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BIOS Setup

BIOS Setup is an overview of the BIOS Setup Program. The program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS SRAM so that it retains the Setup information when the power is turned off.

ENTERING SETUP

Power ON the computer and press immediately will allow you 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" bottom on the system case. You may also restart by simultaneously press <Ctrl> – <Alt>– keys.

CONTROL KEYS

<↑>	Move to previous item
<↓>	Move to next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Esc>	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>	Increase the numeric value or make changes
<-/PgDn>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F2>	Reserved
<F3>	Reserved
<F4>	Reserved
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
<F7>	Load the Optimized Defaults.
<F8>	Reserved
<F9>	Reserved
<F10>	Save all the CMOS changes, only for Main Menu

GETTING HELP

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu / Option Page Setup Menu

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>.

The Main Menu

Once you enter Award BIOS CMOS Setup Utility, the Main Menu (Figure 1) will appear on the screen. The Main Menu allows you to select from nine setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

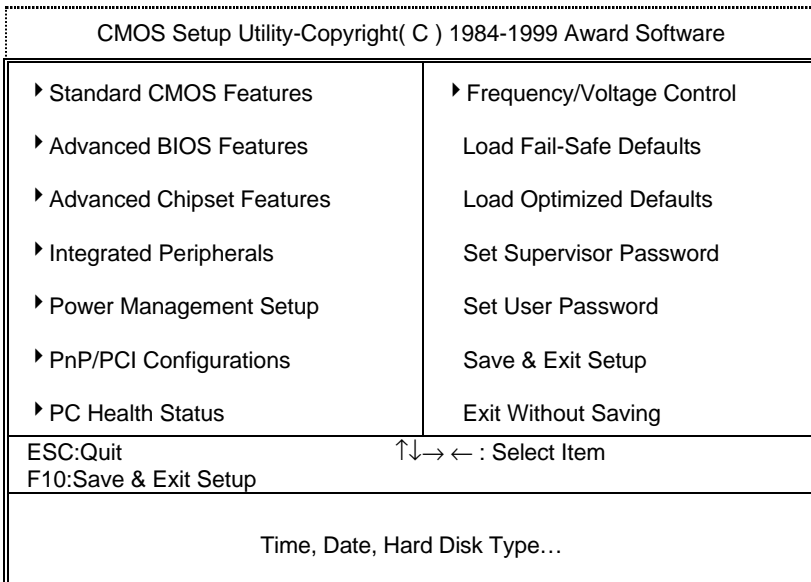


Figure 1: Main Menu

- **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 Award special enhanced features.

- **Advanced Chipset Features**

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

- **Integrated Peripherals**

This setup page includes all onboard peripherals.

- **Power Management Setup**

This setup page includes all the items of Green function features.

- **PnP/PCI Configurations**

This setup page includes all the configurations of PCI & PnP ISA resources.

- **PC Health Status**

This setup page is the System auto detect Temperature, voltage , fan, speed.

- **Frequency/Voltage Control**

This setup page is control CPU's clock and frequency ratio.

- **Load Fail-Safe Defaults**

Fail-Safe Defaults indicates the value of the system parameters which the system would be in safe configuration.

- **Load Optimized Defaults**

Optimized Defaults indicates the value of the system parameters which the system would be in best performance configuration.

- **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**

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

- **Save & Exit Setup**

Save CMOS value settings to CMOS and exit setup.

- **Exit Without Saving**

Abandon all CMOS value changes and exit setup.

Standard CMOS Features

The items in Standard CMOS Features Menu (Figure 2) are divided into 9 categories. Each category includes no, one or more than one setup items. Use the arrows to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software Standard CMOS Features		
Date (mm:dd:yy)	Thu , Jan 7 1999	Item Help
Time (hh:mm:ss)	2 : 31 : 24	
▶ IDE Primary Master	Press Enter None	Menu Level ▶
▶ IDE Primary Slave	Press Enter None	Change the
▶ IDE Secondary Master	Press Enter None	Day, month,
▶ IDE Secondary Slave	Press Enter None	Year and
		century
Drive A	1.44M, 3.5 in.	
Drive B	None	
Floppy 3 Mode Support	Disabled	
Video	EGA / VGA	
Halt On	All, But Keyboard	
Base Memory	640K	
Extended Memory	63488K	
Total Memory	64512K	
↑↓→ ←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 2: Standard CMOS Features Menu

• Date

The date format is <day>, <month> <date> <year>.

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

- **Time**

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

- **IDE Primary Master, Slave / Secondary Master, Slave**

The category identifies the types of hard disk from drive C to F that has been installed in the computer. There are two types: auto type, and user definable type. User type is user-definable; Auto type which will automatically detect HDD type.

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 you select User Type, related information will be asked to enter to the following items. Enter the information directly from the keyboard and press <Enter>. Such information should be provided in the documentation form your hard disk vendor or the system manufacturer.

CYLS.	Number of cylinders
HEADS	number of heads
PRECOMP	write precomp
LANDZONE	Landing zone
SECTORS	number of sectors

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 has been installed in the computer.

None	No floppy drive installed
360K, 5.25 in.	5.25 inch PC-type standard drive; 360K byte capacity.
1.2M, 5.25 in.	5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
720K, 3.5 in.	3.5 inch double-sided drive; 720K byte capacity
1.44M, 3.5 in.	3.5 inch double-sided drive; 1.44M byte capacity.
2.88M, 3.5 in.	3.5 inch double-sided drive; 2.88M byte capacity.

- **Floppy 3 Mode Support (for Japan Area)**

Disabled	Normal Floppy Drive.
Drive A	Drive A is 3 mode Floppy Drive.
Drive B	Drive B is 3 mode Floppy Drive.
Both	Drive A & B are 3 mode Floppy Drives.

- **Video**

The category detects the type of adapter used for the primary system monitor that must match your video display card and monitor. Although secondary monitors are supported, you do not have to select the type in setup.

EGA/VGA	Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SVGA, or PGA monitor adapters
CGA 40	Color Graphics Adapter, power up in 40 column mode
CGA 80	Color Graphics Adapter, power up in 80 column mode
MONO	Monochrome adapter, includes high resolution monochrome adapters

- **Halt on**

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

NO Errors	The system boot will not stop for any error that may be detected and you will be prompted
All Errors	Whenever the BIOS detects a non-fatal error the system will be stopped
All, But Keyboard	The system boot will not stop for a keyboard error; it will stop for all other errors
All, But Diskette	The system boot will not stop for a disk error; it will stop for all other errors
All, But Disk/Key	The system boot will not stop for a keyboard or disk error; it will stop for all other errors

- **Memory**

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

Base Memory

The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.

The value of the base memory is typically 512 K for systems with 512 K memory installed on the motherboard, or 640 K for systems with 640 K 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 1 MB in the CPU's memory address map.

Advanced BIOS Features

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software Advanced BIOS Features		
Virus Warning	Disabled	Item Help
CPU Cache	Enabled	Menu Level ▶ Allows you to choose the VIRUS Warning feature For IDE Hard disk Boot sector Protection. If this Function is enable And someone Attempt to write Data into this area , BIOS will show A warning Message on Screen and alarm beep
CPU L2 Cache ECC Checking	Disabled	
Quick Power On Self Test	Enabled	
First Boot Device	Floppy	
Second Boot Device	HDD-0	
Third Boot Device	LS/ZIP	
Boot Other Device	Enabled	
Swap Floppy Drive	Disabled	
Boot Up Floppy Seek	Enabled	
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	
OS Select For DRAM >64MB	Non-OS2	
HDD S.M.A.R.T. Capability	Disabled	
Report No FDD For WIN 95	No	
↑↓→ ←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 3: Advanced BIOS Features Setup

Virus Warning

If it is set to enable, the category will flash on the screen when there is any attempt to write to the boot sector or partition table of the hard disk drive. The system will halt and the following error message will appear in the mean time. You can run anti-virus program to locate the problem.

Enabled	Activate automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector or hard disk partition table
Disabled	No warning message to appear when anything attempts to access the boot sector or hard disk partition table (Default Value)

- **CPU Cache**

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

Enabled	Enable cache (Default Value)
Disabled	Disable cache

- **CPU L2 Cache ECC Checking**

Enabled	Enable CPU L2 Cache ECC Checking
Disabled	Disable CPU L2 Cache ECC Checking (Default Value)

- **Quick Power On Self Test**

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

Enabled	Enable quick POST (Default Value)
Disabled	Normal POST

- **First / Second / Third Boot device**

Floppy	Select your boot device priority by Floppy
LS/ZIP	Select your boot device priority by LS/ZIP
HDD-0-3	Select your boot device priority by HDD-0-3
SCSI	Select your boot device priority by SCSI
CDROM	Select your boot device priority by CDROM
Disable	Disable this function
LAN	Select your boot device priority by LAN

- **Boot other device**

Enabled	Enabled select your boot device priority function (Default Value)
Disabled	Disabled this function

- **Swap Floppy Drive**

Enabled	Floppy A & B will be swapped under DOS
Disabled	Floppy A & B will be normal definition (Default Value)

- **Boot Up Floppy Seek**

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

Enabled	BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 720 K, 1.2 M or 1.44 M drive type as they are all 80 tracks (Default Value)
Disabled	BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360 K

- **Boot Up NumLock Status**

On	Keypad is number keys (Default Value) .
Off	Keypad is arrow keys.

- **Gate A20 Option**

Normal	Set Gate A20 Option is Normal.
Fast	Set Gate A20 Option is Fast (Default Value) .

- **Typematic Rate Setting**

Enabled	Enable Keyboard Typematic rate setting.
Disabled	Disable Keyboard Typematic rate setting (Default Value) .

- **Typematic Rate (Chars / Sec.)**

6-30	Set the maximum Typematic rate from 6 chars. Per second to 30 characters. Per second. (Default Value: 6)
------	---

- **Typematic Delay (Msec.)**

250-1000	Set the time delay from first key to repeat the same key in to computer (Default Value: 250) .
----------	---

- **Security Option**

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

System	The system can not boot and can not access to Setup page will be denied if the correct password is not entered at the prompt
Setup	The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt (Default Value)

- **OS Select For DRAM>64MB**

Non-OS2	Using non-OS2 operating system (Default Value) .
OS2	Using OS2 operating system and DRAM>64MB.

- **HDD S.M.A.R.T. Capability**

Enabled	Enabled HDD S.M.A.R.T. Capability
Disabled	Disabled HDD S.M.A.R.T. Capability (Default Value)

- **Report No FDD For WIN 95**

No	Assign IRQ6 For FDD (Default Value) .
Yes	FDD Detect IRQ6 Automatically.

Advanced Chipset Features

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software Advanced Chipset Features			
SDRAM CAS Latency Time	Auto	Item Help	
SDRAM Cycle Time Tras/Trc	5/7	Menu Level ▶	
SDRAM RAS-to-CAS Delay	2		
SDRAM RAS Precharge Time	2		
SDRAM Buffer Strength	Auto		
DRAM Page Closing Policy	Precharge Bank		
System BIOS Cacheable	Enabled		
Video BIOS Cacheable	Enabled		
Delayed Transaction	Disabled		
On-Chip Video Window Size	64MB		
Local Memory Frequency	100MHz		
* Onboard Display Cache Setting *			
Initial Display Cache	Enabled		
Display Cache Timing	Fast		

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

Figure 4: Advanced Chipset Features Setup

- **SDRAM CAS latency Time**

Auto	Set SDRAM CAS latency Time to Auto (Default Value) .
3	For 67 / 83 MHz SDRAM DIMM module.
2	For 100 MHz SDRAM DIMM module.

- **SDRAM Cycle Time Tras/Trc**

6/8	Set DRAM Tras/Trc Cycle time is 6/8 SCLKs.
5/7	Set DRAM Tras/Trc Cycle time is 5/7 SCLKs (Default Value) .

- **SDRAM RAS# to CAS# delay**

3	Set SDRAM RAS# to CAS# delay 3 SCLKs.
2	Set SDRAM RAS# to CAS# delay 2 SCLKs (Default Value) .

- **SDRAM RAS# Precharge**

3	Set SDRAM RAS# Precharge is 3.
2	Set SDRAM RAS# Precharge is 2 (Default Value) .

- **SDRAM Buffer Strength**

Auto	Auto detect SDRAM buffer strength. (Default Value) .
Auto-1	Decrease SDRAM buffer strength.
Auto+1	Increase SDRAM buffer strength.

- **DRAM Page Closing Policy**

Precharge Bank	The GMCH precharge bank during the service of a page miss. (Default Value) .
Precharge All	The GMCH precharge all during the service of a page miss.

- **System BIOS Cacheable**

Enabled	Enable System BIOS Cacheable (Default Value) .
Disabled	Disable System BIOS Cacheable.

- **Video BIOS Cacheable**

Enabled	Enable video BIOS Cacheable (Default Value) .
Disabled	Disable video BIOS Cacheable.

- **Delayed Transaction**

Disabled	Normal operation (Default Value) .
Enabled	For slow speed ISA device in system.

- **On-Chip Video Window Size**

32MB	Set Graphics Aperture Size to 32MB.
64MB	Set Graphics Aperture Size to 64MB (Default Value) .
Disabled	Disabled this function.

- **Local Memory Frequency (for 82810E)**

100MHz	Set Display Cache used 100MHz. (Default Value)
133MHz	Set Display Cache used 133MHz.

- **Initialize Display Cache**

Disabled	Disabled Initialize Display Cache.
Enabled	Enabled Initialize Display Cache (Default Value) .

- **Display Cache Timing**

Fast	Set Display Cache Timing to Fast (Default Value) .
Normal	Set Display Cache Timing to Normal.

Integrated Peripherals

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software		
Integrated Peripherals		
		Item Help
On-Chip Primary PCI IDE	Enabled	Menu Level ▶
On-Chip Secondary PCI IDE	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	
USB Controller	Enabled	
USB Keyboard Support	Disabled	
Init Display First	PCI Slot	
AC97 Audio	Auto	
AC97 Modem	Auto	
IDE HDD Block Mode	Enabled	
POWER ON Function	BUTTON ONLY	
*KB Power ON Password	Enter	
*Hot Key Power ON	Ctrl-F1	
Onboard FDC Controller	Enabled	
Onboard Serial Port 1	Auto	
Onboard Serial Port 2	Auto	
UART Mode Select	Normal	
*RxD, TxD Active	Hi,Lo	
*IR Transmittiion delay	Enabled	
Onboard Parallel Port	378/IRQ7	
Parallel Port Mode	SPP	
*EPP Mode Select	EPP1.7	
*ECP Mode Use DMA	3	
Game Port Address	Disabled	
Midi Port Address	Disabled	
Midi Port IRQ	5	

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

Figure 5: Integrated Peripherals

- On-Chip Primary PCI IDE

Enabled	Enable onboard 1st channel IDE port (Default Value).
Disabled	Disable onboard 1st channel IDE port.

- **On-Chip Secondary PCI IDE**

Enabled	Enable onboard 2nd channel IDE port (Default Value) .
Disabled	Disable onboard 2nd channel IDE port.

- **IDE Primary Master PIO (for onboard IDE 1st channel)**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Mode0-4	Manually set the IDE Accessing mode.

- **IDE Primary Slave PIO (for onboard IDE 1st channel)**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Mode0-4	Manually set the IDE Accessing mode.

- **IDE Secondary Master PIO (for onboard IDE 2nd channel)**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Mode0-4	Manually set the IDE Accessing mode.

- **IDE Secondary Slave PIO (for onboard IDE 2nd channel)**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Mode0-4	Manually set the IDE Accessing mode.

- **IDE Primary Master UDMA**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Disabled	Disable UDMA function.

- **IDE Primary Slave UDMA**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Disabled	Disable UDMA function.

- **IDE Secondary Master UDMA**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Disabled	Disable UDMA function.

- **IDE Secondary Slave UDMA**

Auto	BIOS will automatically detect the IDE HDD Accessing mode (Default Value) .
Disabled	Disable UDMA function.

- **USB Controller**

Enabled	Enable USB Controller (Default Value) .
Disabled	Disable USB Controller.

- **USB Keyboard Support**

Enabled	Enable USB Keyboard Support.
Disabled	Disable USB Keyboard Support (Default Value) .

- **Init Display First**

PCI Slot	Set Init Display First to PCI Slot (Default Value) .
Onboard	Set Init Display First to onboard AGP.

- **AC'97 Audio**

Auto	Set AC'97 Audio to Auto (Default Value) .
Enabled	Enabled AC'97 Audio.
Disabled	Disabled AC'97 Audio.

- **AC'97 Modem**

Auto	Set AC'97 Modem to Auto (Default Value) .
Enabled	Enabled AC'97 Modem.
Disabled	Disabled AC'97 Modem

- **IDE HDD Block Mode**

Enabled	Enable IDE HDD Block Mode (Default Value) .
Disabled	Disable IDE HDD Block Mode.

• **POWER ON Function**

Password	Enter from 1 to 5 characters to set the Keyboard Power On Password.
Mouse Left	Double click twice on PS/2 left bottom.
Mouse Right	Double click twice on PS/2 right bottom.
BUTTON ONLY	If your keyboard have "POWER Key" button, you can press the key to power on your system (Default Value) .
Keyboard 98	Windows 98 keyboard "Power" key.

• **Onboard FDC Controller**

Enabled	Enable onboard FDC port (Default Value) .
Disabled	Disable onboard FDC port.

• **Onboard Serial Port 1**

Auto	BIOS will automatically setup the port 1 address (Default Value) .
3F8/IRQ4	Enable onboard Serial port 1 and address is 3F8.
2F8/IRQ3	Enable onboard Serial port 1 and address is 2F8.
3E8/IRQ4	Enable onboard Serial port 1 and address is 3E8.
2E8/IRQ3	Enable onboard Serial port 1 and address is 2E8.
Disabled	Disable onboard Serial port 1.

• **Onboard Serial Port 2**

Auto	BIOS will automatically setup the port 2 address (Default Value) .
3F8/IRQ4	Enable onboard Serial port 2 and address is 3F8.
2F8/IRQ3	Enable onboard Serial port 2 and address is 2F8.
3E8/IRQ4	Enable onboard Serial port 2 and address is 3E8.
2E8/IRQ3	Enable onboard Serial port 2 and address is 2E8.
Disabled	Disable onboard Serial port 2.

• **UART Mode Select**

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

ASKIR	Onboard I/O chip supports ASKIR.
IrDA	Onboard I/O chip supports IrDA.
Normal	Onboard I/O chip supports Normal (Default Value) .

- **RxD , TxD Active**

Hi, Hi	RxD set Hi, TxD set Hi
Hi, Lo	RxD set Hi, TxD set Lo (Default Value) .
Lo, Hi	RxD set Lo, TxD set Hi
Lo, Lo	RxD set Lo, TxD set Lo

- **IR Transmittiion delay**

Enabled	Set IR Transmittiion delay Enabled (Default Value) .
Disabled	Set IR Transmittiion delay Disabled

- **Onboard Parallel port**

378/IRQ7	Enable onboard LPT port and address is 378/IRQ7 (Default Value) .
278/IRQ5	Enable onboard LPT port and address is 278/IRQ5.
Disabled	Disable onboard LPT port.
3BC/IRQ7	Enable onboard LPT port and address is 3BC/IRQ7.

- **Parallel Port Mode**

SPP	Using Parallel port as Standard Printer Port (Default Value) .
EPP	Using Parallel port as Enhanced Parallel Port.
ECP	Using Parallel port as Extended Capabilities Port.
ECP+EPP	Using Parallel port as ECP & EPP mode.

- **EPP Mode Select**

EPP 1.9	EPP Version is 1.9.
EPP 1.7	EPP Version is 1.7 (Default Value) .

- **EPP Mode Use DMA**

1	Set EPP Mode Use DMA is 1.
3	Set EPP Mode Use DMA is 3 (Default Value) .

- **Game Port Address**

Disabled	Disabled On Board Game port (Default Value) .
201	Set Game port address is 201.
209	Set Game port address is 209.

- **Midi Port Address**

Disabled	Disabled On Board Midi Port (Default Value) .
300	Set On Board Midi Port is 300.
330	Set On Board Midi Port is 330.

- **Midi Port IRQ**

5	Set 5 for Midi Port IRQ (Default Value) .
7	Set 7 for Midi Port IRQ

Power Management Setup

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software		
Power Management Setup		
		Item Help
ACPI Suspend Type	S1(PowerOnSuspend)	
Power Management	User Define	
Video Off Method	DPMS	Menu Level ▶
Video Off In Suspend	Yes	
Suspend Type	Stop Grant	
MODEM Use IRQ	4	
Suspend Mode	Disabled	
HDD Power Down	Disabled	
Soft-Off by PWR-BTTN	Instant-off	
Power LED in Suspend	Blinking	
AC BACK Function	Memory	
Wake-Up by PCI card	Enabled	
ModemRingOn/WakeOnLan	Enabled	
FAN Off In Suspend	Enabled	
USB KB/Mouse wake From S3	Disabled	
CPU Thermal-Throttling	50%	
Resume by Alarm	Disabled	
* Date(of Month) Alarm	0	
* Time(hh:mm:ss) Alarm	0 0 0	
** Reload Global Timer Events **		
Primary IDE 0	Disabled	
Primary IDE 1	Disabled	
Secondary IDE 0	Disabled	
Secondary IDE 1	Disabled	
FDD,COM,LPT Port	Enabled	
PCI PIRQ[A-D]#	Enabled	

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

Figure 6: Power Management Setup

- **ACPI Suspend Type**

S1(Power On Suspend)	Set ACPI Suspend type is S1 (Default Value).
S3(Suspend to RAM)	Set ACPI Suspend type is S3.

- **Power Management**

User Define	For configuring our own power management features (Default Value) .
Min Saving	Enable Green function.
Max Saving	Disable Green function.

- **Video off Method**

V/H SYNC+Blank	BIOS will turn off V/H-SYNC when gets into Green mode for Green monitor power saving.
Blank Screen	BIOS will only black monitor when gets into Green mode.
DPMS	BIOS will use DPMS Standard to control VGA card. (The Green type VGA card will turn off V/H-SYNC automatically.) (Default Value).

- **Video Off In Suspend**

Yes	Enabled video off in suspend (Default Value).
No	Disabled video off in suspend.

- **Suspend Type**

Stop Grant	Set Suspend type is stop grant (Default Value).
PwrOn Suspend	Set Suspend type is Power on suspend.

- **MODEM Use IRQ**

NA	Set MODEM Use IRQ to NA.
3	Set MODEM Use IRQ to 3.
4	Set MODEM Use IRQ to 4 (Default Value).
5	Set MODEM Use IRQ to 5.
7	Set MODEM Use IRQ to 7.
9	Set MODEM Use IRQ to 9.
10	Set MODEM Use IRQ to 10.
11	Set MODEM Use IRQ to 11.

- **Suspend Mode**

Disabled	Disable Suspend Mode (Default Value).
1 min - 1 Hour	Setup the timer to enter Suspend Mode.

- **HDD Power Down**

Disable	Disable HDD Power Down mode function (Default Value).
1-15 mins.	Enable HDD Power Down mode between 1 to 15 mins.

- **Soft-off by PWR-BTTN**

Instant-off	Soft switch ON/OFF for POWER ON/OFF (Default Value).
Delay 4 Sec.	Soft switch ON 4sec. for POWER OFF.

- **Power LED in Suspend**

Blinking	Set Power LED in Suspend at Blinking mode (Default Value) .
On	Set Power LED in Suspend at On mode.
Off/Dual	Set Power LED in Suspend at Off/Dual color mode.

- **AC Back Function**

Memory	This function depends on computer status (Default Value) .
Soft-Off	Set System Soft-Off Status.
Full-On	Set System Full-On Status.

- **Wake-Up by PCI card**

Disabled	Disabled this function.
Enabled	Enabled wake-up by PCI card (Default Value) .

- **ModemRingOn / WakeOnLan**

Disabled	Disable these functions.
Enabled	Enable these functions (Default Value) .

- **FAN Off In Suspend**

Disabled	Disable this function.
Enabled	Stop CPU FAN when entering Suspend mode (Default Value) .

- **USB KB/Mouse Wake From S3**

Disabled	Disable this function (Default Value) .
Enabled	Enable this function.

- **CPU Thermal-Throttling**

87.5%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 87.5%.
75.0%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 75.0%.
62.5%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 62.5%.
50.0%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 50.0% (Default Value) .
37.5%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 37.5%.

25.0%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 25.0%.
12.5%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 12.5%.

- **Resume by Alarm**

Disabled	Disable this function (Default Value) .
Enabled	Enable alarm function to POWER ON system.

If the default value is Enabled.

Date (of Month) Alarm :	0~31
Time (hh: mm: ss) Alarm :	(0~23) : (0~59) : (0~59)

- **Primary IDE 0/1**

Disabled	Disable this function (Default Value) .
Enabled	Enable monitor Primary IDE 0/1 for Green event.

- **Secondary IDE 0/1**

Disabled	Disable this function (Default Value) .
Enabled	Enable monitor Secondary IDE 0/1 for Green event.

- **FDD/COM/LPT Port**

Disabled	Disable this function.
Enabled	Enable monitor FDC/COM/LPT for Green event (Default Value) .

- **PCI PIRQ[A-D] #**

Enabled	Monitor PCI PIRQ[A-D] IRQ Active (Default Value) .
Disabled	Ignore PCI PIRQ[A-D] IRQ Active.

PnP/PCI Configurations

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software PnP/PCI Configurations		
PNP OS Installed	No	Item Help
Reset Configuration Data	Disabled	Menu Level ▸
Resources Controlled By	Auto (ESCD)	Select Yes if you Are using a Plug And Play capable Operating system
* IRQ Resources	Press Enter	Select No if you Need the BIOS to Configure non- Boot devices
*DMA Resources	Press Enter	
*Memory Resources	Press Enter	
PCI/VGA Palette Snoop	Disabled	

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

Figure 7: PCI Slot Configuration

- PNP OS Installed**

Yes	Enable PNP OS Installed function.
No	Disable PNP OS Installed function (Default Value).

- Reset Configuration Data**

Disabled	Disable this function (Default Value).
ESCD	Clear ESCD data in flash memory.
DMI	Clear DMI data in flash memory.
Both	Clear Both ESCD and DMI data in flash memory.

- **Resources Controlled by**

Manual	User can set the PnP resource (I/O Address, IRQ & DMA channels) used by legacy ISA DEVICE.
Auto	BIOS automatically use these PnP rescuers (Default Value) .

- **IRQ (3,4,5,7,9, 10,11,12,14,15),DMA(0,1,3,5,6,7) assigned to (Legacy ISA or "PCI/ISA PnP)**

Legacy ISA	The resource is used by Legacy ISA device.
PCI/ISA PnP	The resource is used by PCI/ISA PnP device (PCI or ISA).

- **Reserved Memory Base**

N/A	Disable the MEM. block using (Default Value) .
C800 ~ DC00	Select the MEM. block starting address.

- **PCI/VGA Palette Snoop**

Enabled	For having Video Card on ISA Bus and VGA Card on PCI Bus.
Disabled	For VGA Card only (Default Value) .

PC Health Status

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software		
PC Health Status		
		Item Help
Reset Case Open Status	Disabled	
Case Opened	No	
Current CPU Temperature	47°C/116°F	
CPU FAN Speed	4891 RPM	
Power FAN Speed	0 RPM	
System FAN Speed	0 RPM	
VCORE	2.08 V	
VGTL	1.50 V	
VCC3	3.45 V	
+ 5V	5.10 V	
+12V	12.28 V	
- 12V	-12.52 V	
- 5V	- 5.09 V	
VBAT	3.13 V	
5VSB	5.33 V	
CPU Warning Temperature	70°C/158°F	
Shutdown Temperature	75°C/167°F	
CPU FAN Fail Alarm	Disabled	
Power FAN Fail Alarm	Disabled	
System FAN Fail Alarm	Disabled	

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

Figure 8: PC Health Status

- **Reset Case Open Status**
- **Case Opened**
If the case is closed, "Case Opened" will show "No".
If the case have been opened, "Case Opened" will show "Yes" .
If you want to reset "Case Opened" value, set "Reset Case Open Status" to "Enable" and save CMOS, your computer will restart.
- **Current CPU Temperature (°C / °F)**
Detect CPU Temp. automatically.
- **CPU FAN / Power FAN / System FAN Speed (RPM)**
Detect Fan speed status automatically.

- **Current Voltage (V) VCORE / VGTL/ VCC3 / $\pm 12V$ / $\pm 5V$ /VBAT /5VSB**

Detect system's voltage status automatically.

- **CPU Warning Temperature ($^{\circ}C$ / $^{\circ}F$)**

65 $^{\circ}C$ / 149 $^{\circ}F$	Monitor CPU Temp. at 65 $^{\circ}C$ / 149 $^{\circ}F$
70 $^{\circ}C$ / 158 $^{\circ}F$	Monitor CPU Temp. at 70 $^{\circ}C$ / 158 $^{\circ}F$ (Default Value) .
75 $^{\circ}C$ / 167 $^{\circ}F$	Monitor CPU Temp. at 75 $^{\circ}C$ / 167 $^{\circ}F$
Disabled	Disabled this function.

- **Shutdown Temp. ($^{\circ}C$ / $^{\circ}F$)**

(This function will be effective only for the operating systems that support ACPI Function.)

Disabled	Normal Operation
65 $^{\circ}C$ / 149 $^{\circ}F$	Monitor CPU Temp. at 65 $^{\circ}C$ / 149 $^{\circ}F$, if Temp. > 65 $^{\circ}C$ / 149 $^{\circ}F$ system will automatically power off .
70 $^{\circ}C$ / 158 $^{\circ}F$	Monitor CPU Temp. at 70 $^{\circ}C$ / 158 $^{\circ}F$, if Temp. > 70 $^{\circ}C$ / 158 $^{\circ}F$ system will automatically power off .
75 $^{\circ}C$ / 167 $^{\circ}F$	Monitor CPU Temp. at 75 $^{\circ}C$ / 167 $^{\circ}F$, if Temp. > 75 $^{\circ}C$ / 167 $^{\circ}F$ system will automatically power off (Default Value) .

- **Fan Fail Alarm**

CPU / POWER / SYSTEM

Disabled	Fan Fail Alarm Function Disabled. (Default Value) .
Enabled	Fan Fail Alarm Function Enabled.

Frequency/Voltage Control

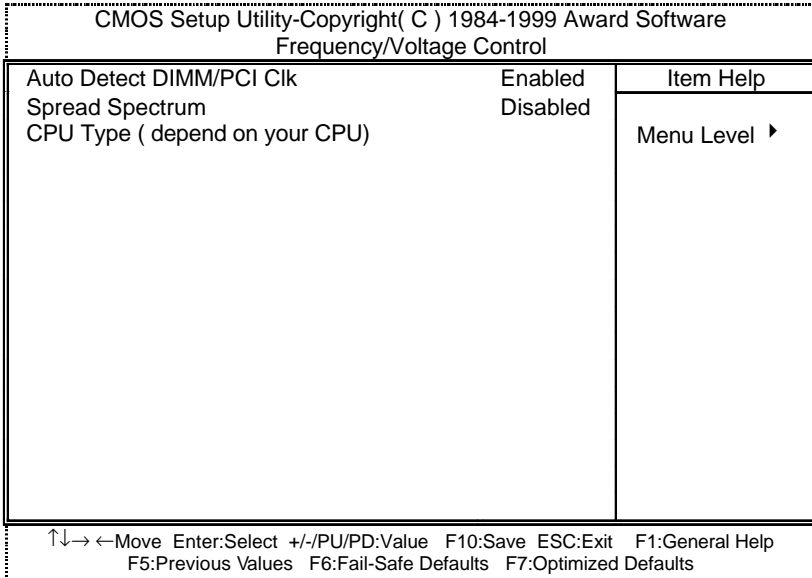


Figure 9: Frequency/Voltage Control

- **Auto Detect DIMM/PCI Clk**

Disabled	Disabled Auto Detect DIMM/PCI Clk.
Enabled	Enabled Auto Detect DIMM/PCI Clk. (Default value)

- **Spread Spectrum**

Disabled	Disabled spread spectrum function. (Default value)
Enabled	Enabled spread spectrum function.

- **CPU Type (depend on your CPU)**

1. System Bus Speed :66MHz

200 / 233 / 266 / 300 / 333 / 366 / 400 / 433 / 466 / 500 / 533

2. System Bus Speed : 100MHz

300 / 350 / 400 / 450 / 500 / 550 / 600 / 650 / 700 / 750 / 800

3. System Bus Speed : 133MHz

400 / 466 / 533 / 600 / 666 / 733 / 800 / 866 / 933 / 1000 / 1066

Load Fail-Safe Defaults

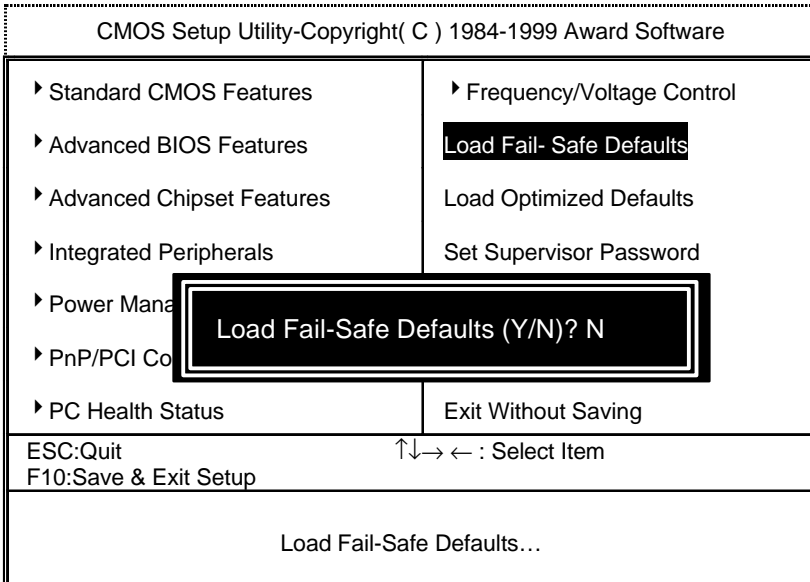


Figure 10: Load Fail-Safe Defaults

- Load Fail-Safe Defaults

Fail-Safe defaults contain the most appropriate values of the system parameters that allow minimum system performance.

Load Optimized Defaults

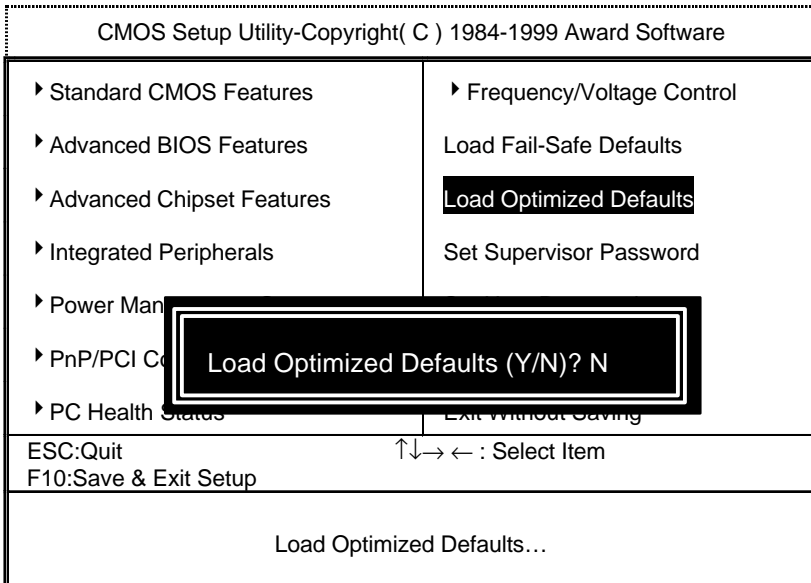


Figure 11: Load Optimized Defaults

- Load Optimized Defaults

Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

Set Supervisor / User Password

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

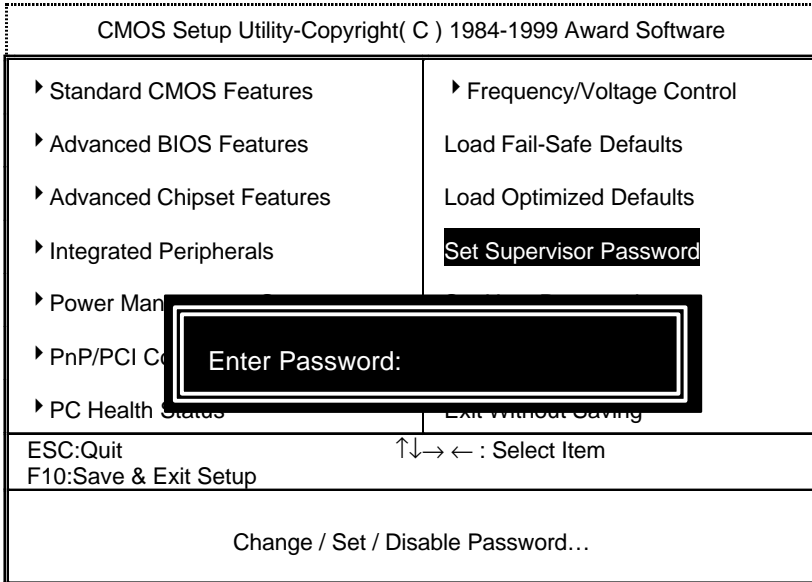


Figure 12: Password Setting

Type the password, up to eight characters, and press <Enter>. The password typed now will clear the 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 password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

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

Save & Exit Setup

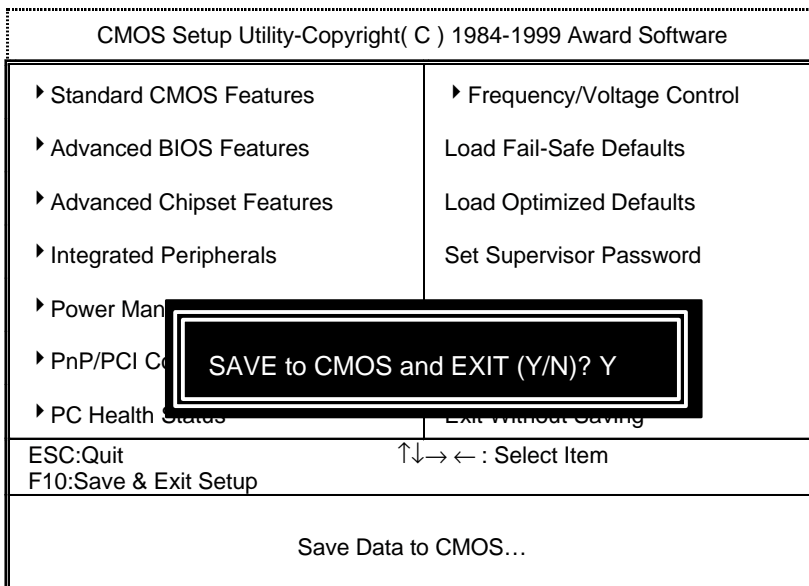


Figure 13: Save & Exit Setup

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

Type "N" will return to Setup Utility.

Exit Without Saving

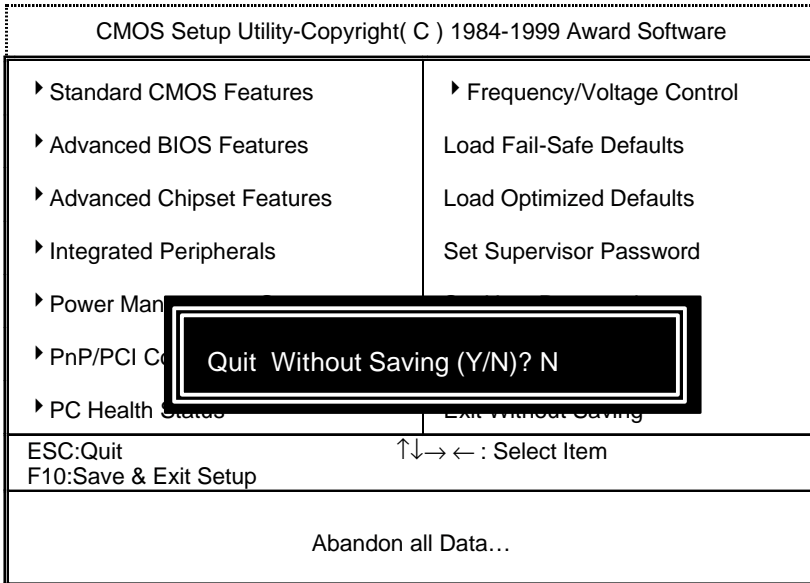


Figure 14: Exit Without Saving

Type "Y" will quit the Setup Utility without saving to RTC CMOS SRAM.

Type "N" will return to Setup Utility.

Appendix

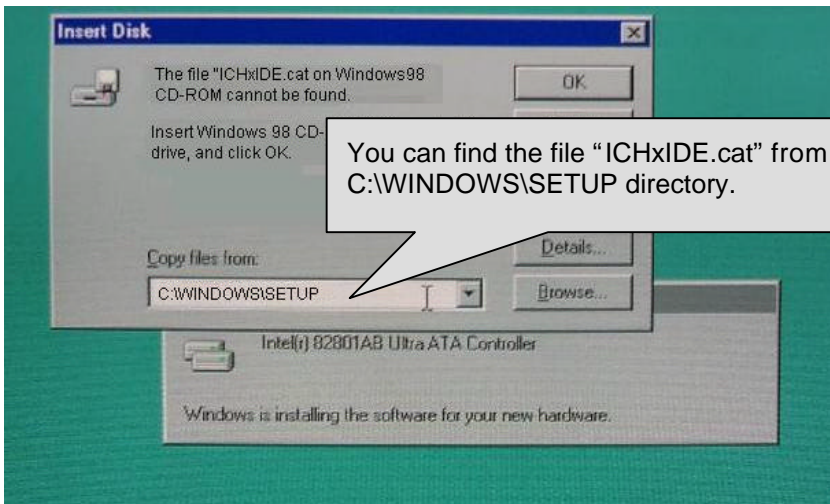
Appendix A : Onboard Driver Installation Procedure

(In this manual, we assume that your CD-ROM Drive letter to be Drive D:)
Please reference IUCD CD directory D: \ Manual \ Whitney810.pdf

Appendix B : 810 INF update utility can't find ICHxIDE.cat file automatically

1. After the installation of Windows 98 is completed, run the "Setup.exe" of INF update utility.
2. System restarts.
3. System starts to recognize every new component.
4. System will stop and prompt users to specify the location of "ICHxIDE.cat" file.
5. The system will not find the location of ICHxIDE.cat automatically.

Resolution:



Appendix C : BIOS Flash Procedure

BIOS update procedure:

- ✓ Please check your BIOS vendor (AMI or AWARD) on the motherboard.
- ✓ It is recommended you copy the AWDFlash.exe or AMIFlash.exe , the BIOS binary files in driver CD(D:\>Utility\BIOSFlash) into the same directory in your hard disk. ; i.e:C:\>Utility\ (C: denotes the driver where you put the flash utilities and BIOS file in.) ; j
- ✓ Restart your computer into MS-DOS mode or command prompt only for Win95/98, go into the directory where the new BIOS file are located Use the utility AWDFlash.exe or AMIFlash.exe to update the BIOS.
- ✓ Type the following command once you have enter the directory where all the files are located
C:\utility\ AWDFlash or AMIFlash <filename of the BIOS binary file intended for flashing>
- ✓ Once the process is finished, reboot the system

● Note: Please download the newest BIOS from our website (www.gigabyte.com.tw) or contact your local dealer for the file.

Appendix D : Acronyms

Acor.	Meaning	Acor.	Meaning	Acor.	Meaning
ACPI	Advanced configuration and power interface	ECC	Error checking and correcting	IRQ	Interrupt request
POST	Power-on self test	IDE	Integrated dual channel enhanced	NIC	Network interface card
LAN	Local area network	SCI	Special circumstance instructions	A.G.P.	Accelerated graphics port
ECP	Extended capabilities port	LBA	Logical block addressing	S.E.C.C.	Single edge contact cartridge
APM	Advanced power management	EMC	Electromagnetic compatibility	LED	Light emitting diode
DMA	Direct memory access	BIOS	Basic input / output system	EPP	Enhanced parallel port
MHz	Megahertz	SMI	System management interrupt	CMOS	Complementary metal oxide semiconductor
ESCD	Extended system configuration data	I/O	Input / Output	DMI	Desktop Management Interface
CPU	Central processing unit	ESD	Electrostatic DISCHARGE	MIDI	Musical interface digital interface
SMP	Symmetric multi-processing	OEM	Original equipment manufacturer	IOAPIC	Input Output Advanced Programmable Input Controller
USB	Universal serial bus	SRAM	Static random access memory	DIMM	Dual inline memory module
OS	Operating System	VID	Voltage ID	DRAM	Dynamic random access memory
					To be continued

6WMM Series Motherboard

Acor.	Meaning	Acor.	Meaning	Acor.	Meaning
DRM	Dual retention mechanism	PAC	<u>P</u> CI <u>A</u> .G.P. <u>c</u> ontroller	PCI	Peripheral component interconnect
ISA	Industry standard architecture	AMR	Audio Modem Riser	RIMM	Rambus In-line Memory Module
CRIMM	Continuity RIMM				