FA11

MAINBOARD MANUAL

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Handling Precautions

Warning:

1. Static electricity may cause damage to the integrated circuits on the mainboard. Before handling any motherboard outside of its protective packaging, ensure that your body is not electrostatically charged.
2. There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or an equivalent type of battery as recommended by the manufacturer.
3. Discard used batteries according to the manufacturer's instructions.

Observe the following basic precautions when handling the motherboard or other computer components:

- Wear a static wrist strap which fits around your wrist and is connected to a natural earth ground.
- Touch a grounded or anti-static surface or a metal fixture such as a water pipe.
- Ensure add-on cards, mainboards, and models do not come into contact with the golden fingers connectors, plugged into the expansion slot.

The above methods prevent static build-up and allow it to be discharged properly.

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Handling Precautions

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Overview

The new Socket 370 1stMainboard FA11 supports a full range of the latest generation Intel® Celeron ™ PPGA/FC-PGA 433-677+ MHz, Coppermine FC-PGA 500–866+ MHz and Cyrix III 433–500+ MHz processors at Front Side Bus speeds of 66 / 100 /133 MHz. The 1stMainboard FA11 is based around the state-of-the-art architecture of the VIA Apollo 133A chipset which supports AGP 4 x bandwidth enabling the increase of the AGP bus of up to 66x4 MHz, thus providing vastly improved data transfer speeds for graphics applications. 3 DIMM sockets allow for a maximum memory capacity of 1.5 GB of the latest PC133 SDRAM and VCM SDRAM technology, while ECC memory is also supported. Ultra DMA 66 support allows for high-range bandwidth and the high-speed data transfer necessary for the improvement of idle CPU sequential transfers.

The 1stMainboard FA11 also includes NOVUS, a range of innovative features that assist in the installation and maintenance of your 1stMainboard. NOVUS includes *EasyKey,* which provides instant keyboard access to the BIOS for adjustments to Clock and Default settings and *LogoGenie,* which allows you to create your own customized logo to be displayed during system boot up. *BIOS Guardian* is an Anti Virus utility that prevents viruses from damaging your system BIOS, while *AudioAlert!*, the World's first voice warning system for motherboards will provide an audible voice warning in the event of no CPU, memory or VGA being detected; moreover, the feature Clockometer, an attractive and user friendly Graphic User Interface (GUI), is featured that enables you to change clock speed settings directly, without having to enter the BIOS Sub-Menus.

(continued on next page)

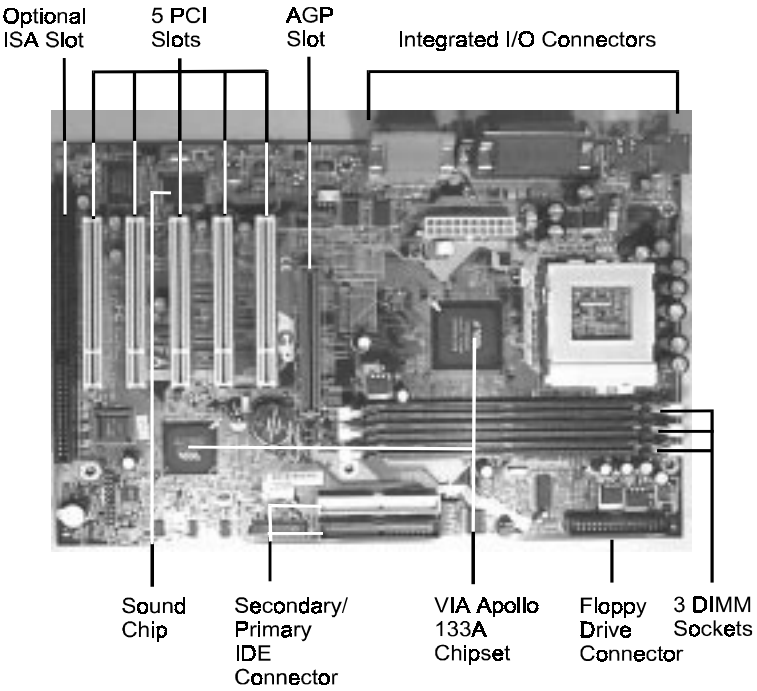
Extensive connectivity is provided by 2 serial ports, 1 parallel port, 1 PS/2 mouse and 1 keyboard connector, 2 USB connectors, 2 front USB pin-header (mfg. option) and 1 media connector (MIDI/Game port, Line-in, Line-out, Mic-in). Expansion is provided by 1 AGP 4X, 5 PCI and 1 ISA (mfg. option). In addition, the 1stMainboard FA11 is equipped with 2 dual channeled enhanced PCI bus master IDE connectors. The 1stMainboard FA11 is ACPI ready, while other features include Hardware Monitoring and SMART support, Auto Power Failure Recovery and Keyboard/Mouse Power On functions. Also included is CD Pro with enhanced drivers and the new CD Plus package containing 9 bundled soft-ware solutions including Clip Art, Norton AntiVirus, Ghost Virtual Drive.

Package Checklist

If you discover any item below was damaged or lost, please contact your vendor.

- ☑ The mainboard
- ☑ This user manual
- ☑ One FDD cable
- ☑ One HDD cable
- ☑ One ATA 66 cable
- ☑ Two Software CDs (CD Pro, CD Plus and its manual)

The FA11 Mainboard



Main Features

- Easy Installation

  BIOS with support for Plug and Play, auto detection of IDE hard drives, LS-120 drives, IDE ZIP drives, Windows 95, Windows 98, Windows NT 4.0, Windows 2000, and OS/2.

- Leading Edge Chipset

  VIA Apollo Pro 694X and 596B provide integrated DRAM controllers with new Dynamic Power Management Architecture (DPMA), concurrent PCI (2.0/2.1), AGP 1.0/2.0 compliant and USB.

- Versatile Main Memory Support

  Accepts up to 2GB DRAM using four DIMMs of 8, 16, 32, 64, 128, 256, 512MB with support for lightning-fast SDRAM (66/100/133MHz). The latest Virtual Channel Memory (VCM) SDRAM also supported. *This board allows the FSB and DRAM to be asynchronous.*

- Flexible Processor Support

  Onboard CPU socket supports:
  Intel® Celeron™ PPGA/FC-PGA 433/500/533/566/600/633*/667*/700*/733* MHz and up* at 66 MHz FSB
  Intel® CuMine™ FC-PGA 500/550/600/650/700/750/800/850 MHz and up* at 100MHz FSB
  Intel® CuMine™ FC-PGA 533/600/667/733/800/866/933 MHz /1GHz* at 133MHz FSB
  Cyrix® III 433/466/500/533/566 MHz* and up* at 133MHz FSB
  Cyrix® Samuel 500/533/600/650/700/733 MHz* and up* at 66/100/133MHz FSB (*: not tested yet)

- AGP, ISA, and PCI Expansion Slots

  One AGP Bus expansion slot, five PCI Bus expansion slots, and one optional ISA Bus slot provide the room to install a full range of add-on cards.

NOTE:
1. The PCI5 slot is shared with the (optional) ISA Slot.
2. The PCI5 slot only allows a slave card on it.

- Enhanced PCI Bus Master IDE Controller with Ultra DMA/33 and Ultra DMA/66 Support

  Integrated Enhanced PCI Bus Master IDE controller features two dual-channel connectors that accept up to four Enhanced IDE devices, including CD-ROM and Tape Backup Drives, as well as Hard Disk Drives supporting the new Ultra DMA/66 protocol. Standard PIO Mode 3, PIO Mode 4, DMA Mode 2, DMA Mode 4 devices are also supported.

- Compact Onboard Audio Subsystem

  Integrated Creative® audio processor with an integrated PCI audio controller, DOS games compatible engine, and offers the feature of high-quality ESFM music synthesizer. The subsystem utilizes line-out, line-in, and MIC mini-jack external jacks, one joystick port with MIDI interface.

- Super Multi Input/Output (I/O) Support

  Integrated Plug and Play multi-I/O chipset features one high-speed UART 16550 compatible serial ports, one infrared port, one EPP/ECP capable parallel port, and one FDD connector.

- Convenient Rear Panel USB Connection Support

  Two USB ports integrated in the rear I/O panel with one manufacturing optional USB connector for front panel connection allow convenient and high-speed Plug and Play connections to the growing number of USB compliant peripheral devices on the market.

- Remote Wake On LAN Support

  Onboard Wake On LAN (WOL) connector allows remote management on your network even the system is power off. The feature provides a simpler and convenient control to LAN-based networks.

- Onboard Accelerated Graphics Port (AGP)
  The motherboard is installed one 32-bit AGP bus with a dedicated 66MHz/133MHz path from the graphics card to the system memory (in 4x mode) offering much greater bandwidth than the 32-bit PCI bus does. AGP enabled 3D graphics cards can directly access main memory across this fast path instead of using local memory. To make use of the improved AGP performance, the motherboard should be installed with SDRAM type memory and the VGA card and drivers should also be fully AGP compliant. Using Microsoft's Windows 98 and Windows 2000 which implement DirectDraw will allow the system to take full use of AGP's benefits without the need to install additional drivers.

ACPI Ready

This mainboard fully implements the new ACPI (Advanced Configuration and Power Interface) 1.0 Hardware and BIOS requirement. If you install ACPI aware operating system, such as Windows 98, you fully utilized the power saving under ACPI. *(Windows 2000 Professional supports ACPI functions.)*

It is compatible with all other none ACPI operating systems. If you want to setup ACPI feature under Windows 98, please follow the description below:
Run Windows 98 setup by using **setup/p j** on the command line for installing Windows 98 with the ACPI control feature.
If you type **setup** without the parameter **/p j**, Windows 98 will be installed as APM, PnP mode, no ACPI will be used. For more detail information, please visit the web site of Microsoft. Its address is: www.microsoft.com/hwtest/.

NOTE: If BIOS date is after 12/02/1999, the ACPI will be installed automatically. Users do not need to setup in the above-mentioned way.

FIC Unique Innovation for Users (NOVUS) -
Enhanced Mainboard Features and System Support

■ LogoGenie

A user friendly GUI supporting Windows 98, LogoGenie allows you to customize, create or select a Logo which will be displayed when the system is booting.

Before execute this LogoGenie function, please make sure the related BIOS feature, BIOS Guardian, is disabled; and refer to its related README file.

NOTE:
1. LogGenie supports Award BIOS only.
2. If you create a Logo file (.bmp) by LogoGenie, the file size must be 640 x 464 x 16 colors (around 145K).

To enable this utility, please proceed as follows:

1. Insert CD Pro 4.X. Select LogoGenie from the Menu and follow the installation instructions.
2. After LogoGenie has been installed, go to Windows Start Box. In Programs Menu, select LogoGenie. Click three check boxes in the pop-up menu for making sure of the BIOS feature (*BIOS Guardian*) and other anti-virus software are disabled. Read README file carefully. After all these, the next procedure proceeds.
3. In LogoGenie Dialogue Box, choose one of 3 options; and then proceed as introduced in 4 or 5 steps listed on the left hand side of the Dialogue Box.
4. After complete the last step, press OK. The system will reboot to restore the BIOS with your new customized Logo.
5. The system will automatically restart with your customized Logo that appears in background.

WARNING: While excute Step3 below, please do not turn off the sytsem power in order to avoid BIOS damage.

■ BIOS Guardian

BIOS Guardian by default is enabled. It must be disabled in order to reflash BIOS, thus effectively acts as a fire-wall against viruses that can attack the BIOS while the system is running.

BIOS Guardian can be disabled as follows:

1. Go to BIOS Set Up Menu. (Press **Del** key while booting.)
2. Go to BIOS Features Set Up Submenu.
3. Disable BIOS Guardian.
4. Save the setting, and restart system.

NOTE: However, if it is disabled and while boot the system, the POST screen will be held and shows you the message to let you know the current status of BIOS Guardian. To press **G** key will enable the BIOS Guardian again; or simply to press the **space bar** will continue the booting process.

■ Easy Key

Instead of completing the multi-layered BIOS setup process these 3 Easy Key functions provide direct access to Sub-Menu's when completing BIOS settings adjustments.

Easy-Keys are as follows:

Ctrl + c: To enter clock settings menu.
Ctrl + p: To load Performance Default settings and restart.
Ctrl + f: To load Fail-Safe Default settings and restart.

■ Audio Alert

After complete a system upgrade, should the computer be assembled incorrectly, a friendly onboard voice caution, will advice of the error during system boot up.

A convenient onboard LED will also flash, waring that there is a system problem. If you do not hear the Audio Alert , please check that your speakers are connected.

Audio warning are activated as follows:
No CPU: 'Caution! Processor not detected. Please check your PC'
No Memory: 'Caution! Memory not detected. Please check your PC'
No Graphics: 'Caution! VGA not detected. Please check your PC'

■ Overclock Partner

Should the system not start because clock speed settings have been increased to a speed incompatible with the system, the Overclock Partner allows you to reboot at system default settings, protecting hardware from any damages caused by changes to the BIOS.

Complete the following steps:

1. Turn the system off.
2. Restart while holding down the **Insert** key. It is important that the **Insert** key is held down until the default clock speed is shown on the POST screen.
3. Enter BIOS setting menu, and re-set clock speed desired or default.

■ Clockometer

Clockometer is a Windows 98 compatible, attractive and user friendly Graphic User Interface (GUI). Clockometer enables you to change clock speed settings directly, without having to enter the BIOS Sub-Menus. With the on-screen display panel you can easily monitor your new clock speed settings with gauges that identify your system speed, Front Side Bus settings and CPU Ratios

On screen buttons:

1. "+" and "-" buttons : adjust the Front Side Bus (FSB)and CPU ratio. (the 'hand' cursor means the active button)
2. "OK" button : changes the FSB and CPU ratio (if adjustable) set tings right away. If you do not save your new setting, your system will not implement the new setting when rebooting the next time.
3. "SAVE" button : save your new settings for rebooting the computer.
4. "Quit" button will escape the Clockometer program.
5. In order to run the other application programs more smoothly, it is strongly recommended to restart your computer after completing any adjustments.

Installation Procedures

The mainboard has several user-adjustable jumpers on the board that allow you to configure your system to suit your requirements. This chapter contains information on the various jumper settings on your mainboard.

To set up your computer, you must complete the following steps:

- Step 1 - **Set system jumpers/switches**
- Step 2 - **Install memory modules**
- Step 3 - **Install the Central Processing Unit (CPU)**
- Step 4 - **Install expansion cards**
- Step 5 - **Connect ribbon cables, cabinet wires, and power supply**
- Step 6 - **Set up BIOS software**
- Step 7 - **Install supporting software tools**

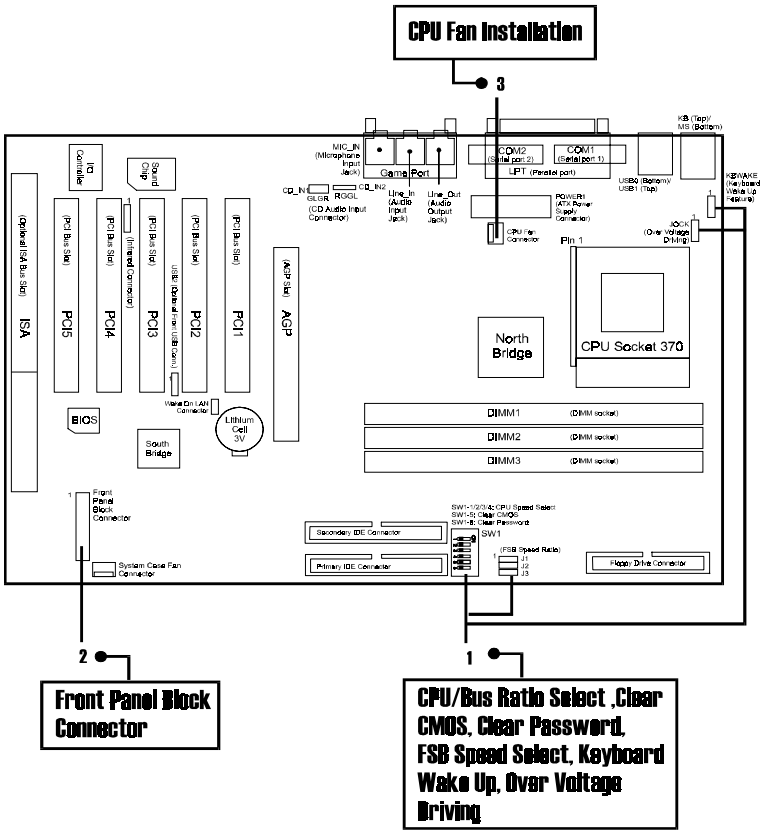
WARNING: Excessive torque may damage the mainboard. When using an electric screwdriver on the mainboard, make sure that the torque is set to the allowable range of 5.0 ~ 8.0kg/cm.

Mainboard components contain very delicate Integrated Circuit (IC) chips. To prevent static electricity from harming any of the mainboard's sensitive components, you should follow the following precautions whenever working on the computer:

1. Unplug the computer when working on the inside.
2. Hold components by the edges and try not to touch the IC chips, leads, or circuitry.
3. Wear an anti-static wrist strap which fits around the wrist.
4. Place components on a grounded anti-static pad or on the bag that came with the component whenever the components are separated from the system.

Quick Reference (from Page 2-2 to 2-4)

Mainboard Layout



NOTE:

1. The PCI5 slot is shared with the (optional) ISA Slot.
2. The PCI5 slot only allows a slave card on it.

1). CPU/BUS Ratio Select, Clear CMOS, Clear Password, Front Side Bus Speed Select, Over Voltage Driving, Keyboard Power On

Ratio	DIP Switch SW1			
	SW1-1	SW1-2	SW1-3	SW1-4
2.5x	ON	ON	ON	OFF
3.0x	ON	ON\	OFF	ON
3.5x	ON	ON	OFF	OFF
4.0x	ON	OFF	ON	ON
4.5x	ON	OFF	ON	OFF
5.0x	ON	OFF	OFF	ON
5.5x	ON	OFF	OFF	OFF
6.0x	OFF	ON	ON	ON
6.5x	OFF	ON	ON	OFF
7.0x	OFF	ON	OFF	ON
7.5x	OFF	ON	OFF	OFF
8.0x	OFF	OFF	ON	ON

Note: For the ratio that higher than 8.0x, please use a ratio-locked CPU and also select Auto Detect on FSB Selection if you use an Intel CPU.

SW1-5 (Clear CMOS)

Enable (Clear CMOS)

Disable (Default)

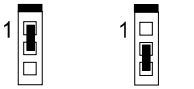
SW1-6 (Clear Password)

Enable (Clear Password)

Disable (Default)

CPU	Front Side Bus	J1	J2	J3
Cyrix	66 MHz	1-2	2-3	2-3
	100 MHz		2-3	1-2
	133 MHz		1-2	1-2
Intel	66 MHz	2-3	2-3	2-3
	100 MHz		2-3	open
	133 MHz		open	open
	Auto Detect		1-2	1-2
CPU Speed = Front Side Bus Speed x Ratio				

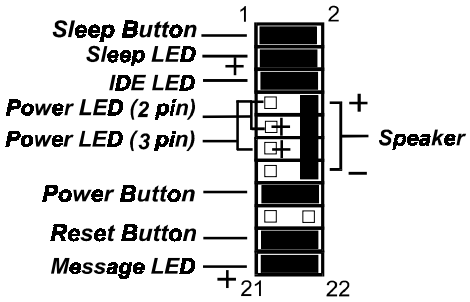
JOCK (Over Voltage Driving)



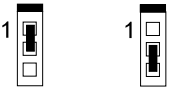
Enable *Disable (Default)*

Caution:
Voltage and Frequency above CPU's and chipset's original specifications are NOT guaranteed to be stable.

2). Front Panel Block Cable Connection



KBWAKE (Keyboard Power On)



Enable *Disable (Default)*

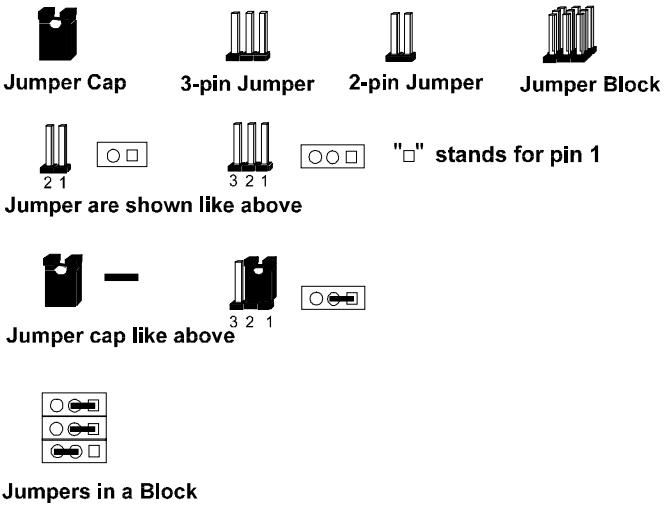
3). CPU Fan Installation

This connector is linked to the CPU fan. When the system is in suspend mode, the CPU fan will turn off; when it reverts back to full on mode, the fan will turn back on. Without sufficient air circulation, the CPU may overheat resulting in damage to both the CPU and the mainboard.

Damage may occur to the mainboard and/or the CPU fan if these pins are used incorrectly. These are not jumpers, do not place jumper caps over these pins.

1). Set System Jumpers/Switches

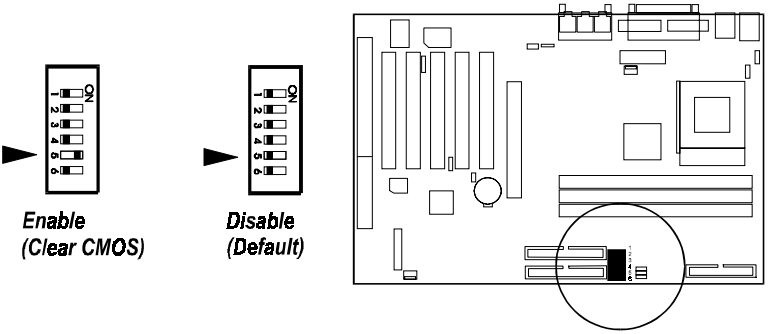
Jumpers are used to select the operation modes for your system. Some jumpers on the board have three metal pins with each pin representing a different function. A "1" is written besides pin 1 on jumpers with three pins. To **set** a jumper, a black cap containing metal contacts is placed over the jumper pin/s according to the required configuration. A jumper is said to be **shorted** when the black cap has been placed on one or two of its pins. The types of jumpers used in this manual are shown below:



NOTE: Users are not encouraged to change the jumper settings not listed in this manual. Changing the jumper settings improperly may adversely affect system performance.

Clear CMOS: SW1-5

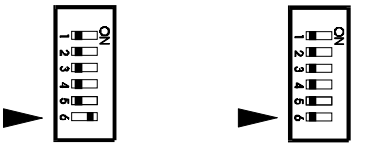
The CMOS RAM is powered by the onboard button cell battery. To clear the RTC data: (1) Turn off your computer. (2) Move the CMOS Clear switch SW1-5 to "On" (Enabled). (3) Turn on your computer to display "CMOS checksum error". (4) Turn off your computer. (5) Move the CMOS Clear switch SW1-5 to "Off" (Disabled). (6) Turn on your computer. (7) Hold down the **Delete** key when boots. (8) Enter the BIOS Setup to re-enter user preferences.



Enable (Clear CMOS) *Disable (Default)*

Clear Password: SW1-6

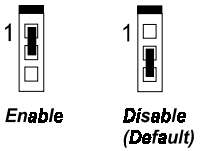
This switch allows you to enable or disable the password configuration. You may need to enable this switch by moving it to the "On" (Enabled) position if you forget your password. To clear the password setting: (1) Turn off your computer. (2) Move the Clear Password switch SW1-6 to "On" (Enabled). (3) Turn on your computer. (4) Hold down the **Delete** key during bootup and enter BIOS Setup to re-enter user preferences. (5) Turn off your computer, (6) Move the Clear Password switch SW1-6 to "Off" (Disabled). (7) Turn on your computer for the new settings to take effect.

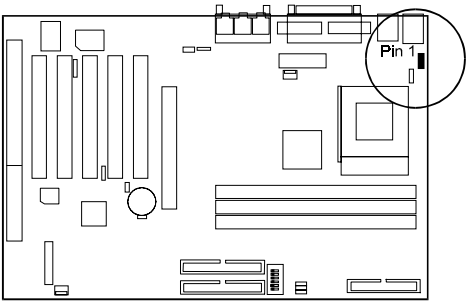


Enable (Clear Password) *Disable (Default)*

Enabling Keyboard Wake-Up Feautre: KBWAKE

The 3-pin jumper allows you to use your keyboard to power on or wake up your computer system.

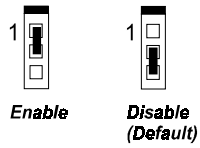


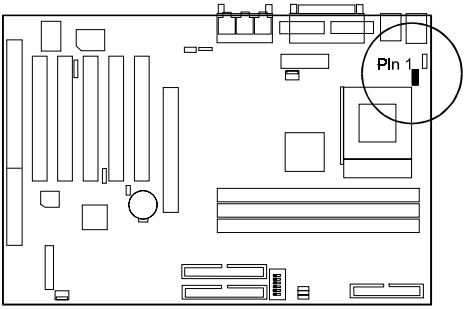


NOTE: For the mainboard to use the Keyboard Wake-up + Wake-on-LAN function, the ATX power supply used should have a current of 1AMP at 5V Stand-By. To use the Keyboard Wake-up function only without using the Wake-on-LAN function, the ATX power supply used should have a current of 400milliAmpere at 5V Stand-By.

Enabling Over Voltage Driving: JOCK

The 3-pin jumper allows you to start the over voltage driving capability of this mainboard to approach the best performance.





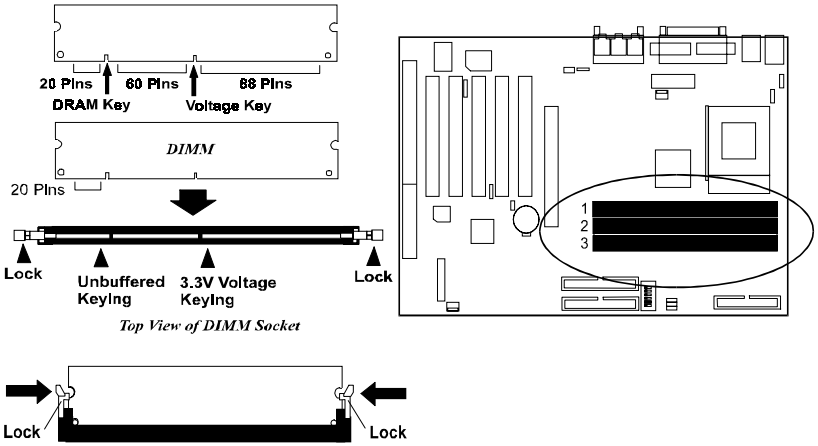
WARNING: Voltage and frequency above CPU's and chipset's original specifications are not guaranteed to be stable.

2). Install Memory Modules

This mainboard provides three onboard DIMM sockets supporting 3.3V (unbuffered) SDRAM DIMM modules. Either 32, 64, 128, 256, 512 MB DIMM can be installed on these three sockets. The maximum total memory supported is up to 1.5 GB.

Install and Remove DIMMs

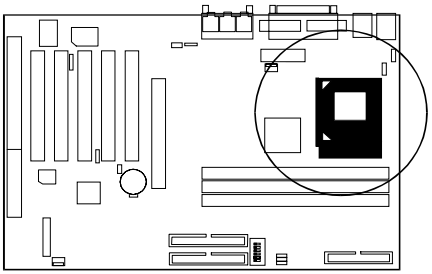
1. Locate the DIMM slots on the mainboard.
2. Install the DIMM straight down into the DIMM slot using both hands.
3. The clip on both ends of the DIMM slot will close up to hold the DIMM in place when the DIMM reaches the slot's bottom.



Press the clips with both hands to remove the DIMM.

3). Install the CPU

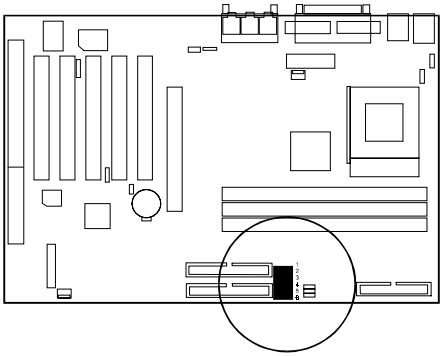
The mainboard has built-in Switching Voltage Regulator to support CPU Vcore autodetection. That is, It has the ability to detect and recognize the CPU voltage, clock, ratio and enables users to set up the CPU frequency from the BIOS Setup Screen. Users can adjust the frequency through “Frequency / Voltage Control” of the BIOS Setup Screen.



To install the CPU, do the following:

1. Lift the lever on the side of the CPU socket.
2. Handle the chip by its edges and try not to touch any of the pins.
3. Place the CPU in the socket. The chip has two notches to correctly locate the chip. Align two notches of the processor with the two triangular marks on the socket. Do not force the chip. The CPU should slide easily into the socket.
4. Swing the lever to the down position to lock the CPU in place.
5. Place the cooling fan with heatsink on top of the installed CPU.

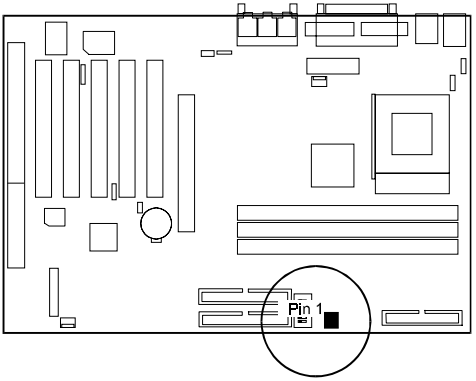
CPU/FSB Speed Ratio Select



Ratio	DIP Switch SW1			
	SW1-1	SW1-2	SW1-3	SW1-4
2.5x	ON	ON	ON	OFF
3.0x	ON	ON	OFF	ON
3.5x	ON	ON	OFF	OFF
4.0x	ON	OFF	ON	ON
4.5x	ON	OFF	ON	OFF
5.0x	ON	OFF	OFF	ON
5.5x	ON	OFF	OFF	OFF
6.0x	OFF	ON	ON	ON
6.5x	OFF	ON	ON	OFF
7.0x	OFF	ON	OFF	ON
7.5x	OFF	ON	OFF	OFF
8.0x	OFF	OFF	ON	ON

Note: For the ratio that higher than 8.0x, please use a ratio-locked CPU and also select Auto Detect on FSB Selection if you use an Intel CPU.

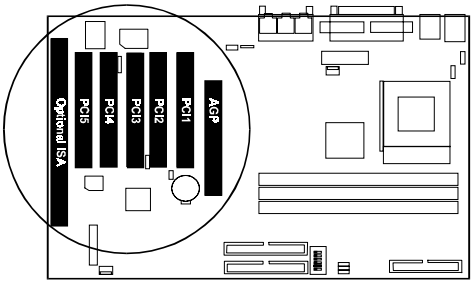
FSB Speed Select



CPU	Front Side Bus	J1	J2	J3
Cyrix	66 MHz	1-2	2-3	2-3
	100 MHz		2-3	1-2
	133 MHz		1-2	1-2
Intel	66 MHz	2-3	2-3	2-3
	100 MHz		2-3	open
	133 MHz		open	open
	Auto Detect		1-2	1-2
CPU Speed = Front Side Bus Speed x Ratio				

4). Install Expansion Cards

This section describes how to connect an expansion card to one of your system's expansion slots. Expansion cards are printed circuit boards that, when connected to the mainboard, increase the capabilities of your system. For example, expansion cards can provide video and sound capabilities. The mainboard features five PCI bus, one ISA bus and one AGP bus expansion slots.



NOTE:
1. The PCI5 slot is shared with the (optional) ISA Slot.
2. The PCI5 slot only allows a slave card on it.

CAUTION: Make sure to unplug the power supply when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both the mainboard and expansioncards.
Always observe static electricity precautions.
Please read "Handling Precautions" at the start of this manual.

To install an expansion card, follow the steps below:

1. Remove the computer chassis cover and select an empty expansion slot.

2. Remove the corresponding slot cover from the computer chassis. Unscrew the mounting screw that secures the slot cover and pull the slot cover out from the computer chassis. Keep the slot cover mounting screw nearby.

3. Holding the edge of the peripheral card, carefully align the edge connector with the expansion slot.

4. Push the card firmly into the slot. Push down on one end of the expansion card, then the other. Use this “rocking” motion until the add–on card is firmly seated inside the expansion slot.

5. Secure the board with the mounting screw removed in Step 2. Make sure that the card has been placed evenly and completely into the expansion slot.

6. Replace the computer system’s cover.

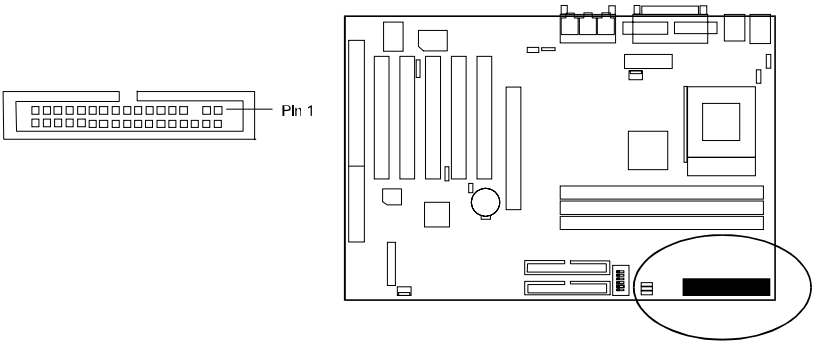
7. Setup the BIOS if necessary.

8. Install the necessary software drivers for the expansion card.

5). Connect Devices

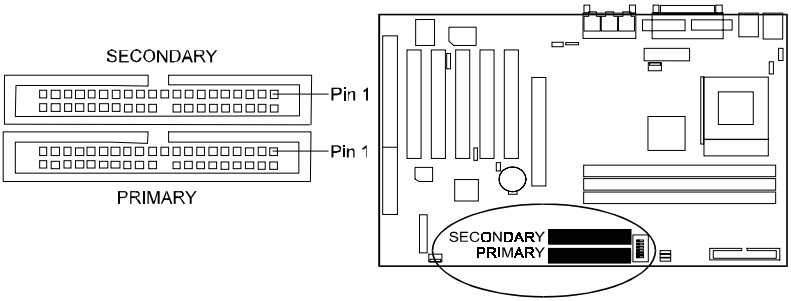
Floppy Diskette Drive Connector: FLOPPY

This connector provides the connection with your floppy disk drive.
The red stripe of the ribbon cable must be the same side with the Pin 1.



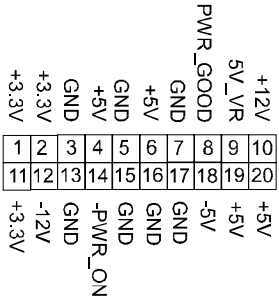
IDE Device Connectors: PRIMARY, SECONDARY

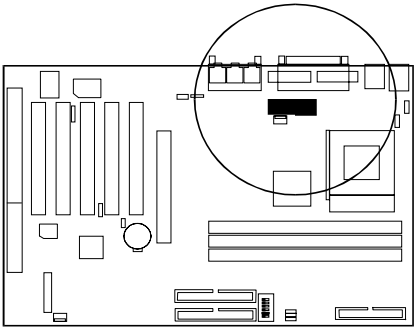
These two connectors are used for your IDE hard disk drives, CD drives, LS-120 drives, or IDE ZIP drives. The red stripe of the ribbon cable must be the same side with the Pin 1.



ATX Power Connector: POWER1

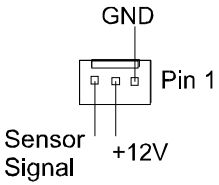
This 20-pin male block connector is connected to the ATX power supply. The plug from the power supply will only insert in one orientation because of the different hole sizes. Find the proper orientation and push down firmly making sure that the pins are aligned.

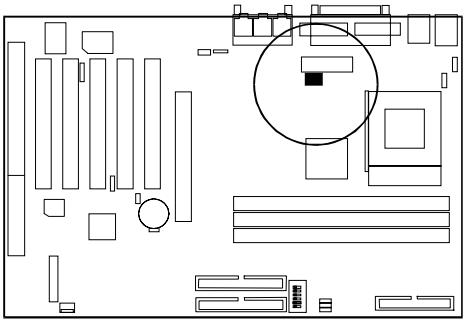




CPU Fan Connector: CPUFAN

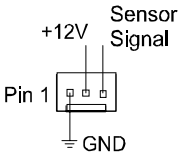
This connector is linked to the CPU fan. When the system is in suspend mode, the CPU fan will turn off; when it reverts back to full–on mode, the fan will turn back on. Please refer to the CPU fan installation manual for more information.

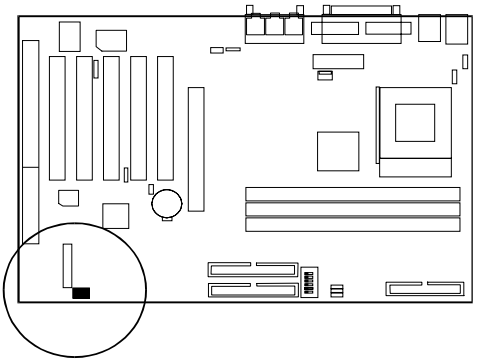




System Case Fan Connector: CHSFAN

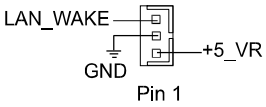
The 3-pin connector allows you to link with the cooling fan on the system case to lower the system temperature.

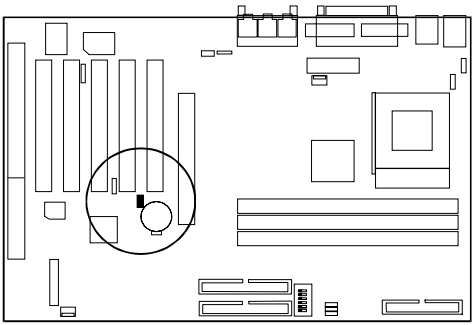




Wake-On-Lan Connector: WOL

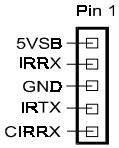
This 3-pin connector allows the remove servers to manage the system that installed this mainboard via your network adapter which also supports WOL. When you install such a LAN card, please read its installation guide for more information.

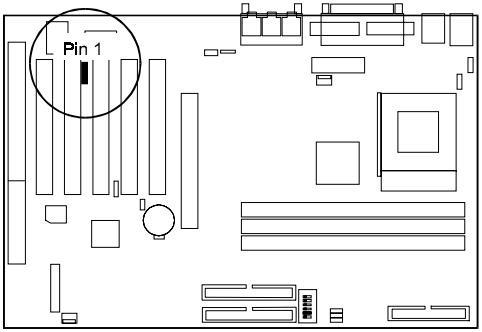




Infrared Connector: IR

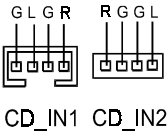
This 5-pin connector is used to link with your ID device to allow transmission of data to another system that also supports the IR feature. This module mounts to a small opening on system cases that support it.

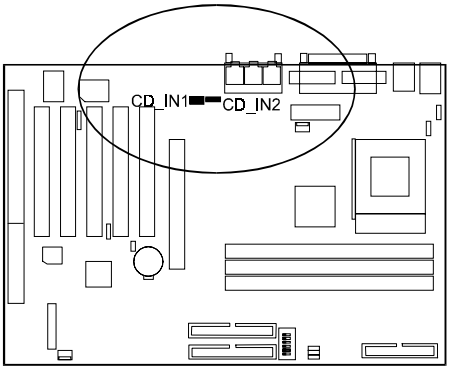




CD Aduio-In Connectors: CD_IN1, CD_IN2

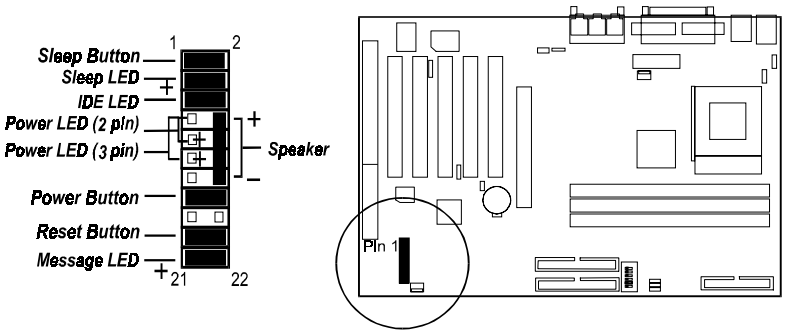
These two 4-pin connectors are used for different types of the AUDIO-OUT port of your CD drive.





Front Panel Block Connector: FPNL

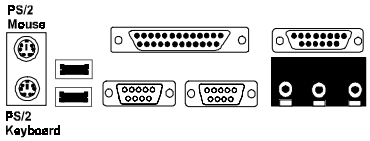
This block connector includes the connectors for linking with IDE LED, power LED, remote power button, message LED, suspend button, reset button and speaker on the front panel of the system case. Please identify polarities of plug wires for the case speaker and LEDs. Please ask vendor about this information when you buy them and install the system by yourself. The plug wires' polarities of these buttons will not affect the function.

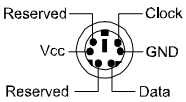


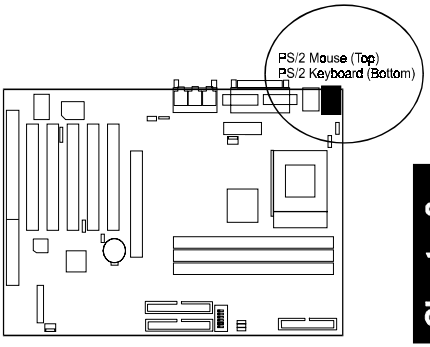
Power LED is connected with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode.
Remote Power Button is connected with remote power (soft power) switch. Push this switch This switch allows the system to be turned on and off rather than using the power supply switch.
Message LED is connected with the message LED. When the system is running normally, the indicator is off. It is controlled by the operating system or application software.
Suspend Button is connected with suspend mode switch.
Reset Button is connected to the reset switch. Push this switch to reboot the system instead of turning the power switch off and on.
Speaker is connected with the case speaker.
IDE LED is connected to the IDE device indicator. This LED will blink when the hard disk drives are activated.

PS/2 Keyboard and Mouse Connector: PS2_KB, PS2_MS

These two 6-pin female connectors are used for your PS/2 keyboard and PS/2 mouse.

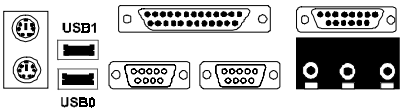




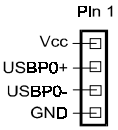


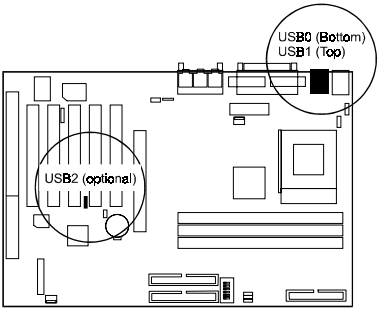
Universal Serial Bus Connectors: USB0, USB1, USB2 (optional)

These two connectors integrated on the edge of the board are used for linking with USB peripheral devices. This board also provides a connector USB2 for linking with the USB socket on the front panel of some system cases. Please note your operating system must support USB features, such as MS Windows 98, MS Windows 95 OSR2.5 with USB Supplement.



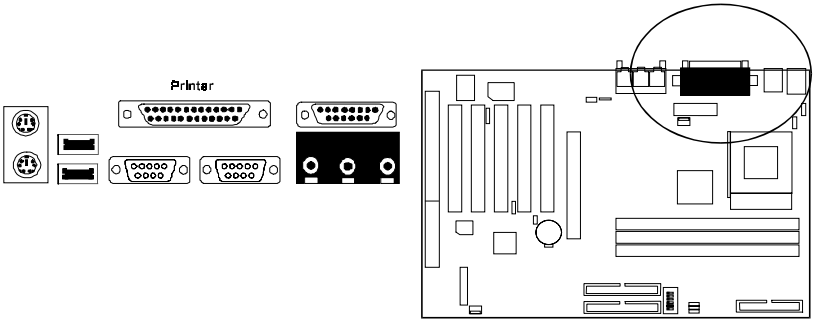
The figure below is the pin assignment of the USB2 connector for front panel USB connection.





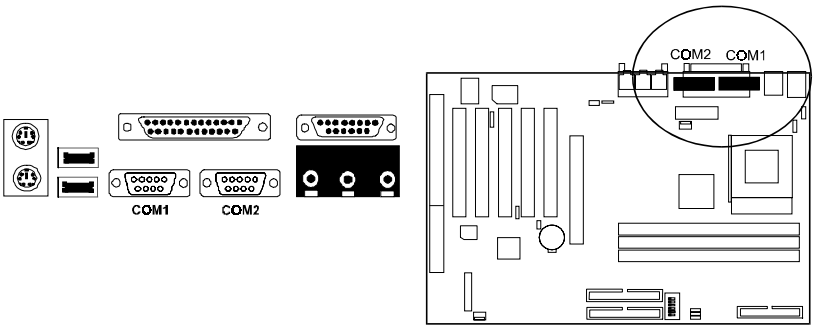
Printer Connector: LPT

This 25-pin D-Sub female connector is attached to your printer.



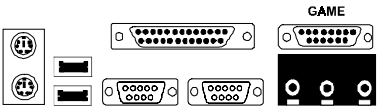
Serial Port Connectors: COM1, COM2

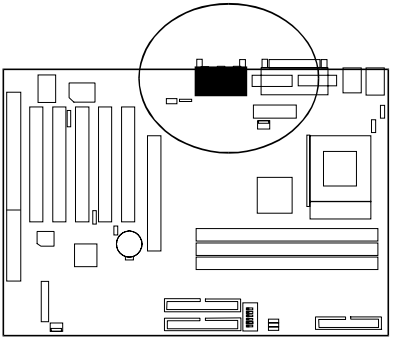
COM1 and COM2 allow you to connect your devices that use serial ports, such as a serial mouse or an external modem.



GAME/MIDI Connector: GAME

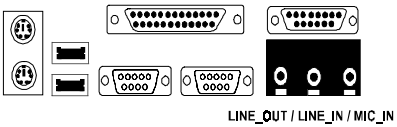
This 15-pin female connector allows you to connect game joysticks or game pads. Connect MIDI devices for playing or editing audio.

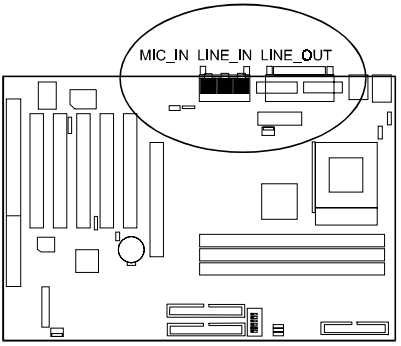




Audio I/O Jacks: LINE_OUT, LINE_IN, MIC_IN

LINE_OUT can be connected to headphones or preferably powered speakers. LINE_IN allows tape players or other audio sources to be recorded by your computer or played through the LINE_OUT. MIC_IN allows microphones to be connected for voice input.





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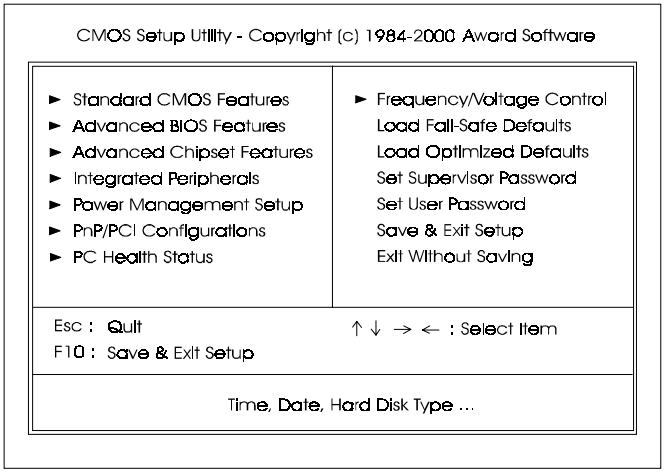
BIOS Setup

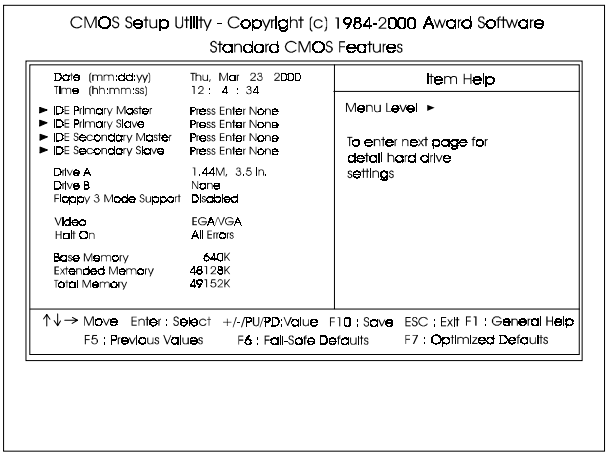
The mainboard comes with the Award BIOS chipthat contains the ROM Setup information of your system. This chip serves as an interface between the processor and the rest of the mainboard's components. This section explains the information contained in the Setup program and tells you how to modify the settings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

CMOS Setup Utility



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

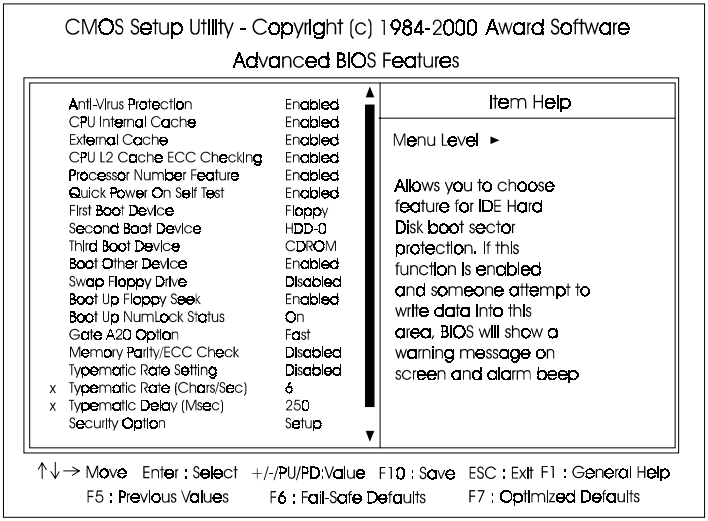


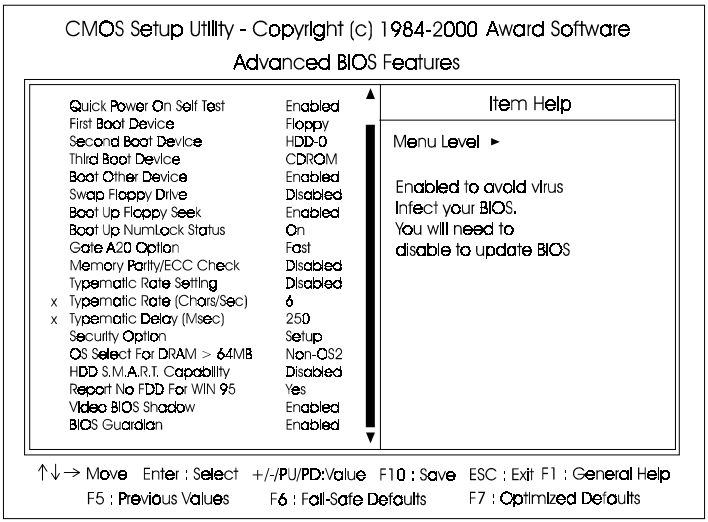
The Standard CMOS Setup screen is displayed above. Each item may have one or more option settings. The system BIOS automatically detects memory size, thus no changes are necessary. Use the arrow keys to highlight the item and then use **PgUp** or **PgDn** keys to select the value you want in each item.

Hard Disk Configurations

Capacity: The hard disk size. The unit is Mega Bytes.
Cylinder: 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.
Landing Zone: 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.

Advanced BIOS Features





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.

CPU L2 Cache ECC Checking

This feature enables BIOS to perform automatic CPU Level 2 cache ECC checking. The options are: Enabled (Default), Disabled.

Processor Number Feature

If a Pentium III processor is installed on this mainboard, the system BIOS will allow other utilities to access the Intel Pentium III serial number while this feature set at Enabled. 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.

First Boot Device

This feature allows user to select the boot device priority.
The options are: Floppy (Default), LS120, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3, ZIP100, LAN, Disabled.

Second Boot Device

This feature allows user to select the boot device priority.
The options are: Floppy, LS120, HDD-0 (Default), SCSI, CDROM, HDD-1, HDD-2, HDD-3, ZIP100, LAN, Disabled.

Third Boot Device

This feature allows user to select the boot device priority.
The options are: Floppy, LS120, HDD-0, SCSI, CDROM (Default), HDD-1, HDD-2, HDD-3, ZIP100, LAN, Disabled.

Boot Other Device

This feature allows user to select the boot device priority.
The options are: Enabled (Default), Disabled.

Swap Floppy Drive

Allows you to switch the order in which the operating system accesses the floppy drives during boot up.
The options are: Enabled, Disabled (Default).

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/ECC 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.

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

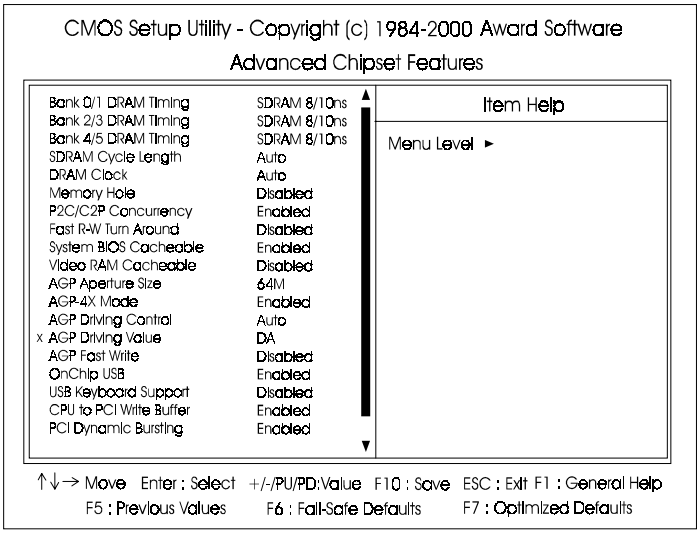
Allows the BIOS to copy the video ROM code of the add-on video card to the system memory for faster access.
The options are: Enabled (Default), Disabled.

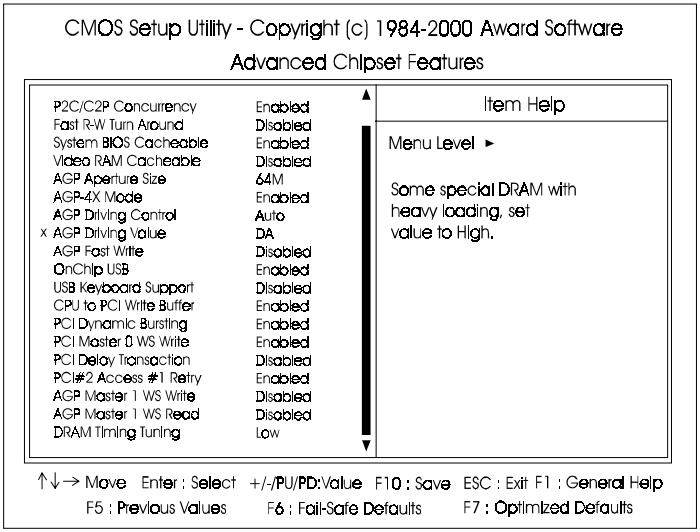
BIOS Guardian

It allows the system to prevent computer viruses. Users will need to disable it to update BIOS. The options are: Enabled (Default), Disabled.

NOTE: Please disable this BIOS feature about BIOS Guardian before you start to reflash BIOS.

Advanced Chipset Features





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: SDRAM 8/10ns (Default), Normal, Medium, Fast, 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: Auto (Default), 3, 2.

DRAM Clock

The feature allows users to select the DRAM clock.
The options are: Auto (Default), HCLK-33M, HCLK+33M, Host Clock.

Memory Hole

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, Disabled (Default).

P2C/C2P Concurrency

This feature allows users to set PCI/AGP Master-to-CPU/ CPU-to-PCI/ AGP Slave concurrent.
The options are: Enabled (Default), Disabled.

Fast R-W Turn Around

It allows users to set DRAM fast read-to-write turn around.
The options are: Enabled, Disabled (Default).

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.

Video RAM Cacheable

When enabled, allows the system to use the video RAM from cache RAM, instead of the slower DRAMs or ROMs.
The options are: Enabled, Disabled (Default).

AGP Aperture Size

It allows you to select the main memory frame size for AGP use.
The options are 4M, 8M, 16M, 32M, 64M (Default), 128M.

AGP-4X Mode

This feature allows user to select the AGP mode be to 2x or 4x 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: Enabled (Default), Disabled.

AGP Driving Control / AGP Driving Value

These two features allow user to improve the performance of AGP card manually by pressing Page Down/Page UP key if necessary.
The options of AGP Driving Control are: Auto (Default), Manual.

AGP Fast Write

When enabled, this feature allows you to set AGP fast write made.
The options are: Enabled, Disabled (Default).

OnChip USB

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.

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 (Default), Enabled.

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; Enabled (Default).

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; Disabled (Default).

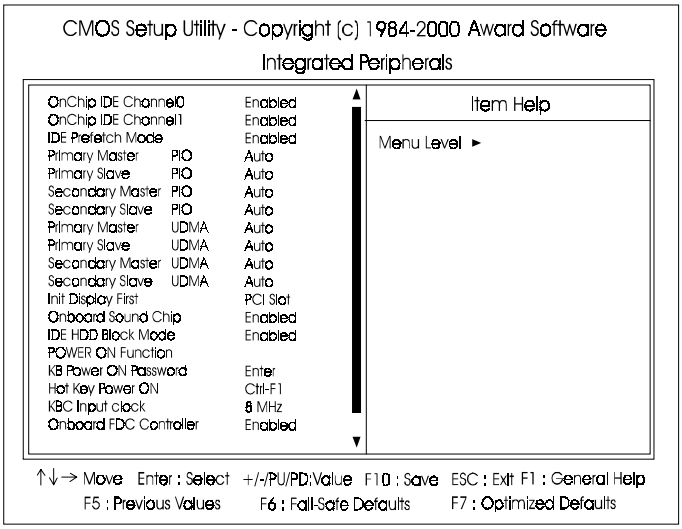
AGP Master 1 WS Read

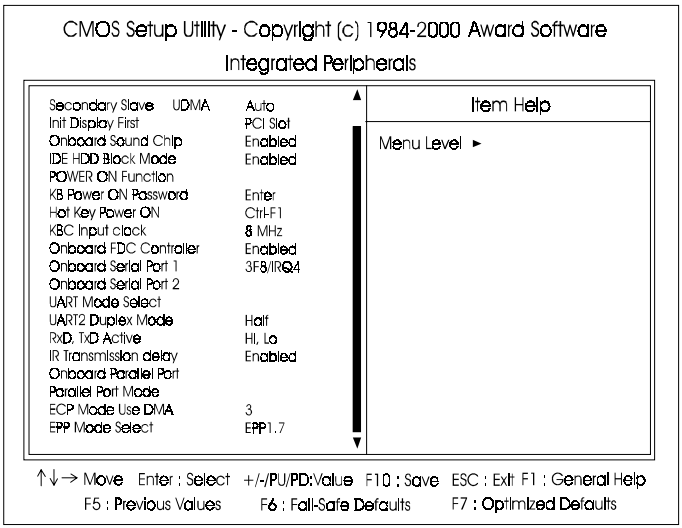
When enabled, the AGP bus master read access to the DRAMs will add one wait-state cycle. The options are: Disabled (Default); Enabled.

DRAM Timing Tuning

This feature allows you to tune DRAM Timing. For some special DRAM with heavy loading and if you install Micron chip base memory, please set to High. The options are: Low (Default); High.

Integrated Peripherals





OnChip IDE Channel0

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 Channel1

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 eliments 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 prot 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.

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.

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.

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.

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.

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), Disable.

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), Disable.

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), Disable.

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), Disable.

Init Display First

When you install an AGP VGA card and 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 Sound Chip

Use this feature to disable the onboard audio chip function if you install your sound card. 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.

POWER ON Function

Allows you to set the method for powering-on the system. The default option of *BUTTON-ONLY* allows system power-on using the standard system case mounted ON/OFF switch. The option *Password* allows you to set up to 5 alphanumeric characters to power-on the system. The option *Hot KEY* allows you to set which of the 12 keyboard function keys (**F1** to **F12**) in combination with the **Ctrl** key to power-on the system. The option *Mouse Click* allows you to use the PS/2 mouse to power-on the system by double-clicking on the mouse button. The options are: Button Only (Default); Password; Hot KEY; Mouse Right, Mouse Left.

NOTE: When using Password, Hot KEY, or Mouse Click options for the item POWER ON Function will render the power button on the system case ineffective. In case user forgets password or hot key setting, use the clear password switch or jumper to clear RTC data (refer to section about clear password on Chapter 2). Another method is to unplug system power from the AC power outlet and then re-insert the power cord. Previous password and hot key settings will be disabled allowing user to set a new one.

KB Power ON Password

Allows you to set up to 5 alphanumeric characters use in powering-on the system. To set password, set the above item POWER ON Function to *Password*, then using the keyboard's down arrow key to move cursor to this item KB Power ON Password and press the <**Enter**> key. A box will appear asking you to input the password desired to power-on the system.

Hot Key power ON

Allows you to set which of the 12 keyboard function keys (**F1** to **F12**) in combination with the **Ctrl** key will be used to power-on the system. The options are: *Ctrl-F1* (default) up to *Ctrl-F12*.

KBC input clock

This feature allows you to select different KBC input clocks which your keyboard actually supported. Please read your keyboard manual also for more information. The options are: 6, 8 (Default), 12, 16 MHz.

Onboard FDC 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 Mode Select

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, Normal (Default).

UART2 Duplex Mode

Allows you to select the IR modes.
The options are: Half (Default), Full.

RxD , TxD Active

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: Hi, Lo (Default); Hi, Hi; Lo, Hi; Lo, Lo.

IR Transmission Delay

When Enabled, the transmission delays 4 characters-time (40 bit-time) if SIR is changed from RX mode to TX mode. When Disabled, no transmission delay if SIR is changed from RX mode to TX mode.
The options are: Enabled (Default), Disabled.

Onboard Parallel Port

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

Parallel Port Mode

Allows you to connect with an advanced printer via the port mode it supports.
The options are: SPP (Default), EPP, ECP, ECP+EPP.

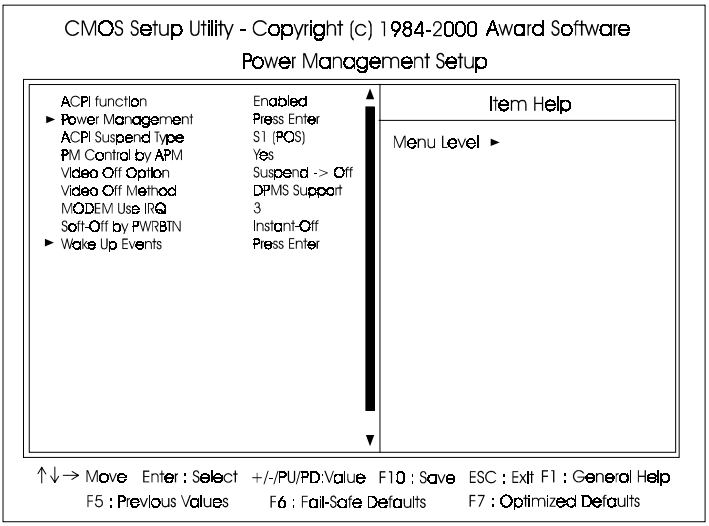
ECP Mode Use DMA

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

EPP Mode Select

This feature allows you to select the EPP type version.
The options are: EPP1.7 (Default), EPP1.9.

Power Management Setup



ACPI function

This item allows you to disable the ACPI function.
The options are: Enabled (Default), Disabled.

Power Management

This item allows you to adjust the 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.

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: Disable (Default), 1, 2, 4, 6, 8, 10, 20, 30, 40 Min, 1 Hour.

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: Disable (Default), 1, 2, 4, 6, 8, 10, 20, 30, 40 Min, 1 Hour.

ACPI Suspend Type

This item allows you to select ACPI suspend types.
The options are: S1(POS) (Default), S3 (STR).

PM Control by APM

The option No allows the APM (Advanced Power Management) specification be ignored. 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

This feature allows you to select the IRQ# to meet your modem's IRQ#. The options 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, Instant-Off (Default).

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 feautre (PM) wake-up event for the DMA or bus master (of the LAN card or/and SCSI card). The options are: OFF (Default), ON.

Wake Up On LAN

When set at Enabled, an input signal comes from the other client/server on the LAN awakes the system from a soft off state if connected over LAN. The options are Disabled or Enabled (Default).

PowerOn by PCI Card

When set at Enabled, any PCI-PM event awakes the system from a PCI-PM controlled state.
The options are Disabled (Default) or Enabled.

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).

Date (of Month)

This feature allows you to set the day of the alarm starts when the RTC Alarm Resume From Soft Off is set to be Enabled. The options are: 0, 1..31.

Resume Time (hh:mm:ss)

If an ATX power supply is installed and when RTC Alarm Resume is Enabled, this feature allows you to set the time of the alarm starts when the RTC Alarm Resume From Soft Off is set to be Enabled.
The options are: 7: 0: 0 (Default). hh (*hour*) - 0, 1, 2,.., 23; mm (*minute*) - 0, 1, 2,..,59; ss (*second*) - 0, 1, 2,..,59.

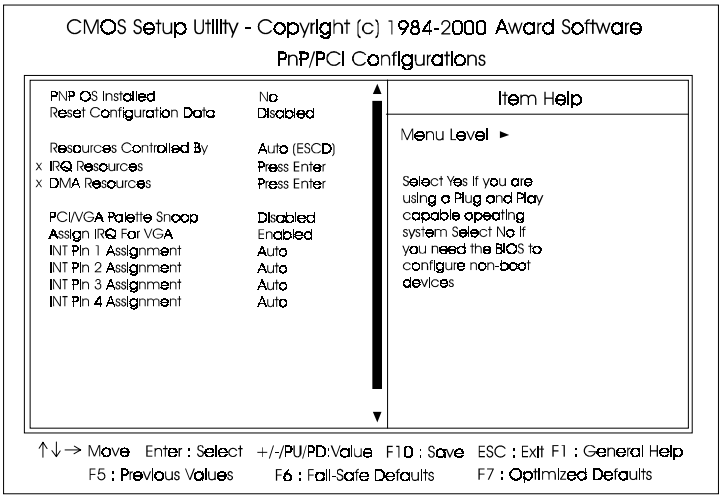
IRQs Activity Monitoring

After the time period which you set, 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 occurs, the system goes back to full-on mode directly.
If the IRQ activity which is defined as Non Primary takes place, the system remains off until the corresponding IRQ handler finishes.
The options of IRQ 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 are: Enabled, Disabled.
The defaults is Disabled for the IRQ8, 9, 10, 11, 15.
The defaults of rest are Enabled.

Primary INTR

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

PnP/PCI Configurations



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.

Reset Configuration Data

Enabling it to reset the system Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on card and the system reconfiguration has caused such a serious conflict that the operating system can not boot. The options are: Disabled (Default), Enabled.

Resources Controlled By

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

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.

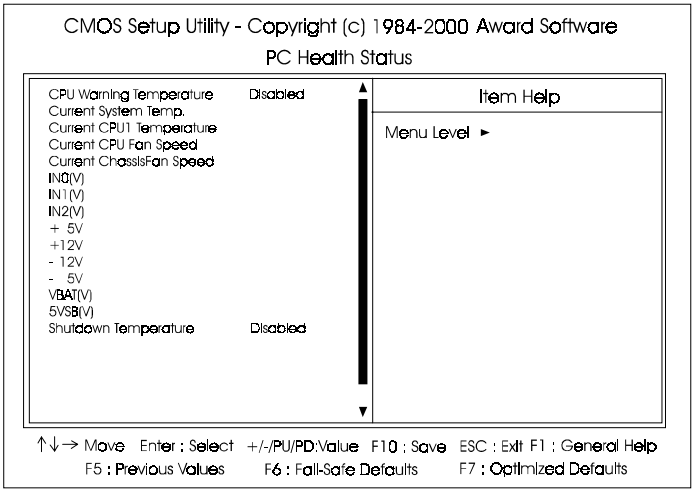
Assign IRQ For VGA

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.

INT Pin 1/2/3/4 Assignment

This feature allows you to assign the PCI IRQ numbers for PCI slots. Selecting the default, Auto, allows the PCI controller to automatically allocate the IRQ numbers.
The options are: Auto (Default), 3, 4, 5, 7, 9, 10, 11, 12, 14, 15.

PC Health Status



This operating menu is optional.

CPU Warning Temperature

This feature allows you to set the temperature to slow down the CPU clock frequency. The options are: The option list provides all temperatures that supported by this board. The default setting is Disabled.

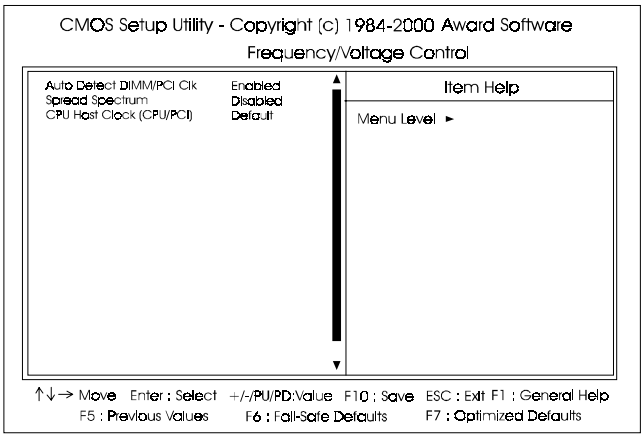
Current System Temp. / Current CPU1 Temperature / Current CPU Fan Speed / Current ChassisFan Speed / Current PWRFAN Speed / IN0(V): to IN2(V): / +5V: / +12V: / –12V: / –5V: / VBAT(V): / 5VSB(V):

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

Shutdown Temperature

When Windows 98 ACPI mode installed, this feature helps to shutdown the system when the system temperature is as high as the selected temperature to prevent from the overheat problem. The option list provides all temperatures that supported by this board. The default setting is Disabled.

Frequency/Voltage Control



Auto Detect DIMM/PCI Clk

When enabled, BIOS will detect the PCI slot and DIMM slot if no any device in, BIOS will auto disable its clock.
The options are: Enabled (Default), Disabled.

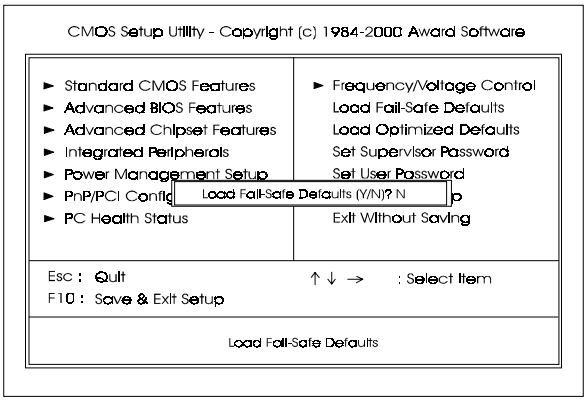
Spread Spectrum

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

CPU Host/PCI Clock

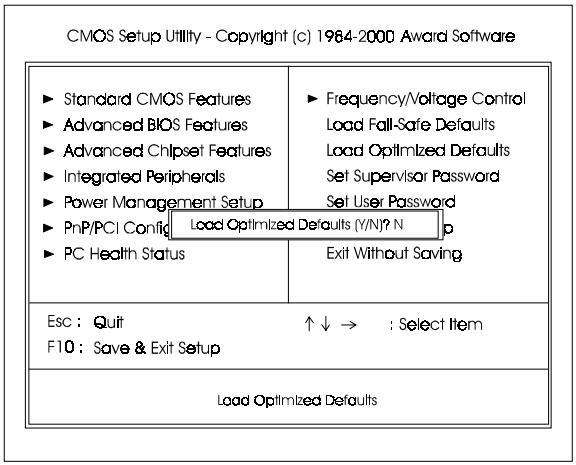
This feature allows you to set the CPU/PCI clock frequency. The default setting, Default, will detect your CPU/PCI clock frequency automatically. The recommended CPU clock frequencies are 66 and 100MHz. The other options may effect the system perfomance. If you set a unappropriate option which leads to a booting problem, keep pressing the Insert key until the display appears will solve it. The options are: Default (Default), 66/33 MHz, 75/37 MHz, 83/41 MHz, 100/33 MHz, 103/34 MHz, 112/37 MHz, 124/41MHz, 124/31MHz, 133/33 MHz, 140/35 MHz, 150/37 MHz.

Load Fail-Safe Defaults



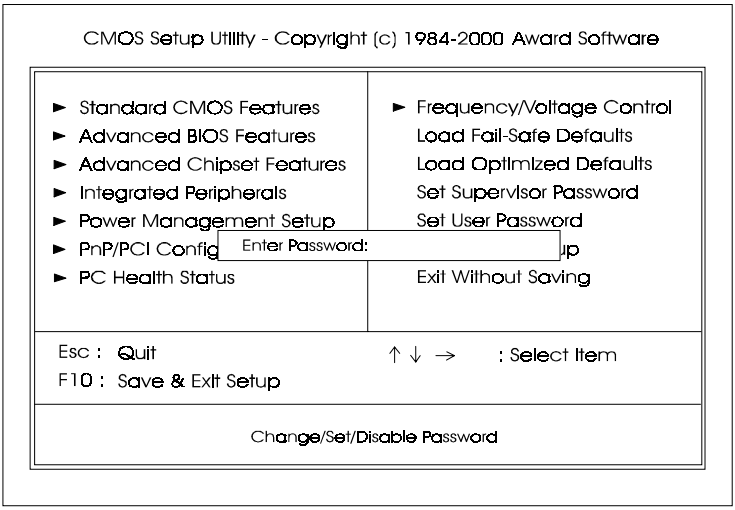
This submenu is selected to diagnose the problem after the computer boots, if the computer will not boot. These settings do not give optimal performance.

Load Optimized Defaults



This submenu is selected for settings which provide the best system performance.

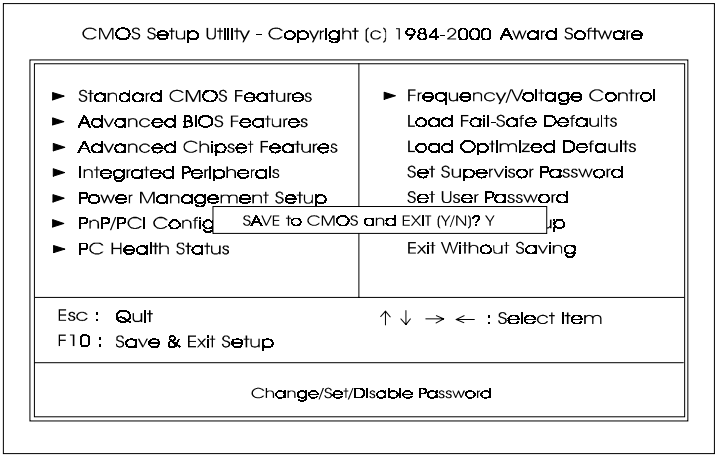
Supervisor/User Password



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.

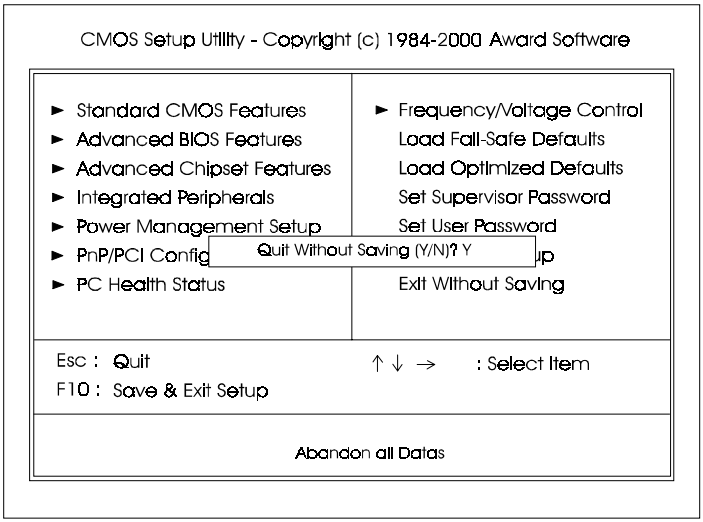
Under the BIOS Feature Setup, if *Setup* is selected under the Security Option field and the Supervisor/User Password is enabled, you will be prompted password every time you try to enter the CMOS Setup Utility. If *System* is selected and the Supervisor/User Password is enabled, you will be requested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

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)?**