote server via LAN. The options are: Enabled (Default), Disabled.

### Boot Sequence

Allows the system BIOS to first try to boot the operating system from the selected disk drive. The options are: A, C, SCSI (Default); C, A, SCSI; C, CDROM, A; CDROM, C, A; D, A, SCSI; E, A, SCSI; F, A, SCSI; SCSI, A, C; SCSI, C, A; C Only; LS/ZIP, C.

### Boot Up Floppy Seek

When enabled, assigns the BIOS to perform floppy diskette drive tests by issuing the time-consuming seek commands. The options are: Enabled (Default), Disabled.

### Boot Up Numlock Status

When set to On, allows the BIOS to automatically enable the Num Lock Function when the system boots up. The options are: On (Default), Off.

### Gate A20 Option

When set at Fast, allows a faster access response under Protected mode. The options are: Fast (Default), Normal.

### Memory Parity Check

This feature enables BIOS to perform automatic memory checking upon detection of ECC or parity DRAM. The options are: Enabled, Disabled (Default).

### Typematic Rate Setting

The term typematic means that when a keyboard key is held down, the character is repeatedly entered until the key is released. The options are: Disabled (Default), Enabled.

### Typematic Rate (Chars/Sec)

This feature is available only if the above item, Typematic Rate Setting, is set at Enabled. Sets the rate of a character repeat when the key is held down.

The options are: 6 (Default), 8, 10, 12, 15, 20, 24, 30.

### Typematic Delay (Msec)

This feature is available only if the item, Typematic Rate Setting, is set at Enabled. Sets the delay time before a character is repeated.

The options are: 250 (Default), 500, 750, 1000 millisecond.

### Security Option

Allows you to set the security level of the system.

The options are: Setup (Default), System.

### PCI/VGA Palette Snoop

Set this feature to be enabled if any ISA adapter card installed in the system requires the VGA palette snoop function.

The options are: Disabled (Default), Enabled.

### OS Select For DRAM > 64MB

If your operating system (OS) is OS/2, select the option OS2. Otherwise, stay with the default setting Non-OS2.

The options are: Non-OS2 (Default), OS2.

### HDD S.M.A.R.T. Capability

S.M.A.R.T. stands for Self-Monitoring and Analysis Reporting Technology which allows your hard disk drive to report any read/write errors and issues a warning with LDCM installed.

The options are: Disabled (Default); Enabled.

### Report No FDD For WIN 95

When the field under the Standard CMOS Setup Menu for Drive A and/or Drive B is set at None, users must set this field is set at Yes for it to function properly. Otherwise, set at No, even if field for Drive A and/or Drive B is set at None, system will still detect and recognize of a floppy drive(s).

The options are: Yes (Default), No.

Video BIOS Shadow

Allows the BIOS to copy the video ROM code of the add-on video card to the system memory for faster access.  
The options are: Enabled (Default), Disabled.

Chipset Features Setup

ROM PCI/ISA BIOS (2A5LEF0A) CHIPSET FEATURES SETUP AWARD SOFTWARE, INC.			
Bank 0/1 DRAM Timing	: FP/EDO 70ns	OnChip USB	: Enabled
Bank 2/3 DRAM Timing	: FP/EDO 70ns	OnChip USB 2	: Enabled
Bank 4/5 DRAM Timing	: FP/EDO 70ns	USB Keyboard Support	: Disabled
SDRAM Cycle Length	: Auto	Auto Detect DIMM/PCI Clk	: Enabled
DRAM Read Pipeline	: Enabled	Spread Spectrum Modulated	: Enabled
Cache Rd+CPU Wt Pipeline	: Enabled	CPU Host Clock	: Default
Cache Timing	: Fast	Current CPU Temp.	:
Video BIOS Cacheable	: Enabled	Current System Temp.	:
System BIOS Cacheable	: Enabled	Current CPUFAN1 Speed	:
Memory Hole At 15Mb Addr.	: Disabled	Current CPUFAN2 Speed	:
AGP Aperture Size	: 64M	Vcore :	
AGP 2X Mode	: Enable	3.3V :	5V :
OnChip Sound	: Enabled	12V :	
OnChip Modem	: Disabled	Esc: Quit	↑↓→← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values (Shift)F2	: Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Bank 0/1 DRAM Timing; Bank 2/3 DRAM Timing;  
Bank 4/5 DRAM Timing;

This feature allows you to select the DRAM read/write speed.  
The options are: FP/EDO 70ns (Default), FP/EDO 60ns, Fast, Normal, Turbo.

SDRAM Cycle Length

This item will function only when SDRAM DIMM/s are installed on the mainboard (BIOS auto detection). If the CAS latency of your SDRAM DIMM is 2, set it at 2 to enhance your system performance. If the CAS latency of your SDRAM DIMM is 3, stay with the default setting, 3.  
The options are: 3; 2; Auto (Default).

### DRAM Read Pipeline

When enabled, it makes the data read speed from memory modules to cache RAMs faster. The options are: Enabled (Default), Disabled.

### Cache Rd+CPU Wt Pipeline

When enabled, it makes the cache RAMs read and the data write to CPU faster.

The options are: Enabled (Default), Disabled.

### Cache Timing

The feature allows users to select the cache timing.

The options are: Fast (Default), Fastest.

### Video BIOS Cacheable

When enabled, allows the system to use the video BIOS codes from SRAMs, instead of the slower DRAMs or ROMs.

The options are: Enabled (Default), Disabled.

### System BIOS Cacheable

When enabled, allows the ROM area F000H-FFFFH to be cacheable when cache controller is activated. The options are: Enabled (Default), Disabled.

### Memory Hole At 15M Addr.

When you install a Legacy ISA card, this feature allows you to select the memory hole's address range of the ISA cycle when the processor accesses the selected address area. Please read your card manual for detail information. When disabled, the memory hole at the 14MB (or 15MB) address will be treated as a DRAM cycle when the processor accesses the 14~16MB (or 15~16MB) address area.

The options are: 15M-16M, 14M-16M, Disabled (Default).

### AGP Aperture Size

It allows you to select the main memory frame size for AGP use.

The options are 4, 8, 16, 32, 64 (Default), 128MB.

### AGP-2X Mode

This feature allows user to select the AGP mode be to 1x or 2x when an AGP add-in card installed. However, when set at Enabled and the AGP card only support 1x mode, the system will fall back 1x mode automatically. The options are: Enable (Default), Disable.

### OnChip Sound

When set at Enabled, this feature activated the onboard audio feature. The options are: Enabled (Default), Disabled.

### OnChip Modem

When set at Enabled, this feature activated the onboard modem feature. The options are: Disabled (Default), Enabled .

### OnChip USB

When enabled, this feature allows you to use the onboard USB feature. The options are: Enabled (Default), Disabled.

### OnChip USB 2

When enabled, this feature allows you to use the onboard USB feature. The options are: Enabled (Default), Disabled.

### USB Keyboard Support

This feature will appear only if the above item Onchip USB is set at Enabled. Set this feature to Enabled to use a USB keyboard with your system. The options are: Disabled (Default), Enabled.

### Auto Detect DIMM/PCI Clk

Set this field at Enabled to allow auto detection of DIMM clock speed. The options are: Enabled (Default), Disabled.

### Spread Spectrum Modulated

This feature is used to set the spread Spectrum to be center spread type or down spread type. The options are: Enabled (Default), Disabled.



## CPU Host Clock

Select *Default* or select a timing combination for the CPU and the PCI bus. When set to *Default*, BIOS uses the actual CPU and PCI bus clock values. The options are: Default (default); 66MHz; 68MHz; 75MHz; 83MHz; 95MHz; 100MHz; 112 MHz; 124MHz.

## Current CPU Temp. / Current System Temp. / Current CPUFAN1 Speed / Current CPUFAN2 Speed / Vcore / 3.3V / 12V / 5V

These items allow end users and technicians to monitor data provided by the BIOS on this mainboard. It is not user-configurable.

## Power Management Setup

ROM PC/ISA BIOS (2A5LEF0A) POWER MANAGEMENT SETUP AWARD SOFTWARE, INC.	
Power Management	: User Define
PM Control by APM	: Yes
Video Off Option	: Suspend -> Off
Video Off Method	: DPMS Support
MODEM Use IRQ	: 3
Soft-Off by PWRBTN	: Delay 4 Sec
PWRON After PW-Fail	: Former-Sts
<b>** PM Timers **</b>	
HDD Power Down	: Disable
Doze Mode	: Disable
Suspend Mode	: Disable
<b>** PM Events **</b>	
VGA	: OFF
LPT & COM	: LPT/COM
HDD & FDD	: ON
DMA/master	: OFF
Modem Ring Resume	: Enabled
RTC Alarm Resume	: Disabled
Primary INTR	: ON
IRQ3 (COM2)	: Primary
IRQ4 (COM1)	: Primary
IRQ5 (LPT2)	: Disabled
IRQ7 (LPT1)	: Primary
IRQ8 (RTC Alarm)	: Disabled
IRQ9 (IRQ2 Redir)	: Secondary
IRQ10 (Reserved)	: Secondary
IRQ11 (Reserved)	: Secondary
IRQ12 (PS/2 Mouse)	: Primary
IRQ14 (Hard Disk)	: Primary
IRQ15 (Reserved)	: Disabled
Esc: Quit      ↑↓→←: Select Item	
F1: Help      PUPD/+/-: Modify	
F5: Old Values (Shift) F2: Color	
F8: Load BIOS Defaults	
F7: Load Setup Defaults	

## Power Management

This item allows you to adjust the power management features. Select Disable for disabling global power management features. Select User Define for configuring your own power management features. MIN Saving initiates all predefined timers in their minimum values. MAX Saving, on the other hand, initiates maximum values.

The options are: User Define (Default), MIN Saving, MAX Saving.

### PM Control by APM

The option No allows the BIOS to ignore the APM (Advanced Power Management) specification. Selecting Yes will allow the BIOS wait for APM's prompt before it enters Doze mode, Standby mode, or Suspend mode. If the APM is installed, it will prompt the BIOS to set the system into power saving mode when all tasks are done.

The options are: No, Yes (Default).

### Video Off Option

This feature provides the selections of the video display power saving mode. The option Suspend - Off allows the video display to go blank if the system enters Suspend mode. The option All Modes - Off allows the video display to go blank if the system enters Doze mode or Suspend mode. The option Always On allows the video display to stay in Standby mode even when the system enters Doze or Suspend mode.

The options are: Suspend - Off (Default), All Modes - Off, Always On.

### Video Off Method

The option V/H SYNC+Blank allows the BIOS to blank off screen display by turning off the V-Sync and H-Sync signals sent from add-on VGA card. DPMS Support allows the BIOS to blank off screen display by your add-on VGA card which supports DPMS (Display Power Management Signaling function). Blank Screen allows the BIOS to blank off screen display by turning off the red-green-blue signals.

The options are: V/H SYNC+Blank, DPMS Support (Default), Blank Screen.

### MODEM Use IRQ

The feature allows users to select the IRQ# of the system that is the same IRQ# as the modem use.

The settings are: NA, 3 (Default), 4, 5, 7, 9, 10, 11.

### Soft-Off by PWR-BTTN

The selection Delay 4 Sec. will allow the system shut down after 4 seconds after the power button is pressed. The selection Instant-Off will allow the system shut down immediately once the power button is pressed.

The settings are: Delay 4 Sec. (Default), or Instant-Off.

### PWRON After PW-Fail

When the system is shut down owing to the power failure, the syhstem wil not be back to power on by itself. This feature allows you to set the system back to which power status of the system when the system power is resumed. The options are: Former-Sts (Default), On, Off.

### HDD Power Down

The option lets the BIOS turn the HDD motor off when system is in Suspend mode. Selecting 1 Min..15 Min allows you define the HDD idle time before the HDD enters the Power Saving Mode.

The options 1 Min..15 Min will not work concurrently. When HDD is in the Power Saving Mode, any access to the HDD will wake the HDD up.

The options are: Disable (Default), 1 Min..15 Min.

### Doze Mode

When disabled, the system will not enter Doze mode. The specified time option defines the idle time the system takes before it enters Doze mode. The options are: Disabled (Default), 1, 2, 4, 8, 12, 20, 30, 40 Min, 1 Hr.

### Suspend Mode

When disabled, the system will not enter Suspend mode. The specified time option defines the idle time the system takes before it enters Suspend mode. The options are: Disabled (Default), 1, 2, 4, 8, 12, 20, 30, 40 Min, 1 Hr.

### VGA

*ON* enables the power management timers when a no activity events is detected in the VGA. *OFF* disables the PM timer even if a no activity event is detected. The options are: OFF (Default), ON.

### LPT & COM

*LPT/COM* enables the power management timers when a no activity event is detected in the LPT and COM ports. *LPT (COM)* enables the power management timers when a no activity event is detected in the LPT (COM) ports. *NONE* to disable the PM timer even if a no activity event is detected. The options are: LPT/COM (Default), LPT, COM, NONE.

### HDD & FDD

*ON* will enable the power management timers when no activity event is detected in the hard drive and floppy drive. *OFF* disables the PM timer even if no activity event is detected. The options are: OFF, ON (Default).

### DMA/master

To set this feature at ON activates that Power Management feature (PM) wake-up event for the DMA or bus master (of the LAN card or/and SCSI card). The options are: OFF (Default), ON.

### Modem Ring Resume

An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state. The options are: Enabled (Default), Disabled.

### RTC Alarm Resume

*Enabled* allows you to set the time the system will be turned on from the system power-off status. The options are: Enabled, Disabled (Default).

### Primary INTR

When the Primary interrupt (the Primary option in the feature of IRQ# Activity) generates will make the Power Management feature (PM) wake-up event on. If set at OFF, all the primary interrupt will not wake-up the system. The options are: OFF, ON (Default).

### IRQ# Activity

After the time period which you set at in Suspend Mode Feature, the system advances from Doze Mode to Suspend Mode in which the CPU clock stops and the screen display is off. At this moment, if the IRQ activity which is defined as Primary occurs, the system goes back to Full-on Mode directly.

If the IRQ activity which is defined as Secondary takes place, the system enters another low power state, Dream Mode, in which the system will act as Full-on Mode except that the screen display remains off until the corresponding IRQ handler finishes, then back to Suspend Mode.

The options of IRQ 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15 are: Primary, Secondary, Disabled.

The default values of IRQ 5, 8, 15 are: Disabled.

The default value of IRQ 3, 4, 7, 12, 14 are: Primary.

The default value of IRQ 9, 10, 11 are: Secondary.

## PNP/PCI Configuration

ROM PCI/ISA BIOS (2A5LEF0A)	
PNP/PCI CONFIGURATION	
AWARD SOFTWARE, INC.	
PNP OS Installed : No	CPU to PCI Write Buffer : Enabled
Resources Controlled By : Auto	PCI Dynamic Bursting : Enabled
Reset Configuration Data : Disabled	PCI Master 0 WS Write : Enabled
	PCI Delay Transaction : Enabled
	PCI#2 Access #1 Retry : Disabled
	AGP Master 1 WS Write : Enabled
	AGP Master 1 WS Read : Disabled
	PCI IRQ Activated By : Level
	Assign IRQ For VGA : Enabled
	Slot 1 Use IRQ No. : Auto
	Slot 2 Use IRQ No. : Auto
	Slot 3 Use IRQ No. : Auto
	Slot 4 Use IRQ No. : Auto
Esc: Quit      ↑↓→←: Select Item F1 : Help      PU/PD/+/- : Modify F5 : Old Values    (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults	

### PNP OS Installed

If your operating system is a Plug-and-Play one, such as Windows NT, Windows 95, select Yes. The options are: No (Default), Yes.

### Resources Controlled By

If set at Auto, the BIOS arranges all system resources. If there exists conflict, select Manual. The options are: Auto (Default), Manual. The manual options of IRQ- / DMA- assigned to are: Legacy ISA, PCI/ISA PnP.

### Reset Configuration Data

When enabled, allows the system to clear the last BIOS configuration data and reset with the default data. The options are: Enabled, Disabled (Default).

### CPU to PCI Write Buffer

When enabled, allows data and address access to the internal buffer of the system controller; so the processor can be released from the waiting state.

The options are: Enabled (Default), Disabled.

### PCI Dynamic Bursting

When enabled, the PCI controller allows Bursting PCI transfer if the consecutive PCI cycles come with the address falling in same 1KB space. This improves the PCI bus throughput.

The options are: Enabled (Default), Disabled.

### PCI Master 0 WS Write

When enabled, allows a zero-wait-state-cycle delay when the PCI master drive writes data to DRAM. The options are: Enabled (Default), Disabled.

### PCI Delay Transaction

Enable this feature to abort the current CPI master cycle and to accept the new PCI master request, it reaccepts the original PCI master and returns the PCI data phase to the original PCI master.

The options are: Disabled, Enabled (Default).

### PCI#2 Access #1 Retry

When enabled, the AGP (PCI#2) access to PCI (PCI#1) will be retried until the maximum count. The options are: Disabled (default); Enabled.

### AGP Master 1 WS Write

When enabled, the AGP bus master write access to DRAMs will add one wait-state cycle. The options are: Enabled (default); Disabled.

### AGP Master 1 WS Read

When enabled, the AGP bus master read access to the DRAMs will add one wait-state cycle. The options are: Disabled (default); Enabled.

### PCI IRQ Activated By

Leave the IRQ trigger set at *Level* unless the PCI device assigned to the interrupt specifies Edge-triggered interrupts.

The options are: Level (default); Edge.

### Assign IRQ For VGA

If your PCI VGA card does not need an IRQ, select Disabled; therefore, an IRQ can be released for the system use.

The options are: Enabled (Default), Disabled.

### Slot 1/2/3/4 Use IRQ No.

Some PCI devices would need to use an IRQ on the PCI bus. Selecting Auto allows the PCI controller to automatically allocate an IRQ.

The options are: Auto (default); 3 to 5; 7; 9 to 12; 14; 15.

## Load BIOS Defaults

ROM PCI/ISA BIOS (2A5LEF0A) CMOS SETUP UTILITY AWARD SOFTWARE, INC.	
STANDARD CMOS SETUP BIOS FEATURES SETUP CHIPSET FEATURES SETUP POWER MANAGEMENT SETUP PNP/PCI CONFIGURATION SETUP LOAD BIOS DEFAULTS LOAD SETUP DEFAULTS	INTEGRATED PERIPHERALS SUPERVISOR PASSWORD USER PASSWORD IDE HDD AUTO DETECTION SATA DEVICE SETUP UT SAVING
Load BIOS Defaults (Y/N)? N	
Esc : Quit F10 : Save & Exit Setup	
↑ ↓ → ← : Select Item (Shift)F2 : Change Color	
Load BIOS Defaults except Standard CMOS SETUP	

BIOS defaults contain the most appropriate values of the system parameters that allow minimum system performance. The OEM manufacturer may change the defaults through MODBIN before the binary image burns into the ROM.

ROM PCI/ISA BIOS (2A5LEF0A) 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 SETUP	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	LOAD SETUP DEFAULTS
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Load SETUP Defaults (Y/N)? N</div>	
LOAD SETUP DEFAULTS	UT SAVING
Esc : Quit F10 : Save & Exit Setup	
↑ ↓ → ← : Select Item (Shift)F2 : Change Color	
Load Setup Defaults except Standard CMOS SETUP	

## Integrated Peripherals

ROM PCI/ISA BIOS (2A5LEF0A) INTEGRATED PERIPHERALS AWARD SOFTWARE, INC.	
OnChip IDE First Channel : Enabled OnChip IDE Secondary Channel : Enabled IDE Prefetch Mode : Enabled IDE HDD Block Mode : Enabled IDE Primary Master PIO : Auto IDE Primary Slave PIO : Auto IDE Secondary Master PIO : Auto IDE Secondary Slave PIO : Auto IDE Primary Master UDMA : Auto IDE Primary Slave UDMA : Auto IDE Secondary Master UDMA : Auto IDE Secondary Slave UDMA : Auto Init Display First : PCI Slot	Onboard Parallel Port : 378/IRQ7 Onboard Parallel Mode : Normal  Onboard Legacy Audio : Disabled
Onboard FDD Controller : Enabled Onboard Serial Port 1 : 3F8/IRQ4 Onboard Serial Port 2 : 2F8/IRQ3 UART 2 Mode : Standard	Esc: Quit      ++--: Select Item F1 : Help      PU/PD/+-: Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults



### OnChip IDE First Channel

When enabled, allows you to use the onboard primary PCI IDE. If a hard disk controller card is used, set at Disabled.

The options are: Enabled (Default), Disabled.

### OnChip IDE Second Channel

When enabled, allows you to use the onboard secondary PCI IDE. If a hard disk controller card is used, set at Disabled.

The options are: Enabled (Default), Disabled.

### IDE Prefetch Mode

When set at Enabled, it allows data to be posted to and prefetched from the primary IDE data ports. Data prefetching is initiated when a data port read occurs. The read prefetch eliminates latency to the IDE data ports and allows them to be performed back to back for the highest possible PIO data transfer rates. The first data port read of a sector is called the demand read. Subsequent data port reads from the sector are called prefetch reads. The demand read and all prefetch reads must be of the same size (16 or 32 bits). The options are: Enabled (Default), Disabled.

### IDE HDD Block Mode

When enabled, the system executes read/write requests to hard disk in block mode. The options are: Enabled (Default), Disabled.

### IDE Primary Master PIO

Allows an automatic or a manual configuration of the PCI primary IDE hard disk (master) mode. The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

### IDE Primary Slave PIO

Allows an automatic or a manual configuration of the PCI primary IDE hard disk (slave) mode. The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

### IDE Secondary Master PIO

Allows an automatic or a manual configuration of the PCI secondary IDE hard disk (master) mode. The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

### IDE Secondary Slave PIO

Allows an automatic or a manual configuration of the PCI secondary IDE hard disk (slave) mode. The options are: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

### IDE Primary Master UDMA

Allows you to select the first PCI IDE channel of the first master hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

### IDE Primary Slave UDMA

Allows you to select the first PCI IDE channel of the first slave hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

### IDE Secondary Master UDMA

Allows you to select the second PCI IDE channel of the secondary master hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

### IDE Secondary Slave UDMA

Allows you to select the second PCI IDE channel of the secondary slave hard disk mode or to detect it by the BIOS if the hard disk supports UDMA (Ultra DMA, faster than DMA). The options are: Auto (Default), Disabled.

### Init Display First

When you install an AGP VGA card and/or a PCI VGA card on the board, this feature allows you to select the first initiation of the monitor display from which card. The options are: PCI Slot (Default), AGP.

### Onboard FDD Controller

When enabled, the floppy diskette drive (FDD) controller is activated. The options are: Enabled (Default), Disabled.

### Onboard Serial Port 1

If the serial port 1 uses the onboard I/O controller, you can modify your serial port parameters. If an I/O card needs to be installed, COM3 and COM4 may be needed. The options are: 3F8/IRQ4 (Default), 3E8/IRQ4, 2F8/IRQ3, 2E8/IRQ3, Disabled.

### Onboard Serial Port 2

If the serial port 2 uses the onboard I/O controller, you can modify your serial port parameters. If an I/O card needs to be installed, COM3 and COM4 may be needed. The options are: 2F8/IRQ3 (Default), 3E8/IRQ4, 2E8/IRQ3, 3F8/IRQ4, Disabled.

### UART 2 Mode

Allows you to select the IR modes if the serial port 2 is used as an IR port. Set at Standard, if you use COM2 as the serial port as the serial port, instead as an IR port. The options are: HPSIR, ASKIR, Standard (Default).

### IR Function Duplex

This feature is available only if the above item, UART 2 Mode, is set at ASKIR or HPSIR. It allows you to select the infrared data transaction way. The options are: Half (Default), Full.

### TX, RX inverting enable

This feature is available only if the item, UART 2 Mode, is set at ASKIR or HPSIR. The feature allows you to select the active signals of the reception end and the transmission end. This is for technician use only. The options are: No, Yes (Default); Yes, Yes; No, No; Yes, No.

### Onboard Parallel Port

Select from a given set of parameters if the parallel port uses the onboard I/O controller. The options are: Disabled, 278/IRQ5, 3BC/IRQ7, 378/IRQ7 (Default).

### Onboard Parallel Mode

Allows you to connect with an advanced printer. Select Normal for standard parallel port (SPP) used on IBM PC/XT, PC/AT and bi-directional parallel port found on PS/2 system. Select EPP mode for enhanced parallel port. Select ECP mode for Microsoft and HP Extended Capabilities Parallel Port. Select ECP/EPP mode for both ECP and EPP modes.

The options are: Normal (Default), EPP, ECP, ECP/EPP.

### ECP Mode Use DMA

This feature allows you to select Direct Memory Access (DMA) channel if the ECP mode selected. The options are: 3 (Default), 1.

### Parallel Port EPP Type

This feature allows you to select the EPP type version.

The options are: EPP1.9 (Default), EPP1.7.

### Onboard Legacy Audio

When set at Enabled, the feature activated the Legacy audio function.

The options are: Disabled, Enabled (Default).

### Sound Blaster

This feature allows you to select the Sound Blaster, if the onboard Legacy audio chosen.

The options are: Enabled, Disabled (Default).

### SB I/O Base Address

This feature allows you to select the SB I/O base address, if the onboard Legacy audio chosen.

The options are: 220H (Default), 240H, 260H, 280H.

### SB IRQ Select

This feature allows you to select the SB IRQ, if the onboard Legacy audio chosen.

The options are: IRQ 5 (Default), IRQ 7, IRQ 9, IRQ 10.

### SB DMA Select

This feature allows you to select the SB DMA channel, if the onboard Legacy audio chosen.

The options are: DMA 1 (Default), DMA 2, DMA 3, DMA 0.

### MPU-401

This feature allows you to select MPU-401, if the onboard Legacy audio chosen.

The options are: Disabled (Default), Enabled.

### MPU-401 I/O Address

This feature allows you to select the MPU-401 I/O address, if the onboard Legacy audio chosen.

The options are: 310-313H, 320-323H, 330-333H (Default), 300-303H.

### FM Port (388-38BH)

This feature allows you to select the FM port (388-38BH), if the onboard Legacy audio chosen.

The options are: Enabled, Disabled (Default).

### Game Port (200-207H)

This feature allows you to select the game port (200-207H), if the onboard Legacy audio chosen.

The options are: Enabled (Default), Disabled.

## Supervisor/User Password

To enable the Supervisor/User passwords, select the item from the Standard CMOS Setup. You will be prompted to create your own password. Type your password up to eight characters and press Enter. You will be asked to confirm the password. Type the password again and press Enter. To disable password, press Enter twice when you are prompted to enter a password. A message appears, confirming the password is disabled.

Under the BIOS Feature Setup, if *Setup* is selected under the Security Option field and the Supervisor/User Password is enabled, you will be prompted password every time you try to enter the CMOS Setup Utility. If *System* is selected and the Supervisor/User Password is enabled, you will be requested to enter the Password every time when you reboot the system or enter the CMOS Setup utility.

## IDE HDD Auto Detection

The IDE Hard Disk Drive Auto Detection feature automatically configures your new hard disk. Use it for a quick configuration of new hard drives. This feature allows you to set the parameters of up to four IDE HDDs. The option with (Y) are recommended by the system BIOS. You may also keys in your own parameters instead of setting by the system BIOS. After all settings, press Esc key to return the main menu. For confirmation, enter the Standard CMOS Setup feature.

## Save and Exit Setup

After you have made changes under Setup, press Esc to return to the main menu. Move cursor to Save and Exit Setup or press F10 and then press Y to change the CMOS Setup. If you did not change anything, press Esc again or move cursor to Exit Without Saving and press Y to retain the Setup settings. The following message will appear at the center of the screen to allow you to save data to CMOS and exit the setup utility:

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

## Exit without Saving

If you select this feature, the following message will appear at the center of the screen to allow you to exit the setup utility without saving CMOS modifications:

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