## Statement:

This manual is the intellectual property of Foxconn, Inc. Although the information in this manual may be changed or modified at any time, Foxconn does not obligate itself to inform the user of these changes.

## Trademark:

All trademarks are the property of their respective owners.

## Version:

User's Manual V1.0 in English for 915G/P/GL/GV/PL/910GL7MH motherboard.
P/N: 91-181-915-MB-0E

## 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's website: http://www.foxconnchannel.com

# 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**

**915G/P/GL/GV/PL/910GL7MH**

is in conformity with

(reference to the specification under which conformity is declared in

accordance with 89/336 EEC-EMC Directive)

☑ EN 55022: 1998/A2    Limits and methods of measurements of radio disturbance characteristics of information technology equipment

☑ EN 61000-3-2/:2000    Electromagnetic compatibility (EMC)
Part 3: Limits
Section 2: Limits for harmonic current emissions
(equipment input current <= 16A per phase)

☑ EN 61000-3-3/A1:2001    Electromagnetic compatibility (EMC)
Part 3: Limits
Section 2: Limits of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current <= 16A

☑ EN 55024/A2:2003    Information technology equipment-Immunity characteristics limits and methods of measurement

Signature :    *James Liang*      Place / Date :    TAIPEI/2005

Printed Name :    James Liang      Position/ Title :    Assistant President

# Declaration of conformity

**FC**

| | |
|---|---|
| TradeName: | FOXCONN |
| Model Name: | **915G/P/GL/GV/PL/910GL7MH** |
| ResponsibleParty: | 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 :     Date :     2005

# 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 915G/P/GL/GV/PL/ 910GL7MH. Each motherboard is carefully designed for the PC user who wants diverse features.

| | |
|---|---|
| -L | with onboard 10/100M LAN |
| -K | with onboard Giga LAN |
| -6 | with 6-Channel audio |
| -8 | with 8-Channel audio |
| -E | with 1394 function |
| -S | with SATA function |
| -R | with RAID function |

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

For example:

ULBA4160000B PC XXXXX-XX-6ELS

On the blue mark of the PPID label, it means the motherboard supports 6-Channel Audio(-6), 1394 port(-E), onboard 10/100M LAN (-L), SATA function(-S).

# Chapter 1

Thank you for buying Foxconn's 915 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® 915G/P/GL/GV/PL/910GL+ ICH6/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
- ❖ Rear I/O Ports

## Main Features

**Size**
- mATX form factor of 9.6 inch x 9.6 inch

**Microprocessor**
- supports Intel® Pentium® 4, or Celeron® D processor in an LGA775 package
- Supports FSB at 533 MHz/800 MHz (910GL7MH does not support FSB 800MHz)
- Supports Hyper-Threading technology

**Chipset**
- 915G7MH series: Intel® 915G  + ICH6/6R
- 915P7MH series: Intel® 915P  + ICH6/6R
- 915GV7MH series: Intel® 915GV  + ICH6/6R
- 915GL7MH series: Intel® 915GL  + ICH6/6R
- 915PL7MH series: Intel® 915PL + ICH6/6R
- 910GL7MH series: Intel® 910GL  + ICH6/6R

**System Memory**
- 915G/P/GV7MH series

  Two 184-pin DIMM slots and two 240-pin DIMM slots

  Supports Dual-Channel DDR 333/400 and Dual-Channel DDR2 533/400
- 915GL/PL/910GL7MH series

  Two 184-pin DIMM slots

  Supports Dual-Channel DDR 333/400

**USB 2.0 Ports**
- Supports hot plug
- Eight USB 2.0 ports
- Supports wake-up from S1 and S3 mode
- Supports USB 2.0 Protocol up to 480 Mbps transmission rate

**Onboard Serial ATA (-S)(optional)**
- 150 MBps transfer rate
- Supports four S-ATA devices
- Supports RAID 0, RAID 1, Matrix RAID (supported on ICH6R)

**Onboard LAN (-L)**

- Supports 10/100 Mbit/sec Ethernet
- LAN interface built-in on board

**Onboard Audio (-6)**

- 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 Graphics  (only for 915G/GV/GL/910GL7MH series)**

- Supports integrated VGA display function (Intel® Graphics Media Accelerator 900)

**PCI Express x16 Support (only for 915G/P/PL7MH series)**

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

**F.G.E.II Support (only for 915GV/GL/910GL7MH series)**

- Compatible with PCI Express x16 specification
- Supports facile dual monitor feature

**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)
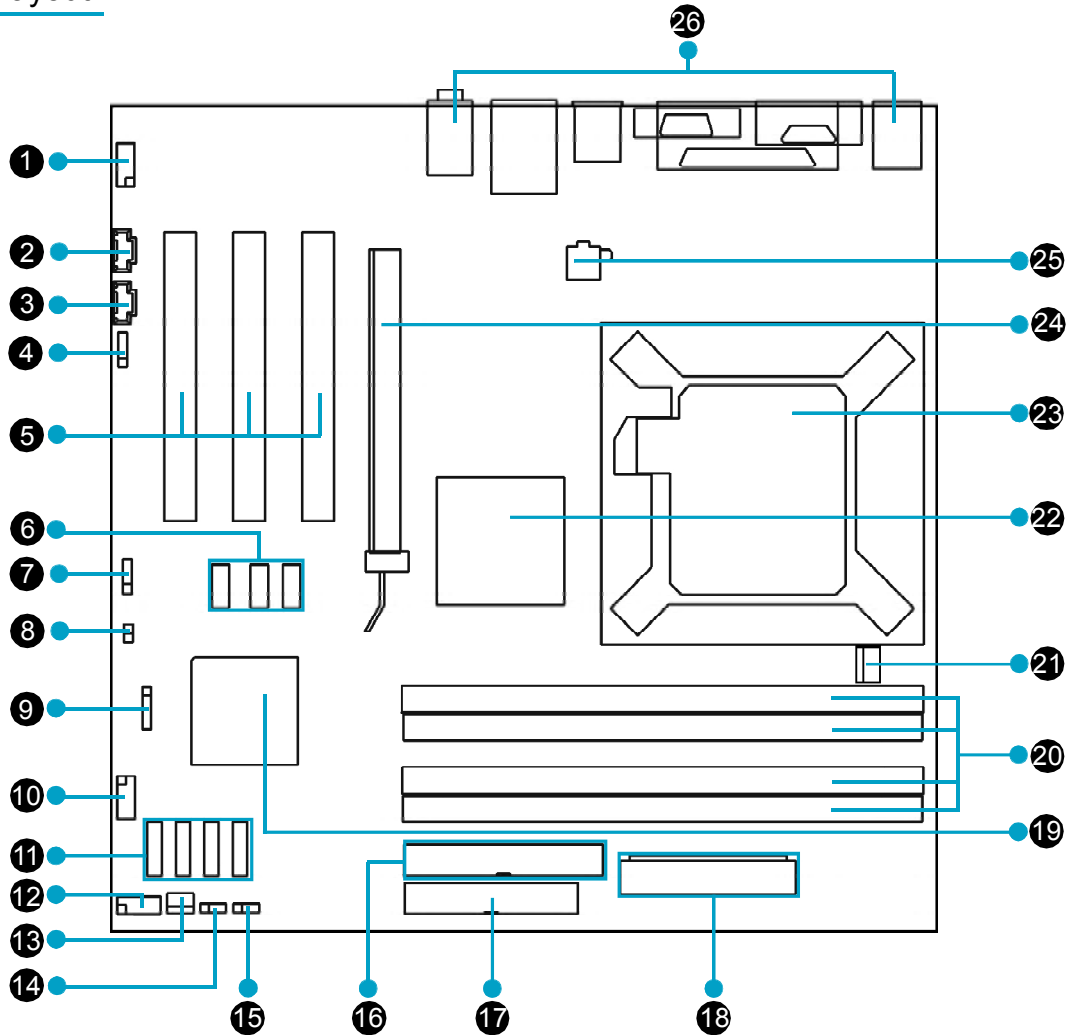
**Expansion Slots**

- Three PCI slots
- One PCI Express x16 Graphics slot (only for 915G/P/PL7MH series) or F.G.E.II slot (only for 915GV/GL/910GL7MH series)

**Advanced Features**

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

## Layout



1. Front Audio Connector
2. CD_IN Connector
3. AUX_IN Connector
4. SPDIF Out Connector (optional)
5. PCI Slots
6. USB Connectors (optional)
7. Speaker Connector (optional)
8. Chassis Intruder Connector
9. IrDA Connector
10. COM2 Connector
11. Serial ATA Connectors
12. Front Panel Connector
13. SYS_FAN Connector
14. Clear CMOS Jumper
15. BIOS TBL Jumper (optional)
16. ATA 100/66/33 Connector
17. FDD Connector
18. 24-pin ATX Power Connector
19. South Bridge: ICH6/ICH6R Chipset
20. DIMM Slots
21. CPU_FAN Connector
22. North Bridge: 915G/P/GL/GV/PL/ 910GL Chipset
23. LGA775 CPU Socket
24. PCI Express x16 Slot/F.G.E.II Slot
25. 4-pin ATX_12V Power Connector
26. Rear I/O Ports

## Rear I/O Ports
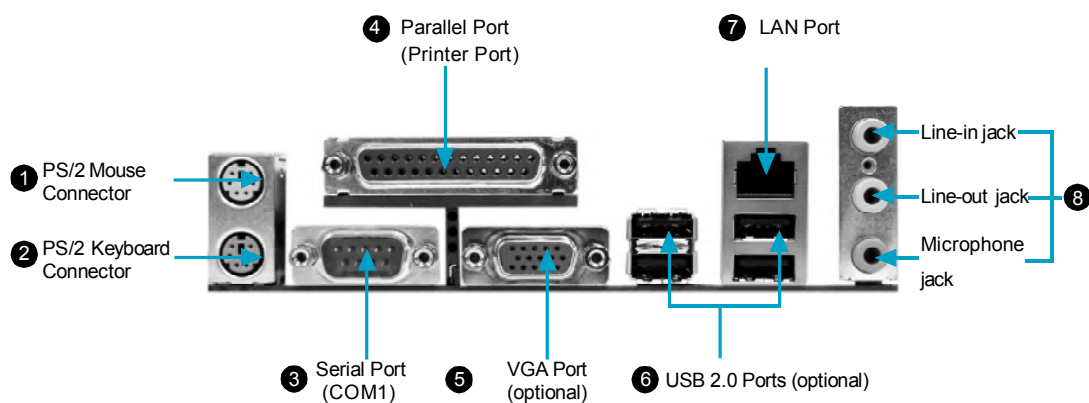


❽ Line-in jack, Line-out jack, Microphone jack

Use the three audio ports to connect audio devices. The Line-in jack is for a tape player or other audio sources. The Line-out jack is for a headphone or a speaker. The Microphone jack is for a microphone. In 6-Channel mode, the function of the three jacks becomes Rear Speaker Out, Front Speaker Out and Center/Subwoofer Speaker respectively.

# Chapter 2

This chapter introduces the hardware installation process, including the installation of the CPU, memory, power supply, slots and pin headers, 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
- ❖ Other Connectors
- ❖ Expansion Slots
- ❖ Jumpers

## CPU

This motherboard supports single processor in an LGA775 package. It also supports Hyper-Threading technology and FSB Dynamic Bus Inversion (DBI).

For the detailed CPU vendor list qualified on this motherboard, please visit the website: http://www.foxconnchannel.com

**Installation of CPU**

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

**Load lever** —————— **Load plate**

**Protective cover**
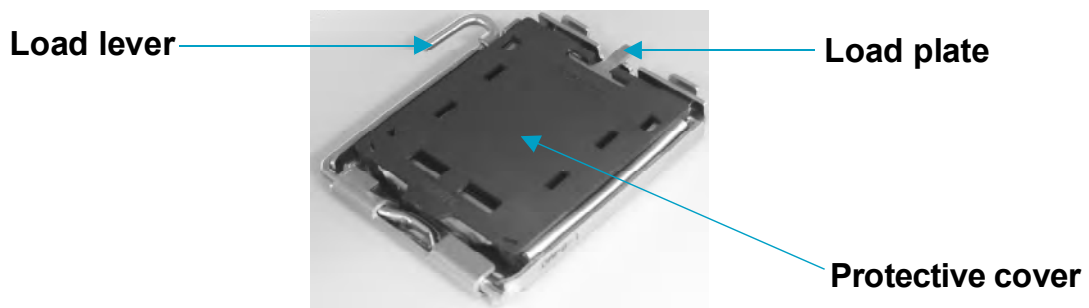
1. Use thumb and forefinger to hold the hook of the load lever and pull the lever down and away from socket to unlock it. Lift the load lever.

2. Push down the rear tab with your forefinger to bring the front end of the load plate up slightly. Open the load plate with thumb. Be careful not to touch the contacts.
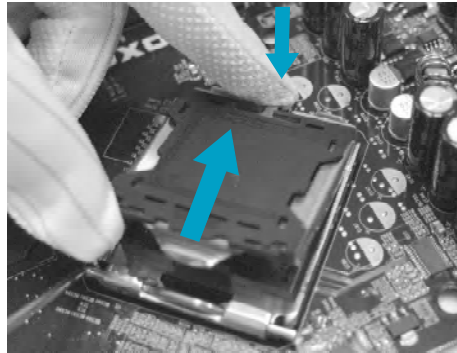
3. Hold CPU with thumb and forefinger. Ensure fingers align to socket cutouts. Match the CPU triangle marker to Pin 1 position as shown below. The alignment key also provides the orientation directed function. Lower the CPU straight down without tilting or sliding the CPU in the socket.



Alignment Key

Pin 1 position

Socket Cutouts
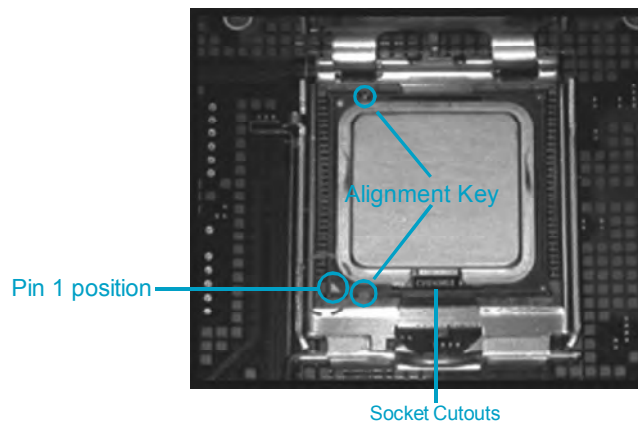
4. After installing the CPU, remove the protective cover from load plate. The protective cover is used to protect the contacts of the socket. Do not discard the protective cover. Always replace the socket cover if the CPU is removed from the socket.
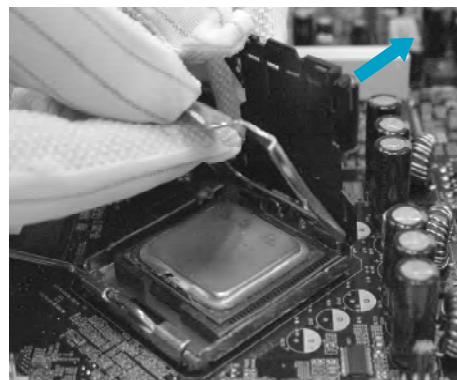
5. Close the load plate, and slightly push down the tongue side.



6. 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 two 184-pin slots with 2.6V for DDR and two 240-pin slots (optional) with 1.8V for DDR2. DIMM1 and DIMM3 slots support 256 Mb, 512 Mb and 1 Gb DDR2 technologies for x8 and x16 devices; DIMM2 and DIMM4 slots support 256 Mb, 512 Mb and 1 Gb DDR technologies for x8 and x16 devices. You must install at least one memory bank to ensure normal operation.

### Memory Configuration Table
Use any of the recommended configurations in the following table

| Channel Mode | DDR Type | DIMM | | | |
|---|---|---|---|---|---|
| | | DIMM1 | DIMM2 | DIMM3 | DIMM4 |
| Single-Channel | DDR | x | Populated | x | x |
| | | x | x | x | Populated |
| | DDR2 | Populated | x | x | x |
| | | x | x | Populated | x |
| Dual-Channel | DDR | x | Populated | x | Populated |
| | DDR2 | Populated | x | Populated | x |

### ⓘ Attention:

1. Before you install memory modules, please make sure that all DIMMs in one system are of the same type (e.g. all DDR or all DDR2, not mixed).
2. If DDR and DDR2 memory banks are installed simultaneously or all four sockets are populated with DIMMs, the buzzer will alarm for memory error warning and power-on failure may result. But in this case, it can not cause any damage to your motherboard and memory banks since an exclusive protection circuit is specially designed for it.

For the latest memory modules support list, please visit the website:
http://www.foxconnchannel.com

**Installation of DDR/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.



DDR memory

104 Pins            80 Pins



DDR2 memory

128 Pins            112 Pins
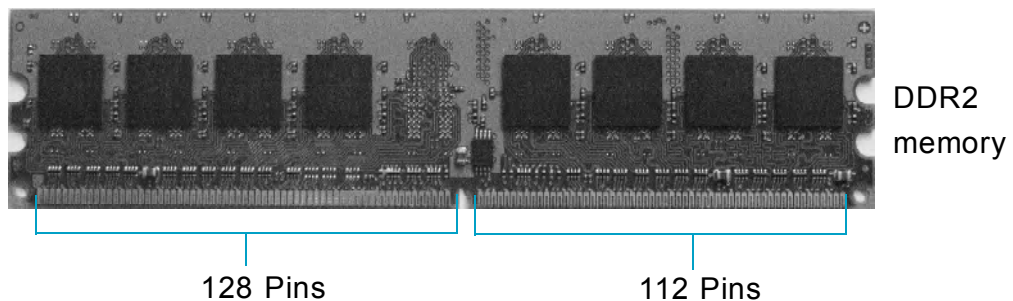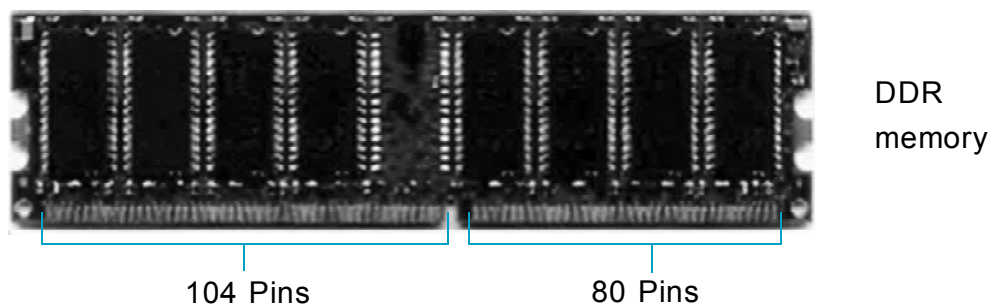
3. The plastic clips at both sides of the DIMM slot will lock automatically.

**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.

**4-pin ATX_12V power connector**

```
         3                    1
12V ──┐ ┌──┐ ┌──┐ ── GND
12V ──┘ └──┘ └──┘ ── GND
         4                    2
```

### 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.
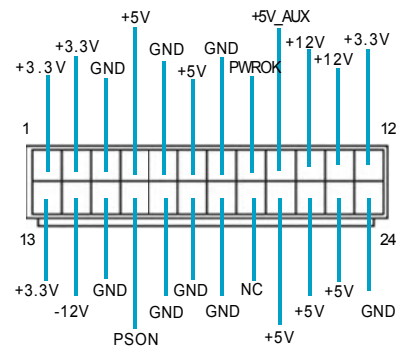
**24-pin ATX power connector**
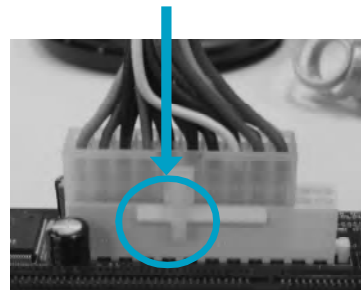
**Note**: We strongly recommended you use 24-pin power supply. If you want to use 20-pin power supply, you need to align the ATX power connector according to the right picture.

Align the connector

## Other Connectors

This motherboard includes connectors for FDD, IDE HDD, Serial ATA, USB, 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: PIDE**

The connector supports the provided Ultra DMA 100/66/33 IDE hard disk ribbon cable. Connect the cable's blue connector to the IDE connector, then connect the gray connector to the Ultra DMA 100/66/33 slave device (hard disk drive) and the black connector to the Ultra DMA 100/66/33 master device.

**🛈 Attention:**

Ribbon cables are directional, therefore, make sure to always connect with the cable on the same side as pin 1 of the PIDE or FDD connector on the motherboard.

**Front Panel Connector: FP1**

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

IDE LED Connector (HD-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; 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 Switch Connector (PWRSW)
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.
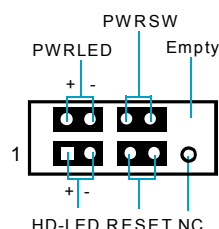


FP1

**Fan Connectors: CPU_FAN, SYS_ FAN**

The fan speed of CPU_FAN and SYS_FAN 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 S3, S4 and S5 mode. Plug the CPU cooling fan cable into the 4-pin CPU FAN power supply on the motherboard. Connect the case cooling fan connector to SYS_FAN.



GROUND SENSE

POWER CONTROL

CPU_FAN



GROUND
+12V
SENSE

SYS_FAN
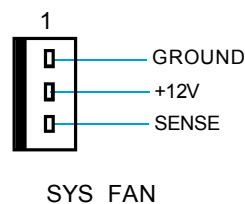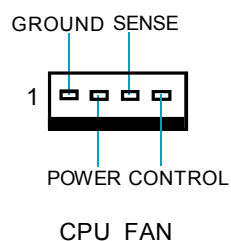
## Audio Connectors: CD_IN, AUX_IN

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

CD_L    GND    CD_R

CD_IN

AUX_R    GND    AUX_L

AUX_IN

## Speaker Connector: SPEAKER (optional)

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

SPK    Empty    SPKJ
NC
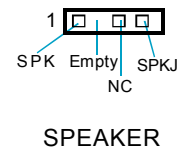
SPEAKER

## SPDIF Out Connector: SPDIF_OUT (optional)

The S/PDIF out connector is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby digital decoder.

**Note: The empty pin of SPDIF cable should be aligned to empty pin of SPDIF out connector.**

GND
SPDIF_OUT
Empty
5V_SYS

SPDIF_OUT
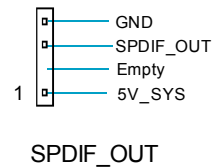
## S-ATA Connectors: SATA1, SATA2, SATA3, SATA4

The S-ATA connector is used to connect the S-ATA device to the motherboard. These connectors support the thin Serial ATA cables for primary storage devices. The current Serial ATA interface allows up to 150MB/s data transfer rate.

GND    GND    GND
TX +    RX+
TX-  RX-

SATA 1/SATA 2/
SATA 3/SATA 4
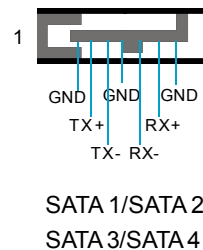
## Chassis Intruder Connector: INTR

The connector connects to the chassis security switch on the case. The system can detect the chasis 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.

1  INTRUDERJ    2  GND

INTR
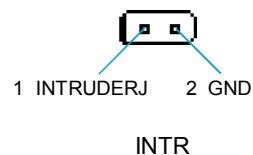
## Audio Connector: F_AUDIO

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.

```
              1
MIC_IN ———[□  □]——— MIC_GND
MIC_PWR ——[□  □]——— +5VA
AUD_OUT-R —[□  □]——— AUD_RET-R
NA ———————[□]——————— Empty
AUD_OUT-L —[□  □]——— AUD_RET-L

            F_AUDIO
```
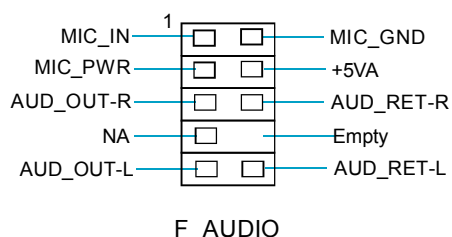
## USB Connectors: F_USB1, F_USB2, F_USB3 (optional)

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

```
               1
5V_DUAL ——[□  □]——— 5V_DUAL
D- ———————[□  □]——— D-
D+ ———————[□  □]——— D+
GND ——————[□  □]——— GND
Empty —————————[□]— NC

           F_USB1/2/3
```
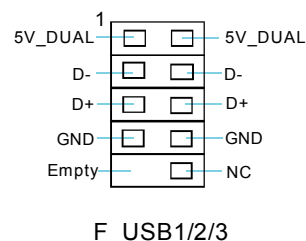
## Addtional COM Connector: COM2

This motherboard provides an additional serial COM connector for your machine.
Connect one side of a switching cable to the connector, then attach the serial COM device to the other side of the cable.

```
          1    2
RLSD ——[□    □]—— SIN
SOUT ——[□    □]—— DTR#
GND ———[□    □]—— DSR#
RTS# ——[□    □]—— CTS#
RI# ———[□]——————— Empty
          9   10

            COM2
```
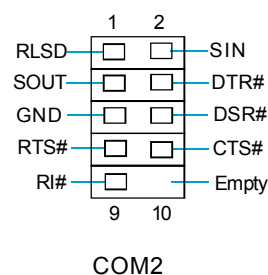
## IrDA Connector: IR

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.

```
    1
  [□]—— +5V
     —— Empty
  [□]—— IRRX
  [□]—— GND
  [□]—— IRTX

      IR
```
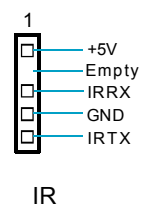
## Expansion Slots

This motherboard includes three 32-bit Master PCI bus slots and one PCI Express x 16 slot (only for 915G/P/PL7MH series) or F.G.E.II slot (only for 915GV/GL/910GL7MH series).

### PCI Slots

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

### PCI Express Slot

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 graphic/video cards, the x1 slot is designed to accommodate less bandwidth-intensive cards, such as a modem or LAN card.

The difference in bandwidth between the x16 and x1 slots is notable to be sure, with the x16 slot pushing 4GB/sec (8GB/sec concurrent) of bandwidth, and the x1 PCI Express slot offering 250MB/sec.

### ⚡ Warning:

If a performance graphics card was installed into 16X PCI Express slot, 2 x 12 pin power supply was strongly recommended.

**F.G.E. II Slot**

The F.G.E.II (Foxconn Graphics Extension II) slot is a special design that provides an extended graphics interface for PCI Express 16X VGA cards.

*Note: For the latest PCI Express 16X VGA cards support list, please visit Foxconn website for details.*
*Foxconn website: http://www.foxconnchannel.com*

With F.G.E.II technology, This motherboard can enjoy Facile Dual Monitor feature, which provides an enhanced productivity feature for business workers, programmer and etc..

**Facile Dual Monitor Feature Support Matrix Table**

| Matrix | Configuration |
|:---:|:---|
| 1 | PCI Express X16 (for 915G)+ Onboard VGA |
| 2 | Onboard VGA (for 915GL/GV/910GL) + F.G.E. II |

**Note**

To install the system with an add-on PCI Express VGA card, please make sure to install the driver of the add-on PCI Express VGA card before you install the onboard VGA driver. If the onboard VGA dirver has already been installed prior to installing the add-on PCI Express VGA card, the system will automatically set the onboard VGA as the primary graphics adapter. In this case, if you want to install the add-on PCI Express VGA card, you need to remove the onboard VGA driver first, and then install the add-on PCI Express VGA card and its driver.

## 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 content carefully prior to modifying any jumper settings.

**Description of Jumpers**

1. For the jumpers on this motherboard, pin 1 can be identified by the silkscreen 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 | 1 | 1-2 | Set pin1 and pin2 closed |
| | 1 | 2-3 | Set pin2 and pin3 closed |
| 1 | 1 | Closed | Set the pin closed |
| | 1 | Open | Set the pin opened |

**Clear CMOS Jumper: CLR_CMOS**

The 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.

NORMAL
(Default)    1  2  3

CLEAR    1  2  3
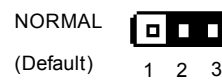
CLR_CMOS

⚡ **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: TBL_EN

The system cannot boot if the BIOS fails to be flashed in conventional flash BIOS process. But not to worry when you use the BIOS TBL function. It is used to protect BIOS "Top Boot Block". The system still can boot by using this function even if the BIOS fails to be flashed. To utilize this function, you just leave this jumper as default (pins 2 and 3 together with the jumper cap).

BIOS TBL
Enable
(Default)
1 2 3

BIOS TBL
Disable
1 2 3

TBL_EN

# 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 AWARDBIOS 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.

```
            Phoenix - AwardBIOS CMOS Setup Utility
   ┌─────────────────────────────┬─────────────────────────────┐
   │ ▶ Standard CMOS Features     │ ▶ PC Health Status           │
   │ ▶ BIOS Features              │   Load Fail-Safe Defaults    │
   │ ▶ Advanced BIOS Features     │   Load Optimized Defaults    │
   │ ▶ Advanced Chipset Features  │   Set Supervisor Password    │
   │ ▶ Integrated Peripherals     │   Set User Password          │
   │ ▶ Power Management Setup      │   Save & Exit Setup          │
   │ ▶ PnP/PCI Configurations     │   Exit Without Saving        │
   ├─────────────────────────────┴─────────────────────────────┤
   │ Esc : Quit                          ↑ ↓ → ←  : Select Item  │
   │ F10 : Save & Exit Setup                                     │
   ├────────────────────────────────────────────────────────────┤
   │               Time, Date, Hard Disk Type...                │
   └────────────────────────────────────────────────────────────┘
```

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 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**

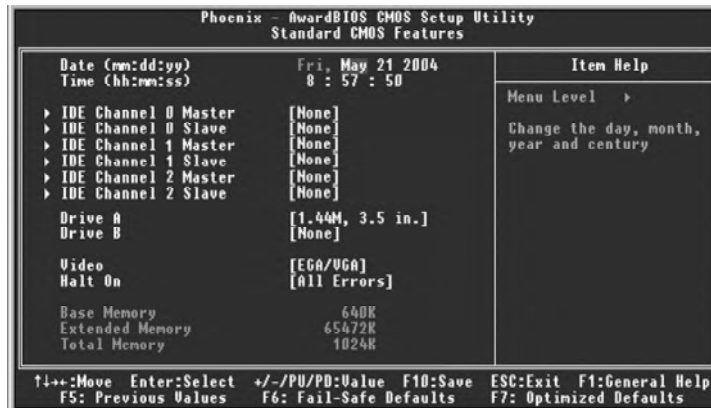The supervisor/user password can be set up through this menu.

**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 select the item to set up, and then use the <PgUp> or <PgDn> keys to choose the setting values.

```
                Phoenix - AwardBIOS CMOS Setup Utility
                        Standard CMOS Features
┌────────────────────────────────────────────┬─────────────────────┐
│  Date (mm:dd:yy)         Fri, May 21 2004    │     Item Help       │
│  Time (hh:mm:ss)          8 : 57 : 50        │                     │
│                                              │  Menu Level    ▶    │
│ ▶ IDE Channel 0 Master    [None]             │                     │
│ ▶ IDE Channel 0 Slave     [None]             │  Change the day, month, │
│ ▶ IDE Channel 1 Master    [None]             │  year and century   │
│ ▶ IDE Channel 1 Slave     [None]             │                     │
│ ▶ IDE Channel 2 Master    [None]             │                     │
│ ▶ IDE Channel 2 Slave     [None]             │                     │
│                                              │                     │
│   Drive A                 [1.44M, 3.5 in.]   │                     │
│   Drive B                 [None]             │                     │
│                                              │                     │
│   Video                   [EGA/VGA]          │                     │
│   Halt On                 [All Errors]       │                     │
│                                              │                     │
│   Base Memory                  640K          │                     │
│   Extended Memory            65472K          │                     │
│   Total Memory                1024K          │                     │
├──────────────────────────────────────────────────────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│ F5: Previous Values    F6: Fail-Safe Defaults    F7: Optimized Defaults │
└──────────────────────────────────────────────────────────────────┘
```

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 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
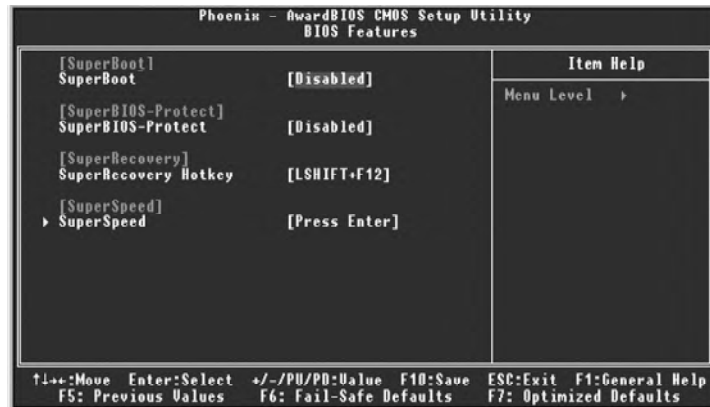


BIOS Features Menu

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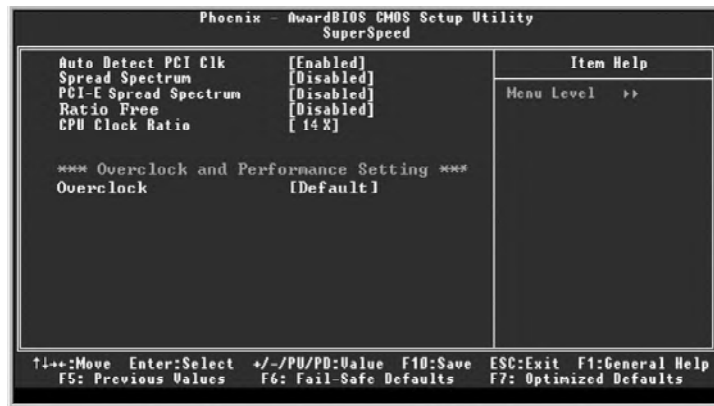SuperRecovery provides the users with an excellent data protection and HDD recovery function. There are 12 optional hotkeys and the default hotkey is LSHIFT+F12.

❖ **[SuperSpeed] SuperSpeed**
Press <Enter> to set the items of SuperSpeed. Please refer to next page.

🌀 **Warning:**

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

```
                Phoenix - AwardBIOS CMOS Setup Utility
                            SuperSpeed
 Auto Detect PCI Clk       [Enabled]              Item Help
 Spread Spectrum           [Disabled]
 PCI-E Spread Spectrum     [Disabled]        Menu Level    ▸▸
 Ratio Free                [Disabled]
 CPU Clock Ratio           [ 14 X]

 *** Overclock and Performance Setting ***

 Overclock                 [Default]




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

SuperSpeed Menu

❖**Auto Detect PCI Clk**

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

❖**Spread Spectrum ∕ PCI-E Spread Spectrum**

If you enable spread spectrum, it can significantly reduce the EMI (Electro-Magnetic Interference).
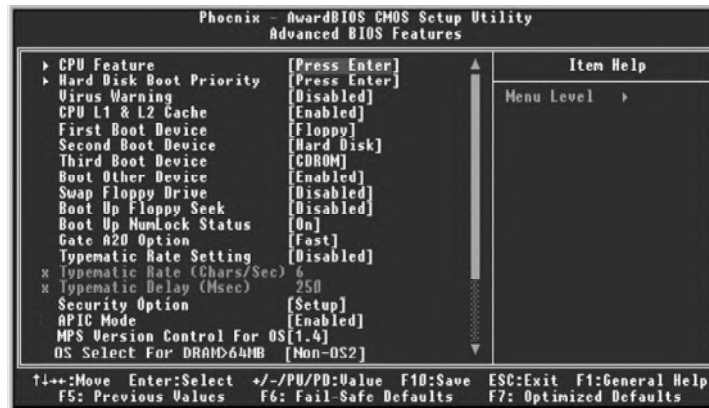
❖**CPU Clock Ratio**

This option is used to set the ratio of an unlocked CPU.

❖**OverClock**

This option is used to set overclock function.

## Advanced BIOS Features



```
              Phoenix - AwardBIOS CMOS Setup Utility
                       Advanced BIOS Features
  ▶ CPU Feature              [Press Enter]   ▲    ┌──────────────────┐
  ▶ Hard Disk Boot Priority  [Press Enter]        │    Item Help     │
    Virus Warning            [Disabled]           ├──────────────────┤
    CPU L1 & L2 Cache        [Enabled]            │ Menu Level   ▶   │
    First Boot Device        [Floppy]             │                  │
    Second Boot Device       [Hard Disk]          │                  │
    Third Boot Device        [CDROM]              │                  │
    Boot Other Device        [Enabled]            │                  │
    Swap Floppy Drive        [Disabled]           │                  │
    Boot Up Floppy Seek      [Disabled]           │                  │
    Boot Up NumLock Status   [On]                 │                  │
    Gate A20 Option          [Fast]               │                  │
    Typematic Rate Setting   [Disabled]           │                  │
  x Typematic Rate (Chars/Sec) 6                  │                  │
  x Typematic Delay (Msec)    250                 │                  │
    Security Option          [Setup]              │                  │
    APIC Mode                [Enabled]            │                  │
    MPS Version Control For OS[1.4]               │                  │
    OS Select For DRAM>64MB  [Non-OS2]     ▼      │                  │
  ┌────────────────────────────────────────────────────────────────┐
  │ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
  │   F5: Previous Values   F6: Fail-Safe Defaults   F7: Optimized Defaults       │
```

Advanced BIOS Features Menu

❖ **CPU Feature**

Press <Enter> to set the items of CPU feature. Please refer to page 32.

❖ **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**

This option is used to set up the virus warning message for the IDE HDD boot sector. When set to Enabled, a warning message will appear on the screen if any program wants to write any information to this sector, and will give an audible warning. The available 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**

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

❖ **CPU L3 Cache**

This option is used to turn on or off the CPU L3 cache. The available setting values are: Disabled and Enabled.

❖**Hyper-Threading Technology**

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**

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**

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**

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**

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**

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**

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**

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**

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

❖**Typematic Delay (Msec)**

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

❖**Security Option**

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**

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

❖**MPS Version Control For OS**

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

❖**OS Select For DRAM > 64MB**

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**

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**

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

❖**Small Logo (EPA) Show**

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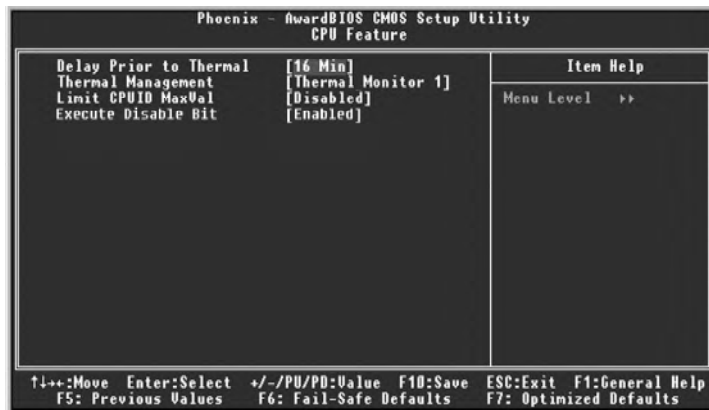
CPU Feature Menu

❖ **Delay Prior to Thermal**

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.
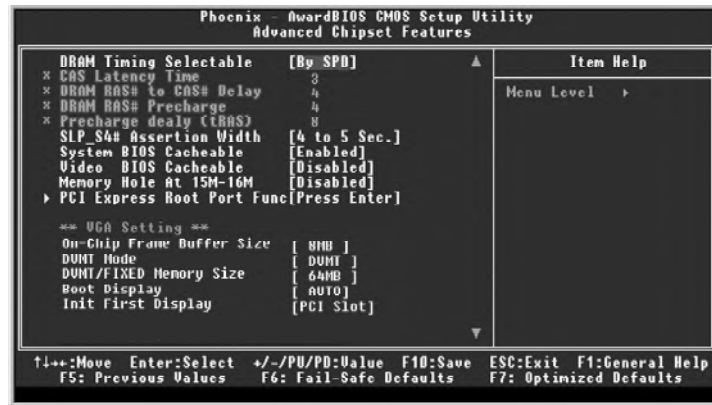
❖**Thermal Management**

This option is used to manage Prescott CPU thermal.

❖**Limit CPUID MaxVal**

The option is used to set limit CPUID MaxVal. The available setting values are: Disabled and Enabled.

## Advanced Chipset Features



Advanced Chipset Features Menu

❖ **DRAM Timing Selectable**

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

❖ **CAS Latency Time**

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

❖ **DRAM RAS# to CAS# Delay**

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**

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)**

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

❖ **SLP_S4# Assertion Width**

This option indicates the assertion width of the SLP_S4# signal to guarantee that the DRAMs have been safely power-cycled. The available setting values are: 1 to 2 sec., 2 to 3 sec., 3 to 4 sec., 4 to 5 sec. .

❖ **System BIOS Cacheable**

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**

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**

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 35.

❖**PEG/Onchip VGA Control**

Set this option as "Onchip VGA", if you want to use onboard VGA; set this option as "PEG Port", if you want to used PCI Express x16 graphics card; set as Auto, BIOS will auto-detect and enable the device you used. The available setting values are: Onchip VGA, PEG Port, Auto.

Note: The  following items  will be shown and modified when you use onboard VGA.

❖**On-Chip Frame Buffer Size**

This item is used to set the VGA frame buffer size. The available setting values are: 1MB, 4MB, 8MB, 16MB, 32MB.
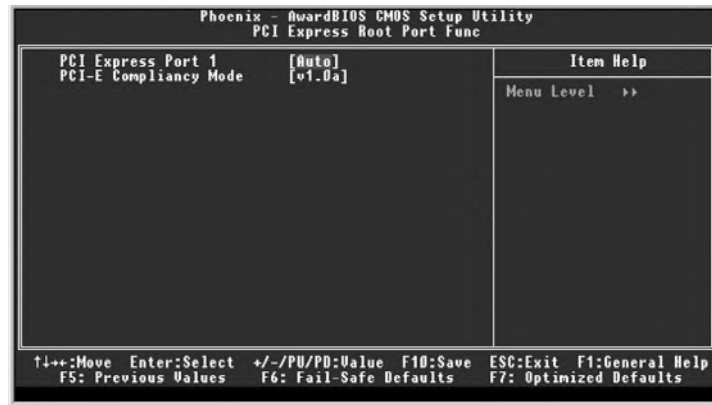Note: This function does not work when the external display card is used.

❖**DVMT/FIXED Memory Size**

This item is used to set DVMT (Dynamic Video Memory Technology) memory size/fixed memory size for onboard VGA .. DVMT ensures the most efficient use of available system memory resources for maximum 2D/3D graphics performance. The available setting values are: 0MB, 32MB, 64MB, 128MB.

❖**Init  Display First**

This option is used to set which display device will be used first when your PC starts up.

```
           Phoenix - AwardBIOS CMOS Setup Utility
                    PCI Express Root Port Func
┌──────────────────────────────────────────┬─────────────────┐
│ PCI Express Port 1        [Auto]          │    Item Help    │
│ PCI-E Compliancy Mode     [v1.0a]         ├─────────────────┤
│                                           │ Menu Level   ▶▶ │
│                                           │                 │
│                                           │                 │
│                                           │                 │
│                                           │                 │
│                                           │                 │
│                                           │                 │
│                                           │                 │
│                                           │                 │
├──────────────────────────────────────────┴─────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│    F5: Previous Values    F6: Fail-Safe Defaults   F7: Optimized Defaults     │
└──────────────────────────────────────────────────────────────┘
```

PCI Express Root Port Func Menu

❖**PCI Express Port 1**

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**

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:
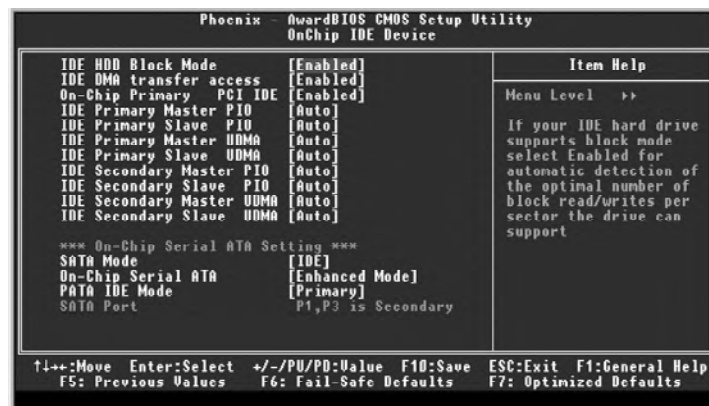


Onchip IDE Menu

❖**IDE HDD Block Mode**

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**

This option is used to set up 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**

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

❖**IDE Primary/Secondary Master/Slave PIO**

These two 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**

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

❖**SATA Mode**

This option is used to set the Serial ATA Mode. The available setting values are: IDE, RAID, AHCI.

❖**On-Chip Serial ATA**

This option is used to set the On-chip Serial ATA function. When it is set to Disabled, the function will be disabled; when it is set to Auto, the BIOS will enable the function automatically; 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**

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**

This option is used to set the Serial ATA Port.

```
              Phoenix - AwardBIOS CMOS Setup Utility
                         Onboard Device
 ┌──────────────────────────────────────────┬─────────────────────┐
 │ USB Controller          [Enabled]        │     Item Help       │
 │ USB 2.0 Controller      [Enabled]        │                     │
 │ USB Keyboard Support    [Disabled]       │  Menu Level    ▶▶   │
 │ USB Mouse Support       [Disabled]       │                     │
 │ Azalia/AC97 Audio       [Auto]           │                     │
 │ Onboard Lan Controller  [Enabled]        │                     │
 │ Onboard Lan Boot ROM    [Disabled]       │                     │
 │                                          │                     │
 │                                          │                     │
 │                                          │                     │
 │                                          │                     │
 │                                          │                     │
 │                                          │                     │
 ├──────────────────────────────────────────┴─────────────────────┤
 │ ↑↓←→:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
 │ F5: Previous Values      F6: Fail-Safe Defaults    F7: Optimized Defaults     │
 └─────────────────────────────────────────────────────────────────┘
```

Onboard Device Menu

### ❖USB Controller

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

### ❖USB 2.0 Controller

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

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

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

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

### ❖Onboard LAN Controller

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

### ❖Onboard Lan Boot ROM

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.
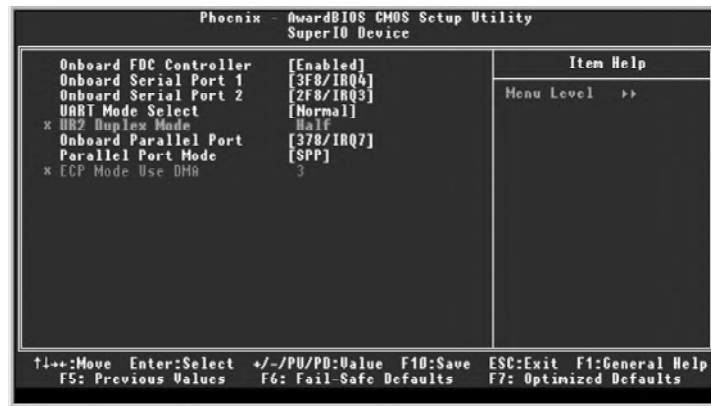
SuperIO Device Menu

❖ **Onboard FDC Controller**

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**

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

❖ **UART Mode Select**

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**

This option is available when UART 2 mode is set to either ASKIR or IrDA. This item enables you to determine the infrared function of the onboard infrared chip.

❖ **Onboad Parallel Port**

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**

Select an address and corresponding interrupt for the onboard parallel port. Setting values include SPP, EPP, ECP, ECP+EPP.

❖ **ECP Mode Use DMA**

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

## Power Management Setup

```
              Phoenix - AwardBIOS CMOS Setup Utility
                     Power Management Setup
┌─────────────────────────────────────────────────────────────────┐
│  ACPI Function           [Enabled]         ▲│    Item Help        │
│  ACPI Suspend Type       [S1(POS)]          │                     │
│ x Run VGABIOS if S3 Resume  Auto            │ Menu Level    ▶     │
│  Power Management        [User Define]      │                     │
│  Video Off Method        [DPMS]             │                     │
│  Video Off In Suspend    [Yes]              │                     │
│  Suspend Type            [Stop Grant]       │                     │
│  MODEM Use IRQ           [3]                 │                     │
│  Suspend Mode            [Disabled]         │                     │
│  HDD Power Down          [Disabled]         │                     │
│  Soft-Off by PWR-BTTN    [Instant-Off]      │                     │
│  PWRON After PWR-Fail    [Off]              │                     │
│ ▶ Power Management Events [Press Enter]     │                     │
│                                             │                     │
│  ** Reload Global Timer Events **           │                     │
│  Primary IDE 0           [Disabled]        ▒│                     │
│  Primary IDE 1           [Disabled]         │                     │
│  Secondary IDE 0         [Disabled]        ▒│                     │
│  Secondary IDE 1         [Disabled]        ▼│                     │
├─────────────────────────────────────────────────────────────────┤
│ ↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help │
│ F5: Previous Values    F6: Fail-Safe Defaults  F7: Optimized Defaults    │
└─────────────────────────────────────────────────────────────────┘
```

Power Management Setup Menu

❖ **ACPI Function**

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, Windows 2000 or Windows XP). The available setting values are: Enabled and Disabled.

❖ **ACPI Suspend Type**

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**

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**

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

❖**Vdieo Off Method**

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**

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**

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**

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**

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**

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**

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**

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 previous status).

❖**Power Management Events**

Press <Enter> to set the items of power management events. Please
refer to page 43.

❖**Primary IDE 0, Secondary IDE 0**

When these items are enabled, the system will restart the power saving time-
out 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**

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

❖**PCI PIRQ[A-D]#**

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**

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**

If this item is enable, 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/modem. This function needs to be supported by the relevant hardware and software. The setting values are Disabled and Enabled.

❖ **Wake Up On LAN**

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

❖**USB KB  Wake-Up From S3**

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**

This option is used to set the timing of the start-up function. In order to use this function, the start-up password function must be cancelled. Also, 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 start-up 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 start-up time. The setting values contain hh:0 – 23; mm:0 – 59; ss:0 – 59.

❖**Power on By Mouse**

This option is used to set the power-on method of your PC. The available setting values are: Disabled, Mouse Move, Mouse Click.

❖**Power On By Keyboard**

This option is used to set the power-on method of your PC. The available setting values are: Disabled, Password, Hot KEY, Any Key, Keyboard 98.

❖**KB Power On Password**

When the "Power On By Keyboard" is set as "Password", use this item to set the keyboard password that powers on the system.

❖**Hot Key Power On**

When the "Power On By Keyboard" is 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**

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**

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 distributes 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**

If you use a non-standard 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**

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**

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

### ❖ Case Open Warning

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

### ❖ Shutdown Temperature

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.

### ❖ Warning Temperature

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.

### ❖ CPU Vcore/Vddr/+3.3 V/+12 V/5.0V

The current voltages will be automatically detected by the system.

### ❖ Voltage Battery

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.

❖**Smart Fan Control**

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

❖**CPU Temperature Adjust**

The current CPU temperature will be adjusted by this option.

## 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 specific 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

## 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 display the main menu screen.

### 1. Install Driver

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 the drivers are all installed.

|   |   |
|---|---|
| A. Chipset Software | B. DirectX 9.0b |
| C. VGA Driver (optional) | D. Audio Driver |
| E. LAN Driver | F. USB2.0 Driver |

### 2. Accessories

Use this option to install additional software programs.

A. SuperUtility

a. SuperStep

Superstep is a powerful and easy-to-operate tool for overclocking. You can quickly increase your CPU's working frequency through its user-friendly interface. It will enhance your CPU's performance and meet all kinds of DIY requirements

b.SuperLogo

SuperLogo can display user-designed graphics and pictures, such as a company logo or personal photos, thus making your PC more personalized and friendly.

c.SuperUpdate

SuperUpdate function can help to update the BIOS through Internet directly.

B. Adobe Reader

C. Norton Internet Security

D. Word Perfect Office 12

### 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

Click <Install Driver> to enter the driver installation menu (as shown in Figure 1). Click the relevant buttons to install Chipset Software, DirectX 9.0, VGA Driver (optional), Audio Driver, LAN Driver and USB2.0 Driver from this CD.
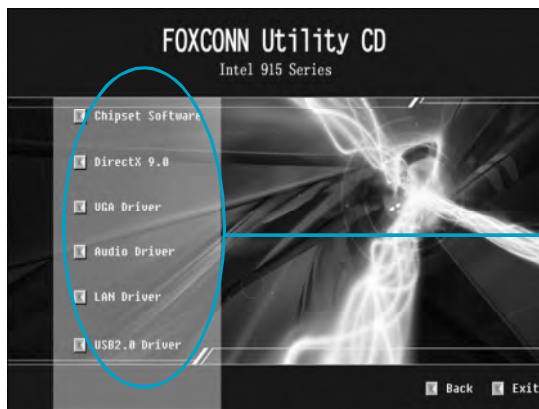


Follow the screen order to install the motherboard drivers

❶

# Chapter 5

This chapter will introduce how to use attached software.

This chapter includes the following information:

- ❖ SuperStep
- ❖ SuperUpdate
- ❖ SuperLogo

# SuperStep

SuperStep is a utility that allows users to change the frequency of the CPU. It also displays system health introduction including CPU temperature, CPU voltage, and PCI/PCI Express 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:
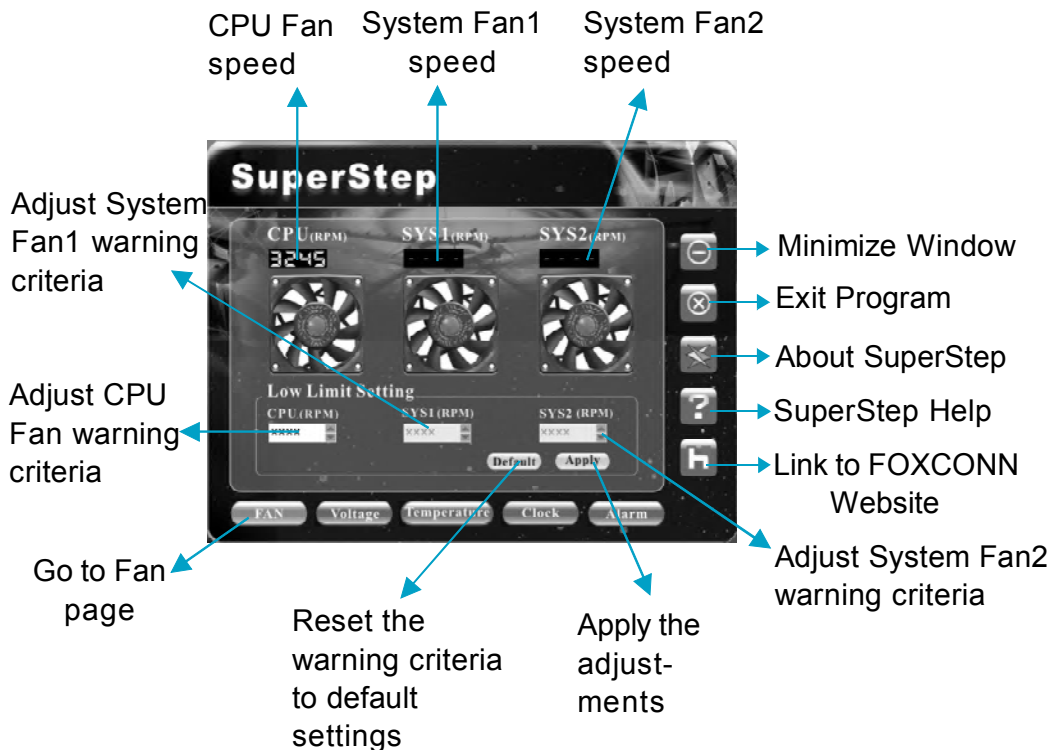
Adjust voltages warning
criteria (upper limit)

Current voltage
readings

Go to Voltage
page

Reset the warning
criteria to default
settings

Apply the
adjustments

Adjust voltages
warning criteria
(Lower limit)

Current CPU
Temperature

Current system
Temperature

Adjust CPU tem-
perature warning
criteria

Adjust system
temperature
warning criteria

Reset the warn-
ing criteria to
default settings

Go to
Temperature
page

Apply the adjustments

Current CPU Clock

Current CPU Ratio

Current PCI Express clock

Current PCI clock

Adjust the CPU External Frequency

Reset to the default settings

Go to Clock page

Apply the adjustments



Check for the system to automatically provide warning messages

Adjust the monitoring Interval

Go to Alarm page

Reset to the default settings

Apply the changes

# SuperUpdate

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

## 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:

Browse BIOS bin file from local HDD

Perform the BIOS update from local image

Current BIOS Information

Minimize Window

Exit Program

BIOS Update Setting

About SuperUpdate

SuperUpdate Help

Link to Foxconn Website

Show the latest BIOS version

Backup system BIOS to an image file
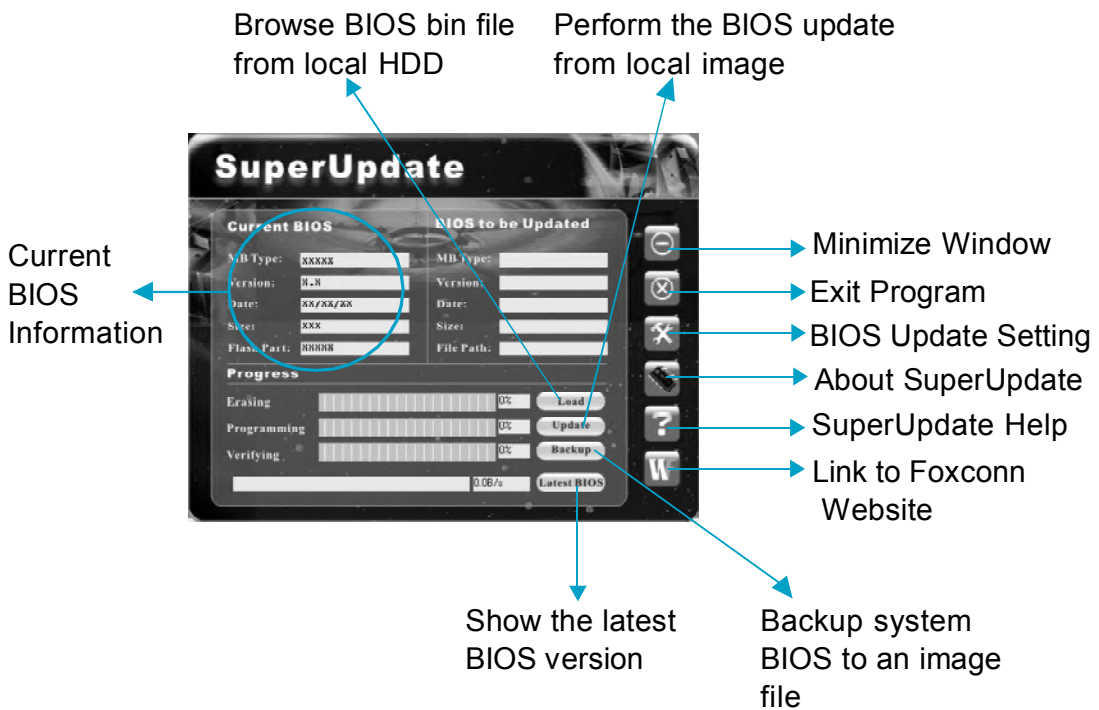
## *Backup BIOS to local image:*

1. Click <Backup> and name your BIOS binary file to backup current BIOS.



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

## *Update BIOS from local image:*

1. Click <Load> to load the BIOS file.

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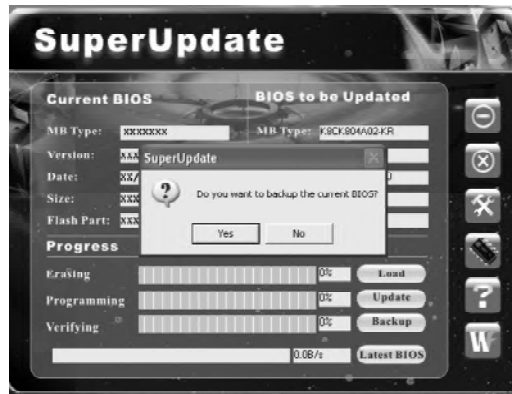


3. Click <Yes> to backup the current BIOS, then the following picture will appear.
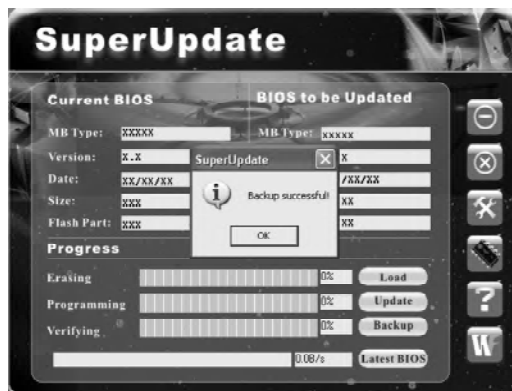


4. Click <OK >, then click <Update>.
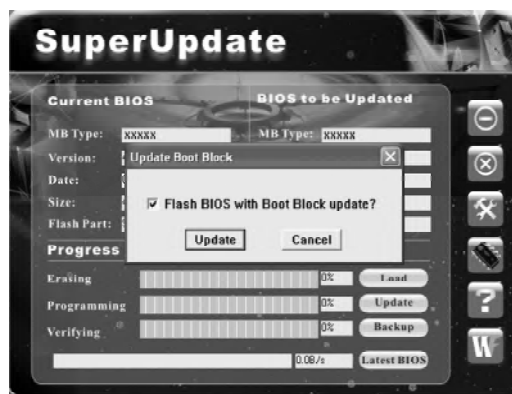
5. Now is updating.



6. Click <Restart>.
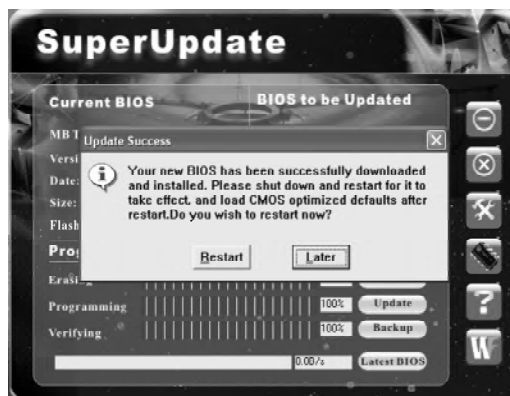
### *Update BIOS On-line:*

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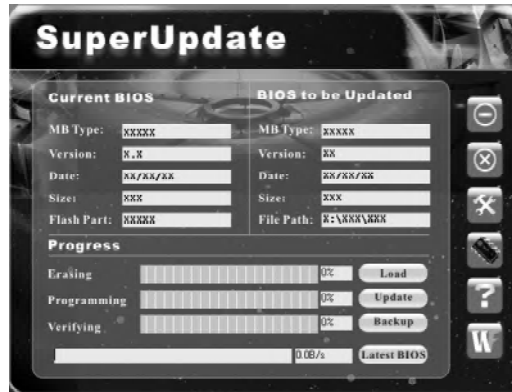


2. The following procedure is the same as **Update BIOS from local image**.

# 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 136 x 84 for top-right logo and 640 x 480 or 800 x 600 for full screen logo.

## *Using SuperLogo:*

Display the Flash Information

Minimize Window

Exit Program

About SuperLogo

SuperLogo Help

Link to Foxconn website

BIOS Write Protect Status

BIOS Flash Rom Free Space

Go to ROM Info. page
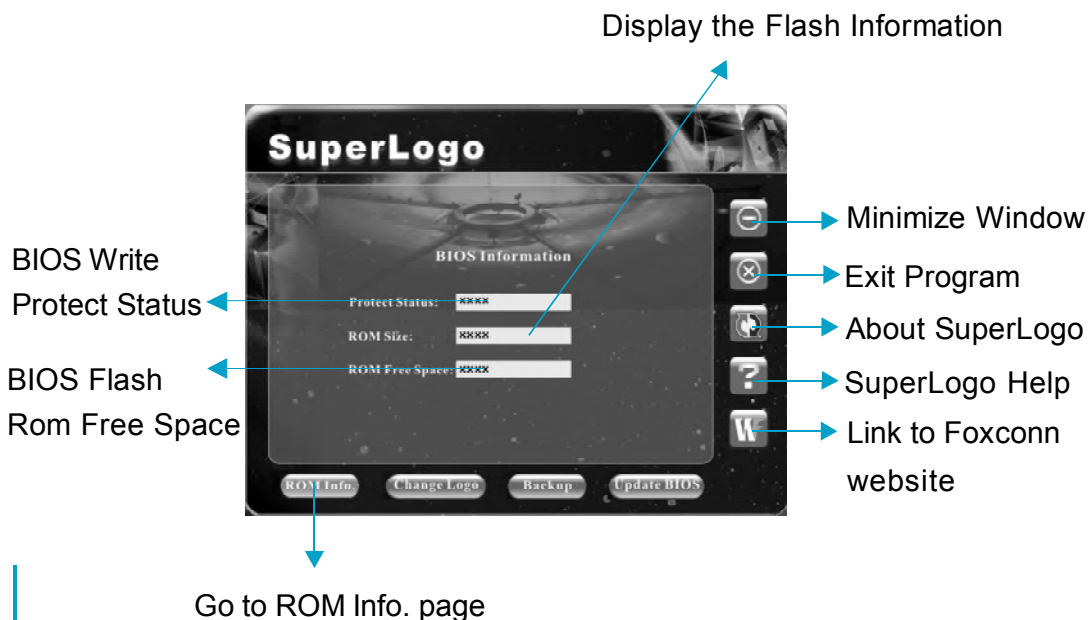
Full screen mode

Top-Right mode

Boot without logo

Follow the Wizard to complete the logo update

Go to Change Logo page



Backup whole BIOS image

Backup Logo

Follow the Wizard to complete the backup function

Go to Backup page



BIOS image file location

Browse a BIN file for updating BIOS

Go to Update BIOS page

# 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.
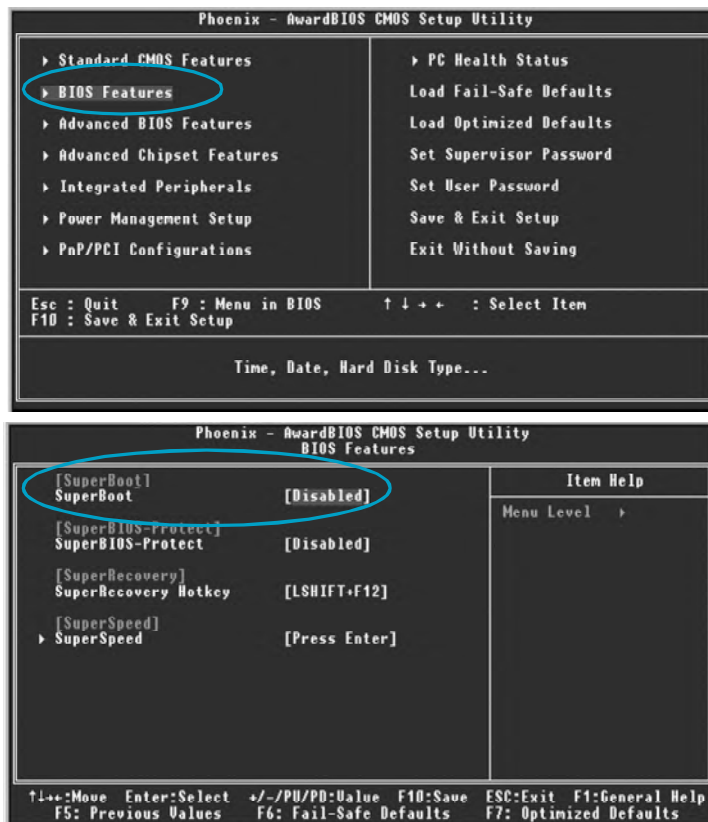


***Notes:***

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.
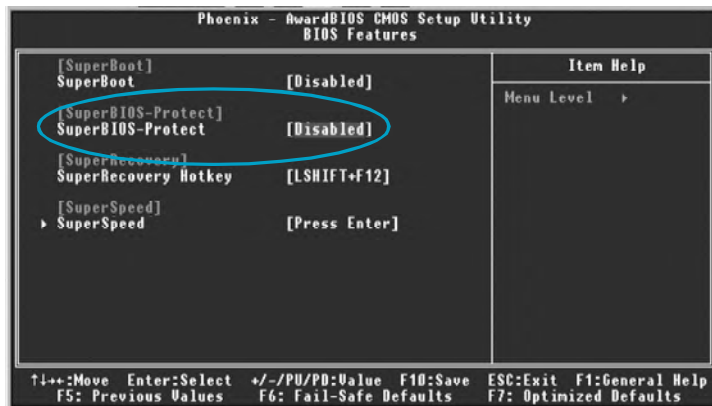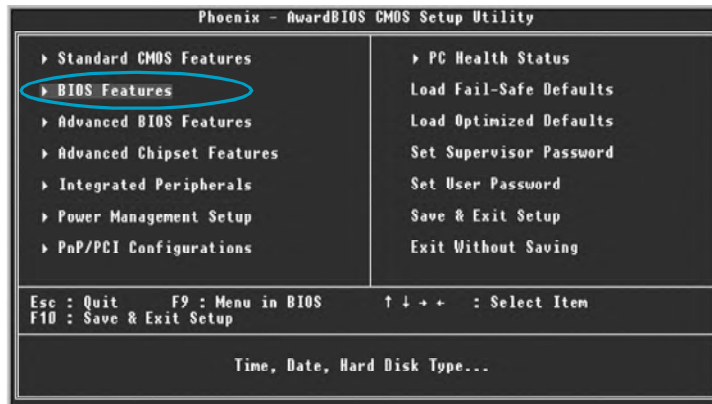




The way to implement this function:
Set "SuperBIOS-Protect" as "Enabled", the  BIOS will be protected.

# 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.
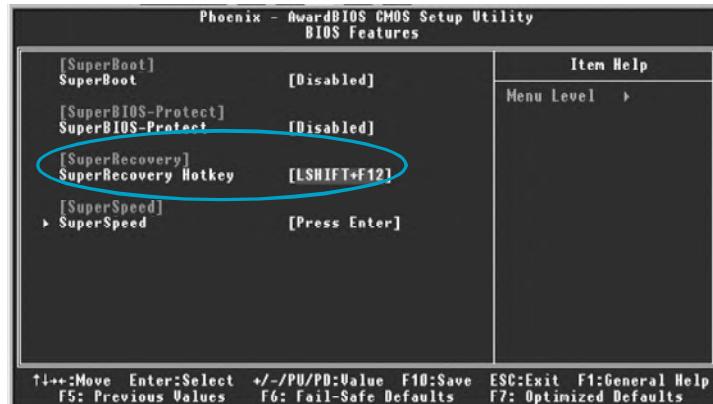
## *Hard Disk Selection:*

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.
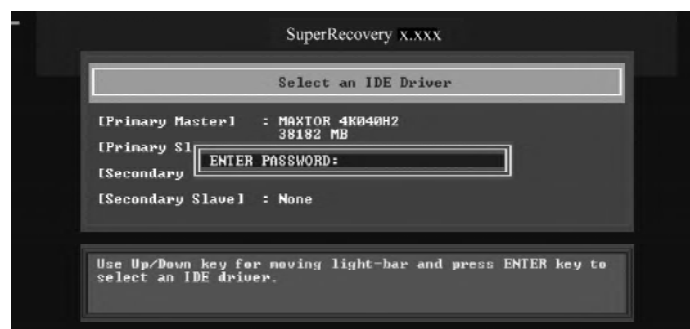
## *Main Menu:*

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.



On-line help message

## *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 be come 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.
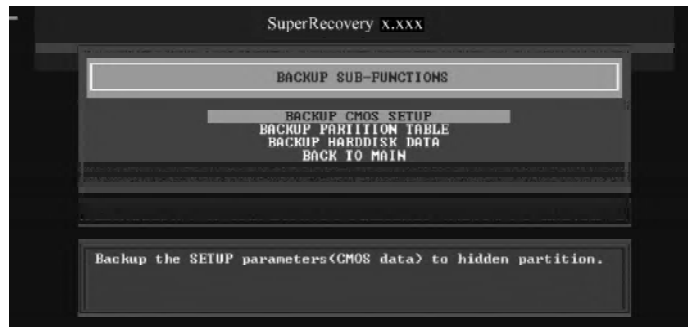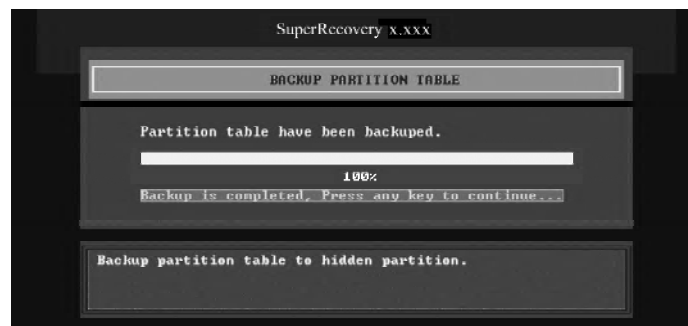


1.  **Backup CMOS Setup:**
    A. Support backing up of the CMOS data.
    B. The backing up or recovery of CMOS data should be done on a motherboard
       of the same type.



2.  **Backup Partition Table:**
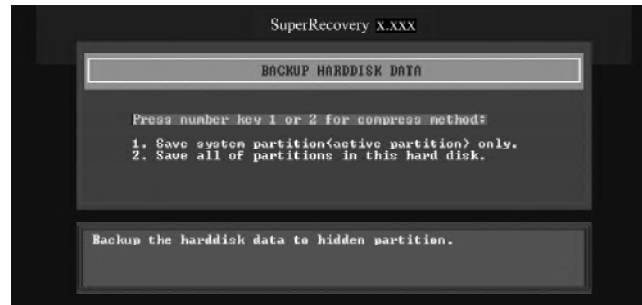    This function can help to backup all partition tables including extended
    partitions.

**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.
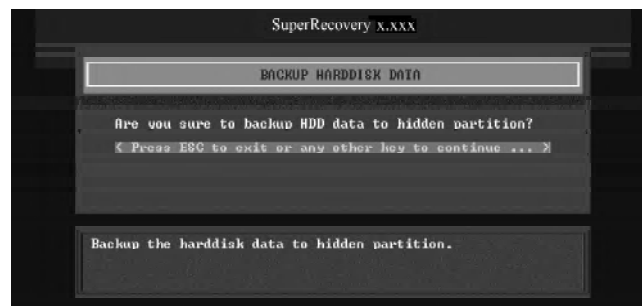




B. Backing up with the progress bar showing.

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.
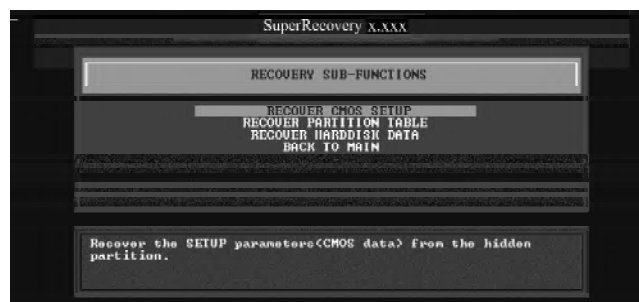
**1.  Recover CMOS Setup:**

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.
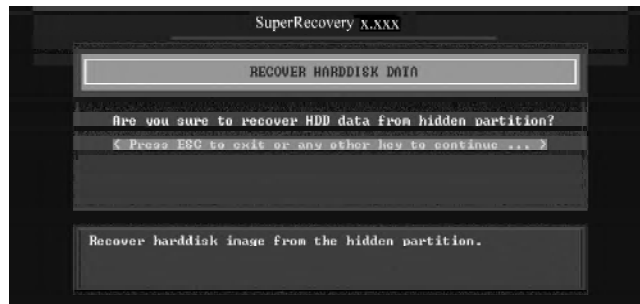




**4. Back to Main:**

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.
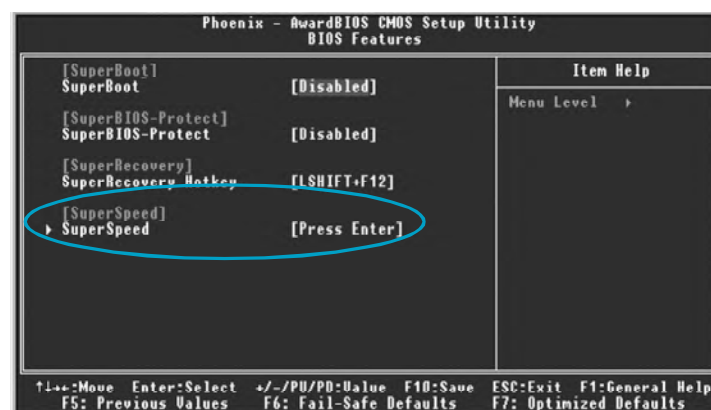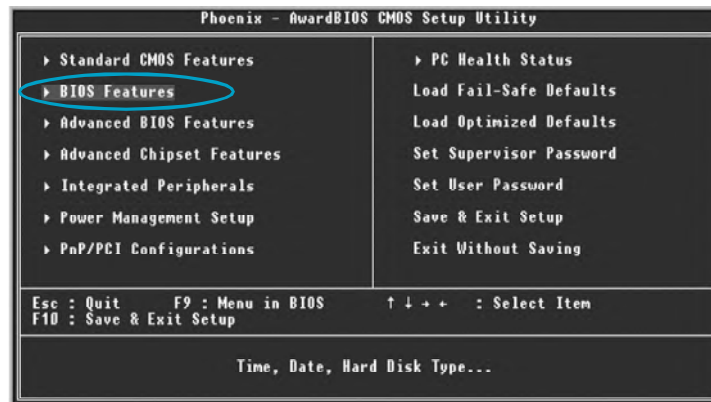
## *Procedures:*

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> menu to set the CPU clock.
5.   Save and exit BIOS Setup; your system will now boot successfully.

```
         Phoenix - AwardBIOS CMOS Setup Utility

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

  Esc : Quit          F9 : Menu in BIOS    ↑ ↓ → ←   : Select Item
  F10 : Save & Exit Setup

                 Time, Date, Hard Disk Type...
```

```
         Phoenix - AwardBIOS CMOS Setup Utility
                      BIOS Features

  [SuperBoot]                                    Item Help
  SuperBoot              [Disabled]
                                              Menu Level   ▶
  [SuperBIOS-Protect]
  SuperBIOS-Protect      [Disabled]

  [SuperRecovery]
  SuperRecovery Hotkey   [LSHIFT+F12]

  [SuperSpeed]
  ▶ SuperSpeed           [Press Enter]




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

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 damages caused.