## Statement:

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## Trademark:

All trademarks are the property of their respective owners.

## Version:

User's Manual V1.1 in English for 925XE7AA series motherboard.

P/N: 91-181-U25-A2-1E

## Symbol description:


**Note:** refers to important information that can help you to use motherboard better.


**Attention:** indicates that it may damage hardware or cause data loss, and tells you how to avoid such problems.


**Warning:** means that a potential risk of property damage or physical injury exists.

## More information:

If you want more information about our products, please visit FOXCONN website: www.foxconnchannel.com

## Item Checklist:

Thank for your purchasing FOXCONN 925XE7AA series motherboard. Please check the package; if there are missing or damaged items, contact your distributor as soon as possible.

- ❖925XE7AA Series Motherboard (x1)
- ❖FOXCONN Utility CD (x1)
- ❖925XE7AA User Manual (x1)
- ❖RAID User Manual (x1)
- ❖RAID Floppy (x3) (2 for SATA / 1 for IDE)
- ❖IDE Ribbon Cable (x3)
- ❖FDD Ribbon Cable (x1)
- ❖I/O Shield (x1)
- ❖S-ATA Signal Cable (x8)
- ❖S-ATA Power Cable (x4)
- ❖USB 2.0 Cable (x1)
- ❖1394 Cable (x1)
- ❖Wi-Fi Card (x1) (optional)
- ❖Wi-Fi Antenna (x1) (optional)

# Declaration of conformity

CE

**HON HAI PRECISION INDUSTRY COMPANY LTD**
**66 , CHUNG SHAN RD., TU-CHENG INDUSTRIAL DISTRICT,**
**TAIPEI HSIEN, TAIWAN, R.O.C.**

declares that the product

**Motherboard**

**925XE7AA series**

is in conformity with
(reference to the specification under which conformity is declared in accordance with 89/336 EEC-EMC Directive)

| | |
|---|---|
| ☑ EN 55022/A1: 2000 | Limits and methods of measurements of radio disturbance characteristics of information technology equipment |
| ☑ EN 61000-3-2/A14:2000 | Electromagnetic compatibility (EMC)<br>Part 3: Limits<br>Section 2: Limits for harmonic current emissions (equipment input current <= 16A per phase) |
| ☑ EN 61000-3-3/A1:2001 | Electromagnetic compatibility (EMC)<br>Part 3: Limits<br>Section 2: Limits of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current <= 16A |
| ☑ EN 55024/A1:2001 | Information technology equipment-Immunity characteristics limits and methods of measurement |

Signature : James Liang  Place / Date : TAIPEI/2004

Printed Name : James Liang  Position/ Title : Assistant President

# Declaration of conformity

| | |
|---|---|
| Trade Name: | FOXCONN |
| Model Name: | **925XE7AA** |
| Responsible Party: | PCE Industry Inc. |
| Address: | 458 E. Lambert Rd. |
| | Fullerton, CA 92835 |
| Telephone: | 714-738-8868 |
| Facsimile: | 714-738-8838 |
| Equipment Classification: | FCC Class B Subassembly |
| Type of Product: | Motherboard |
| **Manufacturer**: | **HON HAI PRECISION INDUSTRY COMPANY LTD** |
| Address: | 66 , CHUNG SHAN RD., TU-CHENG INDUSTRIAL DISTRICT, TAIPEI HSIEN, TAIWAN, R.O.C. |

Supplementary Information:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Tested to comply with FCC standards.

Signature : James Liang Date : 2004

# Table of Contents

# Table of Contents

**Warning:**

1. Attach the CPU and heatsink using silica gel to ensure full contact.
2. It is suggested to select high-quality, certified fans in order to avoid damage to the motherboard and CPU due high temperatures.
3. Never turn on the machine if the CPU fan is not properly installed.
4. Ensure that the DC power supply is turned off before inserting or removing expansion cards or other peripherals, especially when you insert or remove a memory module. Failure to switch off the DC power supply may result in serious damage to your system or memory module.

**Warning:**

We cannot guarantee that your system will operate normally while over-clocked. Normal operation depends on the over-clock capacity of your device.

**Attention:**

Since BIOS programs are upgraded from time to time, the BIOS description in this manual is just for reference. We do not guarantee that the content of this manual will remain consistent with the actual BIOS version at any given time in the future.

**Attention:**

The pictures of objects used in this manual are just for your reference. Please refer to the physical motherboard.

This manual is suitable for motherboard of 925XE7AA series. Each motherboard is carefully designed for the PC user who wants diverse features.

| | |
|---|---|
| -L | with onboard 100M LAN |
| -K | with onboard 1G LAN |
| -6 | with 6 channel audio |
| -8 | with 8 channel audio |
| -E | with 1394 |
| -S | with SATA |
| -R | with RAID |

You can find PPID label on the motherboard. It indicates the functions that the motherboard has.

For example: 


On the blue mark of the PPID label, it means the motherboard supports 6-Channel Audio(-6), 1394 port(-E), onboard 100M LAN (-L), SATA function(-S).

# Chapter 1

Thank you for buying FOXCONN 925XE7AA series motherboard. This series of motherboard is one of our new products, and offers superior performance, reliability and quality, at a reasonable price. This motherboard adopts the advanced Intel® 925XE+ ICH6R chipset, providing users a computer platform with a high integration-compatibility-performance price ratio.

This chapter includes the following information:

- Main Features
- Motherboard Layout

## Main Features

### Size

- ATX form factor of 9.6 inch x 12 inch

### Microprocessor Hyper-Threading

- Supports Intel®, Prescott-T processor in an LGA775 package
- Supports FSB at 1066MHz/800MHz
- Supports Hyper-Threading technology
- Supports FSB Dynamic Bus Inversion (DBI)

### Chipset

- Intel® 925XE (North Bridge) + ICH6R (South Bridge)

### System Memory

- Four 240-pin DIMM slots
- Supports single channel or dual channel mode
- Supports DDR2 type DIMMs
- Supports unbuffered DIMMs only
- Supports 256-Mb, 512-Mb, and 1-Gb DRAM densities
- Supports up to 4 GB of DDR2 memory
- Supports Performance Acceleration Technology (PAT)
- Registered DIMMs not supported

### USB 2.0 Ports

- Supports hot plug
- Eight USB 2.0 ports (four rear panel ports, two onboard USB connectors providing four extra ports)
- Supports wake-up from S1 and S3 mode
- Supports USB 2.0 Protocol up to 480 Mbps transmission rate

### Onboard Serial ATA

- 150MBps transfer rate
- Intel ICH6R South Bridge supports 4 x Serial ATA with RAID 0, RAID 1, RAID 0+1, Matrix RAID
- Silicon Image 3114 RAID controller supports 4 x Serial ATA with RAID 0, RAID 1, RAID 5, RAID 10, JBOD

**Onboard IDE**

- Intel ICH6R South Bridge supports 1 x Ultra DMA 100/66/33
- ITE 8212F IDE RAID controller supports 2 x Ultra DMA 133/100/66 with RAID 0, RAID 1, RAID 0+1, JBOD

**Onboard LAN (-L/-K) (optional)**

- One 1G LAN port with PCI Express x1 interface supported by BCM5789 controller
- One 100M/1G LAN port with PCI interface supported by BCM4401/BCM5788 controller
- Supports 10/100/1000 (-K) Mbit/sec Ethernet
- LAN interface built-in on board

**Onboard 1394 (-E ) (optional)** IEEE 1394

- Support hot plug
- 1 x IEEE 1394b port with rate of transmission at 800 Mbps
- 2 x IEEE 1394a connectors with rate of transmission at 400 Mbps
- Self-configured addressing

**Onboard Audio (-6)(optional)** 6 channel

- AC'97 2.3 Specification Compliant
- Supports SPDIF output
- Onboard Line-in jack, Microphone jack, Line-out jack
- Supports 6-channel audio (setting via software)

**Onboard Audio (-8)(optional)** 8 channel

- Supports 8-channel audio
- Supports SPDIF output
- Supports Intel High Definition Audio
- Supports high quality differential CD input

**PCI Express x16 Support**

- Supports 4 GB/sec (8 GB/sec concurrent) bandwidth
- Low power consumption and power management features

### Green Function

- Supports ACPI (Advanced Configuration and Power Interface)
- Supports S0 (normal), S1 (power on suspend), S3 (suspend to RAM), S4 (Suspend to disk - depends on OS), and S5 (soft - off).

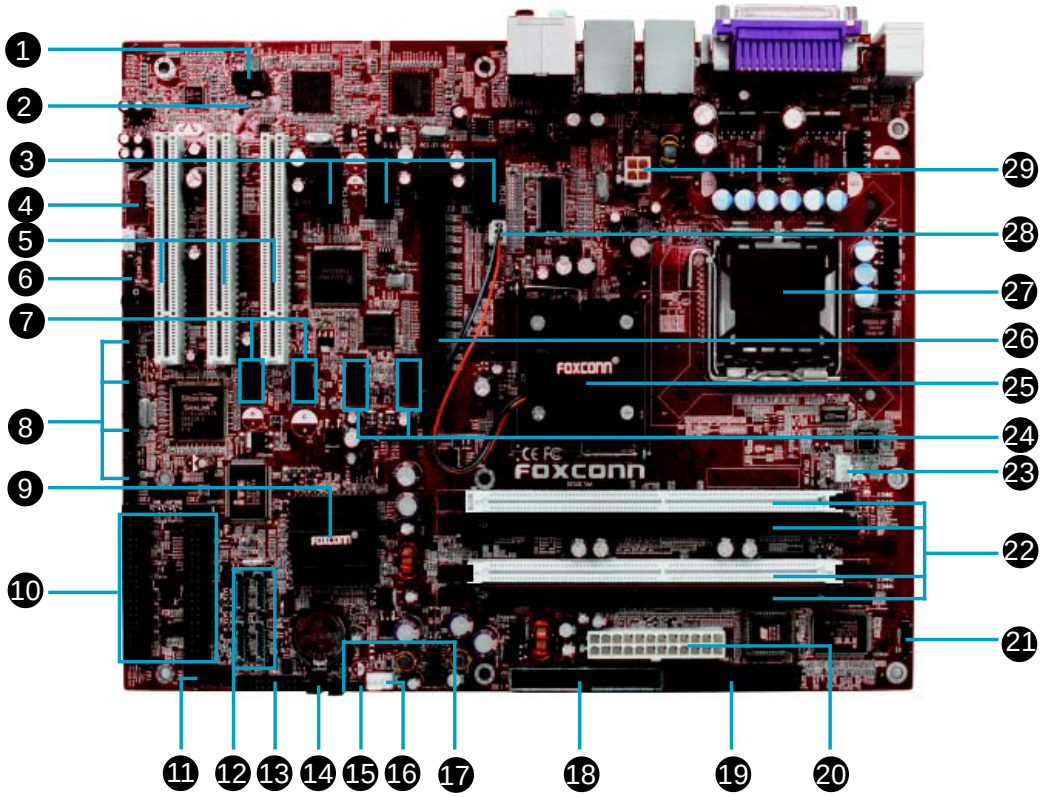
### Expansion Slots

- Three PCI slots
- Three PCI Express x1 slots
- One PCI Express x16 Graphics slot

### Advanced Features

- PCI 2.3 specification compliant
- Supports Windows 2000/XP soft-off
- Supports PC Health function (capable of monitoring system voltage, CPU/ system temperature, and fan speed)

## Motherboard Layout




1. CD_IN connector
2. AUX_IN connector (optional)
3. PCI Express x1 slots
4. Front Audio connector
5. PCI slots
6. Speaker connector
7. Front USB connectors
8. Silicon Image 3114 controlled SATA connectors
9. South Bridge: Intel® ICH6R
10. ATA 133/100/66 IDE connectors
11. Front Panel connector
12. ICH6R controlled SATA connectors
13. TPM connector
14. Clear CMOS jumper
15. Chassis Intruder connector
16. FAN1 connector
17. BIOS TBL jumper
18. ATA 100/66/33 IDE connector
19. FDD connector
20. 24-pin ATX Power connector
21. IrDA connector
22. DDR2 DIMM slots
23. CPU fan connector
24. Front 1394 connectors
25. North Bridge:Intel® 925XE
26. PCI Express x16 slot
27. CPU socket
28. FAN2 connector
29. 12V CPU power connector

**Note:**

The above motherboard layout is provided for reference only; please refer to the physical motherboard.

# Chapter 2

This chapter introduces the hardware installation process, including the installation of the CPU, memory, power supply, slots, rear panel and pin connectors, and the mounting of jumpers. Caution should be exercised during the installation of these modules. Please refer to the motherboard layout prior to any installation and read the contents in this chapter carefully.

This chapter includes the following information:

- CPU
- Memory
- Power supply
- Rear Panel Connectors
- Other Connectors
- Expansion Slots
- Jumpers

**Notes:**

Take note of the following precautions before you install components or change settings.

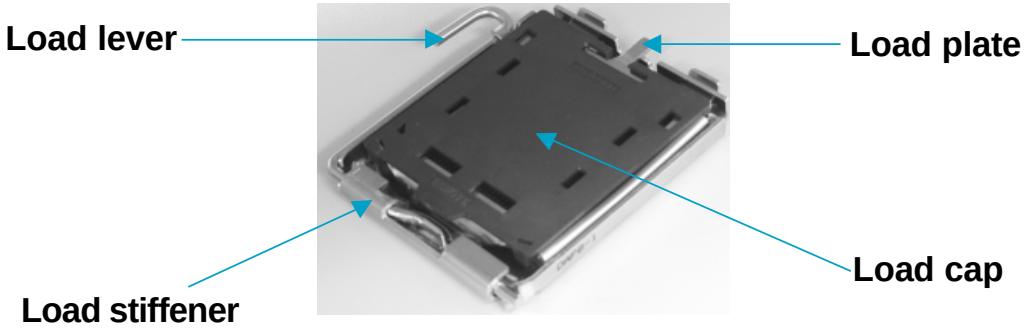
1. Use a grounded wrist strap or touch a safely grounded object, such as an attached power supply, before handling components to avoid damaging them due to static electricity.
2. Unplug the power cord before opening your chassis or touching any component.
3. Hold components by their edges to avoid touching any exposed integrated circuits (ICs).
4. Whenever you uninstall a component, place it on a grounded antistatic pad or into the antistatic bag that it came in.

## CPU

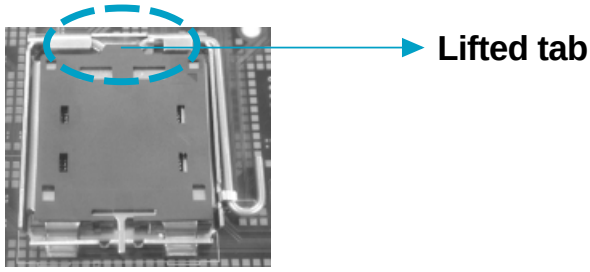
This motherboard supports single Pentium® 4 Processor including Prescott-T processor in an LGA775 package. It also supports Hyper-Threading Technology and FSB Dynamic Bus Inversion (DBI).

### Installation of CPU

Below is the CPU socket illustration. Follow these procedures to install a CPU.

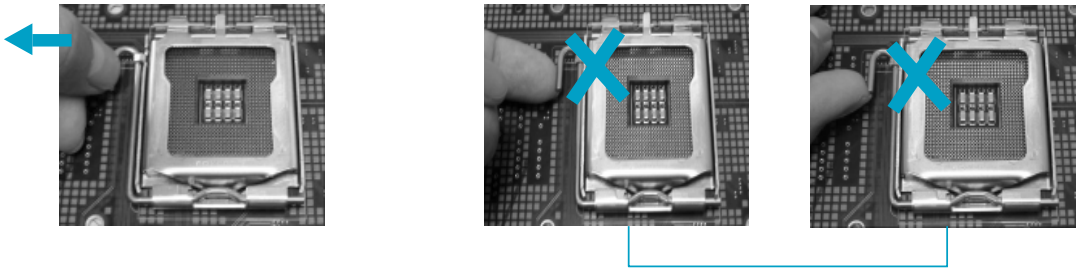



1. Use thumb & forefinger to hold the lifted tab of the cap.




2. Lift the cap up and pick to upload the cap completely from the socket.

3. Use thumb & forefinger to hold the hook of the load lever and pull the lever sideways to unlock it.

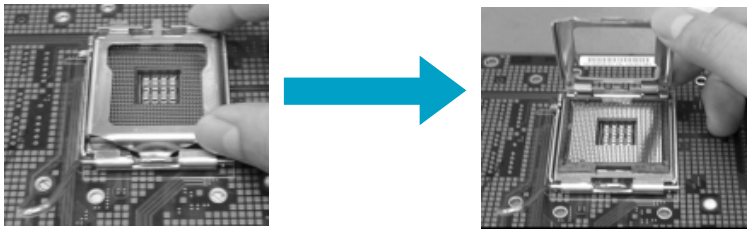


**Correct** **Wrong**

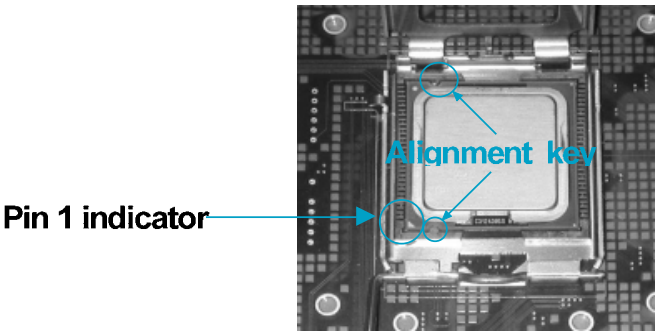
**Warning:**

DO NOT use finger to lift or tick the locking lever, the improper operation will cause finger hurt and the SKT in a poor operation condition.

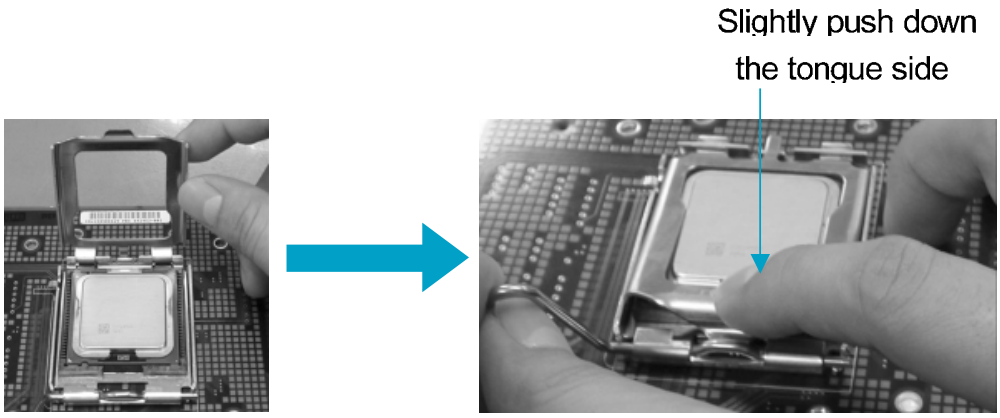
4. Lift up the lever. Use thumb to open the load plate. Be careful not to touch the contacts.



5. Hold the CPU and tilt it to some degree since the contacts are designed to be hooked, then match the triangle marker to Pin 1 position as shown below. Carefully insert the CPU into the socket until it fits in place.



6. Close the load plate, and slightly push down the tongue side.



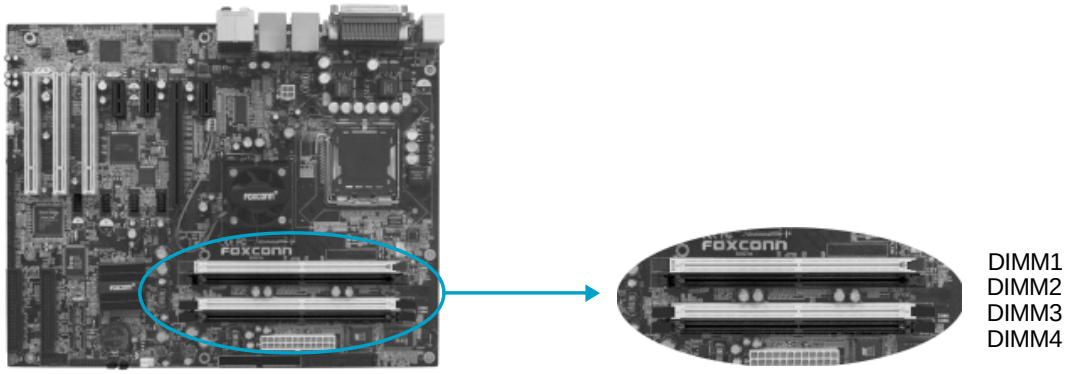

7. Lower the lever and lock it to the load plate, then the CPU is locked completely.

**Note :**

Excessive temperatures will severely damage the CPU and system. Therefore, you should install CPU cooling fan and make sure that the cooling fan works normally at all times in order to prevent overheating and damaging to the CPU. Please refer to your CPU fan user guide to install it properly.

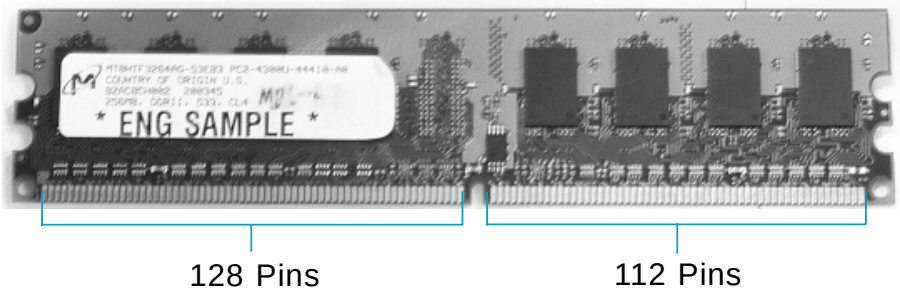
## Memory

This motherboard includes four 240-pin slots with 1.8 V for DDR2. These support 256 Mb, 512 Mb and 1 Gb DDR2 technologies for x8 and x16 devices. You must install at least one memory bank to ensure normal operation.

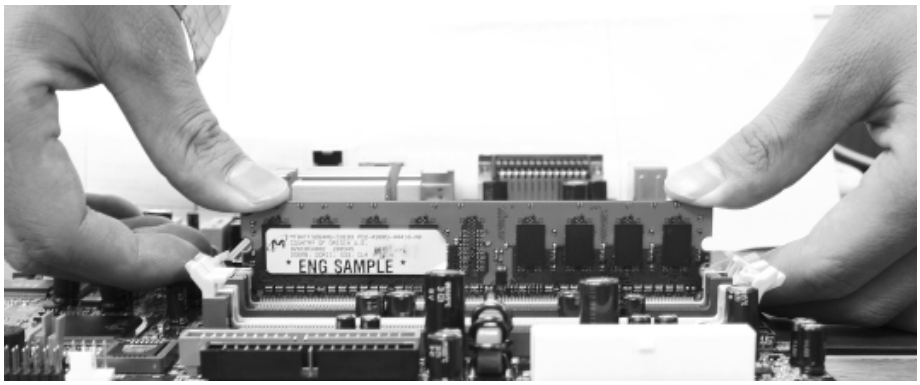


**Installation of DDR2 Memory**

1. There is only one gap in the middle of the DIMM slot, and the memory module can be fixed in one direction only. Unlock a DIMM slot by pressing the module clips outward.
2. Align the memory module to the DIMM slot, and insert the module vertically into the DIMM slot.




3. The plastic clips at both sides of the DIMM slot will lock automatically.




**Warning :**

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, especially the memory devices, otherwise your motherboard or the system memory might be seriously damaged.

## Power Supply

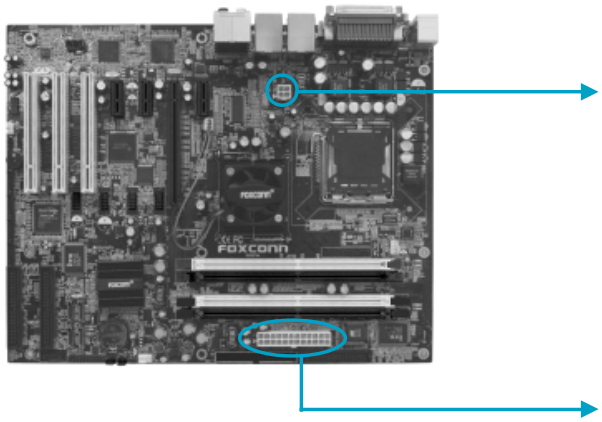
This motherboard uses an ATX power supply. In order to avoid damaging any devices, make sure that they have been installed properly prior to connecting the power supply.

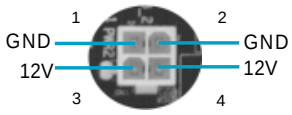
### 4-pin ATX_12V Power Connector: PWR2

The ATX power supply connects to PWR2 and provides power to the CPU.

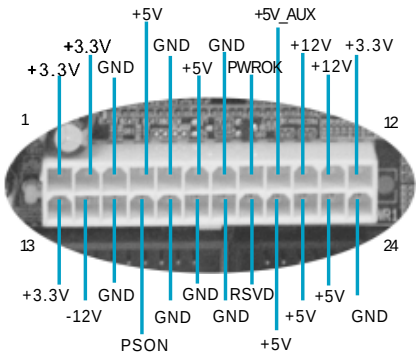
### 24-pin ATX Power Connector: PWR1

PWR1 is the ATX power supply connector. Make sure that the power supply cable and pins are properly aligned with the connector on the motherboard. Firmly plug the power supply cable into the connector and make sure it is secure.





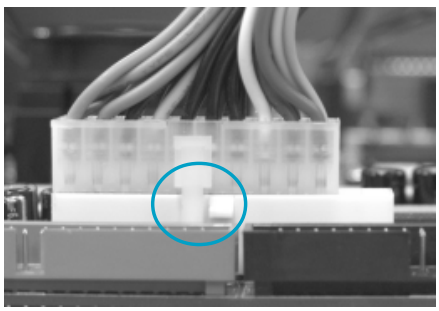

**4-pin ATX_12V power connector**




**24-pin ATX power connector**

**Attention:**

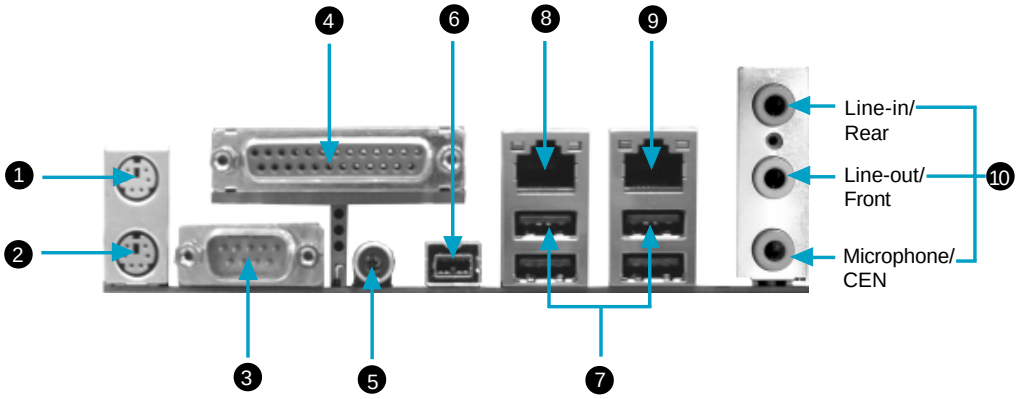
We strongly recommend you use 24-pin power supply. If you want to use 20-pin power supply, you need to align the ATX power connector according to the right picture.



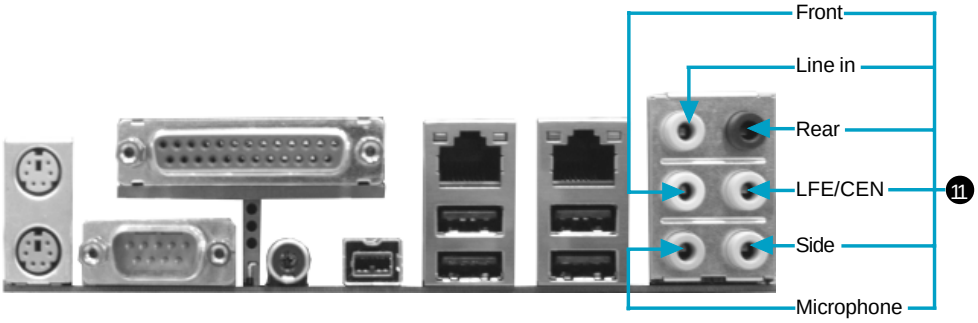
## Rear Panel Connectors

This motherboard provides the ports as below:

### For 2/6-channel




### For 8-channel




❶ PS/2 Mouse Connector

This green 6-pin connector is for a PS/2 mouse.

❷ PS/2 Keyboard Connector

This purple 6-pin connector is for a PS/2 keyboard.

❸ Serial Port (COM1)

This 9-pin COM1 port is for pointing devices or other serial devices.

❹ Parallel Port (Printer Port)

This 25-pin port connects a parallel printer, a scanner, or other devices.

❺ SPDIF coaxial out port

This port connects to external audio output devices with coaxial cable connector.

❻ 1394b Port

This digital interface supporting electronic devices such as digital cameras, scanners, and printers implements IEEE 1394b standard that allows up to 800 Mbps transfer rates, and increase the computer-to-electronic device operational distance from 4.5 meters to 100 meters. IEEE 1394b maintains backward compatibility with 1394a(400 Mbps).

❼ USB 2.0 Ports

These four Universal Serial Bus (USB) ports are available for connecting USB 2.0/1.1 devices.

❽ LAN Port2 (-L/-K) (optional)

This port controlled by BCM4401/BCM5788 with PCI interface allows 100M/1G connection to a Local Area Network (LAN) through a network hub.

❾ LAN Port1 (-K)

This port controlled by BCM5789 controller with PCI Express x1 interface allows 1G connection to a Local Area Network (LAN) through a network hub.

❿ Line in, Line out, Microphone (for 2/6-channel models)

When using a 2-channel sound source, the Line out jack is used to connect to speaker or headphone; the Line in jack connects to an external CD player, tape player or other audio device. The Microphone jack is used to connect to the microphone.

When using a 6-channel sound source, connect the front speaker to the green audio output; connect the rear speaker to the blue audio output; connect the center speaker/subwoofer to the red Microphone output.

⓫ Line in, Line out, Microphone, Rear, LEF/CEN, Side Jacks (for 8-channel models)

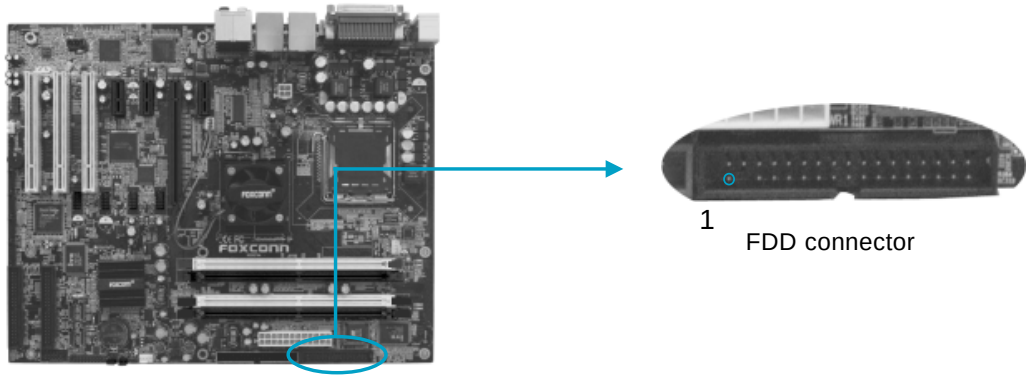
When using an 8-channel sound source, connect the front speaker to the green audio output; connect the rear sound speaker to the black audio output; connect the center speaker/subwoofer to the orange audio output; connect the side sound speaker to the grey audio output.

## Other Connectors

This motherboard includes connectors for FDD devices, IDE HDD devices, Serial ATA devices, USB devices, IR module, and others.

### FDD Connector: FLOPPY

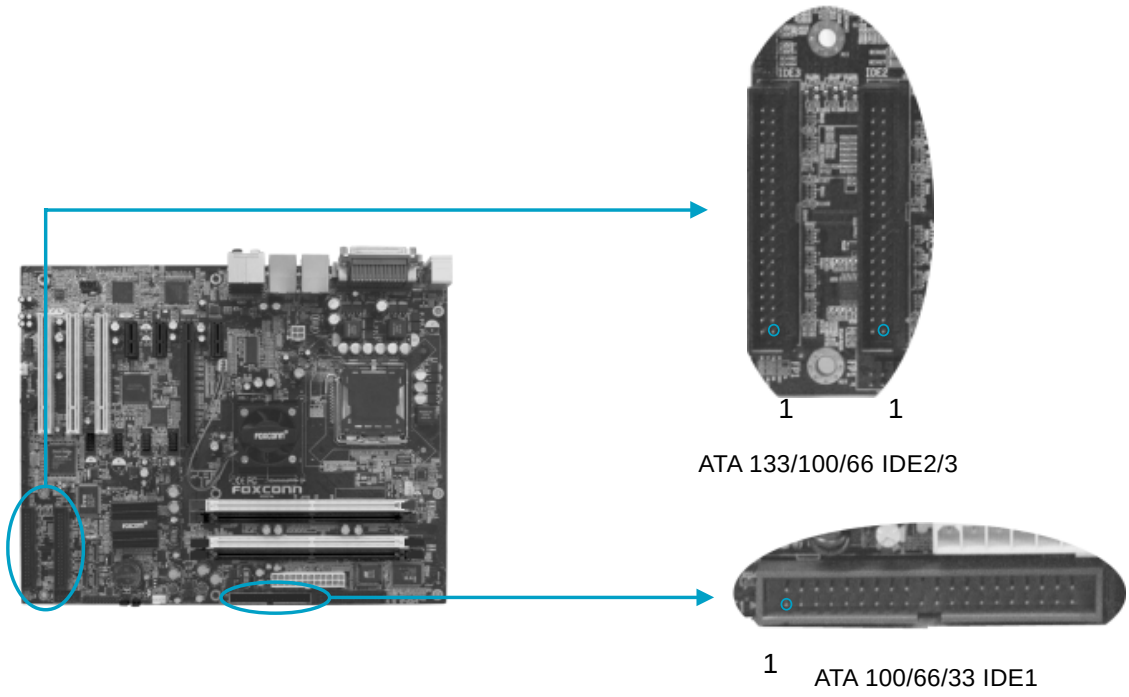
This motherboard includes a standard FDD connector, supporting 360 K, 720 K, 1.2 M, 1.44 M, and 2.88 M FDDs.



**HDD Connector: IDE1, IDE2, IDE3**

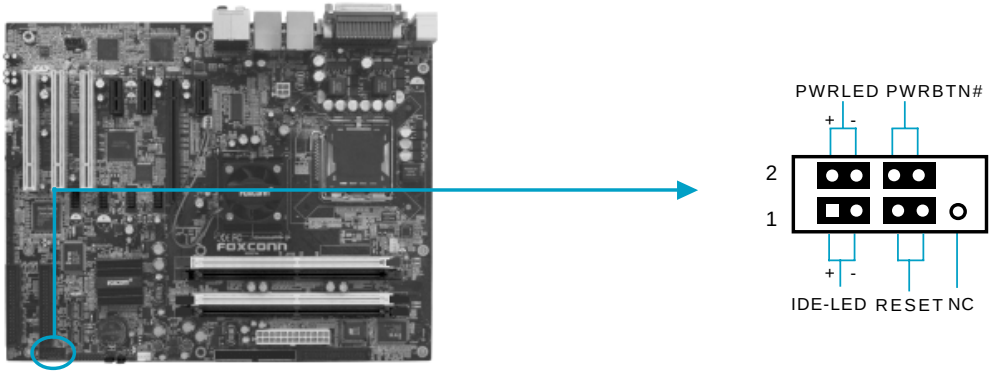
This motherboard implements three IDE connectors: IDE1, IDE2, IDE3. IDE1 connector supports the provided Ultra DMA 100/66/33 IDE hard disk ribbon cable. IDE2/3 connectors support up to four Ultra DMA 133/100/66 IDE hard disk drives that you can configure as a disk array through onboard IDE RAID controller. Refer to RAID manual for details on how to set up RAID configurations.

Connect the cable's blue connector to the IDE connector, then connect the gray connector to the Ultra DMA slave device (hard disk drive) and the black connector to the Ultra DMA master device.



**Front Panel Connector: FP1**

This motherboard includes one connector for connecting the front panel switch and LED indicators.




FP1

IDE LED Connector (IDE-LED)

The connector connects to the case's IDE indicator LED indicating the activity status of hard disks.

Reset Switch (RESET)

Attach the connector to the Reset switch on the front panel of the case and the system will restart when the switch is pressed.

Power LED Connector (PWRLED)

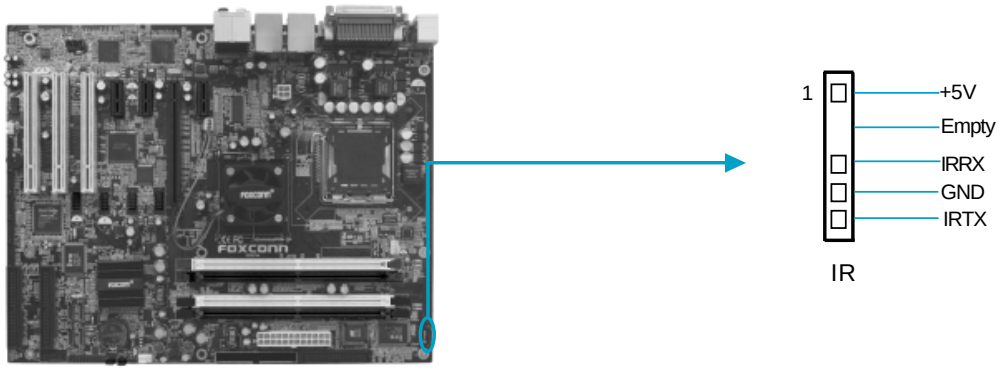
Attach the connector to the power LED on the front panel of the case. The Power LED indicates the system's status. When the system is in S0 status, the LED is on. When the system is in S1 status, the LED is blink; When the system is in S3, S4, S5 status, the LED is off.

Power Button Connector (PWRBTN#)

Attach the connector to the power button of the case. Pushing this switch allows the system to be turned on and off rather than using the power supply button.

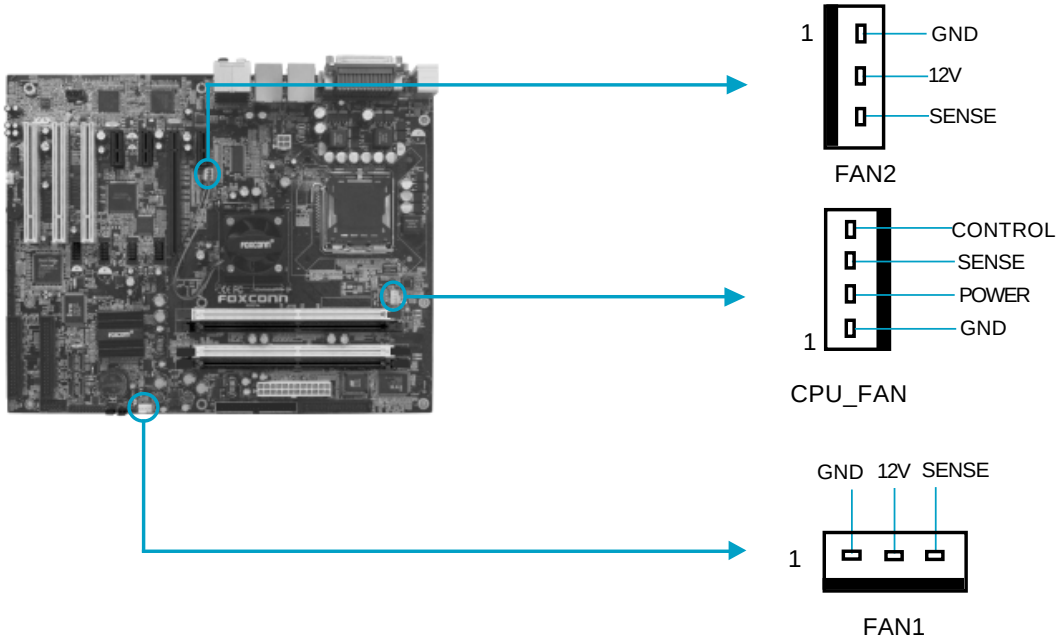
**IrDA Connector: IR**

This connector supports wireless transmitting and receiving device. Before using this function, configure the settings of IR Mode from the “Integrated Peripherals” section of the CMOS Setup.



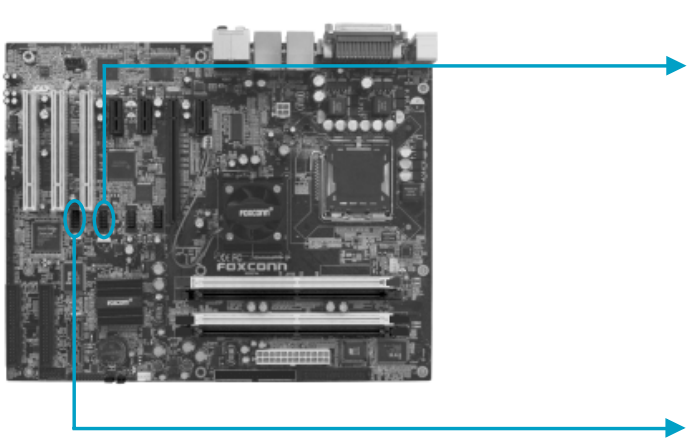

**Fan Connectors: CPU_FAN, FAN 1, FAN 2**

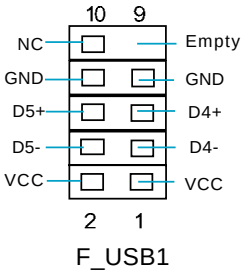
The fan speed of CPU_FAN, FAN 1 and FAN 2 can be detected and viewed in “PC Health Status” section of the CMOS Setup. These fans will be automatically turned off after the system enters S4 and S5 mode.

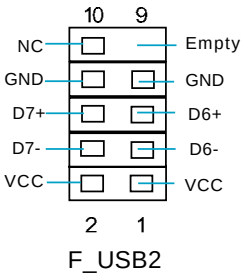


**USB Connectors: F_USB1, F_USB2**

Besides four USB ports on the rear panel, the series of motherboards also have two 10-pin connectors on board which may connect to front panel USB cable(optional) to provide additional four USB ports.

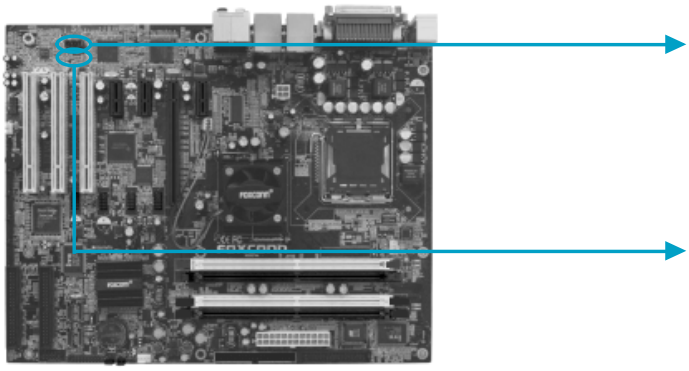


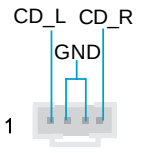


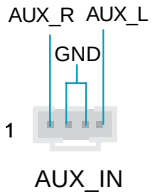




**Audio Connectors: CD_IN, AUX_IN (optional)**

CD_IN, AUX_IN are Sony standard CD audio connectors, they can be connected to a CD-ROM drive through a CD audio cable.

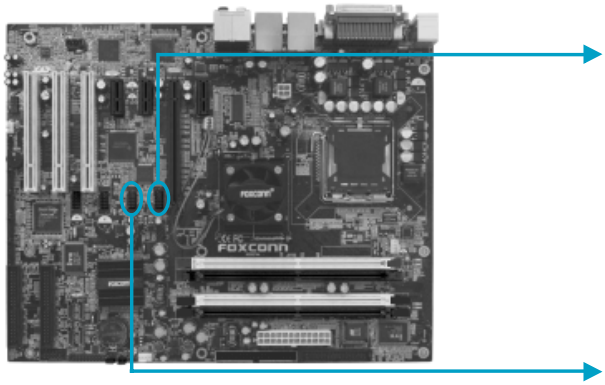


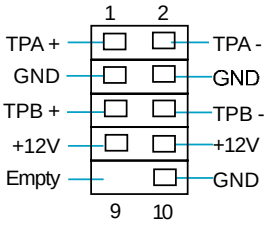


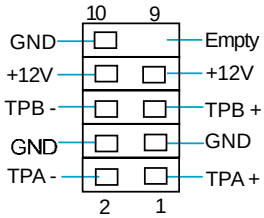
### 1394 Connectors: F_1394_1, F_1394_2 (optional)

The 1394 expansion cable can be connected to either the front (provided that the front panel of your chassis is equipped with the appropriate interface) or rear panel of the chassis.





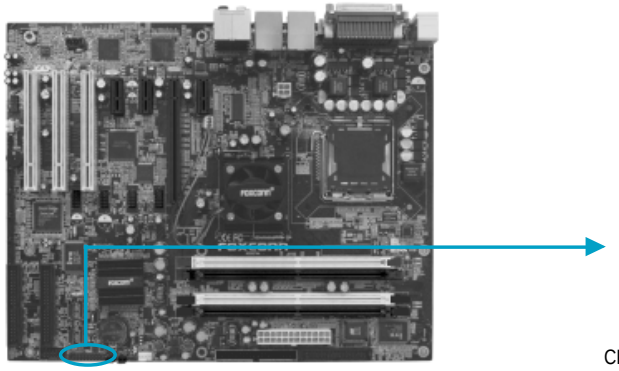

F_1394_1

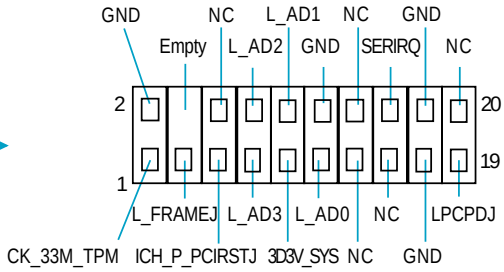



F_1394_2

### TPM Connector: TPM

The TPM (Trusted Platform Module ) provides the ability to the PC to run applications more secure and to make transactions and communication more trustworthy. To utilize this function, you should purchase additional devices and install the driver.

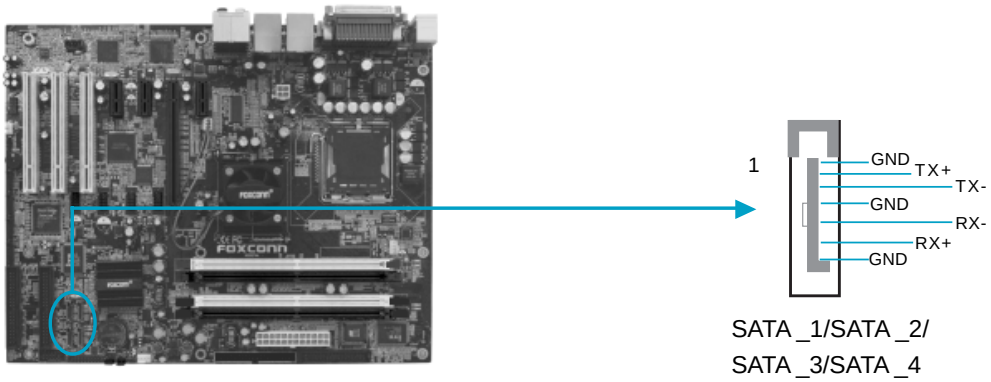





TPM

## Intel® ICH6R controlled S-ATA Connectors: SATA_1/2/3/4

The Serial ATA connector is used to connect the Serial ATA device to the motherboard. These connectors support the thin Serial ATA cables for primary internal storage devices. If you installed Serial ATA hard disk drives, you can create a RAID 0 or RAID 1 configuration with Intel® Matrix Storage Technology through the onboard Intel® ICH6R RAID controller. Refer to RAID manual on how to set up SATA RAID configurations for details.

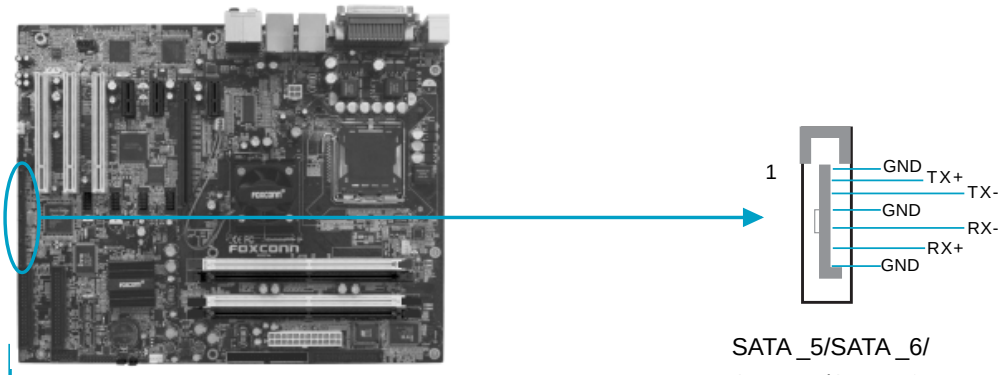



SATA _1/SATA _2/
SATA _3/SATA _4

## Silicon Image 3114 controlled S-ATA Connectors: SATA_5/6/7/8

These four Serial ATA connectors are controlled by Silicon Image 3114 controller, supporting up to four Serial ATA hard disk drives that you can configure a disk array through onboard SATA RAID controller. Refer to RAID manual on how to set up SATA RAID configurations for details.

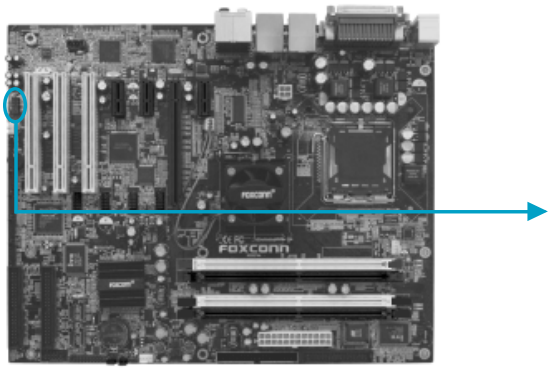
**Note: If you do not want to use RAID mode and just connect one hard disk drive to one of these connectors as boot/data drive, in order to use this hard disk drive, you need create Non-RAID with JBOD mode. Refer to RAID manual on how to set up SATA Non-RAID configurations with JBOD mode for details.**

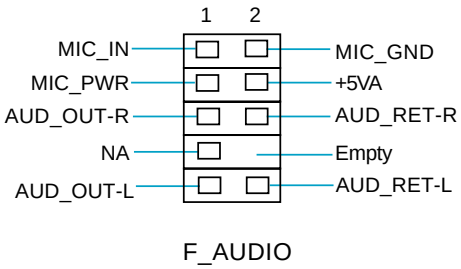



SATA _5/SATA _6/
SATA _7/SATA _8

**Front Audio Connector: F_AUDIO (for 6-channel)**

The audio interface provides two kinds of audio output choices: the Front Audio, the Rear Audio. Their priority is sequenced from high to low (Front Audio to Rear Audio). If headphones are plugged into the front panel of the chassis (using the Front Audio), then the Line-out (Rear Audio) on the rear panel will not work. If you do not want to use the Front Audio, pin 5 and 6, pin9 and 10 must be short, and then the signal will be sent to the rear audio port.

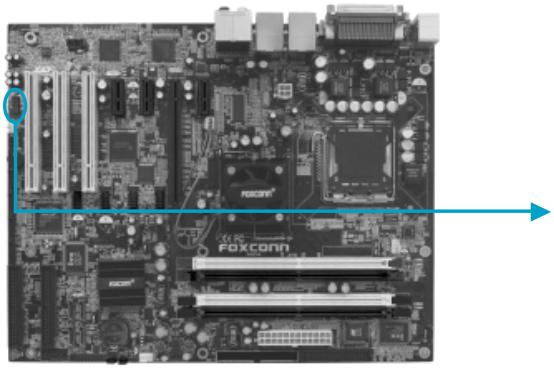


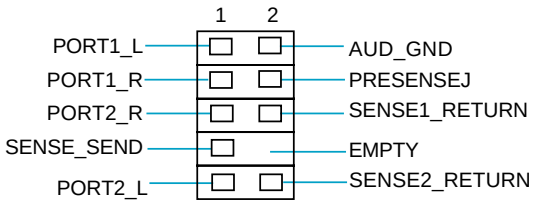



F_AUDIO

**Front Audio Connector: F_AUDIO (for 8-channel)**

The audio interface provides two kinds of audio output choices: the Front Audio, the Rear Audio. Their priority is the same. Front Audio supports re-tasking function.

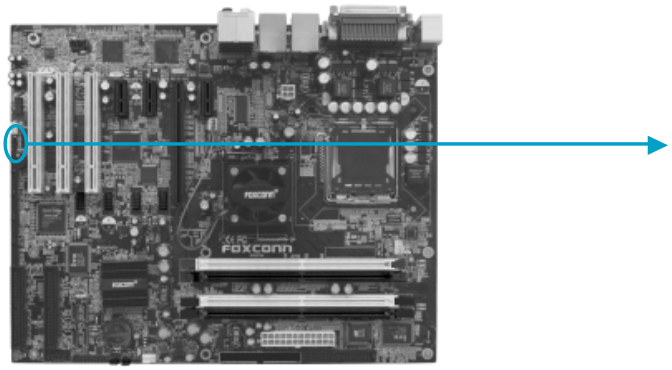


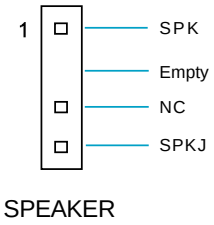



F_AUDIO

### Speaker Connector: SPEAKER

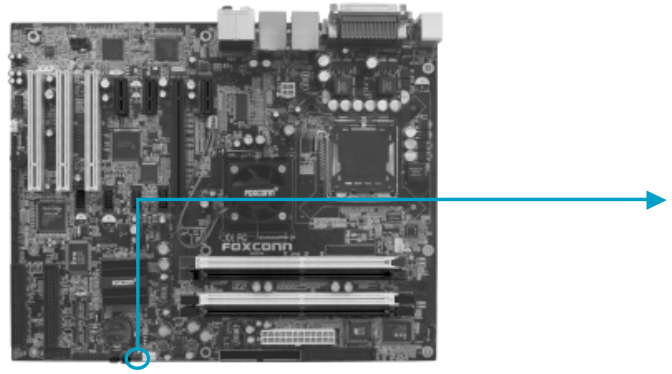
The speaker connector is used to connect speaker of the chassis.

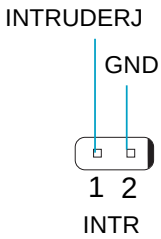





### Chassis Intruder Connector: INTR

The connector connects to the chassis security switch on the case. The system can detect the chassis intrusion through the status of this connector. If the connector has been closed once, the system will send a message. To utilize this function, set “Case Open Warning” to “Enabled” in the “PC Health Status” section of the CMOS Setup. Save and exit, then boot the operating system once to make sure this function takes effect.



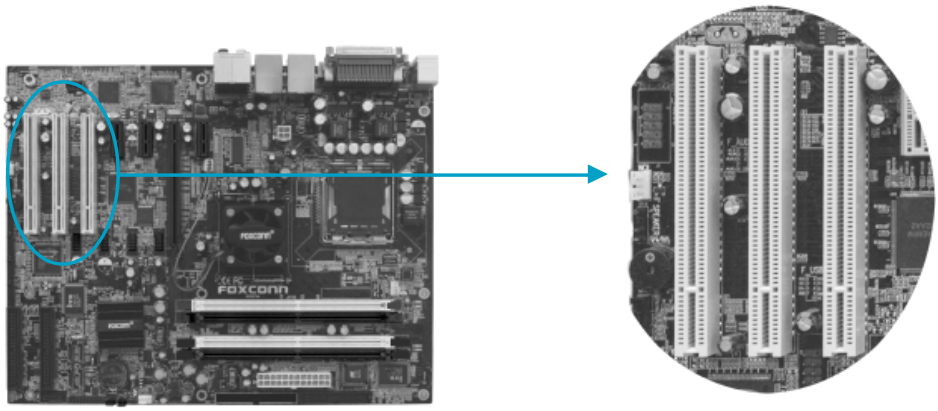


## Expansion Slots

This motherboard includes three 32-bit Master PCI bus slots, three PCI Express x1 slots, and one PCI Express x16 slot.

### PCI Slots

The expansion card can be installed in the PCI slot. When you install or take out such card, you must make sure that the power plug has been pulled out. Please read carefully the instructions provided for such card, and install and set the necessary hardware and software for such card, such as the jumper or BIOS setup.



PCI slots

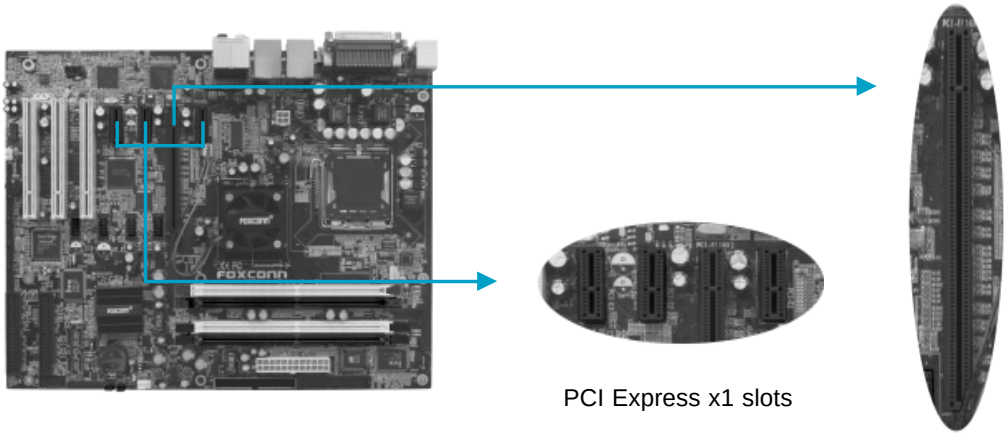
**PCI Express Slots**

PCI Express will offer the following design advantages over the PCI and AGP interface:

-Compatible with existing PCI drivers and software and Operating Systems.
-High Bandwidth per Pin. Low overhead. Low latency.
-PCI Express supports a raw bit-rate of 2.5 Gb/s on the data pins. This results in a real bandwidth per pair of 250 MB/s.
-A point to point connection, allows each device to have a dedicated connection without sharing bandwidth.
-Ability to comprehend different data structure.
-Low power consumption and power management features.

PCI Express will take two forms, x16 and x1 PCI Express slots. Whereas the x16 slot is reserved for graphics/video cards, the x1 slots are designed to accommodate less bandwidth-intensive cards, such as a modem or LAN card.

The difference in bandwidth between the x16 and x1 slots are not able to be sure, with the x16 slot pushing 4GB/sec (8GB/sec concurrent) of bandwidth, and the x1 PCI Express slot offering 250MB/sec.



PCI Express x1 slots

PCI Express x16 slot

**Warning:**

If a performance graphics card was installed into x16 PCI Express slot, 2X12 pin power supply was strongly recommended since that card may draw 75W power.

**Installing an expansion card**

1. Before installing the expansion card, read the documentation that came with it and make the necessary hardware settings for the card.
2. Make sure to unplug the power cord before adding or removing expansion cards.
3. Align the card connector with the slot and press firmly until the card is completely seated on the slot.
4. Secure the card to the chassis with the screw you removed earlier.

## Jumpers

The users can change the jumper settings on this motherboard if needed. This section explains how to use the various functions of this motherboard by changing the jumper settings. Users should read the following contents carefully prior to modifying any jumper settings.

### Description of Jumpers

1. For the jumpers on this motherboard, pin 1 can be identified by the silk-screen printed "△" next to it. However, in this manual, pin 1 is simply labeled as "1".
2. The following table provides some explanation of the jumper pin settings. User should refer to this when adjusting jumper settings.

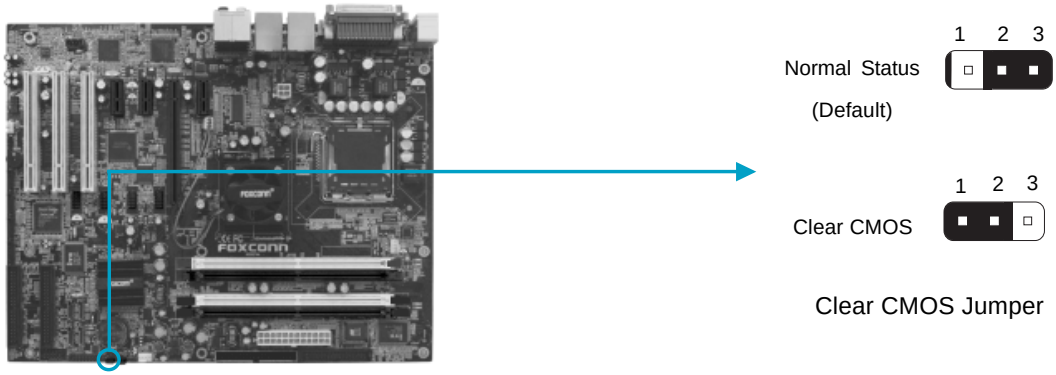
| Jumper | Diagram | Definition | Description |
|---|---|---|---|
|  |  | 1-2 | Set pin1 and pin2 closed |
| |  | 2-3 | Set pin2 and pin3 closed |
|  |  | Closed | Set the pin closed |
| |  | Open | Set the pin opened |

**Clear CMOS Jumper: JP5**

This motherboard uses the CMOS RAM to store all the set parameters. The CMOS can be cleared by removing the CMOS jumper.

How to clear CMOS?

1. Turn off the AC power supply and connect pins 1 and 2 together using the jumper cap.
2. Return the jumper setting to normal (pins 2 and 3 together with the jumper cap).
3. Turn the AC power supply back on.

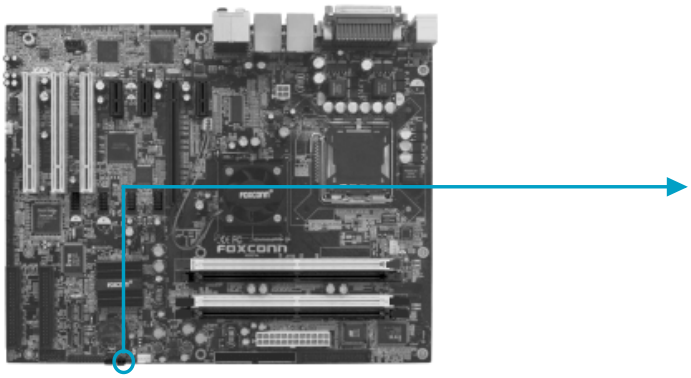


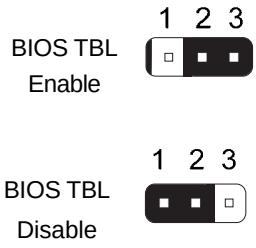

**Warning:**

1. Disconnect the power cable before adjusting the jumper settings.
2. Do not clear the CMOS while the system is turned on.

**BIOS TBL Jumper: JP4**

The system cannot boot, if the BIOS failed to be flashed in conventional flash BIOS process. You will have no such worry when using the BIOS TBL function, which is used to protect BIOS “Top Boot Block”. By using this function, the system still can boot even if the flash BIOS fails and show some information to recover the BIOS. To utilize this function, you just short pin 2 and 3 with the jumper cap.






**BIOS TBL Jumper**

## Starting up for the first time

1. After making all the connections, replace the system case cover.
2. Be sure that all switches are off.
3. Turn on the devices in the following order.
   a. Monitor
   b. External SCSI devices (starting with the last device on the chain)
   c. System power
4. After applying power LED on the system, front panel case lights up. For ATX power supplies, the system LED lights up when you press the ATX power switch. If your monitor complies with green standards or if it has a power standby feature, the monitor LED may light up or switch between orange and green after the system LED turns on. The system then runs the power-on tests. While the tests are running, the BIOS beeps or additional messages appear on the screen. If you do not see anything within 30 seconds from the time you turned on the power, the system may have failed a power-on test. Check the jumper settings and connections or call your retailer for assistance.
5. At power on, hold down <Delete> to enter BIOS Setup. Follow the instructions in Chapter 3.

## Powering off the computer

1. Using the OS shut down function

If you use windows 2000/XP, click the start button, click Shut Down, then click the OK button to shut down the computer. The power supply should turn off after Windows shuts down.

2.Using the dual function power switch

While the system is ON, pressing the power switch for less than 4 seconds puts the system to sleep mode or to soft-off mode, depending on the BIOS setting. Pressing the power switch for more than 4 seconds lets the system enter the soft-off mode regardless of the BIOS setting.

# Chapter 3

This chapter tells how to change system settings through the BIOS Setup menus. Detailed descriptions of the BIOS parameters are also provided.

You have to run the Setup Program when the following cases occur:

1. An error message appears on the screen during the system POST process.
2. You want to change the default CMOS settings.

This chapter includes the following information:

- Enter BIOS Setup
- Main Menu
- Standard CMOS Features
- BIOS Features
- Advanced BIOS Features
- Advanced Chipset Features
- Integrated Peripherals
- Power Management Setup
- PnP/PCI Configurations
- PC Health Status
- Load Fail-Safe Defaults
- Load Optimized Defaults
- Set Supervisor/User Password
- Save & Exit Setup
- Exit Without Saving

## Enter BIOS Setup

The BIOS is the communication bridge between hardware and software, correctly setting up the BIOS parameters is critical to maintain optimal system performance. Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press <Del> key to enter the AWARD BIOS CMOS Setup Utility.

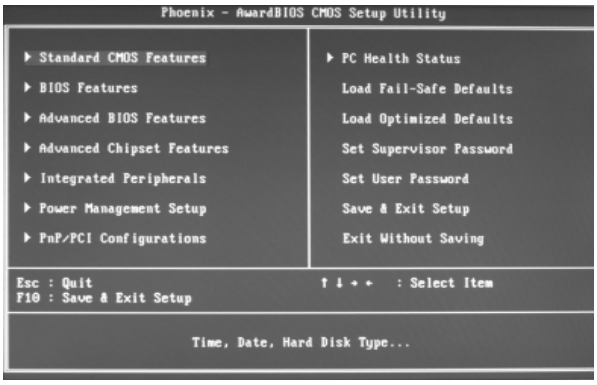
**Press TAB to show POST screen, DEL to enter SETUP.**

**Note:**

We do not suggest that you change the default parameters in the BIOS Setup, and we shall not be responsible for any damage that result from any changes that you make.

## Main Menu

The main menu allows you to select from the list of setup functions and two exit choices. Use the arrow keys to select among the items and press <Enter> to accept or go to the sub-menu.




Main Menu

The items in the main menu are explained below:

**Standard CMOS Features**

The basic system configuration can be set up through this menu.

**BIOS Features**

The special features can be set up through this menu.

**Advanced BIOS Features**
The advanced system features can be set up through this menu.

**Advanced Chipset Features**
The values for the chipset can be changed through this menu, and the system performance can be optimized.

**Integrated Peripherals**
Onboard peripherals can be set up through this menu.

**Power Management Setup**
All the items of Green function features can be set up through this menu.

**PnP/PCI Configurations**
The system's PnP/PCI settings and parameters can be modified through this menu.

**PC Health Status**
This will display the current status of your PC.

**Load Fail-Safe Defaults**
The fail-safe default BIOS settings can be loaded through this menu.

**Load Optimized Defaults**
The optimal performance settings can be loaded through this menu, however, the stable default values may be affected.

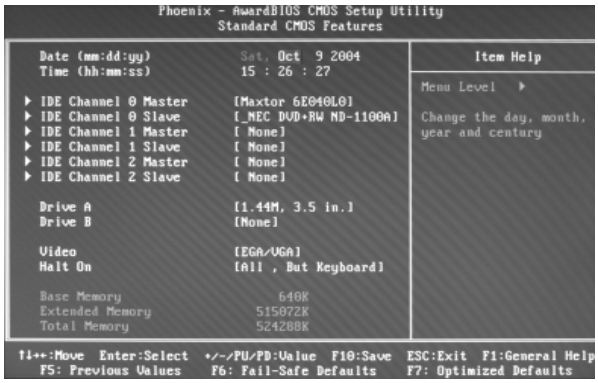
**Set Supervisor/User Password**
The supervisor/user password can be set up through this menu.

**Save & Exit Setup**
Save CMOS value settings to CMOS and exit setup.

**Exit Without Saving**
Abandon all CMOS value changes and exit setup.

## Standard CMOS Features

This sub-menu is used to set up the standard CMOS features, such as the date, time, HDD model and so on. Use the arrow keys to select the item and set up, and then use the <PgUp> or <PgDn> keys to choose the setting values.




Standard CMOS Features Menu

**Date**

This option allows you to set the desired date (usually as the current date) with the <day><month><date><year> format.

Day—weekday from Sun. to Sat., defined by BIOS (read-only).

Month—month from Jan. to Dec..

Date—date from 1st to 31st, can be changed using the keyboard.

Year—year, set up by users.

**Time**

This option allows you to set up the desired time (usually as the current time) with <hour><minute><second> format.

**IDE Channel 0/1/2 Master/Slave**

These categories identify the HDD types of 1 IDE channel installed in the computer system. There are three choices provided for the Enhanced IDE BIOS: None, Auto, and Manual. “None” means no HDD is installed or set; “Auto” means the system can auto-detect the hard disk when booting up; by choosing “Manual” and changing Access Mode to “CHS”, the related information should be entered manually. Enter the information directly from the keyboard and press < Enter>:

| | | | |
|---|---|---|---|
| Cylinder | number of cylinders | Head | number of heads |
| Precomp | write pre-compensation | Landing Zone | landing zone |
| Sector | number of sectors | | |

Award (Phoenix) BIOS can support 3 HDD modes: CHS, LBA and Large or Auto mode.

| | |
|---|---|
| CHS | For HDD<528MB |
| LBA | For HDD>528MB & supporting LBA (Logical Block Addressing) |
| Large | For HDD>528MB but not supporting LBA |
| Auto | Recommended mode |

**Drive A/B**

This option allows you to select the kind of FDD to be installed, including [None], [360K, 5.25 in], [1.2M, 5.25 in], [720K, 3.5 in], [1.44M, 3.5 in] and [2.88 M, 3.5 in].

**Video**

The following table is provided for your reference in setting the display mode for your system.

| | |
|---|---|
| EGA/VGA | Enhanced Graphics Adapter / Video Graphic Array. For EGA, VGA, SEGA, SVGA, or PGA monitor adapters. |
| CGA 40 | Color Graphic Adapter, powering up in 40 column mode. |
| CGA 80 | Color Graphic Adapter, powering up in 80 column mode. |
| MONO | Monochrome adapter, including high resolution monochrome adapters. |

**Halt On**

This category determines whether or not the computer will stop if an error is detected during powering up.

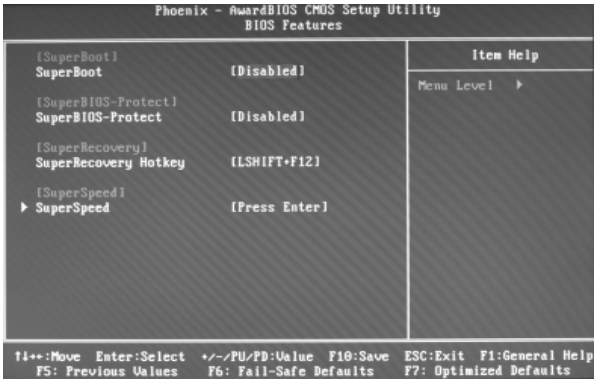
| | |
|---|---|
| All Errors | Whenever the BIOS detects a nonfatal error, the system will stop and you will be prompted. |
| No Errors | The system boot will not stop for any error that may be detected. |
| All, But Keyboard | The system boot will not stop for a keyboard error; but it will stop for all other errors. |
| All, But Diskette | The system boot will not stop for a diskette error; but it will stop for all other errors. |
| All, But Disk/Key | The system boot will not stop for a keyboard or disk error, but it will stop for all other errors. |

**Memory**

This is a Display-Only Category, determined by POST (Power On Self Test) of the BIOS.

| | |
|---|---|
| Base Memory | The BIOS POST will determine the amount of base (or conventional) memory installed in the system. |
| Extended Memory | The BIOS determines how much extended memory is present during the POST. |
| Total Memory | Total memory of the system. |

## BIOS Features




BIOS Features Menu

❖ **[SuperBoot] SuperBoot (Default: Disabled)**

SuperBoot allows system-relevant information to be stored in CMOS upon the first normal startup of your PC, and the relevant parameters will be restored to help the system start up more quickly on each subsequent startup. The available setting values are: Disabled and Enabled.

❖ **[SuperBIOS-Protect] SuperBIOS-Protect (Default: Disabled)**

SuperBIOS-Protect function protects your PC from viruses, e.g. CIH. The available setting values are: Disabled and Enabled.

❖ **[SuperRecovery] SuperRecovery Hotkey (Default: LSHIFT+F12)**

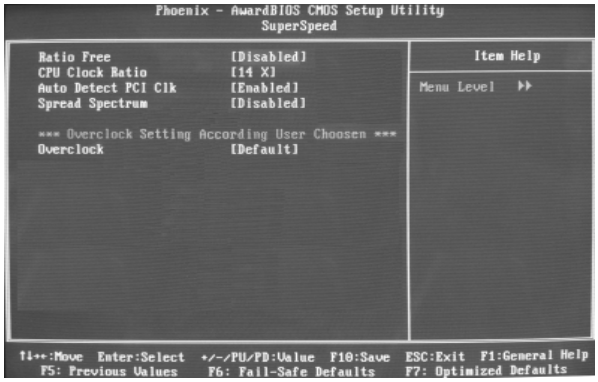
SuperRecovery provides the users with an excellent data protection and HDD recovery function. There are 12 optional hotkeys and the default hotkey is LSHIFT+F12.

❖ **[SuperSpeed] SuperSpeed**

Press <Enter> to set the items of SuperSpeed. Setting these items is good for overclock. Please refer to page 39.

**Warning:**

Be sure your selection is right. CPU overclock will be dangerous! We will not be responsible for any damage caused.




SuperSpeed Menu

❖**Ratio Free (Default: Disabled)**

This option is available only for CPU 3.4GHz and above. When using the CPU 3.4GHz above and enable this item, the value of **CPU Clock Ratio** will be fixed at 14X.

❖**CPU Clock Ratio (Default: Depend on CPU )**

This option is used to set the ratio of CPU.

❖**Auto Detect PCI Clk (Default: Enabled)**

This option is used to set whether the clock of an unused PCI slot will be disabled to reduce electromagnetic interference.

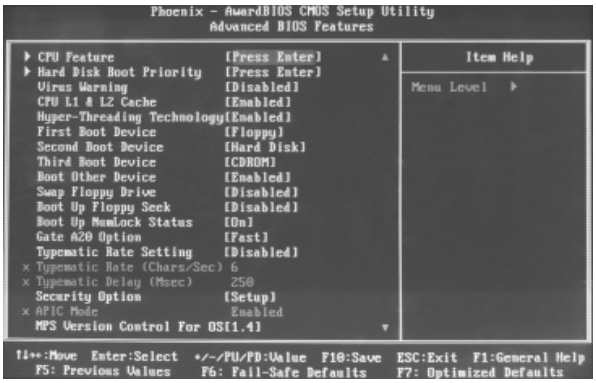
❖**Spread Spectrum (Default: Disabled)**

If you enable spread spectrum, it can significantly reduce the EMI (Electro-Magnetic Interference) generated by the system.

❖**OverClock (Default: Default)**

This option is used to set the items related to Overclock. The available options include: Manual, Optimal Reference and Default. When selecting manual, user can manually set the items about overclock, such as System Memory Frequency, CPU Clock, PCI Express Clock and so on. If user selects Optimal Reference, there are four options for choosing: L1, L2, L3 and L4 in **Super Level** item.

## Advanced BIOS Features




Advanced BIOS Features Menu

### ❖ CPU Feature

Press <Enter> to set the items of CPU feature. Please refer to page 43.

### ❖ Hard Disk Boot Priority

This option is used to select the priority for HDD startup. After pressing <Enter>, you can select the HDD using the <PageUp>/<PageDn> or Up/Down arrow keys, and change the HDD priority using <+> or <->; you can exit this menu by pressing <Esc>.

### ❖ Virus Warning (Default: Disabled)

Allows you to choose the VIRUS warning feature for IDE hard disk boot sector protection. If this function is enabled and someone attempts to write data into this area, BIOS will show a warning message on screen and an alarm will beep. The setting values are: Disabled and Enabled.

Note: Such function provides protection to the startup sector only; it does not protect the entire hard disk.

### ❖ CPU L1 & L2 Cache (Default: Enabled)

This option is used to turn on or off the CPU L1 and L2 cache. The available setting values are: Disabled and Enabled.

### ❖ Hyper-Threading Technology (Default: Enabled)

This option is used to turn on or off the Hyper-Threading function of the CPU. The available setting values are: Disabled and Enabled.

Note: This function will not be displayed until a CPU that supports Hyper-Threading has been installed.

❖**First/Second/Third Boot Device (Default: Floppy/Hard Disk/CDROM)**

This option allows you to set the boot device sequence. The available setting values are: Floppy, LS120, Hard Disk, CDROM, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, Network and Disabled.

❖**Boot Other Device (Default: Enabled)**

With this function set to Enabled, the system will boot from some other devices if the first/second/third boot devices failed. The available setting values are: Disabled and Enabled.

❖**Swap Floppy Drive (Default: Disabled)**

If you have two floppy diskette drives in your system, this item allows you to swap the assigned drive letters. The available setting values are: Disabled and Enabled.

❖**Boot Up Floppy Seek (Default: Disabled)**

This option controls whether the BIOS checks for a floppy drive while booting up. If it cannot detect one (either due to improper configuration or physical unavailability), it will appear an error message. Disable this option, POST will not detect the floppy. The available setting values are: Disabled and Enabled.

❖**Boot Up NumLock Status (Default: On)**

This item defines if the keyboard Num Lock key is active when your system is started. The available setting values are: On and Off.

❖**Gate A20 Option (Default: Fast)**

This option is used to set up the A20 signal control necessary for access to the 1MB memory. The available setting values are: Normal and Fast.

❖**Typematic Rate Setting (Default: Disabled)**

If this item is enabled, you can use the following two items to see the typematic rate and the typematic delay settings for your keyboard. The available setting values are: Disabled and Enabled.

❖**Typematic Rate (Chars/Sec) (Default: 6)**

Use this item to define how many characters per second a held-down key generated.

❖**Typematic Delay (Msec) (Default: 250)**

Use this item to define how many milliseconds must elapse before a held-down key begins generating repeat characters.

❖**Security Option (Default: Setup)**

When it is set to “Setup”, a password is required to enter the CMOS Setup screen; When it is set to “System”, a password is required not only to enter CMOS Setup, but also to startup your PC.

❖**APIC Mode (Default: Enabled)**

This option is used to enable or disable APIC function. The available setting values are: Disabled and Enabled.

❖**MPS Version Control For OS (Default: 1.4)**

This option is used to set up the version of MPS Table used in NT4.0 OS.

❖**OS Select For DRAM > 64MB (Default: Non-OS2)**

This item is only required if you have installed more than 64 MB of memory and you are running the OS/2 operating system. Otherwise, leave this item at the default.

❖**Report No FDD For WIN 95 (Default: No)**

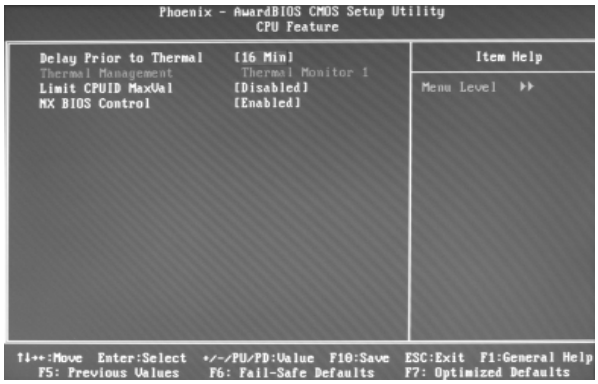
If you are using the Windows 95 and running a system with no floppy drive, select “Yes” for this item to ensure compatibility with Windows 95 logo certification. The available setting values are: No and Yes.

❖**Full Screen LOGO Show (Default: Enabled)**

This item allows you to enable or disable full screen logo. The available setting values are: Disabled and Enabled.

❖**Small Logo (EPA) Show (Default: Disabled)**

This item allows you to enable or disable the EPA logo. The available setting values are: Disabled and Enabled.




CPU Feature Menu

❖ **Delay Prior to Thermal (Default: 16Min)**

This option is used to set the delay time before the CPU enters auto thermal mode. The setting values are: 4 Min, 8 Min, 16 Min, 32 Min.

❖ **Thermal Management (Default: Thermal Monitor 1)**

This option is used to manage Prescott CPU thermal.

Note: Below two items need your CPU support.

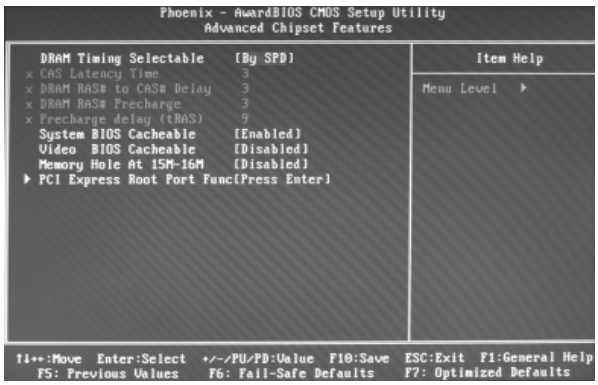
❖ **Limit CPUID MaxVal (Default: Disabled)**

The option is used to set limit CPUID MaxVal. The available setting values are: Disabled and Enabled. Set Limit CPUID MaxVal to 3, should be "Disabled" for WinXp.

❖ **NX BIOS Control (Default: Enabled)**

When disabled, forces the NX feature flag to always return 0. The available setting values are: Disabled and Enabled.

## Advanced Chipset Features




Advanced Chipset Features Menu

❖ **DRAM Timing Selectable (Default: By SPD)**

This item determines DRAM clock/ timing using SPD or manual configuration. The available setting values are: By SPD and Manual.

❖ **CAS Latency Time (Default: depend on memory)**

This item determines CAS Latency. The available setting values are: 5, 4, 3 and Auto.

❖ **DRAM RAS# to CAS# Delay (Default: depend on memory)**

This item allows you to select a delay time between the CAS and RAS strobe signals. The available setting values are: 5, 4, 3, 2, and Auto.

❖ **DRAM RAS# Precharge (Default: depend on memory)**

This item allows you to select the DRAM RAS# precharge time. The available setting values are: 5, 4, 3, 2, and Auto.

❖ **Precharge delay(tRAS) (Default: depend on memory)**

This item allows you to set the precharge delay time. The available setting values are: Auto, 4 - 15.

❖ **System BIOS Cacheable (Default: Enabled)**

Select “Enabled” to allow caching of the system BIOS which may improve performance. If any other program writes to this memory area, a system error may result. The available setting values are: Enabled and Disabled.

❖ **Video BIOS Cacheable (Default: Disabled)**

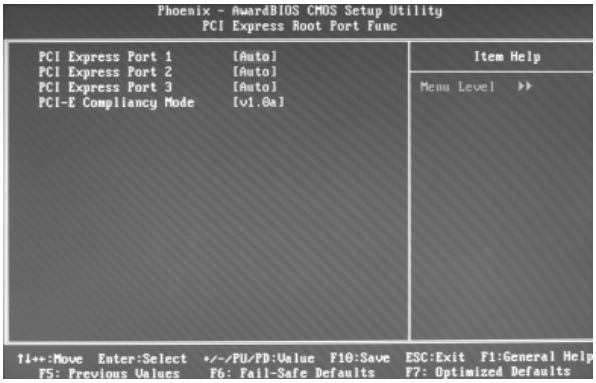
Select “Enabled” to allow caching of the Video BIOS which may improve performance. If any other program writes to this memory area, a system error may result. The available setting values are: Enabled and Disabled.

❖**Memory Hole At 15M-16M (Default: Disabled)**

This option is used to determine whether the 15M-16M address field of memory is reserved for the ISA expansion card. The available setting values are: Enabled and Disabled.

❖**PCI Express Root Port Func**

Press <Enter> to set the items of PCI Express root port function. Please refer to page 46.




PCI Express Root Port Func Menu

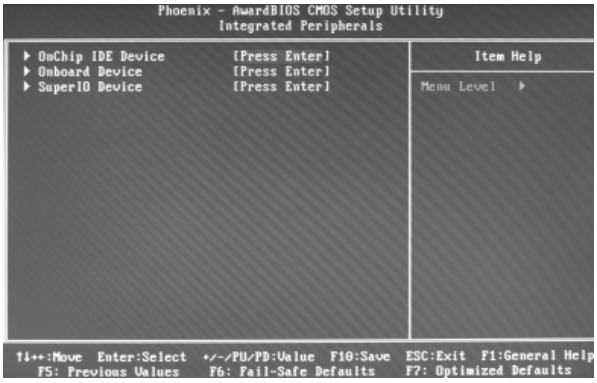
❖**PCI Express Port 1/ 2/ 3 (Default: Auto)**

This option is used to enable or disable PCI Express port 1/2/3. The available setting values are: Auto, Enabled, Disabled.

❖**PCI-E Compliancy Mode (Default: v1.0a)**

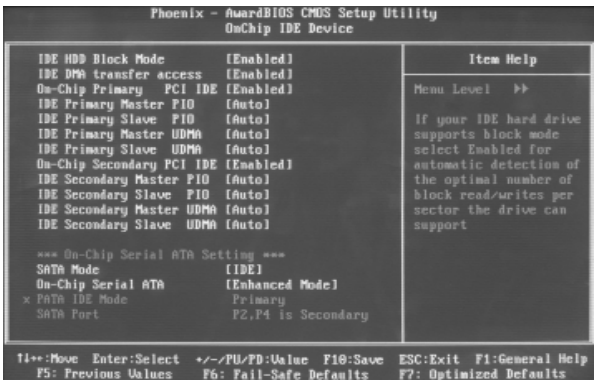
This option is used to select the PCI Express compliancy mode version. The available setting values are: v1.0a, v1.0.

## Integrated Peripherals




Integrated Peripherals Menu

Use the arrow keys to select your options; press the <Enter> key to enter the setup sub-menu. The options and setting methods are discussed below:




Onchip IDE Device Menu

❖ **IDE HDD Block Mode (Default: Enabled)**

This option is used to set whether the IDE HDD block mode is allowed. The available setting values are: Disabled and Enabled.

❖ **IDE DMA transfer access (Default: Enabled)**

This option is used to set the IDE transfer access—with it set to Enabled, the IDE Transfer Access uses the DMA mode; with it set to Disabled, the IDE Transfer Access uses the PIO mode.

❖ **On-Chip Primary PCI IDE (Default: Enabled)**

Use this item to enable or disable the Primary PCI IDE channel that is integrated on the motherboard.

❖**IDE Primary/Secondary Master/Slave PIO (Default: Auto)**

These four items let you assign which kind of PIO (Programmed Input/Output) is used by IDE devices. Choose Auto to let the system auto detect which PIO mode is best or select a PIO mode from 0-4.

❖**IDE Primary/Secondary Master/Slave UDMA (Default: Auto)**

Ultra DMA technology provides faster access to IDE devices. If you install a device that supports Ultra DMA, change the appropriate item on this list to Auto. The available setting values are: Disabled and Auto.

❖**On-chip Secondary PCI IDE (Default: Enabled)**

Use this item to enable or disable the Secondary PCI IDE channel that is integrated on the motherboard.

❖**SATA Mode (Default: IDE)**

This option is used to set the Serial ATA Mode. If you want to use RAID function, make sure that SATA Enhanced Mode is selected in On-Chip Serial ATA option and set this item with “RAID” value.

❖**On-Chip Serial ATA (Default: Enhanced Mode)**

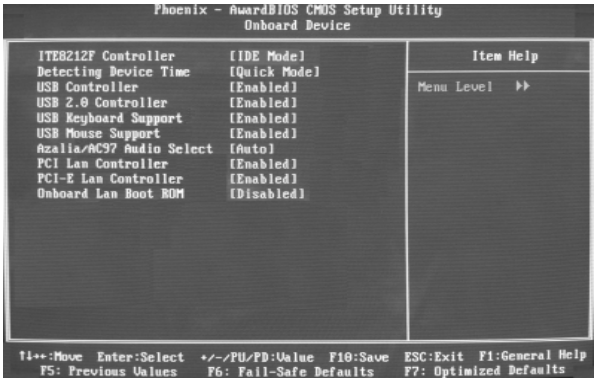
This option is used to set the On-chip Serial ATA function. When it is set to Disabled, the function will be disabled; with it set to Combined Mode, two HDDs at most will be supported; with it set to Enhanced Mode, six HDDs at most will be supported (for those under Windows 2000 and Windows XP only); with it set to SATA Only, only the S-ATA HDD can be used.

❖**PATA IDE Mode (Default: Primary)**

When On-Chip Serial ATA set as “Combined Mode”, this option will be modified. It is used to set the PATA IDE Mode. The available setting values are: Primary, Secondary.

❖**SATA Port (Default: P2, P4 is Secondary)**

When **On-Chip Serial ATA** is set to Combined Mode, this item will show the SATA Port is primary or secondary and relevant Port number.




Onboard Device Menu

❖ **ITE8212F Controller (Default: IDE Mode)**

This option is used to set the operating mode of ITE8212F Controller. The available setting values are: IDE Mode and Raid Mode.

❖ **Detecting Device Time (Default: Quick Mode)**

This option is used to set the time the ITE8212F IDE RAID controller detects devices connected to the IDE RAID connectors. This option is available when **ITE8212F Controller** is set to IDE Mode. The available setting values are: Quick Mode and Standard Mode.

❖ **USB Controller (Default: Enabled)**

This option is used to set whether the USB Controller is enabled. The available setting values are: Disabled and Enabled.

❖ **USB 2.0 Controller (Default: Enabled)**

This option is used to set whether the USB 2.0 Controller is enabled. The available setting values are: Disabled and Enabled.

❖ **USB Keyboard Support (Default: Enabled)**

This option is used to set whether the USB keyboard controller is enabled in a legacy operating system (such as DOS). The available setting values are: Disabled and Enabled.

❖ **USB Mouse Support (Default: Enabled)**

This option is used to set whether the USB mouse controller is enabled in a legacy operating system (such as DOS). The available setting values are: Disabled and Enabled.

❖**Azalia/AC97 Audio Select (Default: Auto)**

This option is used to set whether onboard Azalia/AC97 Audio is enabled. The available setting values are: Disabled and Auto.

❖**PCI Lan Controller (Default: Enabled)**

This option is used to set whether the PCI LAN controller is enabled. The available setting values are: Disabled and Enabled.

❖**PCI-E Lan Controller (Default: Enabled)**

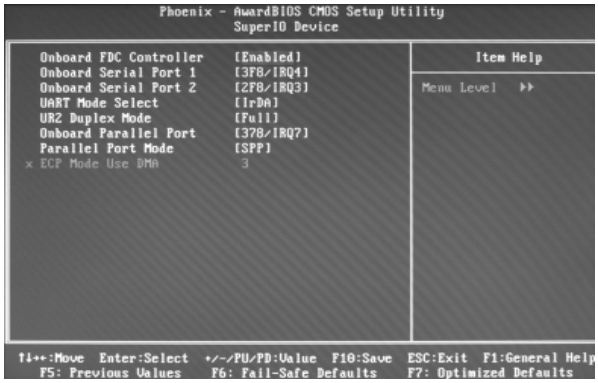
This option is used to set whether the PCI Express LAN controller is enabled. The available setting values are: Disabled and Enabled.

❖**Onboard Lan Boot ROM (Default: Disabled)**

This option is used to decide whether to invoke the boot ROM of the onboard LAN chip. The available setting values are: Disabled and Enabled.

**PXE Function:**

Enabling **Onboard Lan Boot ROM** and setting one of **First/Second/Third Boot Device** in **Advanced BIOS Features** as “Network” will implement PXE function. When entering BIOS Setup second time, system will add a new item “Network Boot Priority” in “Advanced BIOS Feature” and it can be used to adjust onboard LAN boot sequence.




SuperIO Device Menu

❖ **Onboard FDC Controller (Default: Enabled)**

This option is used to set whether the onboard FDC controller is enabled. The available setting values are: Disabled and Enabled.

❖ **Onboard Serial Port 1/2 (Default: 3F8/IRQ4 / 2F8/IRQ3)**

This option is used to assign the I/O address and interrupt request (IRQ) for the onboard serial port 1/2.

❖ **UART Mode Select (Default: IrDA)**

Use this option to select the UART mode. Setting values include Normal, IrDA, ASKIR. The setting value is determined by the infrared module installed on the board.

❖ **UR2 Duplex Mode (Default: Full)**

This option is available when **UART Mode Select** is set to either ASKIR or IrDA. This item enables you to determine the infrared function of the onboard infrared chip.

❖ **Onboard Parallel Port (Default: 378/IRQ7)**

This item allows you to determine onboard parallel port controller I/O address and interrupt request (IRQ). Setting values include Disabled, 378/IRQ7, 278/IRQ5, and 3BC/IRQ7.

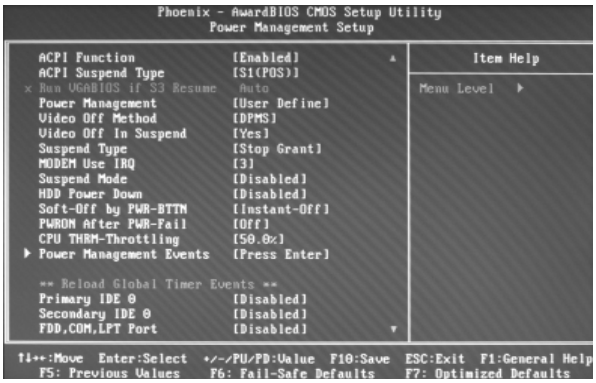
❖ **Parallel Port Mode (Default: SPP)**

This item is used to assign data transport protocols of parallel port. The available options: SPP, EPP, ECP, ECP+EPP and Normal. Normal mode supports data output only; ECP and EPP mode support data input and output in bidirectional mode, but they just fit known ECP and EPP devices.

❖ **ECP Mode Use DMA (Default: 3)**

Select a DMA Channel for the parallel port when using the ECP mode. This field is configured only if Parallel Port Mode is set to ECP. The available setting values are: 3 and 1.

## Power Management Setup




Power Management Setup Menu

❖ **ACPI Function (Default: Enabled)**

ACPI stands for “Advanced Configuration and Power Interface”. ACPI is a standard that defines power and configuration management interfaces between an operating system and the BIOS. In other words, it is a standard that describes how computer components work together to manage system hardware. In order to use this function the ACPI specification must be supported by the OS (for example, Windows2000 or WindowsXP). The available setting values are: Enabled and Disabled.

❖ **ACPI Suspend Type (Default: S1 (POS))**

This option is used to set the energy saving mode of the ACPI function. When you select “S1 (POS)” mode, the power will not shut off and the power supply status will remain as it is. In S1 mode the computer can be resumed at any time. When you select “S3 (STR)” mode, the power will be cut off after a delay period. The status of the computer before it enters STR will be saved in memory, and the computer can quickly return to previous status when the STR function wakes. When you select “S1 & S3” mode, the system will automatically select the delay time.

❖ **Run VGABIOS if S3 Resume (Default: Auto)**

This option allows the system to initialize the VGABIOS from S3 (Suspend to RAM) sleep state when you select “S3 (STR)” mode in the above option. The available setting values are: Auto, Yes and No.

❖ **Power Management (Default: User Define)**

This option is used to set the power management scheme. Available setting values are: User Define, Min Saving, and Max Saving.

❖**Video Off Method (Default: DPMS)**

This option is used to define the video off method. “Blank Screen” mode means that after the computer enters power saving mode, only the monitor will close, however, the vertical and horizontal scanning movement of the screen continues. When you select the “V/H SYNC + Blank” mode the vertical and horizontal scanning movement of screen stops when the computer enters power saving mode. “DPMS” mode is a new screen power management system, and it needs to be supported by the monitor you’re using.

❖**Video Off In Suspend (Default: Yes)**

This option is used to determine whether the video is turned off when the system enters sleep mode. The setting values are: No and Yes.

❖**Suspend Type (Default: Stop Grant)**

This option is used to set sleep mode. The setting values are Stop Grant (saves the status of the whole system and then turns off power), and PwrOn Suspend (CPU and core system go to low power mode, keeps power supply).

❖**MODEM Use IRQ (Default: 3)**

This option is used to set the IRQ in which the modem can use. The system will automatically wake up when the modem receives an incoming call.

❖**Suspend Mode (Default: Disabled)**

This option is used to set the idle time before the system enters into sleep status. The setting values are Disabled and 1 Min-1 hour.

❖**HDD Power Down (Default: Disabled)**

This option is used to turn off hard disk power if the hard disk is idle for a given period of time. The setting values are Disabled and 1 Min-15 Min.

❖**Soft-Off by PWR-BTTN (Default: Instant-Off)**

This option is used to set the power down method. This function is only valid for systems using an ATX power supply.

When “Instant-Off” is selected, press the power switch to immediately turn off power. When “Delay 4 Sec.” is selected, press and hold the power button for four seconds to turn off power.

❖**PWRON After PWR-Fail (Default: Off)**

This option is used to set what action the PC will take with the power supply when it resumes after a sudden power failure. The available options are: Off (remain in turn off status), On (auto power on) and Former-Sts (resume with the previ-ous status).

❖ **CPU THRM-Throttling (Default: 50.0%)**

This option is used to specify the CPU speed (at percentage) to slow down the CPU when it reaches the predetermined overheat temperature. The setting values are 75.0%, 50.0%, 25.0%.

❖ **Power Management Events**

Press <Enter> to set the items of power management events. Please refer to page 55.

❖ **Primary/Secondary IDE 0 (Default: Disabled)**

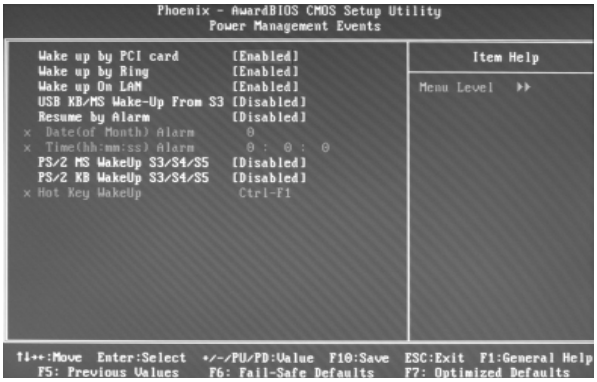
When these items are enabled, the system will restart the power saving timeout counters when any activity is detected on any of the drives or devices on the primary or secondary IDE channels. The setting values are Disabled and Enabled.

❖ **FDD, COM, LPT Port (Default: Disabled)**

when this item is enabled, the system will restart the power saving timeout counters when any activity is detected on the floppy disk drive, serial port, or the parallel port.

❖ **PCI PIRQ[A-D]# (Default: Disabled)**

When this option is disabled, any PCI device set as the Master will not power on the system.




Power Management Events Menu

❖**Wake up by PCI card (Default: Enabled)**

This option is used to set the system to wake up by PCI card. The setting values are: Disabled and Enabled.

❖**Wake up by Ring (Default: Enabled)**

If this item is enabled, it allows the system to resume from a software power down or power saving mode whenever there is an incoming call to an installed fax. This function needs to be supported by the relevant hardware and software. The setting values are: Disabled and Enabled.

❖ **Wake up On LAN (Default: Enabled)**

This option is used to set the system to wake up onboard Lan 5788. The setting values are: Disabled and Enabled.

❖**USB KB/MS Wake-Up From S3 (Default: Disabled)**

This option is used to set the system to wake up by USB equipment when it is in S3 (Suspend to RAM) mode. The setting values are: Disabled and Enabled.

❖**Resume by Alarm (Default: Disabled)**

This option is used to set the timing of the startup function. In order to use this function, the PC power source must not be turned off. The setting values are: Disabled and Enabled.

❖**Date (of Month) Alarm**

When the Resume by Alarm set as “Enabled”, this option will be modified. It is used to set the timing for the startup date. The setting values contain 0 - 31.

❖**Time (hh:mm:ss) Alarm**

When the Resume by Alarm set as “Enabled”, this option will be modified. It is used to set the timing for the startup time. The setting values contain hh:0 – 23; mm:0 – 59; ss:0 – 59.

❖ **PS/2 MS WakeUp S3/S4/S5 (Default: Disabled)**

This option is used to set the wake up by PS/2 mouse. The setting values are: Disabled, Any Actions, Double Click.

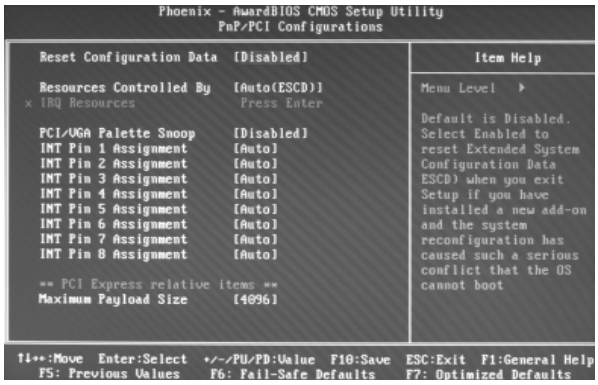
❖ **PS/2 KB WakeUp S3/S4/S5 (Default: Disabled)**

This option is used to set the wake up by PS/2 keyboard. The setting values are: Disabled, Hot KEY, Any KEY, Keyboard 98.

❖ **Hot Key WakeUp (Default: Ctrl-F1)**

When the PS/2 KB Wake Up S3/S4/S5 set as Hot KEY, use this item to set the hot key combination that awakes the system. The available setting values are: Ctrl+F1-F12.

## PnP/PCI Configurations




PnP/PCI Configurations Menu

❖ **Reset Configuration Data (Default: Disabled)**

This option is used to set whether the system is permitted to automatically distribute IRQ DMA and I/O addresses when each time the machine is turned on. The setting values are: Disabled and Enabled.

❖ **Resources Controlled By (Default: Auto (ESCD))**

This option is used to define the system resource control scheme. If all cards you use support PnP, then select Auto (ESCD) and the BIOS will automatically distribute interruption resources. If the ISA cards you installed not supporting PnP, you will need to select “Manual” and manually adjust interruption resources in the event of hardware conflicts. However, since this motherboard has no ISA slot, this option does not apply.

❖ **IRQ Resources**

When the Resources Controlled By set as “Manual”, this option will be modified. Press the <Enter> key, then manually set IRQ resources.

❖ **PCI/VGA Palette Snoop (Default: Disabled)**

If you use a nonstandard VGA card, use this option to solve graphic acceleration card or MPEG audio card problems (e.g., colors not accurately displayed). The setting values are Disabled and Enabled.

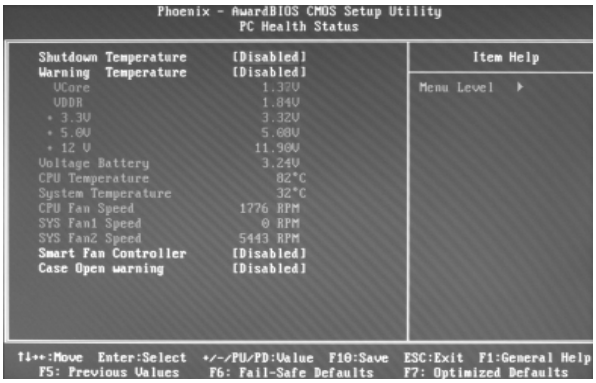
❖ **INT Pin 1-8 Assignment (Default: Auto)**

This option is used to name the interrupt request (IRQ) line assigned to a device connected to the PCI interface on your system.

❖ **Maximum Payload Size (Default: 4096)**

This option is used to set maximum TLP payload size for PCI Express devices. The unit is byte. The available setting values are: 128, 256, 512, 1024, 2048, 4096.

## PC Health Status




PC Health Status Menu

❖ **Shutdown Temperature (Default: Disabled)**

This option is used to set the system temperature upper limit. When the temperature exceeds the setting value, the motherboard will automatically cut off power to the computer. The setting values are: Disabled and 60°C/140°F, 65°C/149°F, 70°C/158°F, 75°C/167°F.

❖ **Warning Temperature (Default: Disabled)**

This option is used to set the warning temperature for the system. When the temperature of CPU is higher than setting value, the motherboard will send off warning information. The setting values are: Disabled and 50°C/122°F, 53°C/127°F, 56°C/133°F, 60°C/140°F, 63°C/145°F, 66°C/151°F, 70°C/158°F,.

❖ **VCore/VDDR/+3.3 V/+5.0V/+12 V**

The current voltages will be automatically detected by the system.

❖ **Voltage Battery (optional)**

This option is used to show the voltage of battery.

❖ **CPU Temperature**

The current CPU temperature will be automatically detected by the system.

❖ **System Temperature**

The current system temperature will be automatically detected by the system.

❖ **CPU Fan Speed**

The current speed of the CPU fan will be automatically detected by the system.

❖ **SYS Fan1 Speed**

The current speed of the system fan1 will be automatically detected by the system.

❖ **SYS Fan2 Speed**

The current speed of the system fan2 will be automatically detected by the system.

❖ **Smart Fan Controller (optional) (Default: Disabled)**

This option is used to enable or disable smart fan function. The setting values are: Disabled and Enabled.

❖ **Case Open warning (Default: Disabled)**

This option is used to enable or disable case open warning function. The setting values are: Disabled and Enabled.

## Load Fail-Safe Defaults

Press <Enter> to select this option. A dialogue box will pop up that allows you to load the default BIOS settings. Select <Y> and then press <Enter> to load the defaults. Select <N> and press <Enter> to exit without loading. The defaults set by BIOS set the basic system functions in order to ensure system stability. But if your computer cannot POST properly, you should load the fail-safe defaults to restore the original settings. Then carry out failure testing. If you only want to load the defaults for a single option, you can select the desired option and press the <F6> key.

## Load Optimized Defaults

Select this option and press <Enter>, and a dialogue box will pop up to let you load the optimized BIOS default settings. Select <Y> and then press <Enter> to load the optimized defaults. Select <N> and press <Enter> to exit without loading. The defaults set by BIOS are the optimized performance parameters for the system, to improve the performance of your system components. However, if the optimized performance parameters are not supported by your hardware devices, it will likely cause system reliability and stability issues. If you only want to load the optimized default for a single option, select the desired option and press the <F7> key.

## Set Supervisor/User Password

The access rights and permissions associated with the Supervisor password are higher than those of a regular User password. The Supervisor password can be used to start the system or modify the CMOS settings. The User password can also start the system. While the User password can be used to view the current CMOS settings, these settings cannot be modified using the User password. When you select the Set Supervisor/User Password option, the following message will appear in the center of the screen, which will help you to set the password:

**Enter Password:**

Enter your password, not exceeding 8 characters, then press <Enter>. The password you enter will replace any previous password. When prompted, key in the new password and press <Enter>.

If you do not want to set a password, just press <Enter> when prompted to enter a password, and in the screen the following message will appear. If no password is keyed in, any user can enter the system and view/modify the CMOS settings.

**PASSWORD DISABLED!!!**
**Press any key to continue …**

Under the menu “Advanced BIOS Features Setup”, if you select “System” from the Security Option, you will be prompted to enter a password once the system is started or whenever you want to enter the CMOS setting program. If the incorrect password is entered, you will not be permitted to continue.
Under the menu “Advanced BIOS Features Setup”, if you select “Setup” from the Security Option, you will be prompted to enter a password only when you enter the CMOS setting program.

## Save & Exit Setup

When you select this option and press <Enter>, the following message will appear in the center of the screen:

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

Press <Y> to save your changes in CMOS and exit the program; press <N> or <ESC> to return to the main menu.

## Exit Without Saving

If you select this option and press <Enter>, the following message will appear in the center of the screen:

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

Press <Y> to exit CMOS without saving your modifications; press <N> or <ESC> to return to the main menu.

# Chapter 4

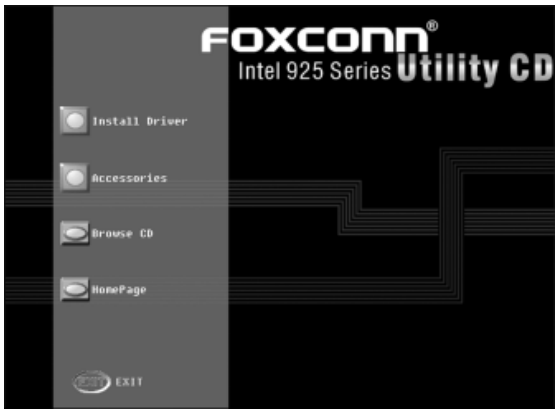
The utility CD that came with the motherboard contains useful software and several utility drivers that enhance the motherboard features.

This chapter includes the following information:

- Utility CD content
- Start to install drivers
  - Install Chipset Software
  - Install IAA RAID
  - Install DirectX 9.0b
  - Install Audio Driver (optional)
  - Install LAN Driver
  - Install IDE RAID
  - Install Silicon Image RAID Driver
  - Install 1394B Driver
- Install SuperUtility
- Install Adobe Reader
- Install Norton Internet Security

## Utility CD content

This motherboard comes with one Utility CD. To begin using the CD, simply insert the CD into your CD-ROM drive. The CD will automatically displays the main menu screen.




**1. Install Drivers**

Using this choice, you can install all the drivers for your motherboard. You should install the drivers in order, and you need to restart your computer after all the drivers installed.

A. Chipset Software
B. IAA RAID
C. DirectX 9.0b
D. Audio Driver (optional)
E. LAN Driver
F. IDE RAID
G. Silicon Image RAID Driver
H. 1394B Driver

**2. Accessories**

Use this option to install additional software programs.

A. SuperUtility
B. Adobe Reader
C. Norton Internet Security

**3. Browse CD**

Click here to browse CD content.

**4. Homepage**

Click here to visit Foxconn motherboard homepage.

**Note:**

1. Install the latest patch first if your OS is Windows XP or Windows 2000.
2. Follow the CD screen order to install your motherboard drivers.

## Start to install drivers

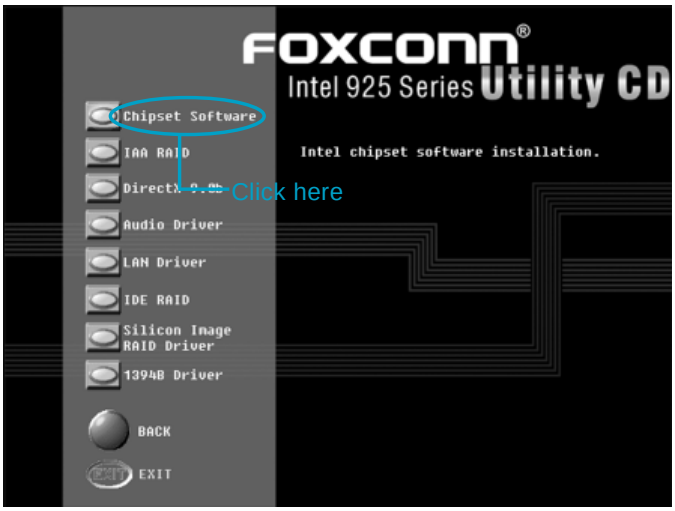
Select <Install Driver>, and click to enter the install driver screen. You can select the driver that you want to install and begin the setup steps.

**Note:**

The following setup steps are based on Windows XP environment. There may be some differences with other operating systems.

### Install Chipset Software

Click <Install Driver> from the main menu and enter the install driver menu. Click <Chipset Software> to start the installation.



**Install IAA RAID**

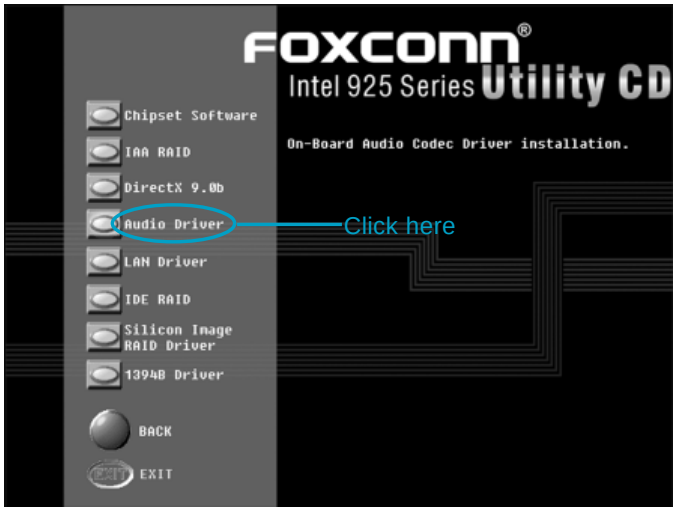
Click <Install Driver> from the main menu and enter the install driver menu. Click <IAA RAID> to open the IAA RAID setup guide.


**Install DirectX 9.0b**

Click <Install Driver> from the main menu and enter the install driver menu. Click <DirectX 9.0b> to start the installation.

**Install Audio Driver (optional)**

Click <Install Driver> from the main menu and enter the install driver menu. Click <Audio Driver> to start the installation.

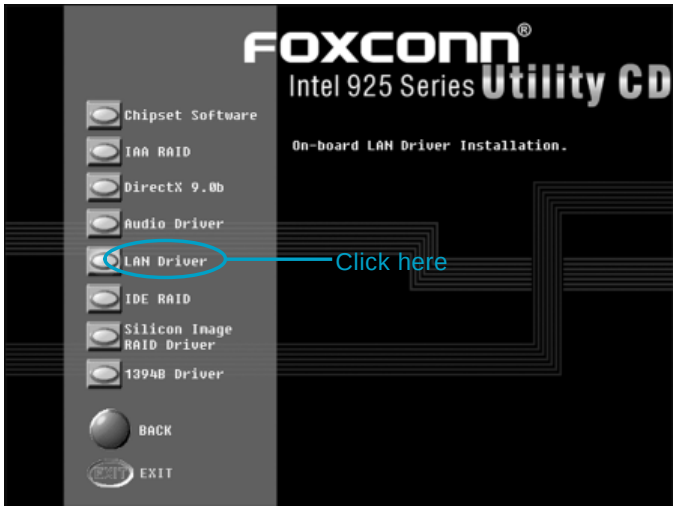



**Note:**

If you are using Windows2000 operating system, please install Service Pack 4 before installing audio driver.

**Install LAN Driver (optional)**

Click <Install Driver> from the main menu and enter the install driver menu. Click <LAN Driver> to start the installation.



### Install IDE RAID

Click <Install Driver> from the main menu and enter the install driver menu. Click <IDE RAID> to start the installation.


### Install Silicon Image RAID

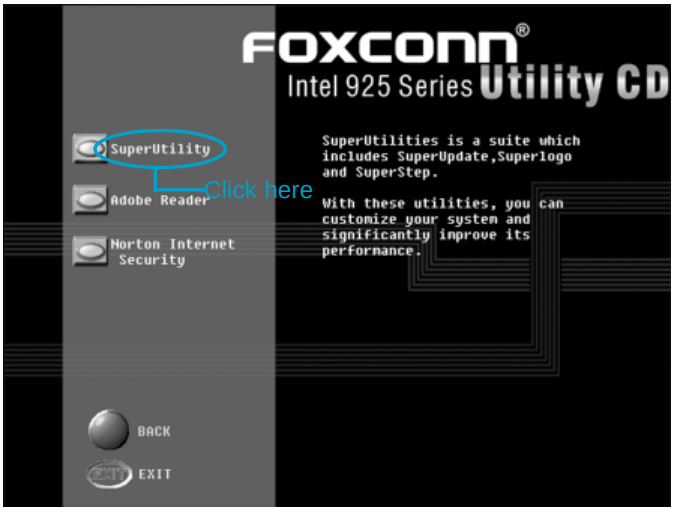
Click <Install Driver> from the main menu and enter the install driver menu. Click <Silicon Image RAID Driver> to start the installation.

### Install 1394B Driver

Click <Install Driver> from the main menu and enter the install driver menu. Click <1394B Driver> to start the installation.

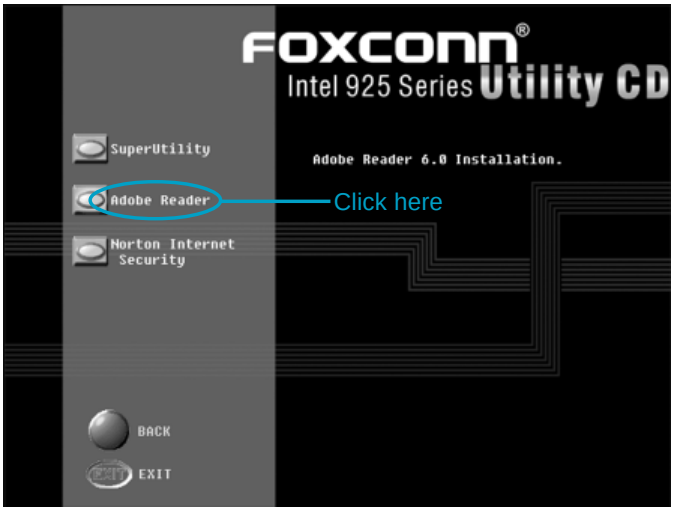

### Install SuperUtility

From the main menu, select <Accessories>. Click <SuperUtility> to start the setup.



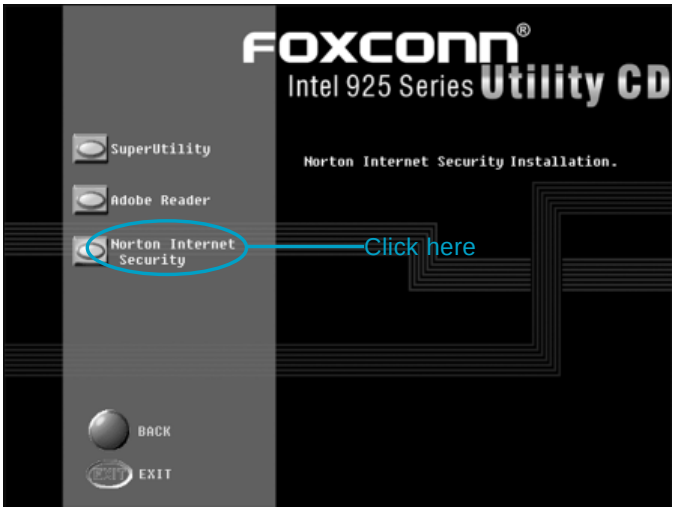
**Install Adobe Reader**

From the main menu, select <Accessories>. Click <Adobe Reader> to start the setup.




**Install Norton Internet Security**

From the main menu, select <Accessories>. Click <Norton Internet Security> to start the setup.



# Chapter 5

This chapter will introduce how to use attached software.

This chapter provides the following information:

- SuperStep
- SuperLogo
- SuperUpdate

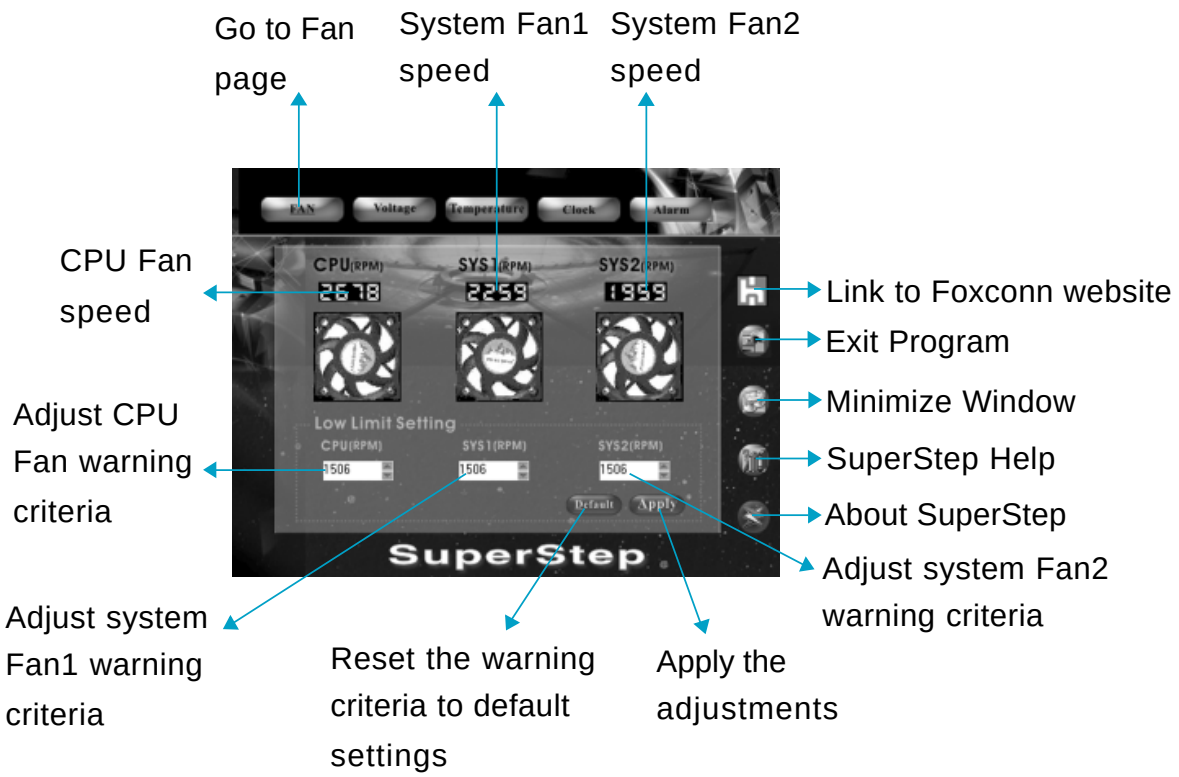
# SuperStep

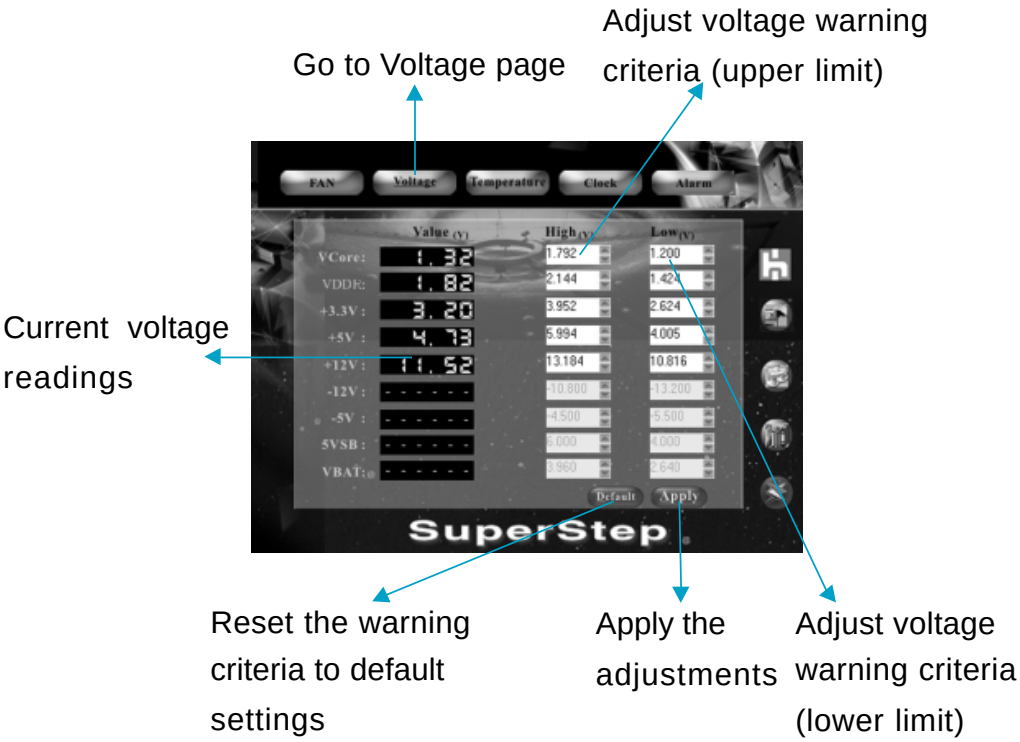
SuperStep is a utility that allows users to change the frequency of the CPU. It also displays system health information including CPU temperature, CPU voltage, and PCI clock.

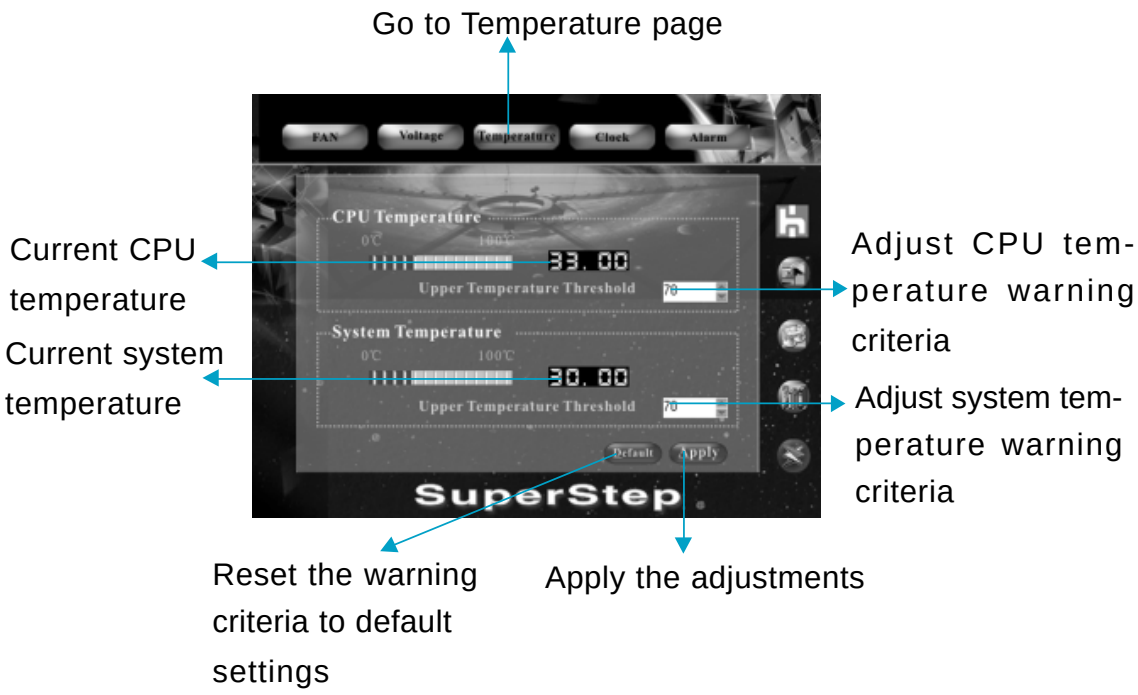
## *SuperStep features:*

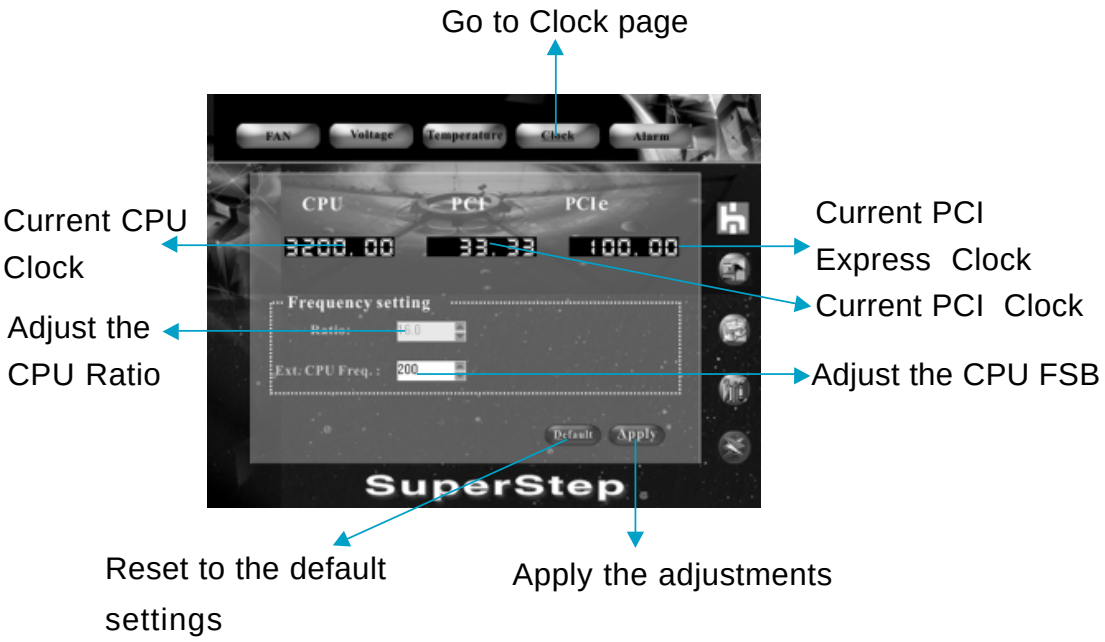
1. Supports Win2000 and WinXP.
2. Automatic alarm mechanism when system runs irregularly.
3. Adjusts the CPU frequency to speed up your system and achieve better system performance.
4. Simple and easy to operate, with a user-friendly graphics interface.

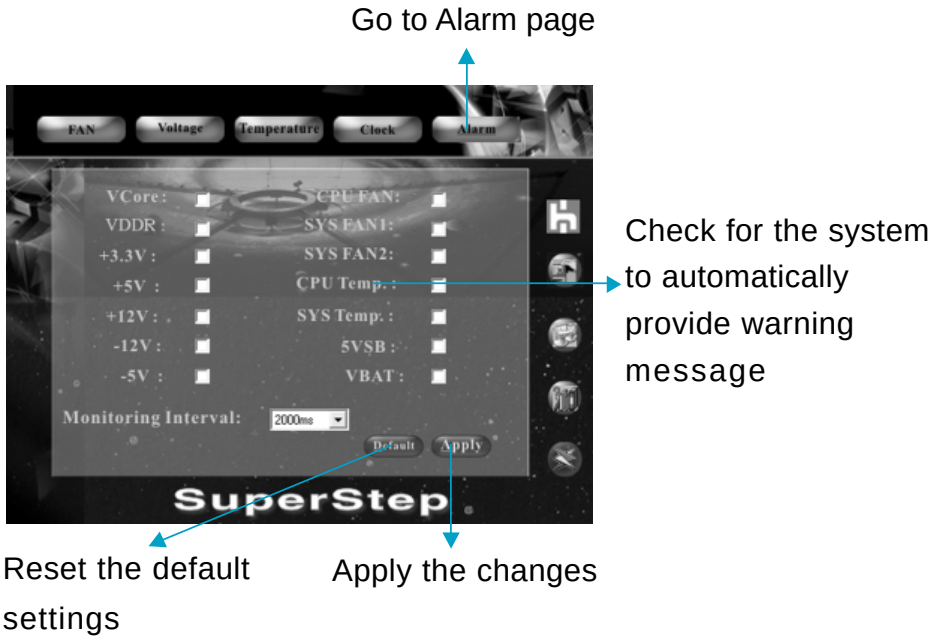
## *Using SuperStep:*




Go to Voltage page
Adjust voltage warning criteria (upper limit)
Current voltage readings
Reset the warning criteria to default settings
Apply the adjustments
Adjust voltage warning criteria (lower limit)
FAN
Voltage
Temperature
Clock
Alarm
Value (V)
High (V)
Low (V)
VCore:
VDDR:
+3.3V:
+5V:
+12V:
-12V:
-5V:
5VSB:
VBAT:
Default
Apply
SuperStep


Go to Temperature page
Current CPU temperature
Current system temperature
Adjust CPU temperature warning criteria
Adjust system temperature warning criteria
Reset the warning criteria to default settings
Apply the adjustments
FAN
Voltage
Temperature
Clock
Alarm
CPU Temperature
Upper Temperature Threshold
System Temperature
Upper Temperature Threshold
Default
Apply
SuperStep


Go to Clock page
FAN
Voltage
Temperature
Clock
Alarm
CPU
PCI
PCIe
3200.00
33.33
100.00
Frequency setting
Ratio:
Ext. CPU Freq. :
200
Default
Apply
SuperStep
Current CPU Clock
Adjust the CPU Ratio
Current PCI Express Clock
Current PCI Clock
Adjust the CPU FSB
Reset to the default settings
Apply the adjustments


Go to Alarm page
FAN
Voltage
Temperature
Clock
Alarm
VCore :
VDDR :
+3.3V :
+5V :
+12V :
-12V :
-5V :
CPU FAN:
SYS FAN1:
SYS FAN2:
CPU Temp. :
SYS Temp. :
5VSB :
VBAT :
Monitoring Interval:
2000ms
Default
Apply
SuperStep
Check for the system to automatically provide warning message
Reset the default settings
Apply the changes

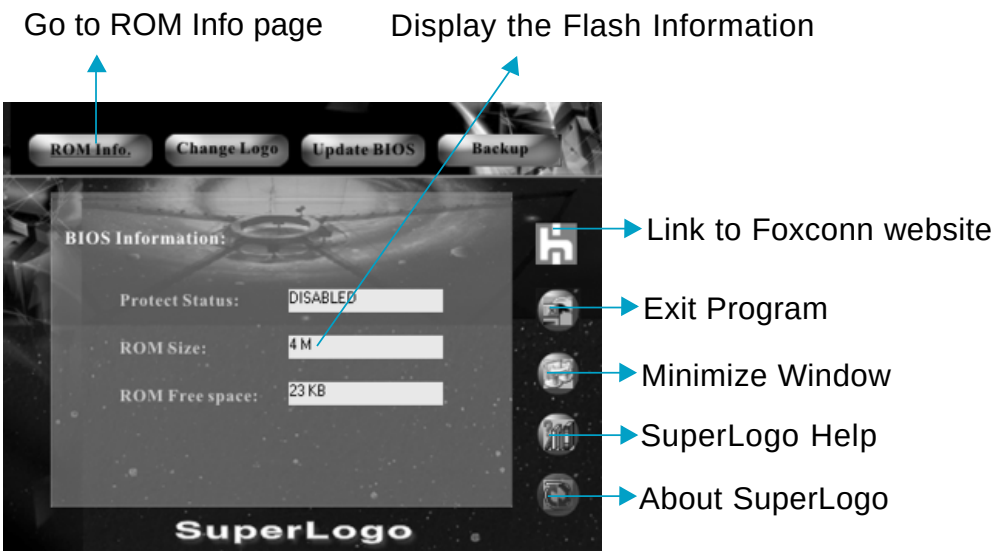
# SuperLogo

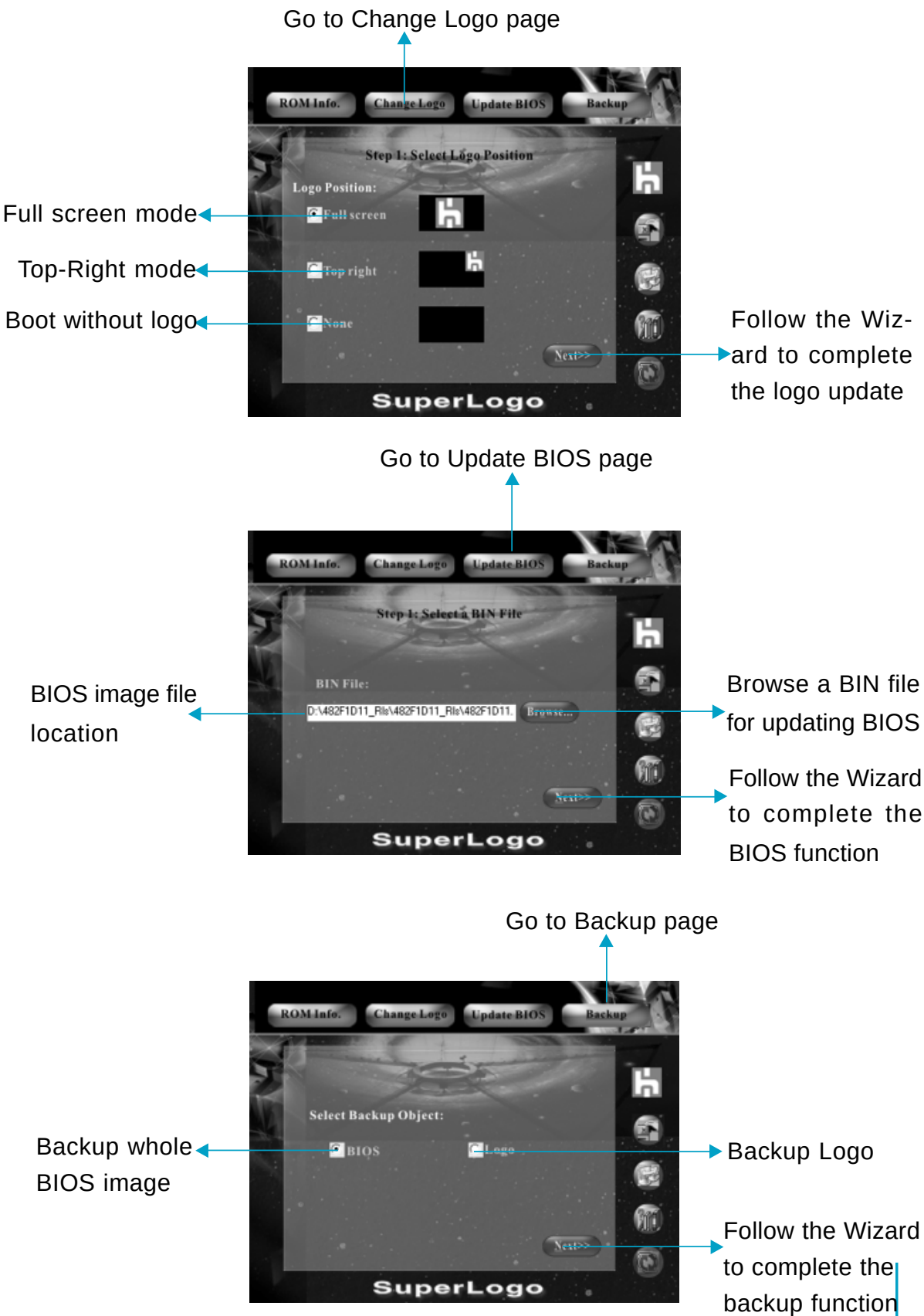
SuperLogo is a Windows utility that allows users to change the BIOS sign on logo. The utility is able to replace and backup the BIOS logo, and update and backup the BIOS image within the Windows environment.

## *SuperLogo features:*

1. Supports Win2000 and WinXP.
2. Supports 4Mb size flash parts, flash write method is independent with flash type.
3. Simple and easy to operate, with a user-friendly graphics interface.
4. Supports BMP and JPEG graphic format files. The best color is 16 or 256 colors. The best resolution is 136x84 for top-right logo and 640x480 or 800x600 for full screen logo.

## *Using SuperLogo:*




Go to Change Logo page
ROM Info.
Change Logo
Update BIOS
Backup
Step 1: Select Logo Position
Logo Position:
Full screen
Top right
None
Next>>
SuperLogo
Full screen mode
Top-Right mode
Boot without logo
Follow the Wiz-ard to complete the logo update
Go to Update BIOS page
ROM Info.
Change Logo
Update BIOS
Backup
Step 1: Select a BIN File
BIN File:
D:\482F1D11_Rls\482F1D11_Rls\482F1D11.
Browse...
Next>>
SuperLogo
BIOS image file location
Browse a BIN file for updating BIOS
Follow the Wizard to complete the BIOS function
Go to Backup page
ROM Info.
Change Logo
Update BIOS
Backup
Select Backup Object:
BIOS
Logo
Next>>
SuperLogo
Backup whole BIOS image
Backup Logo
Follow the Wizard to complete the backup function

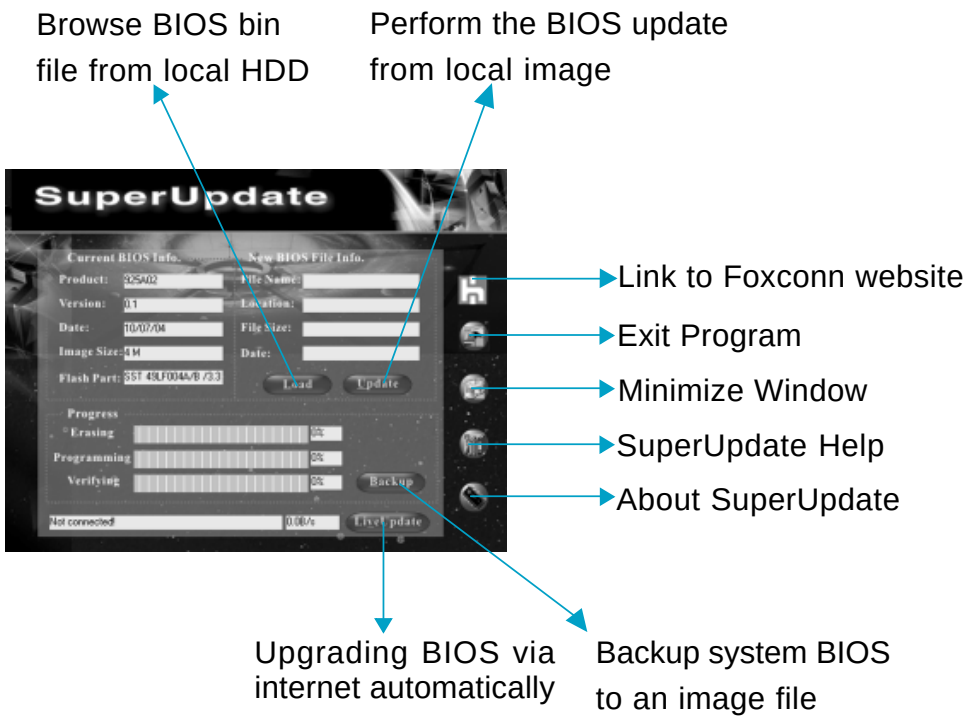
# SuperUpdate

SuperUpdate is a Windows utility that allows users to backup and upgrade the system BIOS from local or Internet.

## *SuperUpdate features:*

1. Supports Win2000 and WinXP.
2. Supports 4Mb size flash parts; flash write method is independent of flash type.
3. Simple and easy to operate, with a user-friendly graphics interface.

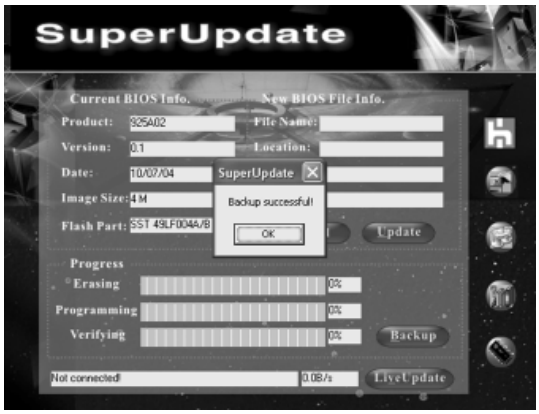
## *Using SuperUpdate:*



### *Backup BIOS to local image:*

1. Click <Backup> to backup current BIOS file.

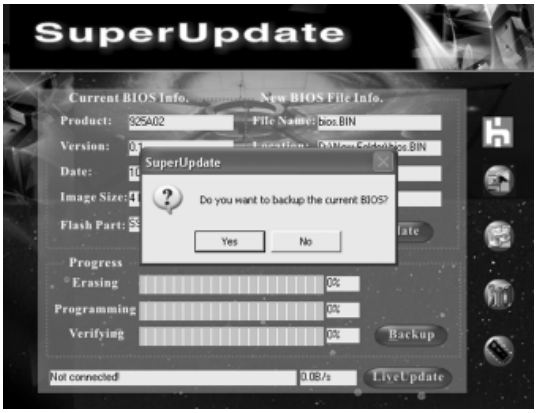

2. Click <OK> to finish the backup process.



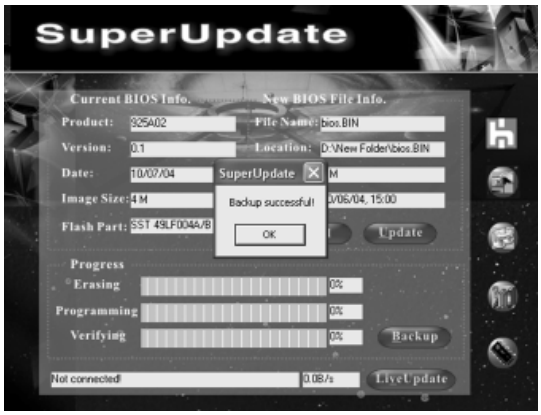

### *Update BIOS from local image:*

1. Click <Load> to load a new BIOS file.

2. Click <Update>, the following message will appear.

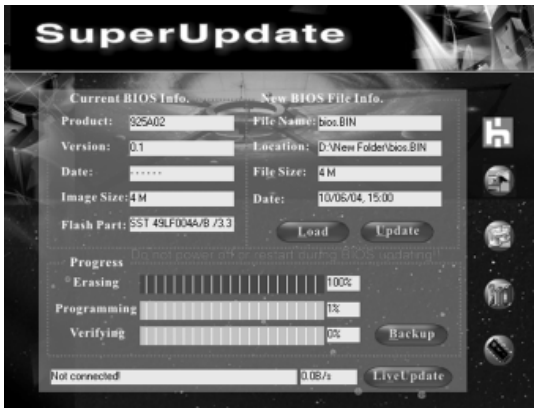



3. Click <Yes> to backup the current BIOS, then the following picture will appear.




4. Click <OK >, then click <Update>.

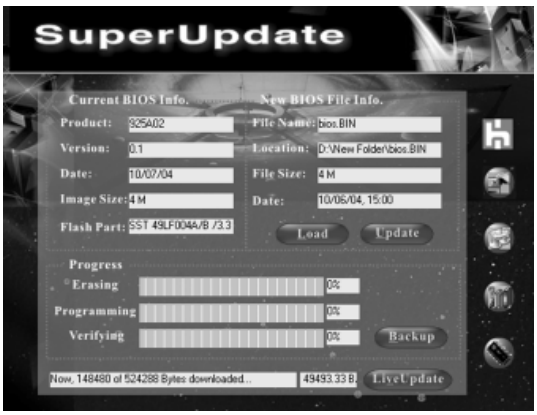
5. Now is updating.




6. Click <Restart >.

### *Update BIOS On-line:*

1. Click <Liveupdate> to automatically update the BIOS from the internet.




2. The following procedure is the same as **Update BIOS from local image**.

# Chapter 6

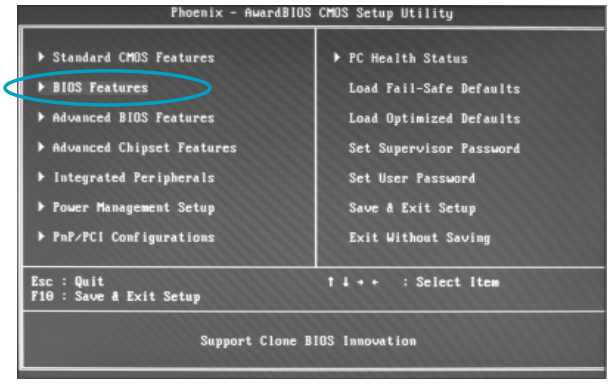
This chapter will introduce special functions of BIOS and how to use them in detail. It can further exert the max potential of motherboard to bring you super-value enjoyment.

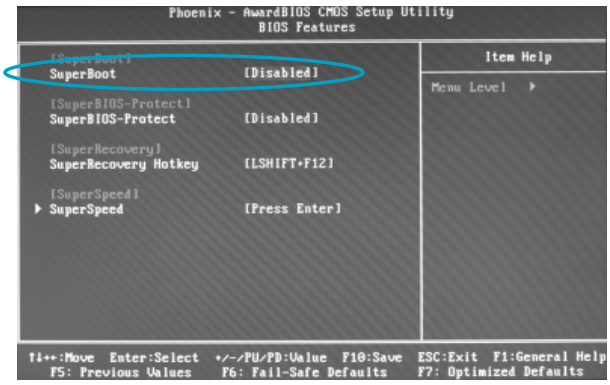
This chapter introduces the following special functions of BIOS:

- SuperBoot
- SuperBIOS-Protect
- SuperRecovery
- SuperSpeed

# SuperBoot

SuperBoot technology greatly reduces the long boot process time of computers. A BIOS without SuperBoot has to perform many routines every time when the system starts, such as checking the system core and initializing system peripherals. Now with SuperBoot, a PC can bootup without any unnecessary. SuperBoot is quite easy to use: choose the right option in CMOS setup (refer to BIOS features), SuperBoot saves the information when the PC boots up the first time, and restores the parameters for the system, thus letting the PC boot freely and rapidly.



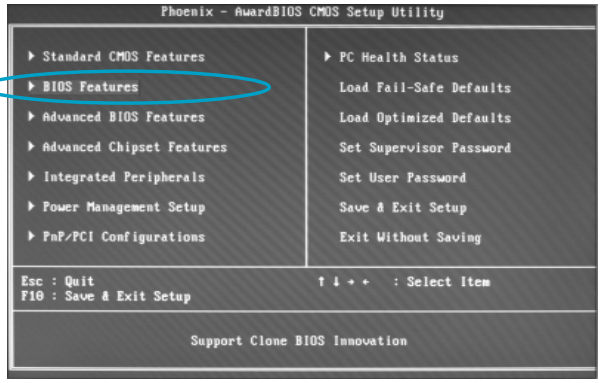



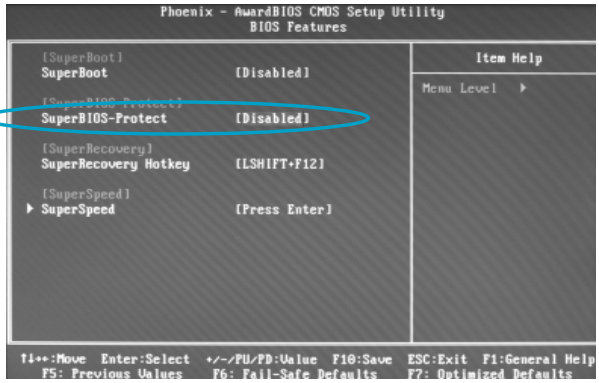

***Notes:***

1. If the previous boot was not completed then the BIOS will perform a normal POST, even if SuperBoot is enabled.
2. No matter whether SuperBoot is enabled or not, the BIOS will perform a normal POST if the CMOS fails.

# SuperBIOS-Protect

The BIOS of the motherboard is contained inside the Flash ROM. Severe viruses, such as the CIH virus, are so dangerous that they may overwrite the BIOS. If the BIOS has been damaged, the system will be unable to boot. We provide the following solution which protects the system BIOS from being attacked by such viruses.




The way to implement this function, set “SuperBIOS-Protect” as “Enabled”, the BIOS will be protected.

# SuperRecovery

SuperRecovery is an easy-to-operate tool for backing up or recovering your hard disk data. It offers simplified user interfaces with hotkey access and allows you to experience unprecedented high security and reliability with extra functions, such as hotkey launch, and powerful anti-virus protection.

## Features:

***1. Password Protection:***

You can set a password for each HDD.

***2. Data Protection:***

Hidden partitions can only be accessed during data back up or recovery. Even reformatting the disk using FDISK or PQMAGIC will not allow access to the disk. This means that data backed up in a hidden partition is very secure.

***3. Intelligent Menu:***

Unavailable items will be displayed in gray. For example, if you haven't divided a hidden partition, items like "Release Hidden Partition", "Back up" and "Recovery" will be displayed in gray and can't be selected. And, when you select an item, the related information will appear on the bottom of the screen.

## Disclaimer:

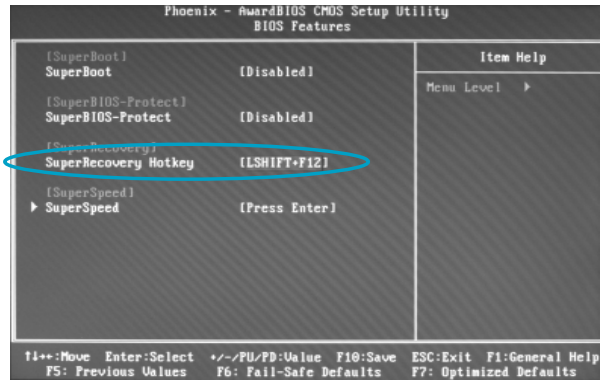
Please study this software program's specification carefully before using it. The vendor should not be liable for any damage arising out of or in connection with the use of this program, including liability for lost profit or data, or any other damage whatsoever.

## System Requirements:

1. ATA5 or above compliant IDE HDD.
2. FAT16, FAT32, NTFS files system.
3. PS/2 keyboard or USB keyboard.

## ***Hotkey Selection:***

You should enter the CMOS setup interface first by pressing <DEL> during POST (Power On Self Test). Then select the "SuperRecovery Hotkey" option to adjust the hotkey settings in the "BIOS Features" menu.
There are 12 options: LSHIFT (Left Shift)+F1~F12. LSHIFT+F12 is the default.




## Hard Disk Selection:

The hard disk selection menu will be displayed after you press the hotkey, listing all the IDE HDDs installed in your system. You can switch the highlight bar to make a selection and press <Enter> to confirm it.

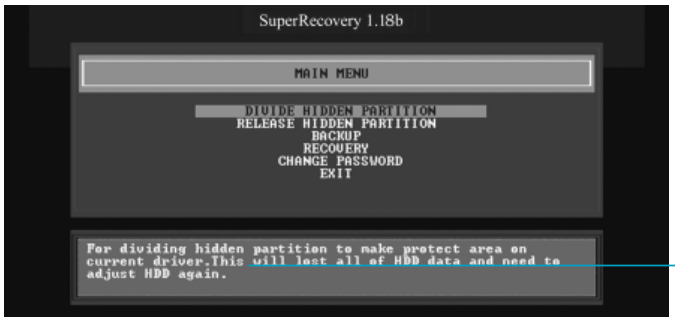
**Attention:**

1. Make sure that you have selected a HDD before entering the main menu.
2. Make sure that the HDD you selected is ATA5 or higher. For HDDs lower than ATA5, there will be a “No Support” message in the HDD list menu listing beside the name of it.
3. Only one HDD can be operated at a time.


Note: If you have assigned a password to the selected HDD, you will be prompted to provide it before proceeding.

## Main Menu:

Select a HDD to enter main menu. There are five function items, “Divide Hidden Partition”, “Release Hidden Partition”, “Backup”, “Recovery” and “Change Password”. You can switch the highlight bar to make a selection on the operation which should be performed on the HDD and confirm your selection by pressing <Enter>. The following operation will be performed on the disk you selected.




## Divide Hidden Partition:

**1. What is a Hidden Partition?**

SuperRecovery can be used to divide a hidden partition, which is to be reserved for backing up HDD data. The partitioning will erase all the old data saved in the HDD, to make sure that the following operations can be continued. Once the division is done, any future variation to the HDD will never affect the hidden partition, such as virus, causing turbulence, windows system breaking down or data loss. SuperRecovery can recover all the data backed up in hidden partition, letting you easily get your computer on track again.

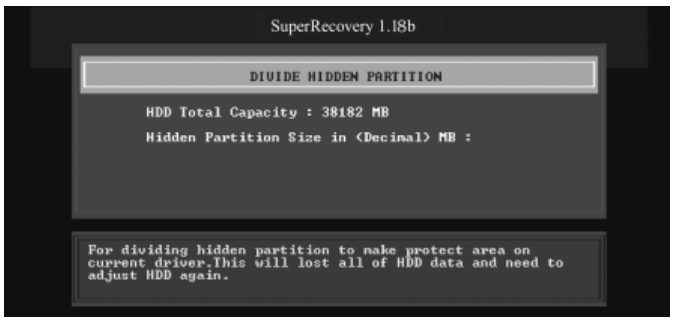
**2. Divide Hidden Partition:**

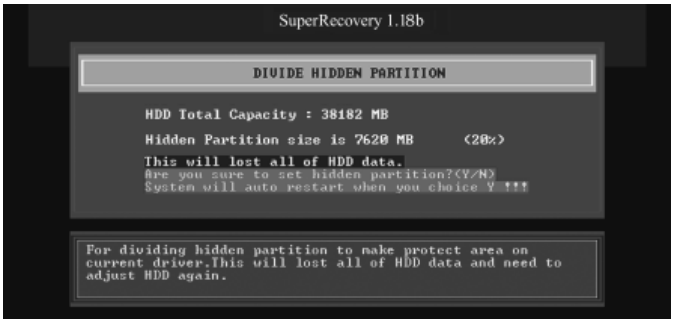
A. Enter a percentage of the HDD total capacity or an actual size in MB as the size of the hidden partition, such as “30%” or “3000”. Press <Enter> to confirm your input. As the average rate of compression is 50% or so, you are suggested to divide 30% of the total as the capacity of the hidden partition.

B. The system will then prompt you to Enter <Y> or <N> for confirmation. Press <Y> to restart the computer, and the division for hidden partition will go into effect after the system is restarted.

**Attention :**

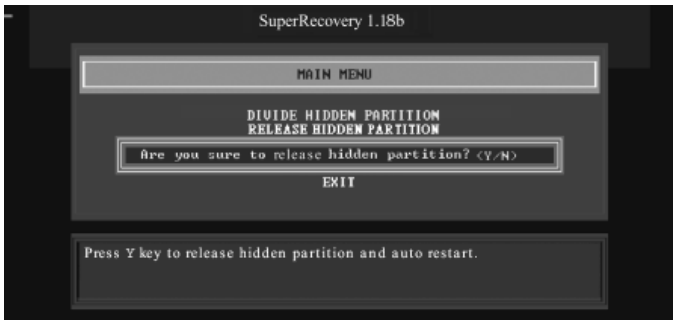
1. All the HDD data will be cleared by the partitioning process, so it is better to do the division on an empty HDD.
2. At the same time, the overall HDD capacity will decrease in order to make space for the hidden partition, which will become unavailable for normal use.



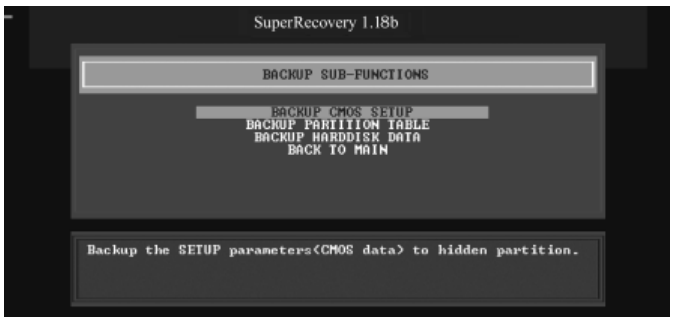

## ***Release Hidden Partition:***

This is used to release the hidden partition. If you choose this item and press <Y> to confirm, the system will be restarted to release the hidden partition. But the released partition is still unavailable for you after the system is restarted. It's necessary for you to enable it by using FDISK, PQMAGIC, or some other tools.



## Backup:

Select BACKUP to enter the Backup interface, where you can find the following three sub-function items: “BACKUP CMOS SETUP”, “BACKUP PARTITION TABLE” and “BACKUP HARDDISK DATA”. Switch the highlight bar by pressing the arrow keys to make a selection and then press <Enter> to confirm your choice.



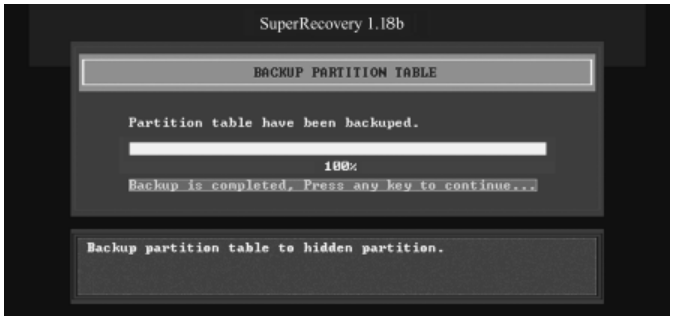

**1. Backup CMOS Setup:**

A. Support backing up of the CMOS data.

B. The backing up or recovery of CMOS data should be done on a motherboard of the same type.

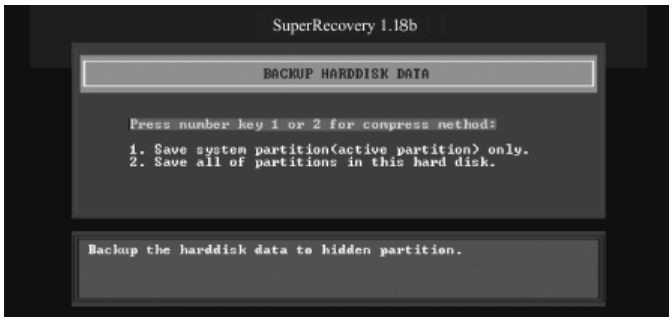

**2. Backup Partition Table:**

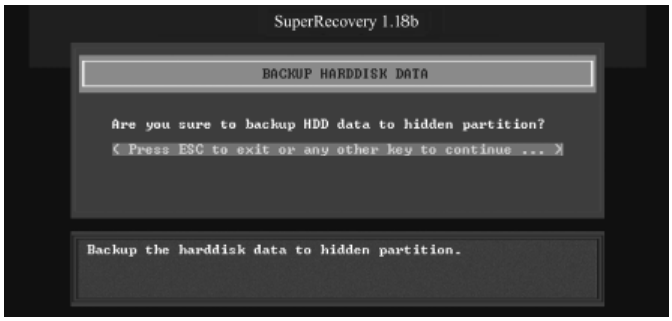
This function can help to backup all partition tables including extended partitions.



**3. Backup Hard disk Data:**

A. If there are active partitions (system partition), you can choose to backup an active partition or the whole disk. But only one can be taken between the two choices. Old data will be replaced by the newly backed up data.




B. Backing up with the progress bar showing.

C. A report with all the critical data on this operation will be displayed after the backup is completed.

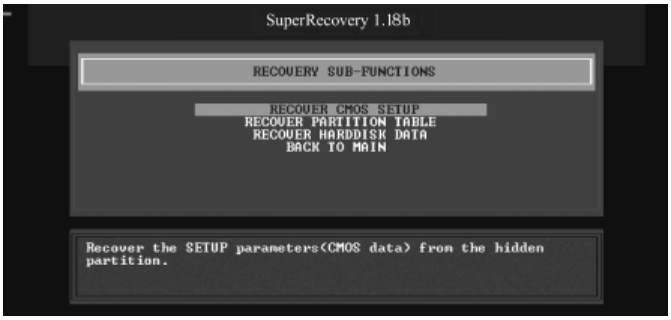
| | |
|---|---|
| Original Size: | The data size loaded in selected partition; |
| Valid Size: | The size of valid data. |
| Elapsed Time: | How long the procession cost. |
| Compressed Size: | The size of data after compression. |
| Compressed Rate: | Compressed Size/Valid Size. |


**4. Back to Main:**

This item is used to exit the Backup interface.

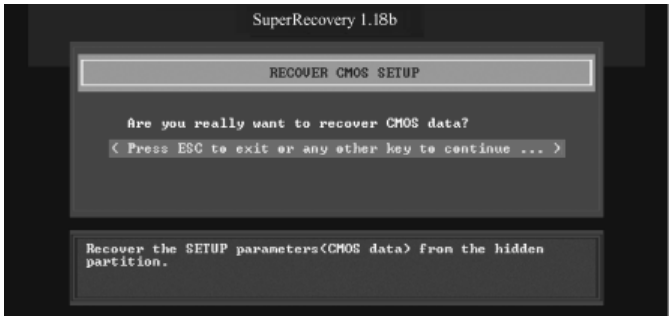
## ***Recovery:***

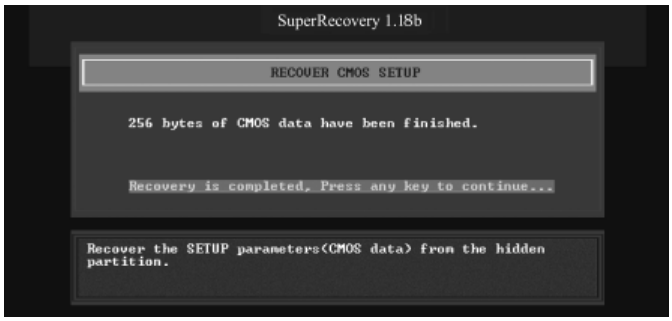
Select RECOVERY to enter the Recovery interface. You will see the following sub-function items: RECOVER CMOS SETUP, RECOVER PARTITION TABLE and RECOVER HARDDISK DATA. You can switch the highlight bar by pressing the arrow keys to make a selection and press <Enter> to confirm your selection.



### 1. Recover CMOS Setup:

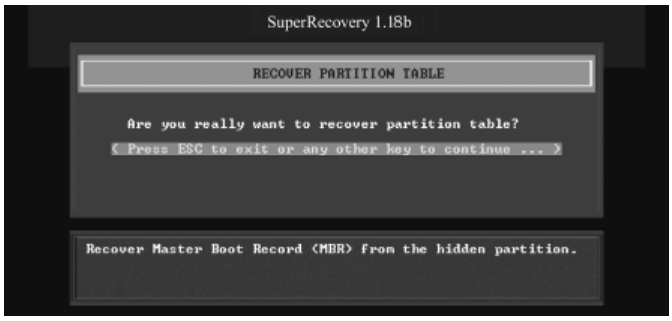
This function is used to restore the latest backup of CMOS settings you made.

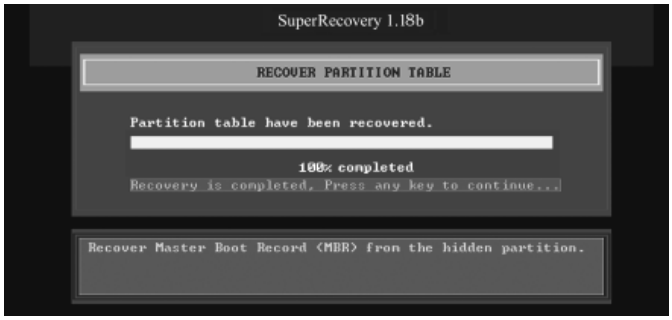



### 2. Recover Partition Table:

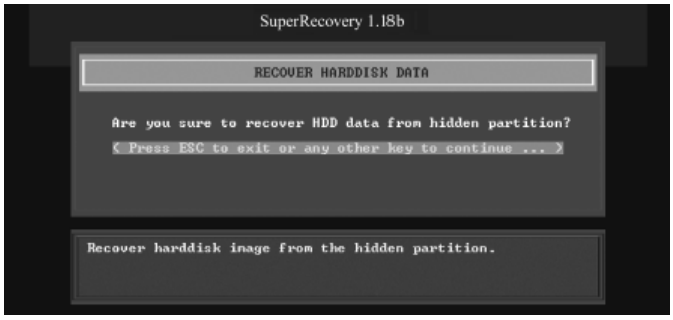
This function is used to recover all partition tables including extended partitions.

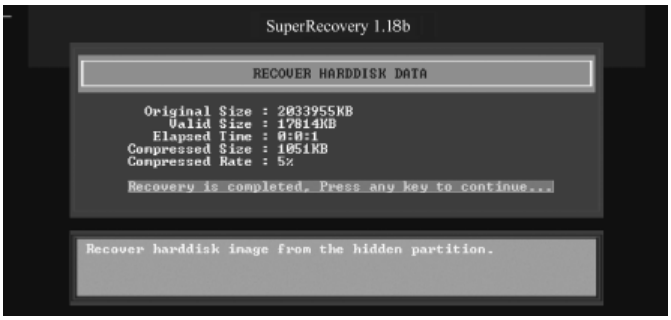


**3. Recover Hard disk Data:**

This item is used to restore the backed up data from the hidden partition.




**4. Back to Main:**

This item is used to exit the Recovery interface.

## ***CHANGE PASSWORD Introduction:***

Select CHANGE PASSWORD to enter the Change Password interface.

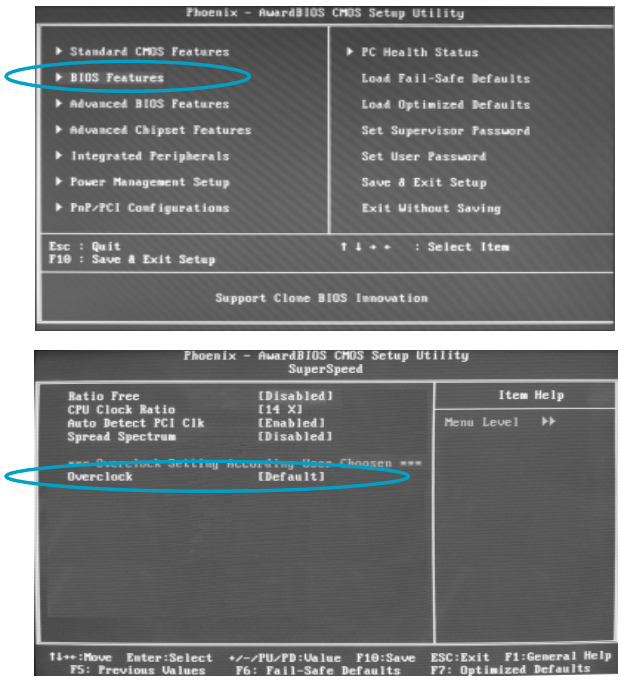
A. Enter the old password first. Press <Enter> if password is null.
B. Enter the new password. Then enter the same again to confirm it.
C. Press <Enter> for null password.
D. The password will be saved in the hidden partition.

# SuperSpeed

SuperSpeed is a powerful and efficient easy technology for PC DIY fans. It offers a friendly interface. Users can set the CPU Clock easily in the BIOS setup.

## *Procedures:*

1. Correctly install your CPU.
2. Plug in other configurations and restore the system.
3. Switch on power to the system and press the <Del> key to enter BIOS Setup.
4. Enter the <BIOS Features>\<SuperSpeed> menu to set the CPU clock.
5. Save and exit BIOS Setup; your system will now boot successfully.




BIOS provides you with a set of basic values for your processor selection instead of the jumper settings. The processor speed can be manually set from the <BIOS Features> menu screen.

**Warning:**

Be sure your selection is right. CPU overclock can be dangerous! We will not be responsible for any damage caused.

# Using 8-channel Audio (optional)

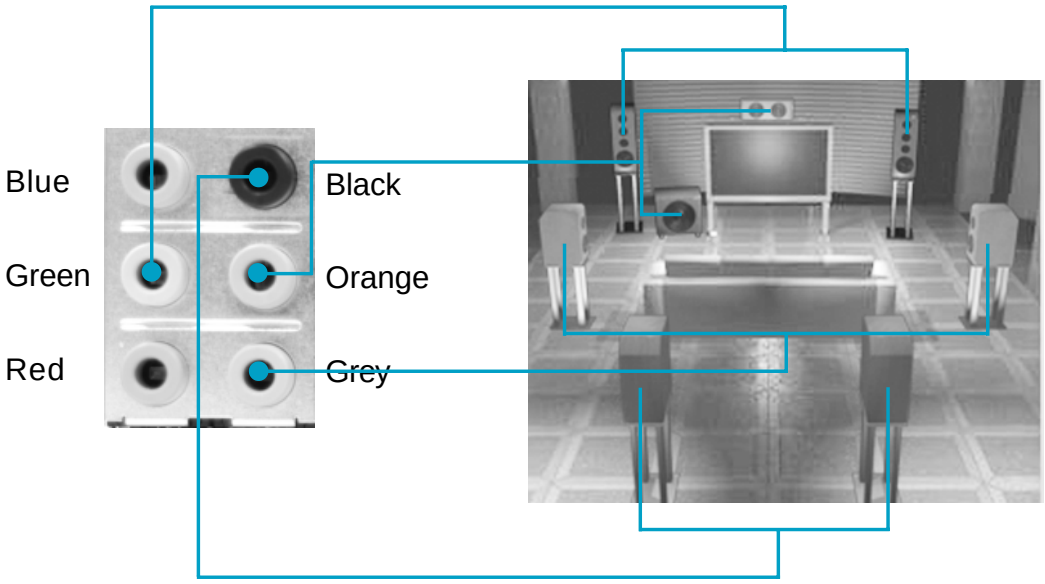
## 1. Introduction

8-channel audio is the highest surround sound standard available adding two speakers over existing 6-channel audio set-ups. 8-channel surround sound is already a standard feature for premium consumer audio devices, so it only makes sense that as users increasingly use their PCs to listen to the latest multimedia content that 8-channel support makes the migration as a standard PC feature.

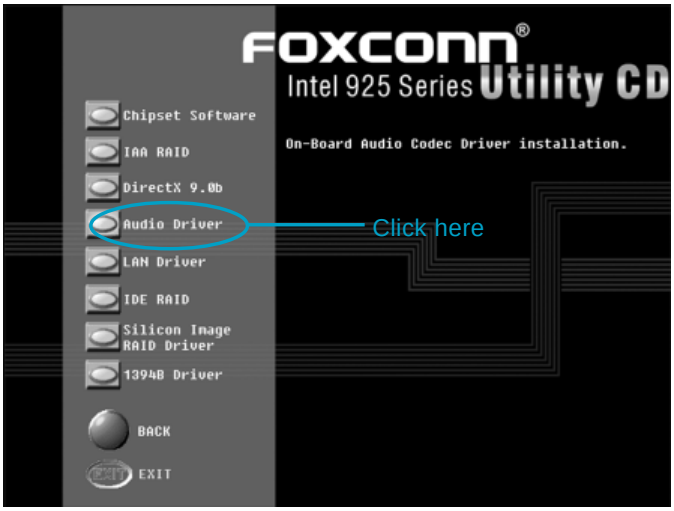
In the 8-channel surround sound configuration there are the standard front, center, LFE (bass) speakers but also two surround speakers are placed at the sides of a listener, and two speakers directly behind the listener. Some formats also support a 8-channel audio configuration wherein there is only one speaker behind the listener. However, since audio connections always come in stereo pairs most PC hardware will automatically support the 8-channel configuration. It is also fully supported in the Windows XP operating system.

## 2. Using 8-channel Audio

STEP 1. Connect the front channels to green jack, the rear channels to black jack, the Center/Subwoofer channels to orange jack and Side channels to grey jack. Please refer to below figure.




STEP 2. You need to install the driver for the audio chip before you can use the 8-channel audio function.



STEP 3. After installation of the audio driver, you'll find an  icon on the taskbar's status area. Double click the icon, you will see the following picture.


STEP 4. Click "Speaker configuration". The following picture will appear.


STEP 5. Make sure you select "8CH Speaker" from the above picture. Now you can enjoy the 8-channel audio function.