

5 BIOS Configuration

P4U880A/IO main board provides an easy-to-use Phoenix BIOS for you to set up your system and store your system information in CMOS RAM.

After power on or reset the system, the following messages appear :

Press to enter SETUP, then you can press to enter BIOS SETUP main menu as shown below :

| Main Menu | |
|-------------------------|--|
| System Setup | |
| Fixed Disk Setup | |
| Advanced System Setup | |
| Boot Options | |
| Security and Anti-Virus | |
| Green PC Features | |
| | |
| Load ROM Default Values | |
| Load Values from CMOS | |
| | |
| Save Values to CMOS | |

↑↓Move
F1 Help

Enter Select
ESC Exit

F10 Save & Exit

System Setup

Use arrow keys to highlight the System Setup selection in main menu then press <Enter> and the System Setup menu will appear as shown below :

| System Setup | |
|------------------|-------------------|
| System Time | : [4:51:52] |
| System Date | : [01/14/1994] |
| | |
| Video System | : [EGA / VGA] |
| | |
| System Memory | : 640 KB |
| Extended Memory | : 7MB |
| | |
| Diskette Drive A | : [Not Installed] |
| Diskette Drive B | : [Not Installed] |

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- System Time/Date : Use arrow keys to move the highlight cursor to the time and date that you want to modify, then use <PgUp> or <PgDn> key to modify the value.
- Video System : Use arrow keys to highlight this option then use <PgUp> or <PgDn> to select the correct value.
- System/Extended Memory : Auto configured by BIOS and cannot be modified.
- Diskette Drive A/B : Use arrow keys to highlight this option then use <PgUp> or <PgDn> to select the correct floppy drive settings.

Fixed Disk Setup

Use arrow keys to highlight Fixed Disk Setup in the main menu and press <Enter> to enter Fixed Disk Setup menu as shown below :

| Fixed Disk Setup | |
|----------------------------------|------------|
| . IDE Adapter 0 Master (C:212Mb) | |
| . IDE Adapter 0 Slave (None) | |
| . IDE Adapter 1 Master (None) | |
| . IDE Adapter 1 Slave (None) | |
| Large Disk Access Mode | : [DOS] |
| UMC 8673 built-in PCI IDE | : [Both] |

↑↓Move

Enter Select

F1 Help

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UMC 8673 built-in PCI IDE: If using on-board IDE connector, you should set this option [Both], and if using other IDE adapter, you should set this option [Disabled].

Large Disk Access Mode : Available options are DOS and OTHER.

Fixed Disk Configuration: Use arrow keys to highlight the IDE adapter that you want to configure and press <Enter> to enter the next menu as shown below:

Note: For different Hard Disks, the parameters of the following menu are different.

| IDE Adapter 0 Master (C:212Mb) | |
|---------------------------------------|----------------|
| Autotype Fixed Disk : [Press Enter] | |
| Type | : [Auto] 212Mb |
| Cylinders | : 683 |
| Heads | : 16 |
| Sectors / Track | : 38 |
| Write precomp | : None |
| . Multi-Sector Transfers : 16 Sectors | |
| 1. BA Mode Control | : [Disabled] |
| 32 Bit I/O | : [Disabled] |

↑↓ Move
F1 Help

Enter Select
ESC Exit

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If the Type option is set to [Auto], BIOS will auto detect Hard Disk during system boot. If you want BIOS to auto-type the Hard Disk, you can highlight the Autotype Fixed Disk option then press <Enter>. You can also manually select the Hard Disk type by choosing the BIOS built-in Hard Disk Table. Use arrow keys to highlight the Type option and use <PgUp> or <PgDn> to select the correct HD type from BIOS HD table. If your Hard Disk has cylinder greater than 1024, set LBA Mode Control to [Enable] for the maximum use of your Hard Disk.

Advanced System Setup

Use arrow keys to highlight the Advanced System Setup option in main menu and press <Enter> to enter the Advanced System Setup menu as shown below:

| Advanced System Setup | |
|------------------------------------------------------------------------------------|------|
| Warning ! | |
| Items on this menu, if set incorrectly, could cause your system to malfunction. | |
| .Integrated peripherals | |
| .Memory Cache | |
| .Memory Shadow | |
| .Advanced Chipset Control | |
| .PCI Devices | |
| Plug & Play O/S | [No] |
| Reset Configuration Data | [No] |

↑↓Move

Enter Select

F1 Help

ESC Exit

F10 Save & Exit

Integrated Peripherals

To configure on board IO, use arrow keys to highlight this option and press <Enter> to enter Intergrated Peripherals menu as shown below:

| Integrated Peripherals | |
|------------------------|-----------------|
| COM port | : [3F8, IRQ4] |
| COM port | : [2F8, IRQ3] |
| LPT port | : [378, IRQ7] |
| Diskette controller | : [Enabled] |
| LPT extend mode | : [Standard] |
| Game port | : [Enabled] |

↑↓Move

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COM port : Use arrow keys to highlight this option, use <PgUp> or <PgDn> key to setup on board IO COM port address or [disabled].

LPT port : Use arrow keys to highlight this option, use <PgUp> or <PgDn> key to setup on board IO LPT port address or [disabled].

Diskette controller : Use arrow keys to highlight this option, use <PgUp> or <PgDn> key to setup on board IO Diskette Controller [Enabled] or [Disabled].

LPT extend mode : Use arrow keys to highlight this option, use <PgUp> or <PgDn> key to setup on board IO LPT extend mode: Standard, ECP or EPP.

Game port : Use arrow keys to highlight this option, use <PgUp> or <PgDn> key to setup on board Game port [Enabled] or [Disabled].

Memory Cache: To configure your memory cache, use arrow keys to highlight this option and press <Enter> to enter memory cache menu as shown below :

| Memory Cache | |
|--------------------------|------------------|
| Cache Auto Configuration | : [Enabled] |
| External Cache | : [Enabled] |
| System BIOS Cacheable | : [Disabled] |
| Video BIOS Cacheable | : [Disabled] |
| L2 Cache Write Back | : [Enabled] |
| Cache Speed | : 2-2-2-2 |
| CPU Cache Policy | : [Write Back] |
| L2 Cache Tag Length | : 7 bits |

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Note :

- 1. If you want to re-configure the cache speed, you should first set Cache Auto Configuration option to [Disabled]*
- 2. If system clock is 50MHz (Intel 486DX50), the cache speed should always be 3-2-2-2.*

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MemoryShadow: Use arrow keys to highlight this option in Advanced System Setup menu and press <Enter> to enter Memory Shadow submenu as shown below:

| Memory Shadow | |
|-----------------------|--------------|
| System shadow | : Enabled |
| Video shadow | : [Enabled] |
| Shadow memory regions | |
| C800 - CBFF | : [Disabled] |
| CC00 - CFFF | : [Disabled] |
| D000 - D3FF | : [Disabled] |
| D400 - D7FF | : [Disabled] |
| D800 - DBFF | : [Disabled] |
| DC00 - DFFF | : [Disabled] |

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Use arrow keys to select the item and use <PgUp> or <PgDn> to modify the value. To return to the previous menu press <ESC>.

Advanced Chipset Control: Use arrow keys to highlight this option in Advanced System Setup menu and press <Enter> to enter Advanced Chipset Control as shown below :

| Advanced Chipset Control | |
|----------------------------|--------------|
| Chipset Auto Configuration | : [Enabled] |
| DRAM Read Wait State | : 1 |
| DRAM Write Wait State | : 1 |
| Resource Lock For DRAM | : [Disabled] |
| Host-to-PCI Wait State | : [1] |
| PCI Parity Check | : [Disabled] |
| DRAM Parity Check | : [Disabled] |
| LDEV# Sampling Point | : 1 T2 |

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Note : *It is recommended that DRAM Read/Write Wait State should be greater than or equal to 1 wait state.*

PCI Devices : Use arrow keys to highlight this option in Advanced System Setup menu and press <Enter> to enter PCI Devices menu as shown below :

| PCI Devices | |
|---------------------------------|-------------|
| PCI Auto Configuration | : [Enabled] |
| PCI Device, Slot # 1 | : |
| Enable Master | : [Enabled] |
| Use Default Latency Timer Value | : [Yes] |
| Latency Timer Value | : [00400] |
| PCI Device, Slot # 2 | : |
| Enable Master | : [Enabled] |
| Use Default Latency Timer Value | : [Yes] |
| Latency Timer Value | : [00400] |
| PCI Device, Slot # 3 | : |

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The items in PCI Devices menu cannot be displayed on a single screen, you can use arrow keys to scroll the whole items up or down and use <PgUp> or <PgDn> key to modify the value of each item. To return to the previous menu press <ESC> key.

Plug and Play O/S : If using Plug and Play O/S, set this option [Ycs].

Warning: As this BIOS supports Plug & Play function, if a Non-PnP card is used, it maybe conflict with other devices. In that case, you should configure it correctly as follows:

1. *Change the jumper settings of your Non-PnP card to avoid conflict with other devices.*
2. *Add the configuration data of this card to ESCD (Extend System Configuration Data) through system utility, such as Intel ICU (ISA Configuration Utility), Windows 95, etc.*

Reset Configuration Data : If set [Yes], all system configuration data will be reset.

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Boot Options

Use arrow keys to highlight Boot Options in the main menu and press <Enter> to enter Boot Options menu as shown below :

| Boot Options | |
|----------------|------------------|
| Boot sequence | : [C: then A:] |
| SETUP Prompt | : [Enabled] |
| POST Errors | : [Enabled] |
| Floppy check | : [Disabled] |
| Summary Screen | : [Enabled] |

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Boot Options menu gives you the options to choose the system boot up sequence. You can use arrow keys to highlight the item then use <PgUp> or <PgDn> key to change the value. To return to the main menu press <ESC> key.

Security and Anti-Virus

Use arrow keys to highlight Security and Anti-Virus in the main menu and press <Enter> to enter security and Anti-Virus menu as shown below :

| Security and Anti-Virus | |
|-------------------------|-----------------|
| Supervisor Password is | : [Disabled] |
| User Password is | : [Disabled] |
| Set Supervisor Password | : [Press Enter] |
| Set User Password | : [Disabled] |
| | |
| Password on boot | : [Disabled] |
| | |
| Diskette access | : [Supervisor] |
| Fixed disk boot sector | : [Disabled] |

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The Phoenix BIOS gives you a tight control on your computer through the settings of Supervisor Password and User Password, if you want to set or change the password, use the arrow keys to highlight Set Supervisor Password item and press <Enter> . Use keyboard to enter the new password and press <Enter>, then the system will ask you to re-enter it and press <Enter>. Your new password will take effect until you save & exit setup and reboot the system. To return to the main menu press <ESC>.

Green PC Feature

P4U880A/IO Main Board features a most efficient power saving management and supports all 486 CPUs for green feature (Non-SMI 486 IRQ green mode and SMI-CPU in SMM mode). In Doze mode CPU clock will be slowed down to 1/2 of normal speed for a SMI-CPU or be switched to 8MHz for a normal CPU. In Standby mode CPU clock will be slowed down to 1/4 of normal speed for a SMI-CPU or be kept in 8 MHz for a normal CPU and the screen will be blank, hard disk will be powered down if set in BIOS. In Suspend mode CPU will be stopped working for a Intel SL Enhanced or Cyrix CPU while other CPUs will be worked in their slowest state in order to save energy. In any of the 3 green mode you could wake up the system by pressing any key or a pre-set wake up event.

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Use arrow keys to highlight Green PC Features and press <Enter> to enter Green PC Features menu as shown below :

| Green PC Features | |
|---------------------------------|--------------------|
| APM | : [Enabled] |
| Power Saving Mode | : [Disabled] |
| System Doze Timer | : [15 sec] |
| System Standby Timer | : [2 min] |
| System Suspend Timer | : [2 min] |
| Wakeup system during suspend | : [Disabled] |
| Wakeup time AT (hour) | : [0 hr] |
| Wakeup time AT (minute) | : [0 min] |
| VGA with Power Down feature | : [None] |
| Non-SMI CPU support | : [Generate IRQ10] |
| IDE Hard Disk Standby Timer | : [Disabled] |
| Advanced Power Management Setup | |

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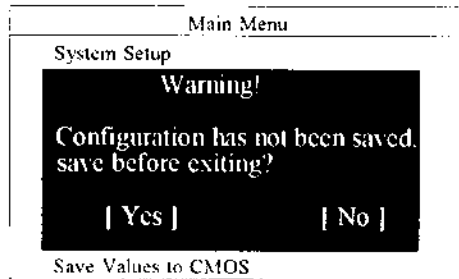
The items in Green PC Features menu cannot be displayed on a single screen, you can use arrow keys to scroll the whole items and use <PgUp> or <PgDn> key to modify the value of each item. To return to the previous menu press <ESC> key.

VGA with Power Down feature: If set then VGA screen will be blank when entering Standby mode.

IDE Hard Disk Standby Timer: If timer set, Hard Disk will turn down power, when there is no disk access and time-out. (Only valid for the Hard Disk with power management feature)

Save & Exit

After you configure all BIOS settings, you should return to the main menu by pressing <ESC> key and save your changes to CMOS RAM and reboot the system so that all your changes of configurations can take effect. To save the settings, press <F10> and the following screen will appear as shown below then press <Y> and <Enter> to save the value and reboot the system.



Space Select Enter Accept