

## 3 Built-in BIOS Setup Program

### SETUP Program

This chapter describes the Award BIOS setup for P6FX1-B. The setup program uses a number of menus that you can specify changes to your hardware and turn the special features on or off.

To enter the BIOS setup program, users can turn on or reboot the system. Press the <DEL> key when the system displays "Press DEL to enter SETUP".

The following screen will be displayed.

ROM PCI/ISA BIOS <<P6FX1-B>> CMOS SETUP UTILITY AWARD SOFTWARE, INC.	
STANDARD CMOS SETUP BIOS FEATURES SETUP CHIPSET FEATURES SETUP POWER MANAGEMENT SETUP PNP/PCI CONFIGURATION LOAD BIOS DEFAULTS LOAD SETUP DEFAULTS	INTEGRATED PERIPHERALS SUPERVISOR PASSWORD USER PASSWORD IDE HDD AUTO DETECTION SAVE & EXIT SETUP EXIT WITHOUT SAVING
Esc : Quit	↑ ↓ → ← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color
Time, Date, Hard Disk Type ...	

Figure 3 -1. SETUP Main Menu



*The instructions at the bottom of Main Menu Screen show the items of each option.*

- ☐ **STANDARD CMOS SETUP** - This option allows users to check or modify the basic system configuration.
- ☐ **BIOS FEATURES SETUP** - This option is used to set the various system options for the users, including the virus warning, external cache, security option, boot operations, and video BIOS shadow, etc.
- ☐ **CHIPSET FEATURES SETUP** - This option allows users to control the features of chipset.
- ☐ **POWER MANAGEMENT SETUP** - This option allows users to set the power saving status for reducing the power consumption.

## BIOS

- ☐ **PNP/PCI CONFIGURATION SETUP** - This option is used to set the various system function and internal addresses of the PCI devices. Allows users to configure system IRQ and DMA to **PCI/ISA PnP** or **Legacy ISA**.
- ☐ **LOAD BIOS DEFAULTS** - Users can load the BIOS default values to boot the system safely.
- ☐ **LOAD SETUP DEFAULTS** - This option supports the better performance for the system. It is recommended to choose **SETUP Defaults** for the setup.
- ☐ **INTEGRATED PERIPHERALS** - This option allows users to decide how many kinds peripherals need to change their I/O type, mode and used or not. This options also allows user to set the various system function and onboard PCI IDE controller.
- ☐ **SUPERVISOR PASSWORD** - Password is required when entering and changing all of the SETUP option or booting your system. Users can change the current password stored in the CMOS by accessing this option.
- ☐ **USER PASSWORD** - Password is required when booting your system and entering to change only the USER PASSWORD. Users can change the current password stored in the CMOS by accessing this option.
- ☐ **IDE HDD AUTO DETECTION** - This option can automatic detect the hard disk drive type(s) including the number of cylinders and heads, write pre-compensation time, read/write head landing zone, and number of sectors per track.
- ☐ **SAVE & EXIT SETUP** - After saving the changes what you have made in the SETUP program, then exit and reboot the system.
- ☐ **EXIT WITHOUT SAVING** - Abandons all previous settings, then exit and reboot the system.

After choosing an item from the SETUP main menu, move the cursor by using the ↑,↓,→,← arrow keys and press <Enter>. To modify the setting of an option, simply press the <PgUp> or <+> and the <PgDn> or <-> keys. Press the <F2> key when changing the color setting, <F1> for a context sensitive help function, and the <ESC> key when quitting SETUP.

---

## Standard CMOS Setup

ROM PCI/ISA BIOS <<P6FX1-B>>  
STANDARD CMOS SETUP  
AWARD SOFTWARE, INC

Data (mm:dd:yy) : Thu, Sep 17 1996
Time (hh:mm:ss) : 17 : 58 : 42

## BIOS

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	: 1.44M, 3.5 in.		<div>Base Memory: 640K Extended Memory: 7168K Other Memory: 384K <hr/>Total Memory: 8192K</div>					
Drive B	: None							
Floppy 3 mode Support	: Disabled							
Video	: EGA/VGA							
Halt On	: All Errors							
Esc : Quit	↑ ↓ → ← : Select Item		PU/PD/+/- : Modify					
F1 : Help	(Shift) F2 : Change Color							

Figure 3-2. Standard CMOS SETUP Screen

**Date** - Allows manual setting of the electronic calendar on the mainboard.

**Time** - Sets the internal clock of the system which includes hour, minutes, and seconds.

**Primary Master** - Specifies the physical and electronic properties of the standard hard disk drives installed. Relevant specifications include the type, number of cylinders (CYLS), heads (HEAD), write pre-compensation time (PRECOMP), read/write head landing zone (LANDZ), number of sectors per track (SECTOR), and HDD mode (MODE). Selecting "**AUTO**" in the hard disk type item avoids the necessity of loading the HDD specifications and the function of the IDE HDD Auto Detection option in the main menu. The system BIOS will automatically detect the hard drive installed on the system upon bootup.

**Drive A:/B:** - Specifies the capacity and format of the floppy drive installed in your system.

**Floppy 3 Mode Support** - If 3 mode function is enabled, Floppy Diskette is only compatible to the Floppy Diskette Format of Japan Spec. : **1.2MB, 3.5in.** Otherwise, it is compatible to Floppy Diskette Format of IBM PC.

**Video** - Specifies the display adapter installed.

**Halt On** - Enables the system to halt on several conditions/options. The default value is set as "**All Errors.**"

**Base/Extended/Other Memory** - A small section in the lower right corner of the screen displays the important information about your system which includes the base, extended, and other memory sizes. They are updated automatically by the SETUP program according to the status detected by the BIOS self-test. This section of the Standard CMOS SETUP screen is for viewing purpose only; therefore, manual modifications are not allowed.

## BIOS

---

### BIOS Features Setup

ROM PCI/ISA BIOS <<P6FX1-B>> BIOS FEATURES SETUP AWARD SOFTWARE, INC.			
Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU Internal Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
External Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
Quick Power On Self Test	: Disabled	D0000-D3FFF Shadow	: Disabled
Boot Sequence	: A,C	D4000-D7FFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	D8000-DBFFF Shadow	: Disabled
Boot Up NumLock Status	: On	DC000-DFFFF Shadow	: Disabled
Gate A20 Option	: Fast		
Security Option	: Setup		
PCI/VGA Palette Snoop	: Disabled		
OS Select For DRAM > 64MB	: Non-OS2		
		ESC : Quit            ↑↓→←: Select Item	
		F1 : Help            PU/PD/+/- : Modify	
		F5 : Old Values    (Shift)F2 : Color	
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Figure 3 -3. BIOS Features Setup Screen

**Virus Warning** - Allows the virus warning feature for the hard disk boot sector to display a warning message and produce a beep sound whenever an attempt is made to write on the hard disk's boot sector. The default value for this option is "**Disabled**."

**CPU Internal Cache** - Enables the internal 16KB code/data cache of the Intel Pentium CPU when set to "**Enabled**" (default).

**External Cache** - Enables the on-board secondary cache (either standard non-burst or burst cache) when set to "**Enabled**" (default).

**Quick Power On Self Test** - Allows the power on self test to run at either a fast or a normal speed. The available options are:

- Disabled (default)
- Enabled

## ***BIOS***

**Boot Sequence** - Selects the drive where the system would search for the operating system to run with. The available options are:

- A,C (default)
- C,A
- C,CDROM, A
- CDROM,C,A

**Swap Floppy Drive** - “**Enabled**” will effectively change the A: drive to B: and the B: to A: drive. “**Disabled**” (default) sets the floppy drives in their default states.

**Boot Up NumLock Status** - Sets the <Num Lock> key to either on or off during system boot-up. The available options are:

- On (default)
- Off

**Gate A20 Option** - Boosts the performance of system with software using the 80286 protected mode such as OS/2 or UNIX. This option determines the accessibility of the extended memory. The available options are:

- Fast (default)
- Normal

**Security Option** - Determines whether the password will be asked for in every boot (**System**), or when entering into the SETUP program (**Setup** - default). Refer to the section entitled SUPERVISOR PASSWORD for the password setting procedure.

**PCI/VGA Palette Snoop** - Selects “Enabled” to solve the abnormal color in Windows while using ISA MPEG and PCI VGA card. The available options are:

- Disabled (default)
- Enabled

**OS Select For DRAM > 64MB** - Selects the OS if DRAM > 64MB. This option allows you to access the memory that over 64MB in OS/2. The available options are:

- Non-OS2 (default)
- OS2

**Video BIOS Shadow** - Enables the system shadowing and achieve the best performance of the system. The available options are:

- Enabled (default)
- Disabled

**C8000-CBFFF, CC000-CFFFF, D0000-D3FFF, D4000-D7FFF, D8000-DBFFF, DC000-DFFFF Shadow** - If you have a shadowing of the BIOS at any of the above segments, you may set the appropriate memory cacheable function to “**Enabled**”. Otherwise, select “**Disabled**” (default).

BIOS

Chipset Features Setup

áROM PCI/ISA BIOS <<P6FX1-B>>  
CHIPSET FEATURES SETUP  
AWARD SOFTWARE, INC.

Auto Configuration	: Enabled	System BIOS Cacheable	: Enabled
DRAM Speed Selection	: 60ns	Video RAM Cacheable	: Disabled
DRAM RAS# Precharge Time	: 3	8 Bit U/O Recovery Time	: 1
MA Additional Wait State	: Disabled	16 Bit U/O Recovery Time	: 1
RAS# to CAS# Delay	: Disabled	Memory Hole At 15M-16M	: Disabled
DRAM Read Burst (B/E/F)	: x2/2/3	DRAM Fast Leadoff	: Disabled
DRAM Write Burst (B/E/F)	: x2/2/3		
ISA Bus Clock	: PCICLK/4		
DRAM Refresh Queue	: Enabled		
DRAM Refresh Type	: CAS b4 RAS		
DRAM ECC/PARITY Select	: Disabled		
Fast Dram Refresh	: Disabled		
Read-Around-Write	: Enabled		
PCI Burst Write Combine	: Enabled		
PCI-To-DRAM Pipeline	: Enabled		
CPU-To-PCI Write Post	: Enabled		
CPU-To-PCI IDE Posting	: Enabled		

ESC : Quit                   ↑↓→←: Select Item  
F1 : Help                   PU/PD/+/- : Modify  
F5 : Old Values (Shift)F2 : Color  
F6 : Load BIOS Defaults  
F7 : Load Setup Defaults

Figure 3 -4. Chipset Features Setup Screen

Auto Configuration - Loads the default values, if “Enabled”, for the DRAM and cache options. Otherwise, “Disabled” allows you to program each option as required. The available options are:

- Enabled (default)
- Disabled

DRAM Speed Selection - Configures the DRAM read/write timing for the maximum performance. The available options are:

- 60ns (default)
- 70ns

DRAM RAS# Precharge Time - Selects RAS# precharge time for DRAM access. The available options are:

- 3 (default)
- 4

MA Additional Wait State - One additional wait state is inserted before the assertion of the first Maxx and CAS#/RAS# assertion during DRAM read or write leadoff cycles. The available options are:

- Disabled (default)
- Enabled

## ***BIOS***

**RAS# To CAS# Delay** - Allows 1 clock delay or none between assertion of RAS# and CAS#. The available options are:

- Disabled (default)
- Enabled

**DRAM Read Burst Timing <B/E/F>** - Controls DRAM Read Burst Timings. If users set the option to x2/2/3, the Burst Read Timings of **B**EDO, **E**DO and **F**PM DRAM respectively are x222, x222, and x333. The available options are:

- x2/2/3 (default)
- x1/2/3
- x2/3/4
- x3/4/4

**DRAM Write Burst Timing <B/E/F>** -Controls DRAM Write Burst Timings. The available options are:

- x2/2/3 (default)
- x3/3/4
- x3/3/3
- x4/4/4

**ISA Clock** - ISA clock divide by 4 or 3 depending on PCI bus clock. Users can refer to the formula for clear figure. ( **ISA Clock = PCI Clock / 3** or **ISA Clock = PCI Clock / 4** ). The available options are:

- PCICLK/4 (default)
- PCICLK/3

**DRAM Refresh Queue** - If DRAM is set to “Enabled”, the internal 4 deep refresh queue is enable for adjusting the DRAM refresh rate. The available options are:

- Enabled (default)
- Disabled

**DRAM Refresh Type** -If you choose “RAS only”, the DRAM refresh type is RAS only; If you choose “CAS b4 RAS”, the DRAM refresh type is CAS-before-RAS. The available options are:

- CAS b4 RAS (default)
- RAS only

**DRAM ECC/PARITY Select** - Allows user configure the DRAM error check method is ECC or Parity check . The available options are:

- Enabled (default)
- Disabled

**Fast DRAM Refresh** - The fast refresh mode implements a refresh cycle every 32 host clocks. The available options are:

- Disabled (default)
- Enabled

**Read -Around-Write** - When the option is disabled, all posed writes in the DBX are retired before a CPU or PCI read access is serviced. The available options are:

- Enabled (default)
- Disabled

## ***BIOS***

**PCI Burst Write Combine** - If this option is set as enabled, DBX is allowed to combine back-to-back sequential CPU to PCI Writes into a single PCI Write Burst. The available options are:

- Enabled (default)
- Disabled

**PCI-To-DRAM Pipeline** - Restricts pipelining of PCI to DRAM Write cycles when this option is set as disabled. The available options are:

- Enabled (default)
- Disabled

**CPU-To-PCI Write Post** - Enables the CPU to PCI posting. The available options are :

- Enabled (default)
- Disabled

**CPU-To-PCI IDE Post** - When this option is set as disabled, the cycles are treated as normal I/O write transactions. The available options are :

- Enabled (default)
- Disabled

**System BIOS Cacheable** - Allows shadowing of the system BIOS and improves the system performance. The available options are:

- Enabled (default)
- Disabled

**Video RAM Cacheable** - Sets the mode of the system's video BIOS shadowing mode. The available options are:

- Disabled (default)
- Enabled

**8 Bit I/O Recovery Time** - Defines the 8-bit I/O recovery time with one of the following system clock options. The available options are:

- 1 (default)
- 2/3/4/5/6/7/8/NA

**16 Bit I/O Recovery Time** - Defines the 16-bit I/O recovery time with one of the following system clock options. The available options are:

- 1 (default)
- 2/3/4/NA

**Memory Hole At 15M-16M** - Enables this option to reserve the certain space in memory for ISA cards. The available options are:

- Disabled (default)
- Enabled

**DRAM Fast Leadoff** - Reserves for performance enhancement. The available options are:

- Disabled (default)
- Enabled



## Power Management Setup

ROM PCI/ISA BIOS <<P6FX1-B>> Power MANAGEMENT SETUP AWARD SOFTWARE, INC.		
Power Management	: Disabled	** Power Down & Resume Events **
PM Control by APM	: Yes	IRQ3 (COM 2) : ON
Video Off Method	: DPMS	IRQ4 (COM 1) : ON
MODEM Use IRQ	: NA	IRQ5 (LPT 2) : ON
		IRQ6 (Floppy Disk) : ON
Doze Mode	: Disabled	IRQ7 (LPT 1) : ON
Standby Mode	: Disabled	IRQ8 (RTC Alarm) : OFF
Suspend Mode	: Disabled	IRQ9 (IRQ2 Redir) : ON
HDD Power Down	: Disabled	IRQ10 (Reserved) : ON
		IRQ11 (Reserved) : ON
**Wake Up Events In Doze & Standby **		IRQ12 (PS/2 Mouse) : ON
IRQ3 (Wake-Up Event)	: ON	IRQ13 (Coprocesor) : ON
IRQ4 (Wake-Up Event)	: ON	IRQ14 (Hard Disk) : ON
IRQ8 (Wake-Up Event)	: OFF	IRQ15 (Reserved) : ON
IRQ12 (Wake-Up Event)	: ON	
		ESC : Quit      ↑↓→←: Select Item
		F1 : Help      PU/PD/+/- : Modify
		F5 : Old Values (Shift) F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

Figure 3 -5. Power Management Setup Screen

**Power management** - Allows users determine how often the Power management activating . The available options are:

- Disable (default)
- Max Saving
- Min Saving
- User Define

**PM Control by APM** - Sets the power management (PM) control by the APM. The available options are:

- Yes (default)
- No

**Video Off Method** - Sets the video power green method . The available options are:

- DPMS (default)
- V/H SYNC+Blank
- Blank Screen

**MODEM Use IRQ** - In order to support resume on ring and to pass APM 1.2, this option is required to be set same IRQ as the modem add-in-card used. The available options are:

- NA (default)
- 3/4/5/7/9/10/11

**Doze Mode** - Sets the time interval after system inactivity when the system enters DOZE mode. The available options are:

- Disabled (default)
- 1 Hour
- 1/2/4/6/8/10/20/30/40 Min

**Standby Mode** - Sets the timer interval after system inactivity when the system enters STANDBY mode. The available options are:

- Disabled (default)
- 1 Hour

## ***BIOS***

- 1/2/4/6/8/10/20/30/40 Min

**Suspend Mode** -Sets the time interval after system inactivity when the system enters SUSPEND mode. The available options are:

- Disabled (default)
- 1 Hour
- 1/2/4/6/8/10/20/30/40 Min

**HDD Power Down** - Sets the time to power down HDD is standby mode. The available options are:

- Disabled (default)
- 1....15 Min

### **Wake Up Events In Doze & Standby**

**IRQ 3/4/8/12 (Wake-Up Event)** - Sets the wake-up event to “**ON**” or “**OFF**” while system enters the suspend mode.

### **Power Down & Resume Events**

**Power Down Activities** - The manual also lists the Power Management SETUP (PM) events by which the system wakes up from STANDBY or SUSPEND modes. Switch the following parameters to “**ON**” or “**OFF**”:

- |                        |                       |
|------------------------|-----------------------|
| • COM Ports Accessed   | • IRQ8 (RTC Alarm)    |
| • LPT Ports Accessed   | • IRQ9 (IRQ2 Redir)   |
| • Drive Ports Accessed | • IRQ10 (Reserved)    |
| • IRQ3 (COM2)          | • IRQ11 (Reserved)    |
| • IRQ4 (COM1)          | • IRQ12 (PS/2 Mouse)  |
| • IRQ5 (LPT2)          | • IRQ13 (Coprocessor) |
| • IRQ6 (Floppy Disk)   | • IRQ14 (Hard Disk)   |
| • IRQ7 (LPT 1)         | • IRQ15 (Reserved)    |

## PNP/PCI CONFIGURATION Setup

ROM PCI/ISA BIOS <<P6FX1-B>>  
PNP/PCI CONFIGURATION  
AWARD SOFTWARE, INC.

Resources Controlled By : Auto	PCI IRQ Activated By : Level
Reset Configuration Data : Disabled	PCI IDE IRQ Map To : PCI-AUTO
	Primary IDE INT# : A
	Secondary IDE INT# : B
ESC : Quit      ↑↓←→ : Select Item F1 : Help      PU/PD/+/- : Modify F5 : Old Values (Shift) F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults	

Figure 3 -6. PNP/PCI CONFIGURATION SETUP Screen

Resources Controlled By - Allows user what kind IRQs assignment to be used .  
“Manual” or “Automatic” definition . The available options are:

- Auto (default)
- Manual



*The default of “Resources Controlled By” is Auto. If users set Manual option for the setting, “IRQ-3 / IRQ-4 / IRQ-5 / IRQ-7 / IRQ-9 / IRQ-10 / IRQ-11 / IRQ-12 / IRQ-14 / IRQ-15 / DMA-0 / DMA-1 / DMA-3 / DMA-5 / DMA-6 / DMA-7 assigned to” options below will be shown on the screen.*

Reset Configuration Data - Determines whether store in ESCD data want to clear .  
This is a one shot switch . The available options are:

- Enabled (default)
- Disabled

IRQ-3 / IRQ-4 / IRQ-5 / IRQ-7 / IRQ-9 / IRQ-10 / IRQ-11 / IRQ-12 / IRQ-14 /  
IRQ-15 / DMA-0 / DMA-1 / DMA-3 / DMA-5 / DMA-6 / DMA-7 assigned to -  
Users can select resources controlled by “manual” method to fix legacy ISA card  
IRQ & DMA in Plug & Play problem . Legacy card has the highest priority to use  
someone IRQ# & DMA# which one assigned by manual . The available options  
are:

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

PCI IRQ Activated By - Programs the PCI IRQ to single edge or logic level.

Level/Edge sensitivity is programmed per controller. Every IRQ input for a given  
bank is either “EDGE” or “LEVEL” (default) triggered.

## BIOS

PCI IDE IRQ Map To - Defines the IDE IRQ Routing either from the PCI Bus or the ISA Bus. The available options are:

- PCI-AUTO (default)
- PCI-SLOT 1
- PCI-SLOT 3
- ISA
- PCI-SLOT 2
- PCI-SLOT 4



*If user sets this option to "ISA", both the "Primary IDE INT#" and "Secondary IDE INT#" options below will not be shown on the screen.*

Primary/Secondary IDE INT# - Defines the primary/secondary IDE INT# of the PCI IDE card. The available options are:

- A (default of Primary IDE INT#)
- C
- B (default of Secondary IDE INT#)
- D



*This option may not be able to configure all the values within the SETUP program according to the installed equipments (i.e., floppy drives A: & B:, hard disk drives C: & D:).*

---

## Load BIOS Defaults

In the event of a loss in memory on the configuration SETUP, the user can restore the information on the BIOS by loading its default values. Loading the BIOS defaults provides safe booting of the system.

---

## Load Setup Defaults

SETUP defaults are considered default values with which the system will be enabled to perform better. This is due to the enabling of some options within the SETUP program. However, if problems are encountered after loading the SETUP defaults, reboot the system and load the BIOS defaults instead.

## INTEGRATED PERIPHERALS

ROM PCI/ISA BIOS <<P6FX1-B>> INTEGRATED PERIPHERALS AWARD SOFTWARE, INC.	
IDE HDD Block Mode : Enabled	USB Controller : Disabled
IDE Primary Master PIO : Auto	
IDE Primary Slave PIO : Auto	
IDE Secondary Master PIO : Auto	
IDE Secondary Slave PIO : Auto	
On-Chip Primary PCI IDE : Enabled	
On-Chip Secondary PCI IDE : Enabled	
PCI Slot IDE 2nd Channel : Enabled	
Onboard FDD Controller : Enabled	
Onboard Serial Port 1 : 3F8/IRQ4	
Onboard Serial Port 2 : 2F8/IRQ3	
UART 2 Mode : Standard	
Onboard Parallel Port : 378H/IRQ7	
Parallel Mode : Normal	
	ESC : Quit      ↑↓←→ : Select Item
	F1 : Help      PU/PD/+/- : Modify
	F5 : Old Values (Shift) F2 : Color
	F6 : Load BIOS Defaults
	F7 : Load Setup Defaults

Figure 3 -7. PNP CONFIGURATION SETUP Screen

IDE HDD Block Mode - Determines whether block transfer mode want to use or not . The available options are:

- Enabled (default)
- Disabled

IDE Primary/Secondary Master/ Slave PIO - Sets the advanced hard disk PIO transfer mode which effects your hard disk transfer rate. The program will auto detect the mode of this option you select “**Auto**”. Otherwise, you must set this option by yourself. The available options are:

- Auto (default)
- Mode 0
- Mode 1
- Mode 2
- Mode 3
- Mode 4

On-Chip Primary/Secondary PCI IDE - Enables or Disables the primary/secondary PCI IDE of Intel IDE controller. Selecting “**Disabled**” can release IRQ14.

- Enabled (default)
- Disabled

PCI Slot IDE 2nd Channel - **Enables** or **Disables** the second IDE channel of PCI slot if users use the PCI IDE card on board. The available options are:

- Enabled (default)
- Disabled

## BIOS

Onboard FDD Controller - Enables or Disables the FDD controller or on-board I/O chip. The available options are:

- Enabled (default)
- Disabled

Onboard Serial Port 1/2 - Sets the I/O address for serial port 1/2.

- 3F8/IRQ4 (default of Onboard serial Port 1)
- 2F8/IRQ3 (default of Onboard serial Port 2)
- 3E8/IRQ4
- 2E8/IRQ3
- Disabled

UART 2 Mode - Determines which type IR module want to use . The available options are:

- Standard (default)
- ASKIR
- HPSIR



*If users set this option to "Standard", the "**IR Duplex Mode**" option below will not be shown on the screen.*

IR Duplex Mode - Allows users to control the infrared communication duplex mode. The available options are:

- Half (default)
- Full

Onboard Parallel Port - Sets the I/O address for the parallel port. The available options are:

- 3BC/IRQ7 (default)
- Disabled
- 278/IRQ5
- 378/IRQ7



*If users set this option to "Disabled", the "**Onboard Parallel Mode**" option below will not be shown on the screen.*

Parallel Mode - Selects the working mode of parallel port. The available options are:

- Normal (default)
- ECP+EPP
- EPP
- ECP



1. *If users set this option to "Normal ", the "**ECP Mode Use DMA**" and "**Parallel Port EPP Type**" options below will not be shown on the screen.*
2. *If users set this option to "EPP", the "**ECP Mode Use DMA**" option below will not be shown on the screen.*
3. *If Users set this option to "ECP", the "**Parallel Port EPP Type**" option will not be shown on the screen.*

ECP Mode Use DMA - Selects the DMA channel of ECP Mode to transfer your data. The available options are:

- 3 (default)
- 1

Parallel Port EPP Type - Determines what version EPP protocol support . The available options are:

- EPP1.7 (default)
- EPP1.9

USB Controller - Enables or Disables the USB function of Intel on-board chip. The available options are:

- Disabled (default)
- Enabled

---

## **SUPERVISOR PASSWORD**

The SUPERVISOR PASSWORD utility allows you to set, change, and disable the password which is stored in the BIOS. To change the password setting, press <Enter> on the SUPERVISOR PASSWORD option of the main menu and then type the new password.

Configure the Security Option within the BIOS Features Setup corresponding to the setting in this utility. SUPERVISOR PASSWORD access right hither than USER PASSWORD .

The password can be at most 8 characters long. The program will require you to confirm the new password before it exits and will enable the utility. To disable the SUPERVISOR PASSWORD, press the <F1> when the program asks you to enter the new password.

---

## **USER PASSWORD**

USER PASSWORD only can be used when the system is booting . Users only can enter SETUP screen to change the USER PASSWORD.

The password can be at most 8 characters long. The program will require you to confirm the new password before it exits and enables the utility. To disable the USER PASSWORD, press the <F1> as the program asks you to enter the new password.

---

## **IDE HDD Auto Detection**

The IDE HDD Auto Detection provides auto configuration of the hard drive installed in the system. It supports LBA, Large, and Normal modes. If the system's hard disk drive has a capacity of over 528MB and supports LBA functions, you may enable either the LBA mode or the Large mode. On the other hand, if the hard disk

## BIOS

drive's capacity is over 528MB but does support LBA functions, you may enable the Large mode in order to use over 528MB.



- a. *The LBA and Large modes will only appear on the screen when the installed hard disk drive is specified to support the LBA mode.*
- b. *In the case when a hard disk drive's cylinder specification exceeds 1024, and does not support the LBA functions, only the Large mode will be displayed on the screen.*
- c. *With a hard disk drive supporting cylinders below 1024, only the Normal mode will appear on the screen. The Normal mode will also be shown on the screen under conditions a & b above.*
- d. *Hard disk drives with less than 528MB total capacity must be set to Normal mode when combined with either old BIOS versions or the Award BIOS.*



*LBA and Large modes are new specifications which may not be fully supported by all operating systems. An example of which is the current version of UNIX System (R3.2.4) which is still unable to support the LBA function. Therefore, determine the specifications of your hard disk drive and operating system before selecting the drive's mode.*

After pressing the <Enter> key on this item of the main menu, the display screen will show the following screen.

```
ROM PCI/ISA BIOS <<P6FX1-B>>
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

HARD DISKS          TYPE  SIZE  CYLS HEAD PRECOMP LANDZ SECTOR  MODE
-----
Primary Master  :

      Select Primary Master  Option (N=Skip) : N
      OPTIONS      SIZE  CYLS HEAD PRECOMP LANDZ SECTOR  MODE
      -----
      1            0    0    0    0    0    0    NORMAL

Note: Some OSes (like SCO-UNIX) must use "NORMAL" for installation
Esc : Skip
```

Figure 3 -8. IDE HDD Auto Detection Screen

Once the program detects the type of hard disk installed, it will display the relative information such as the type, cylinders, heads, write pre-compensation, landing zone, number of sectors per track, size and mode. A message asking you to accept the IDE HDD detected will also be flashed on the screen.



---

## **Quitting SETUP**

After making all modifications in the SETUP program, go to the option "Save & Exit SETUP" then press the <Enter> key. The program will display the following screen.

Press <Y> to confirm the changes made, and the <N> or the <ESC> keys if further modifications are still necessary before exiting the SETUP program. Once the <Y> key is pressed, the system will automatically exit the program and reboot. However, if you want to cancel all changes made under the SETUP program, go to the option "Exit Without Saving".

Press <Y> and the system will exit the SETUP program then reboot without saving any of the changes made.



*You may also use the <F10> key to save the new settings.*