Statement:

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Version:

User's Manual V1.1 in English for 755/760A01 series motherboard.

P/N:91-181-755-11-00

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: www.foxconnchannel.com

Item Checklist:

Thank for your purchasing Foxconn's 755/760A01 series motherboard. Please check the package; if there are missing or damaged items, contact your distributor as soon as possible.

- 755/760A01 series motherboard (x1)
- Foxconn Utility CD (x1)
- User's Manual (x1)
- 755/760A01 series Flyer (x1)
- SATA RAID user's Manual (x1)
- IDE Ribbon cable (x1)
- FDD Ribbon cable (x1)
- I/O Shield (x1)
- SPDIF Cable (x1) (optional)
- USB 2.0 Cable (x1) (optional)
- S-ATA Signal Cable (x2)
- S-ATA Power Cable (x1)
- SiS964 RAID Installation Support Disk (x1)
- Silicon 3112A RAID Installation Support Disk (x1)

Declaration of conformity

CE

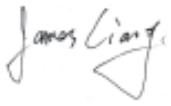
HON HAI PRECISION INDUSTRY COMPANY LTD
66 , CHUNG SHAN RD., TU-CHENG INDUSTRIAL DISTRICT,
TAIPEI HSIEN, TAIWAN, R.O.C.

declares that the product

Motherboard
755/760A01 series

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

☑	EN 55022/A1: 2000	Limits and methods of measurements of radio disturbance characteristics of information technology equipment
☑	EN 61000-3-2/A14:2000	Electromagnetic compatibility (EMC) 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/A1:2001	Information technology equipment-Immunity characteristics limits and methods of measurement

Signature :  Place / Date : TAIPEI/2004

Printed Name : James Liang Position/ Title : Assistant President

Declaration of conformity

Trade Name:	Foxconn
Model Name:	**755/760A01**
Responsible Party:	PCE Industry Inc.
Address:	458 E. Lambert Rd. Fullerton, CA 92835
Telephone:	714-738-8868
Facsimile:	714-738-8838
Equipment Classification:	FCC Class B Subassembly
Type of Product:	Motherboard
Manufacturer:	**HON HAI PRECISION INDUSTRY COMPANY LTD**
Address:	66 , CHUNG SHAN RD., TU-CHENG INDUSTRIAL DISTRICT, TAIPEI HSIEN, TAIWAN, R.O.C.

Supplementary Information:

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

Signature :  Date : 2004

Table of Contents

Table of Contents

Warning:

1. Attach the CPU and heatsink using silica gel to ensure full contact.
2. It is suggested to select high-quality, certified fans in order to avoid damage to the motherboard and CPU due to high temperature.
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.

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Chapter 1

Thank you for buying Foxconn's 755/760A01 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 SiS 755/760+SiS 964 chipset, providing users a computer platform with a high integration-compatibility-performance price ratio.

This chapter includes the following information:

- Main Features
- Motherboard Layout

Main Features

Size:

- ATX form factor of 12” x 8.8”

Microprocessor:

- Supports AMD® Athlon64 Processor Hyper Transport™ Technology with 8/16 links
- Supports AMD® Athlon64 Processor Hyper Transport™ Technology up to 1600 MT/s bandwidth

Chipset:

- SiS Chipset: SiS 755/760 (North Bridge) +SiS 964 (South Bridge)

System Memory DDR400

- Three 184-pin DDR DIMM slots
- Supports PC3200/2700/2100 memory
- Supports 128/256/512 Mb technology up to 3GB

USB 2.0 Port

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

Onboard Serial ATA

- 150MBps transfer rate
- Supports four S-ATA devices, such as HDD, etc
- Supports Raid0, Raid1 and JBOD

Onboard 1394(optional) IEEE 1394

- Supports hot-plug
- With rate of transmission at 400Mbps
- Self-configured addressing
- Supports two independent 1394 units synchronously at most, such as HDD, CD-ROM

755A01-032604.p65 2 2004-3-26, 15:28

Onboard LAN (optional)

- Supports10/100/1000 (optional) Mbps Ethernet
- LAN interface built-in on board

Onboard Audio

- AC' 97 2.3 Specification Compliant
- Supports S/PDIF output
- Onboard Line-in jack, Microphone-in jack, Line-out jack
- Supports 5.1 channels audio (setting via software)

BIOS

- Licensed advanced AWARD (Phoenix) BIOS, supports flash ROM, Plug-and-Play
- Supports IDE, CD-ROM, SCSI HDD or USB device boot up

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

- 5 PCI slots
- 1 AGP slot

Onboard Graphics (only for 760A01)

- Supports integrated VGA display function

AGP 8X support

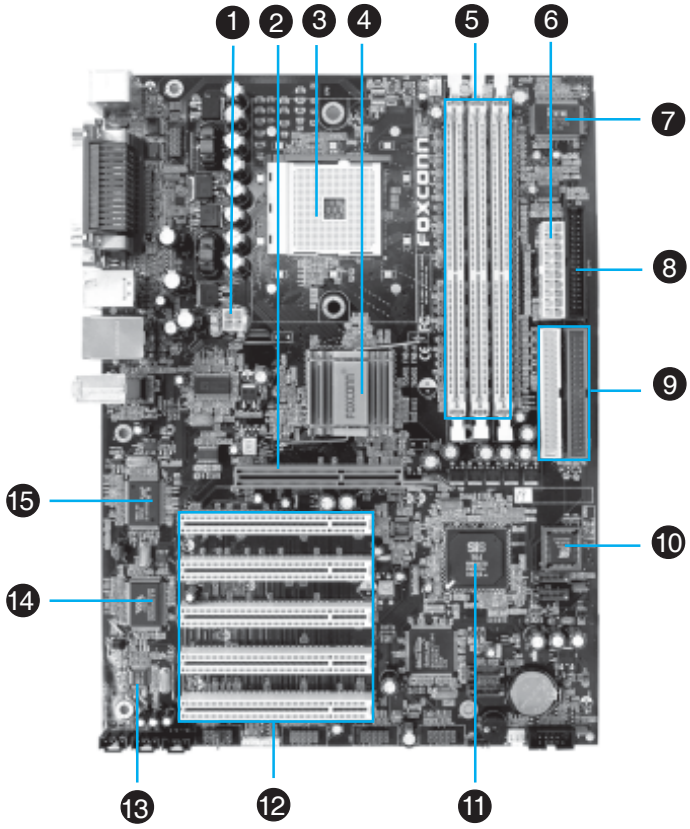
- Supports AGP 8X graphics cards

Advanced Features

- PCI 2.2 Specification Compliant
- Supports Windows98/2000/ME/XP soft-off
- Supports Wake-up On LAN, Wake-up on Modem functions
- Supports PC Health function (capable of monitoring system voltage, CPU, system temperature, and fan speed)

755A01-032604.p65 3 2004-3-26, 15:28

Motherboard Layout



755A01-032604.p65 4 2004-3-26, 15:28

1 ATX 12V connector

This power connector connects the 4-pin 12V plug from the ATX 12V power supply.

2 AGP slot

This Accelerated Graphics Port (AGP) slot supports 1.5V AGP8X mode graphics cards for 3D graphical applications.

3 CPU socket

A 754-pin surface mount, Zero Insertion Force (ZIF) Socket for the AMD® Athlon64 Processor, Support HyperThansport™ Technology with 8/16 links, up to 1600MT/s bandwidth.

4 North Bridge controller

The SiS 755/760 integrate a high performance host interface for the AMD® Athlon64 Processor, and SiS MuTIOL technology.

5 DDR DIMM sockets

These three 184-pin DIMM sockets support up to 3GB system memory using unbuffered non-ECC PC3200/2700/2100 DDR DIMMS.

6 ATX power connector

This 20-pin connector connects to an ATX power supply. The power supply must have at least 1A on the +5V standby lead (+5VSB).

7 Super I/O controller

The ITE8705F controller Super I/O provides support that includes floppy, serial ports, and parallel port to rest of platform through the SiS 755/760 and SiS 964 via the Low Pin Count (LPC) interface.

8 Floppy disk connector

This connector accommodates the provided ribbon cable for the floppy disk drive. One side of the connector is slotted to prevent incorrect insertion of the floppy disk cable.

755A01-032604.p65 5 2004-3-26, 15:28

⑨ IDE connectors

These dual-Channel bus master IDE connectors support Ultra DMA 133/100/66. Both the primary (blue) and secondary (white) connectors are slotted to prevent incorrect insertion of the IDE ribbon cable.

⑩ Flash ROM

This 4Mb firmware contains the programmable BIOS program.

⑪ South Bridge controller

Referred to as the SiS 964 MuTIOL Media I/O, this controller integrates the audio controller with AC'97 interface, Ethernet MAC, Universal Serial Bus Host controller, S-ATA interface, IDE Master/Slave controllers and the MuTIOL connect to PCI bridge.

⑫ PCI Slots

These five 32-bit PCI 2.2 expansion slots support bus master PCI cards like SCSI or LAN cards with 133MB/s maximum throughput.

⑬ Audio CODEC

The ALC655 is an AC'97 CODEC that allows 6-Channel audio playback. The audio CODEC provides six DAC channel for 5.1 surround sound, S/PDIF output and Line-in stereo inputs, integrated headphone amplifier, greater than 90dB dynamic range with the jack sense and jack enumeration feature

⑭ 1394 controller(optional)

VT6307 is the controller for IEEE1394a on motherboard. The VT6307 is a complete small package single chip PCI solution at 400Mbps, low power seamless plug and play connections to the latest IEEE 1394 enabled devices.

⑮ LAN controller(optional)

The RTL8110S-32 Gigabit Ethernet is a single-chip solution for LAN on motherboard (LOM) applications, and supports 10/100/1000 Mbps data transfer rates. **(For -K models)**

The RTL8110C Ethernet is a single-chip solution for LAN on motherboard (LOM) applications, and supports 10/100 Mbps data transfer rates. **(For -L models)**

755A01-032604.p65 6 2004-3-26, 15:28

Chapter 2

This chapter introduces the hardware installation process, including the installation of the CPU and memory. It also addresses the connection of your power supply, use of the rear panel connectors, connection of hard drive and floppy drive data cables, and setting up various other feature of the motherboard. Caution should be exercised during the installation process. Please refer to the motherboard layout prior to any installation and read the contents in this chapter carefully.

This chapter includes the following information:

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

Notes:

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

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

755A01-032604.p65 8 2004-3-26, 15:28

CPU

This motherboard supports AMD® Athlon64 processors with a 1600 MT/s bandwidth and HyperThansport ™ Technology.

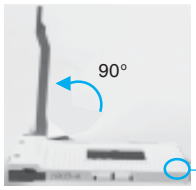
Attention:

The CPU pins must be properly aligned with the holes in the socket, otherwise the CPU may be damaged.

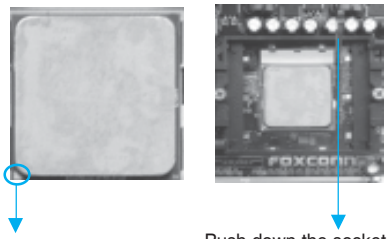
Installation of CPU

Follow these steps to install the CPU.

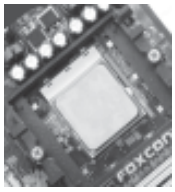
1. Unlock the socket by pressing the lever sideways, then lift it up to a 90° angle.



2. Align the cut edge to the gap in the base of the socket. Carefully insert the CPU into the socket until it fits in place.



3. When the CPU is in place, press it firmly on the socket while you push down the socket lever to secure the CPU. The lever clicks on the side tab to indicate that it is locked.

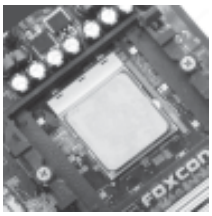


755A01-032604.p65 9 2004-3-26, 15:28

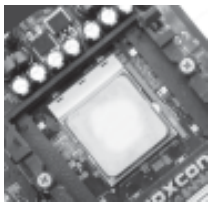
Installation of CPU Fan

New technology allows processors to run at higher and higher frequencies. To avoid problems arising from high-speed operation, for example, overheating, you need to install the proper fan. The following procedure is provided for reference only, please refer to your CPU fan user guide for the actual procedure.

1.Locate the CPU retention mechanism base (surrounds the CPU socket).



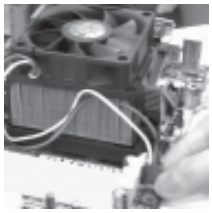
2. If required, apply a light coating of silica gel to the top of the CPU.



NOTE: The CPU heatsink may have a pre-applied thermal compound. In that case, the silica gel is not required.

3. Attach the fan to the base.

4. Connect the fan's power cable to the appropriate 3-pin terminal on the motherboard.



Warning:

Excessive temperature will severely damage the CPU and system. Therefore, make sure that the cooling fan works normally at all times in order to prevent overheating and damaging to the CPU.

CPU Qualified Vendor List

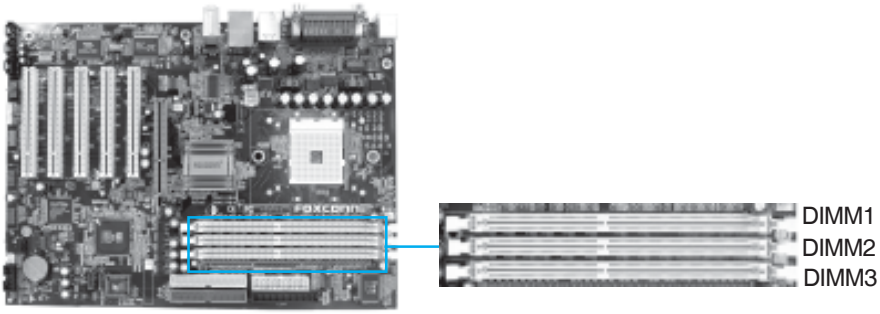
The following table lists the CPUs that have been tested and qualified for use with this motherboard.

Vendor	Type
AMD	Athlon64 3000+
AMD	Athlon64 3200+
AMD	Athlon64 3400+

755A01-032604.p65 11 2004-3-26, 15:28

Memory

This motherboard includes three 184-pin slots with 266/333/400 MHz Single Channel DDR DRAM interface, You must install at least one memory module to ensure normal operation. If you install three modules, they must be the same speed. Mixing memory modules from different manufactures are not recommended.



755A01-032604.p65 12 2004-3-26, 15:28

Recommended Memory Configurations

The following table lists the recommended memory configurations.

Number of DIMMs	CA1 Socket 1*	CA2 Socket 2*	CA2 Socket 3*	Maximum Frequency (MHz)	
				1T	2T
1	x8 single rank or x16	empty	empty	200	200
1	empty	x8 single rank or x16	empty	200	200
1	empty	empty	x8 single rank or x16	200	200
1	x8 double rank	empty	empty	200	200
1	empty	x8 double rank	empty	200	200
1	empty	empty	x8 double rank	200	200
2	x8 single rank or x16	x8 single rank or x16	empty	200	200
2	x8 single rank or x16	x8 double rank	empty	200	200
2	x8 single rank or x16	empty	x8 single rank or x16	200	200
2	x8 single rank or x16	empty	x8 double rank	200	200
2	x8 double rank	x8 single rank or x16	empty	200	200
2	x8 double rank	x8 double rank	empty	166	166
2	x8 double rank	empty	x8 single rank or x16	200	200
2	x8 double rank	empty	x8 double rank	166	166
2	empty	x8 single rank or x16	x8 single rank or x16	166	200
2	empty	x8 single rank or x16	x8 double rank	100	200
2	empty	x8 double rank	x8 single rank or x16	100	200
2	empty	x8 double rank	x8 double rank	100	166
3	x8 single rank or x16	x8 single rank or x16	x8 single rank or x16	166	200
3	x8 single rank or x16	x8 single rank or x16	x8 double rank	100	166
3	x8 single rank or x16	x8 double rank	x8 single rank or x16	100	166
3	x8 single rank or x16	x8 double rank	x8 double rank	100	166
3	x8 double rank	x8 single rank or x16	x8 single rank or x16	166	166
3	x8 double rank	x8 single rank or x16	x8 double rank	100	166
3	x8 double rank	x8 double rank	x8 single rank or x16	100	166
3	x8 double rank	x8 double rank	x8 double rank	100	166

755A01-072104.p65 13 2004-7-21, 8:27

Memory Qualified Vendor List

The following table lists the memory modules that have been tested and qualified for use with this motherboard.

Vendor	Type	Size
Kingmax	PC3200 (DDR 400)	256M, 512M
Kingmax	PC2100 (DDR 266)	256M
Kingston	PC3200 (DDR 400)	256M, 512M
Hynix	PC3200 (DDR 400)	256M, 512M
Nanya	PC3200 (DDR 400)	256M
Apacer	PC3200 (DDR 400)	256M, 512M
Apacer	PC2700 (DDR 333)	512M
Geil	PC3200 (DDR 400)	256M
VDATA	PC3200 (DDR 400)	256M
RAMBO	PC3200 (DDR 400)	256M, 512M
RAMBO	PC2700 (DDR 333)	512M
Transend	PC3200 (DDR 400)	256M, 512M
Twinmos	PC3200 (DDR 400)	256M
Samsung	PC3200 (DDR 400)	1G

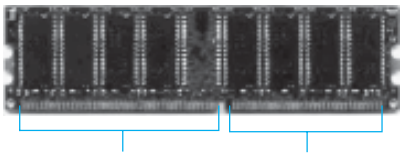
Note:

Make sure to use only the tested and qualified DDR modules listed above. Other DDR modules manufactured by other vendors may not be suitable for this motherboard.

755A01-032604.p65 14 2004-3-26, 15:28

Installation of DDR Memory

1. There is only one gap in the center of the DIMM slot, and the memory module can be fixed in one direction only.
2. Align the memory module to the DIMM slot, and insert the module vertically into the DIMM slot.



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

Note:

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.

755A01-032604.p65 15 2004-3-26, 15:28

Power Supply

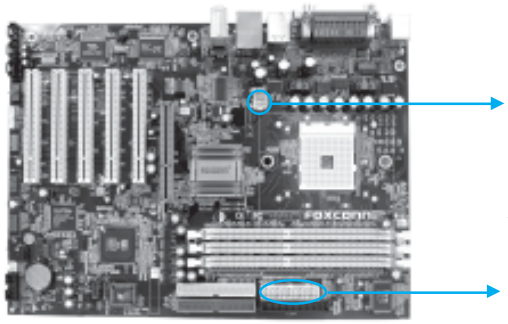
This motherboard uses an ATX power supply. In order to avoid damaging any devices, make sure that they have been installed properly prior to connecting the power supply.

ATX 12V Power Connector: PWR2

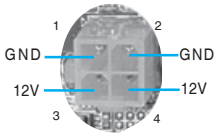
The 4 pin ATX 12V power supply connects to PWR2 and provides power to the CPU.

ATX Power Connector: PWR1

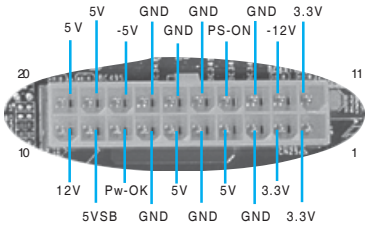
PWR1 is the ATX power supply connector. Make sure that the power supply cable and pins are properly aligned with the connector on the motherboard. Firmly plug the power supply cable into the connector and make sure it is secure.



ATX 12V Power Connector



ATX 20-pin Power Connector



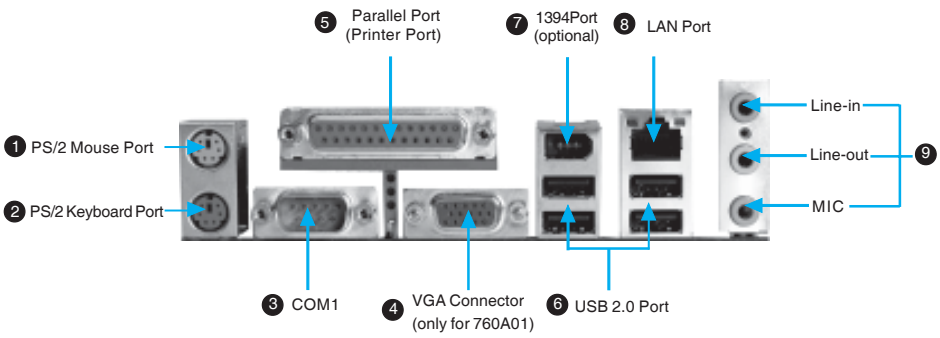
Attention:

You have to press the power button for more than four seconds if you change the default Instant-off setting to “Delay 4 Sec” for the “Soft-Off by Power Button” option in the BIOS Power Management Setup.

755A01-032604.p65 16 2004-3-26, 15:28

Rear Panel Connectors

This motherboard provides the following ports as below:



❶ PS/2 Mouse Port

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

❷ PS/2 Keyboard Port

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

❸ Serial Ports: COM1

This two 9-pin COM1/COM2 ports are for pointing devices or other serial devices.

❹ VGA Connector (only for 760A01)

The VGA connector is for output to VGA-compatible device.

❺ Parallel Port: Printer Port

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

❻ USB 2.0 Ports

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

755A01-032604.p65 17 2004-3-26, 15:28

❼ 1394 port (optional)

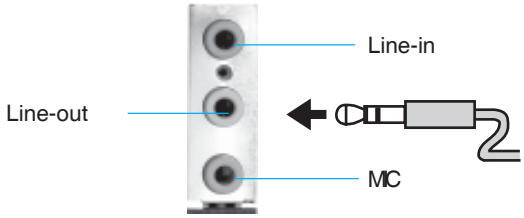
This digital interface supports electronic devices such as digital cameras, scanners, and printers.

❽ LAN Port

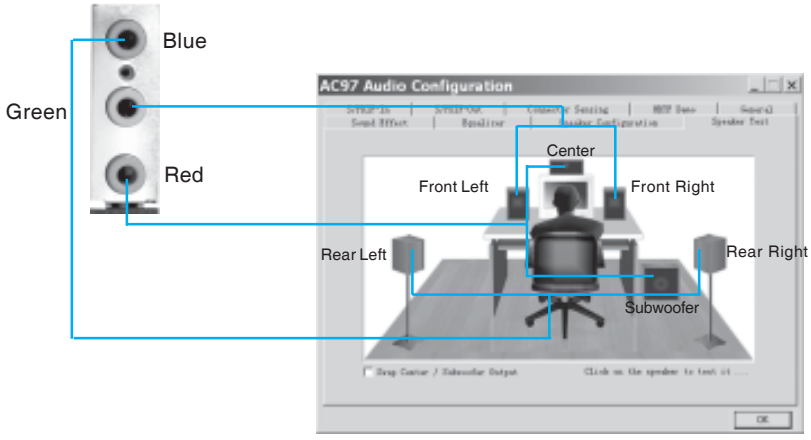
This port allows connection to a Local Area Network(LAN) through a network hub.

❾ Audio Port

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



When using a 6-channel sound source, connect the front speaker to the green audio output; connect the surround sound speaker to the blue audio input; connect the central speaker/sub woofer to the red MIC input, as being shown in the following figure:



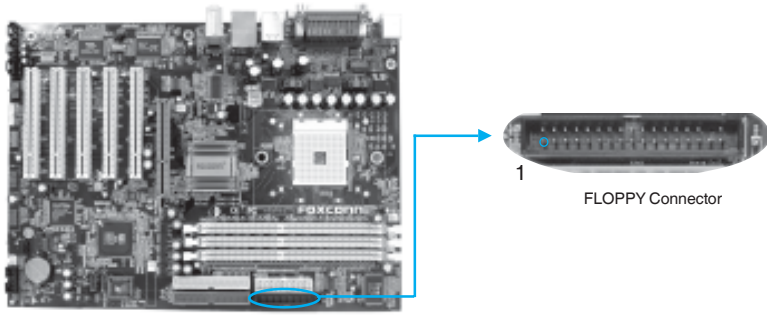
755A01-032604.p65 18 2004-3-26, 15:28

Other Connectors

This motherboard includes interfaces for FLOPPY, IDE HDD, SATA, USB, 1394, IR module, CPU fan, system fan, and others.

FLOPPY

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



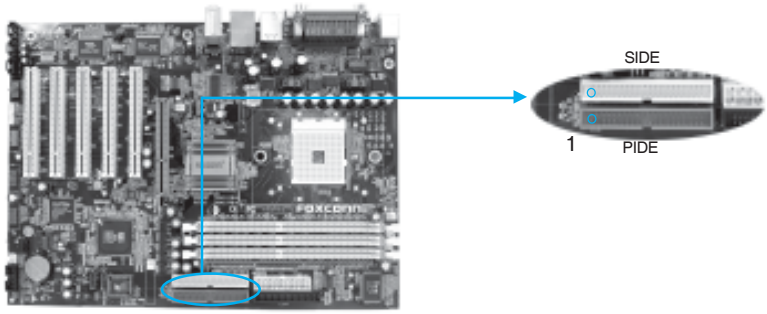
HDD connectors: PIDE & SIDE

These connectors support the provided UltraDMA133/100/66 IDE hard disk ribbon cable. Connect the cable's blue connector to the primary (recommended) or secondary IDE connector, then connect the gray connector to the Ultra DMA133/100/66 slave device (hard disk drive) and the black connector to the Ultra DMA133/100/66 master device. If you install two hard disks, you must configure the second drive as a slave device by setting its jumper accordingly. Refer to the hard disk documentation for the jumper settings.

Attention:

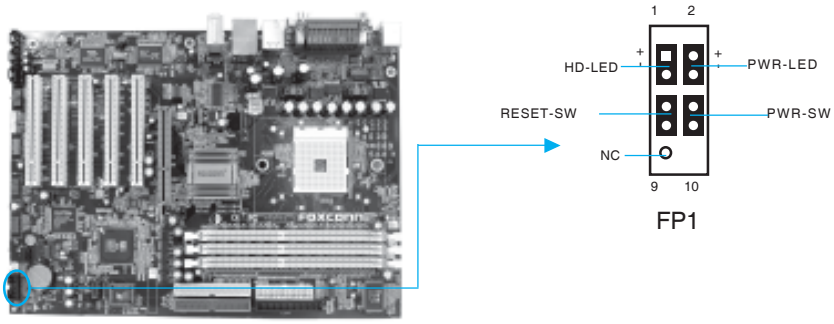
Ribbon cables are directional, therefore, make sure to always connect with the cable on the same side as pin 1 of the PIDE/SIDE or FLOPPY connector on the motherboard.

755A01-032604.p65 19 2004-3-26, 15:28



Front Panel Connector: FP1

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



Hard Disk LED Connector (HD-LED)

Attach the connector to the HD-LED on the front panel of the case; the LED will flash while the HDD is in operation.

Reset Switch (RESET-SW)

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 (PWR-LED)

Attach the connector to the power LED on the front panel of the case. The Power LED indicates the power supply 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 staus, the LED is off.

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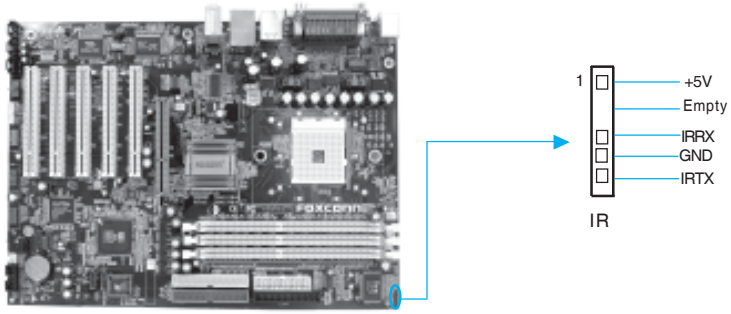
755A01-032604.p65 20 2004-3-26, 15:28

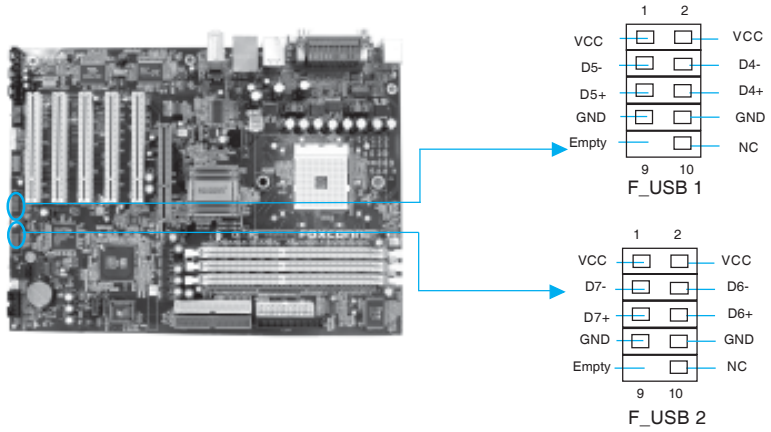
IrDA Header: IR

The IrDA infrared transmission allows your computer to send and receive data via an infrared ray. The relevant parameters for the BIOS Integrated Peripherals should be set prior to using this function.



USB Header: F_USB 1, F_USB 2

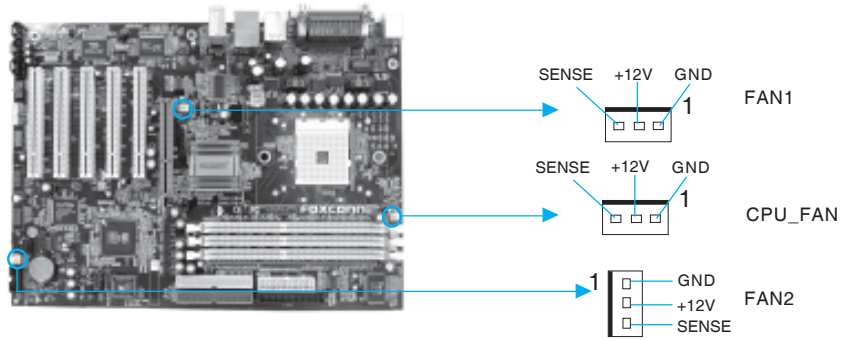
Besides four USB ports on the rear panel, the series of motherboards also have two 10-pin headers on board which may connect to front panel USB cable (optional) to provide additional four USB ports.



755A01-032604.p65 21 2004-3-26, 15:28

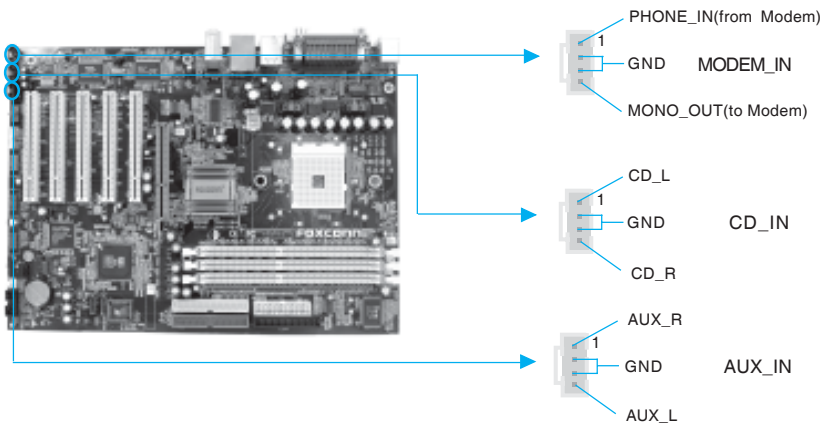
Fan Connectors: CPU_FAN, FAN1, FAN2

There are three fan headers on this motherboard. These fans will be automatically turned off after the system enters suspend mode.



Audio Connectors: MODEM_IN, CD_IN, AUX_IN

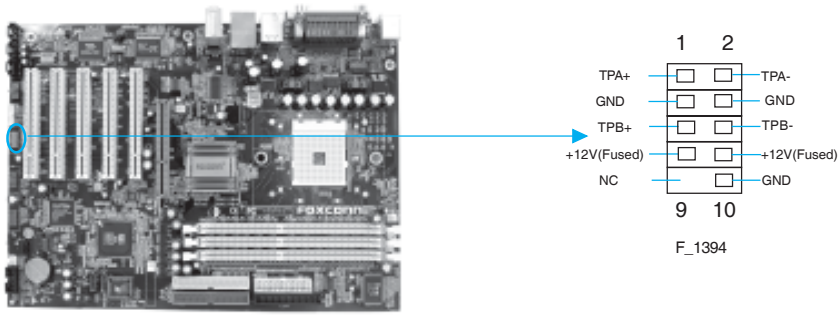
To receive audio input from the CD-ROM, attach its audio connector to the CD_IN/AUX_IN audio headers on the motherboard. The Modem_IN connector allows the onboard audio to interface with a voice modem card with a similar connector. It allows connecting the mono_in (such as a phone) or mono_out (such as a speaker) between the onboard audio and the voice modem card.



755A01-032604.p65 22 2004-3-26, 15:28

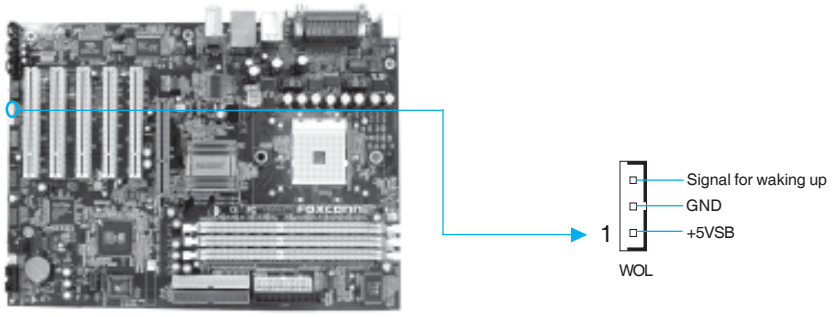
1394 Header: F_1394(optional)

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



Wake-up On LAN: WOL

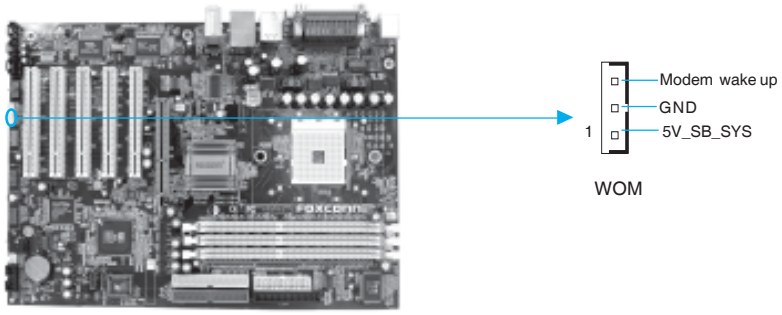
Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. To utilize this function, please be sure to use an ATX 12V power supply with a 5VSB line capable of delivering a current of at least 1A, and a LAN adapter which supports this function. Then connect the header to the relevant connector on the LAN adapter, set “PCIPME Power Up Control” to “Enabled” in the “Power Management Setup” section of the CMOS SETUP. Save and exit, then boot the operating system once to make sure this function takes effect.



755A01-032604.p65 23 2004-3-26, 15:28

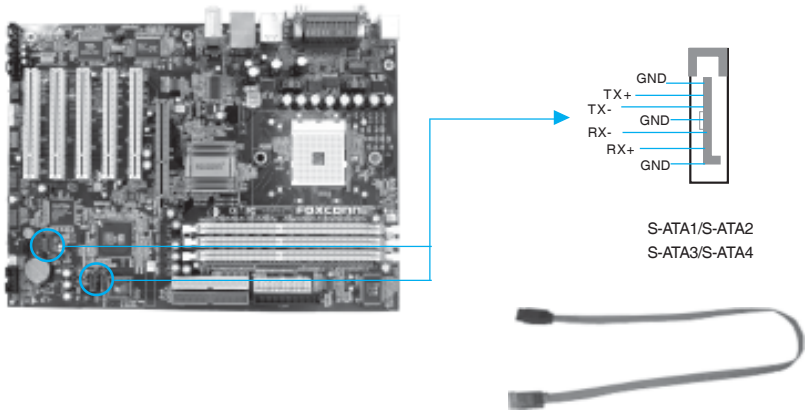
Wake-up on Modem: WOM

Through this function, systems in suspend or soft-off mode can be waked up by a ring signal received from the internal modem. When this function is used, be sure an internal modem card which supports this function is used. Then connect the header to the relevant connector on the modem card, set “RING Power Up Control” to “Enabled” in the “Power Management Setup” section of the CMOS SETUP. Save and exit, then boot the operating system once to make sure this function takes effect.



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

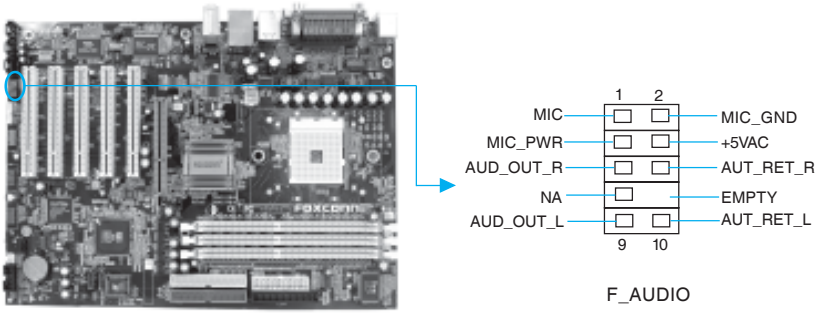
The S-ATA header is used to connect the S-ATA device to the motherboard. These connectors support the thin Serial ATA cables for primary internal storage devices. The current S-ATA interface allows up to 150MB/s data transfer rate. There are four S-ATA connectors on the motherboard.



755A01-032604.p65 24 2004-3-26, 15:28

Audio Interface: F_AUDIO

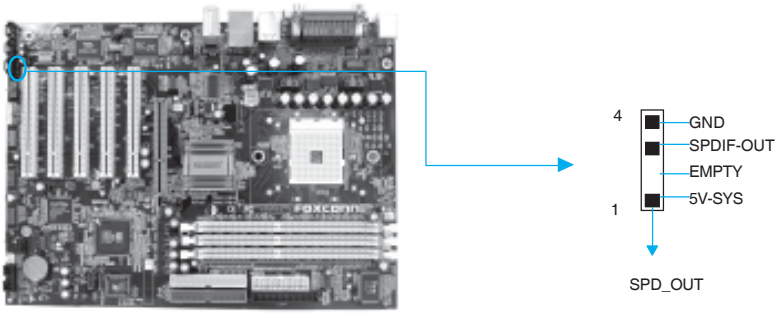
The audio port includes two parts – the Front Audio and Rear Audio. Their priority is sequenced from high to low (Front Audio to Rear Audio). If headphones are plugged into the front panel of the chassis (using the Front Audio), then the Line Out (Rear Audio) on the rear panel will not work. If you do not want to use the Front Audio, pin 5 and 6, pin 9 and 10 must be short, and then the signal will be sent to the rear audio port.



F_AUDIO

S/PDIF Out Connector: SPD_OUT

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

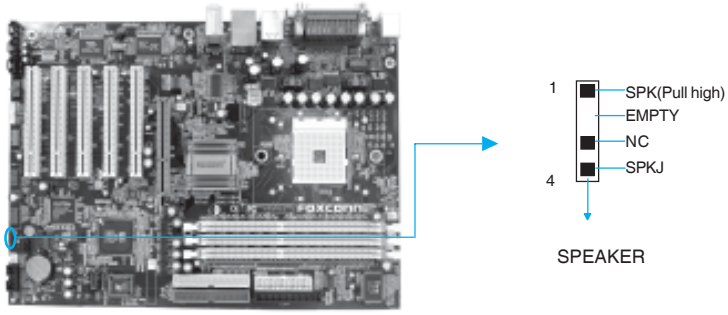


SPD_OUT

755A01-032604.p65 25 2004-3-26, 15:28

Speaker Connector

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

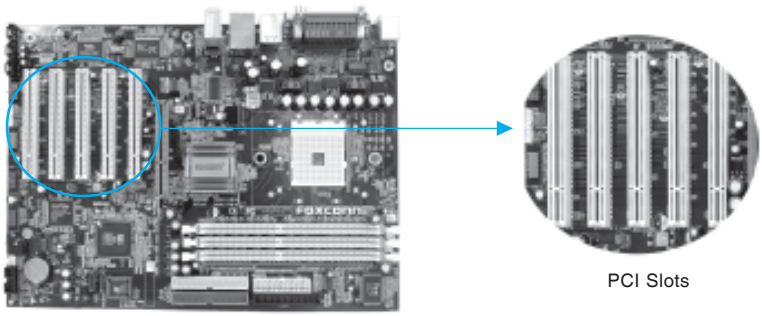


Expansion Slots

This motherboard includes five 32-bit Master PCI bus slots and one AGP slot.

PCI Slots

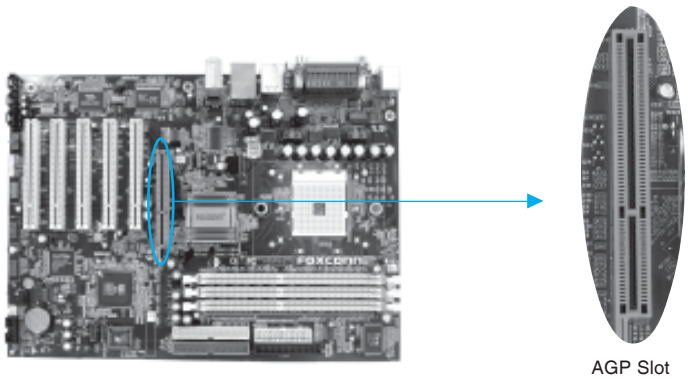
The expansion cards can be installed in the five PCI slots. When you install or take out such cards, you must make sure that the power plug has been pulled out. Please read carefully the instructions provided for such cards, and install and set the necessary hardware and software for such cards, such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



755A01-032604.p65 26 2004-3-26, 15:28

AGP Slot

This motherboard has an AGP slot that supports 1.5V AGP cards. AGP is an interfacing specification designed to display 3D images. It provides a specialized 66Mhz, 32-bit channel to allow the graphic controller to directly access the master memory and supports 4X and 8X speeds.



AGP Slot

Installing an expansion card

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

AGP Qualified Vendor List

The following table lists the AGP cards that have been tested and qualified for use with this motherboard.

755A01-032604.p65 27 2004-3-26, 15:28

Vendor	Type	Video Memory
MSI	MS-GeForce 4 MX440 8X	128MB
ATI	ATI Radeon 7000	64MB
UNIKA	7917 GeForce 4 MX 440	64MB
CP	ATI 9500 8X	128MB
CP	ATI 9600 8X	128MB
ASUS	V7100 8X	128MB
ASUS	V7700 8X	128MB

Note:

Make sure to use only the tested and qualified AGP cards listed above. Other AGP cards manufactured by other vendors may not be suitable for this motherboard.

Jumpers

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

Description of Jumpers

1. For the jumpers on this motherboard, pin 1 can be identified by the 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. Users should refer to this when adjusting jumper settings.

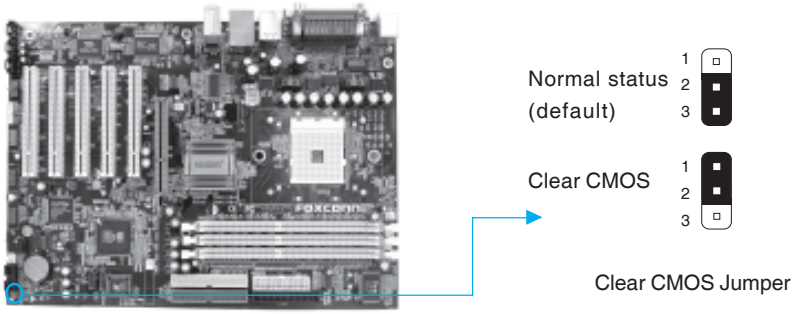
Jumper	Diagram	Definition	Description
		1-2	Set pin 1 and pin 2 closed
		2-3	Set pin 2 and pin 3 closed
		Closed	Set the pin closed
		Open	Set the pin opened

755A01-032604.p65 28 2004-3-26, 15:28

Clear CMOS Jumper: CLS_CMOS

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

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



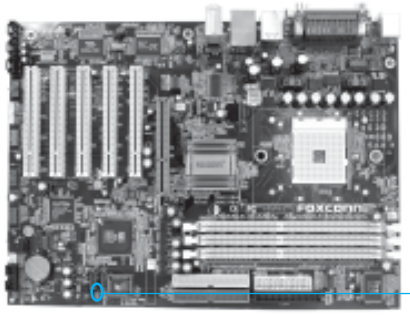
Warning:

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

755A01-032604.p65 29 2004-3-26, 15:28

BIOS-Protection Jumper: FWH_EN

The motherboard BIOS is inside the FWH. If the jumper FWH_EN is set as disable (Pin1 & Pin2), the system BIOS is protected from being attacked by a serious virus, such as the CIH virus. You will be unable to flash the BIOS to the motherboard when the system BIOS is protected.



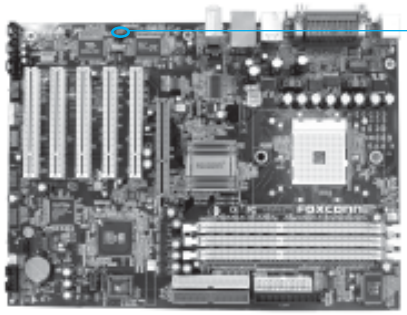
Flash Write Enable (Default) 1 2 3

Flash Write Disable 1 2 3

BIOS-Protection Jumper

LAN Disable Jumper: LAN_DIS

This jumper is used to enable or disabled onboard LAN. Close pin 1 and 2, the onboard LAN is enabled. Close pin 2 and 3, the onboard LAN is disabled.



LAN_DIS 1 2 3

Onboard LAN Enable

LAN_DIS 1 2 3

Onboard LAN Disable

Starting up for the first time

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

Powering off the computer

1. Using the OS shut down function
   If you use windows 98/ME/2000/XP, click the Start button, click Shut Down, then click the OK button to shut down the computer. The power supply should turn off after Windows shuts down.
2. Using the dual function power switch
   While the system is ON, pressing the power switch for less than 4 seconds puts the system to sleep mode or to soft-off mode, depending on the BIOS setting. Pressing the power switch for more than 4 seconds lets the system enter the soft-off mode regardless of the BIOS setting.

755A01-032604.p65 31 2004-3-26, 15:28

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

Enter BIOS Setup

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

Press TAB to show POST Screen, DEL to enter SETUP.

Note:

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

Main Menu

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

Main Menu

The items in the BIOS Setup main menu are explained below:

Standard CMOS Features

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

BIOS Features

The general system features can be set up through this menu.

755A01-032604.p65 33 2004-3-26, 15:28

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
All 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.

Frequency/Voltage Control
Frequency and voltage settings can be adjusted through this menu.

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.

755A01-032604.p65 34 2004-3-26, 15:28

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.

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 by using the keyboard.
year	year,set up by users.

Time

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

IDE Channel 0/1 Master/Slave & Channel 2/3 Master

These categories identify the HDD types of 4 IDE channels 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		

755A01-032604.p65 35 2004-3-26, 15:28

Award (Phoenix) BIOS can support 4 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, 5.25in], [1.2M, 5.25in], [720K, 3.5in], [1.44M, 3.5in] and [2.88 M, 3.5in].

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 errors 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 a disk error,but it will stop for all other errors.

755A01-032604.p65 36 2004-3-26, 15:28

Memory

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

Base Memory	The BIOS POST will detemine 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.

755A01-032604.p65 37 2004-3-26, 15:28

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)**
Super-BIOS Protect funtion protects your PC from being affected by viruses, e.g. CIH. The available setting values are: Disabled and Enabled.

❖ **[SuperSpeed] CPU Clock (Depending on the specification of the CPU)**
The conventional over-clock method uses the jumpers on the motherboard, and it is both troublesome and apt to errors. By using SuperSpeed, a CPU can be overclocked by keying in the desired in the CPU clock range.

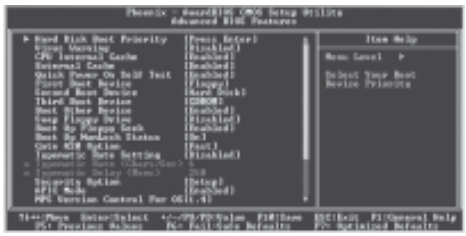
❖ **[SuperRecovery] SuperRecovery Hotkey (Default: LSHIFT+F12)**
SuperRecovery provides the users with an excellent data protection and HDD recovery function. There are 12 optional settings, and the default setting is LSHIFT+F12.

Warning:

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

755A01-032604.p65 38 2004-3-26, 15:28

Advanced BIOS Features



Advanced BIOS Features Menu

❖**Hard Disk Boot Priority**

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

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

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 Internal Cache (Default: Enabled)**

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

❖**External Cache (Default: Enabled)**

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

❖**Quick Power On Self Test (Default: Enabled)**

With this function enabled, the system will skip the normal test while starting up, therefore reducing the overall start up time. The available setting values are: Disabled and Enabled.

755A01-032604.p65 39 2004-3-26, 15:28

❖**First/Second/Third Boot Device (Default: Floppy/Hard Disk/CDROM)**
This option allows you to set the boot device sequence. The available setting values are: Floppy, LS120, Hard Disk, CDROM, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, LAN, and Disabled.

❖**Boot Other Device (Default: Enabled)**
With this function set to enabled, the system will boot from some other devices if the first/second/third starting devices failed.

❖**Swap Floppy Drive (Default: Disabled)**
If it is set to enabled, the label of FDD A and B can be exchanged. The available setting values are: Disabled and Enabled.

❖**Boot Up Floppy Seek (Default: Enabled)**
If it is set to enabled, BIOS will activate the floppy drive during the system boot, and the drive's indicator will flash after the activation. The magnetic head will move back and forth from A to B. The available setting values are: Disabled and Enabled.

❖**Boot Up NumLock Status (Default: On)**
This option is used to set up the NumLock status after the startup. When it is set to On, the NumLock will be activated during system startup. When it is set to off, users can use the number keys instead of the arrow keys to move the cursor. The available setting values are: On and Off.

❖**Gate A20 Option (Default: Fast)**
This option is used to set up the A20 signal control necessary for access to the 1MB memory. The available setting values are: Normal and Fast.

❖**Typematic Rate Setting (Default: Disabled)**
If this option 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 Enable.

❖**Typematic Rate (Chars/Sec) (Default: 6)**
Use this option to define how many characters per second a held-down key generated.

❖**Typematic Delay (Msec) (Default: 250)**
Use this option to define how many milliseconds must elapse before a held-down key beings generating repeat characters.

755A01-032604.p65 40 2004-3-26, 15:28

❖**Security Option (Default: Setup)**
When it is set to setup, a password is required to enter the CMOS Setup screen; when it is set to system, a password is required not only to enter CMOS Setup, but also to startup your PC, as well.

❖**APIC Mode (Default: Enabled)**
This option is used to enable or disable APIC mode. The available setting values are: Disabled and Enabled.

❖**MPS Version Control For OS (Default: 1.4)**
This option is used to set up the version of MPS Table used in NT4.0 OS.

❖**OS Select For DRAM > 64MB (Default: Non-OS2)**
This option 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 option at the default.

❖**HDD S.M.A.R.T. Capability (Default: Disabled)**
This option is used to enable or disable hard disk's S.M.A.R.T. support function. The available setting values are: Disabled and Enabled.

❖**Report No FDD For WIN 95 (Default: Yes)**
If you are using the Windows 95 and running a system with on floppy drive, select "Yes" for this option to ensure compatibility with Windows 95 logo certification. The available setting values are: No and Yes.

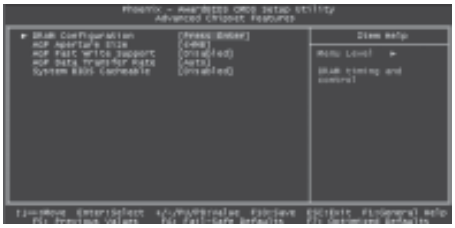
❖**Video BIOS Shadow (Default: Enabled)**
This option is used to enable or disable Video BIOS Shadow. If you enable this option, the video BIOS will be copied to RAM. Video shadow will increase the video speed. The available setting values are: Disabled and Enabled.

❖**Full Screen LOGO Show (Default: Enabled)**
This option allows you to enable or disable the full screen logo. The available setting values are: Disabled and Enabled.

❖**Small Logo (EPA) Show (Default: Disabled)**
This option allows you to enable or disable the EPA logo. The available setting values are: Disabled and Enabled.

755A01-032604.p65 41 2004-3-26, 15:28

Advanced Chipset Features



Advanced Chipset Features Menu

❖**DRAM Configuration (Default: Press Enter)**
Press enter to set the items about DRAM Configuration. Please refer to page 43.

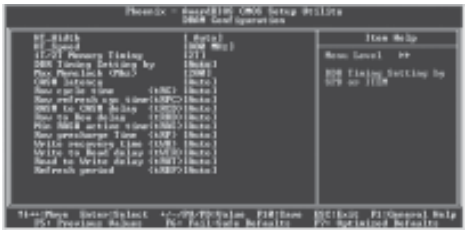
❖**AGP Aperture Size (Default: 64MB)**
This option defines the size of the aperture if you use an AGP graphic adapter. The aperture is a portion of the PCI memory address range dedi cated for graphic memory address space.
Note: This function does not work when onboard VGA is used.

❖**AGP Fast Write Support (Default: Disabled)**
Use this option to enable or disable AGP fast write support.

❖**AGP Data Transfer Rate (Default: Auto)**
Use this option to set AGP data rate.

❖**System BIOS Cacheable (Default: Disabled)**
Select “Enabled” to allow catching 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: Disabled and Enabled.

755A01-032604.p65 42 2004-3-26, 15:28



DRAM Configuration Menu

❖**HT_Width (Default: Auto)**

The available setting values are: 8 bits,16 bits and Auto.

❖**HT_Speed(Default: 800MHz)**

The available setting values are: 200MHz, 400 MHz, 600 MHz and 800 MHz.

❖**1T/2T Memory Timing (Default: 2T)(Optional)**

The available setting values are: Auto, 1T, 2T.

❖**DDR Timing Setting by (Default: Auto)**

The available setting values are: Manual and Auto.

❖**Max Memclock (Mhz) (Default: 200)**

The available setting values are: 100, 133, 166 and 200.

❖**CAS# Latency (Default: Auto)**

The available setting values are: CL=2.0, CL=2.5, CL=3.0 and Auto.

❖**Row cycle time <tRC> (Default: Auto)**

The available setting values are: Auto, 7 - 22 Bus Clocks.

❖**Row refresh cyc time <tRFC> (Default: Auto)**

The available setting values are: Auto, 9 - 24 Bus Clocks.

❖**RAS# to CAS# delay <tRCD> (Default: Auto)**

The available setting values are: Auto, 2 - 7 Bus Clocks.

755A01-032604.p65 43 2004-3-26, 15:28

❖**Row to Row delay <tRRD> (Default: Auto)**
The available setting values are: Auto, 2 -7 Bus Clocks.

❖**Min RAS# active time <tRAS> (Default: Auto)**
The available setting values are: Auto, 5 -15 Bus Clocks.

❖**Row precharge Time <tRP> (Default: Auto)**
The available setting values are: Auto, 2 - 6 Bus Clocks.

❖**Write recovery time <tWR> (Default: Auto)**
The available setting values are: Auto, 2 - 3 Bus Clocks.

❖**Write to Read delay <tWTR> (Default: Auto)**
The available setting values are: Auto, 1 Bus Clock.

❖**Read to Write delay <tRWT> (Default: Auto)**
The available setting values are: Auto, 1 - 6 Bus Clocks .

❖**Refresh period <tREF> (Default: Auto)**
The available setting values are: Auto, 1x1552 Cycles - 4x4672 Cycles.

755A01-032604.p65 44 2004-3-26, 15:28

Integrated Peripherals

Integrated Peripherals Menu

❖**SIS OnChip IDE Device**

Press enter to set onchip IDE device. Please refer to page 46.

❖**SIS OnChip PCI Device**

Press enter to set onchip PCI device. Please refer to page 47.

❖**Onboard SuperIO Device**

Press enter to set onchip onboard SuperIO device. Please refer to page 48.

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

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

❖**Init Display First (Default:PCI Slot)**

This option is used to set which display device will be used first when your PC starts up. The available setting values are: PCI Slot and AGP.

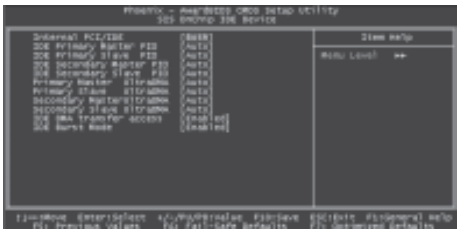
❖**USB0/1/2/2.0 Access Interface (Default:EDB Bus)**

This option is used to set USB0/1/2/2.0 Access Interface. The available setting values are: PCI Bus and EDB Bus.

❖**Audio Access Interface (Default:EDB Bus)**

This option is used to set audio access Interface. The available setting values are: PCI Bus and EDB Bus.

755A01-032604.p65 45 2004-3-26, 15:28



SIS Onchip IDE Device Menu

❖**Internal PCI/IDE (Default: Both)**

This option is used to set the ports of onboard IDE. The available setting values are: Disabled, Primary, Secondary and Both.

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

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

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

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

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

This option is used to enable or disable IDE DMA transfer access.

❖**IDE Burst Mode (Default: Enabled)**

This option is used to enable or disable IDE burst mode.

755A01-032604.p65 46 2004-3-26, 15:28

SIS OnChip PCI Device Menu

❖**SIS USB Controller (Default: Enabled)**
This option is used to enable or disable SIS USB controller.

❖**USB 2.0 Supports (Default: Enabled)**
This option is used to enable or disable USB 2.0.

❖**USB Keyboard Support (Default: Enabled)**
This option is used to set USB keyboard support. The available setting values are: Disabled and Enabled.

❖**USB Mouse Support (Default: Enabled)**
This option is used to set USB mouse support. The available setting values are: Disabled and Enabled.

❖**SIS AC97 AUDIO (Default: Enabled)**
This option is used to enable or disable SIS AC97 audio.

❖**SIS S/W Modem (Default: Enabled)**
This option is used to enable or disable CNR modem.

❖**SIS Serial ATA Controller (Default: Enabled)**
This option is used to enable or disable SIS serial ATA controller. The available setting values are: Disabled and Enabled.

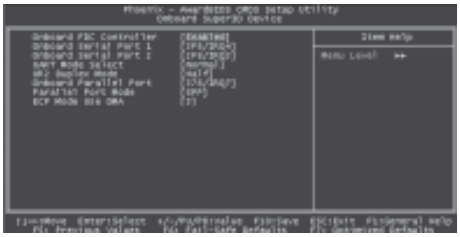
❖**SIS Serial ATA Mode (Default: IDE)**
This option is used to set Serial ATA mode. The default is recommended.
The available setting values are: IDE and RAID.

❖**Lan Controller (Default: Enabled)**
The available setting values are: Disabled and Enabled.

755A01-032604.p65 47 2004-3-26, 15:28

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

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



Onboard SuperIO Device Menu

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

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

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

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

Note: Do not try to set the same values for serial port 1 and 2.

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

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

❖**UR2 Duplex Mode (Default: Half)**

This option is available when UART 2 mode is set to either ASKIR or IRDA. This option enables you to determine the infared function of the onboard infrared chip. The available setting values are: Half and Full.

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

This option allows you to determine onboard parallel port controller I/O ad dress and interrupt request(IRQ). Setting values include: Disabled, 378/IR Q7, 278/IRQ5 and 3BC/IRQ7.

❖Parallel Port Mode (Default: SPP)

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

❖ECP Mode Use DMA (Default: 3)

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.

755A01-032604.p65 49 2004-3-26, 15:28

Power Management

Power Management Setup Menu

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

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

❖ **ACPI Suspend Type (Default: S3(STR))**

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 supply status will remain as it is, in S1 mode the computer can beresumed 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.

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

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

❖ **Suspend Mode (Default: Disabled)**

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

❖ **Video Off Option (Default: Susp, Stby - > Off)**

This option is used to set video off option. The setting values are Always On, Suspend -> Off, Susp,Stby - > Off, All Modes -> Off.

755A01-032604.p65 50 2004-3-26, 15:28

❖ **Video Off Method (Default: DPMS Supported)**
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 Supported” mode is a new screen power management system, and it needs to be supported by the monitor you’re using.

❖ **Switch Function (Default: Break/Wake)**
This option is used to enable or disable switch function to wake up. The setting values are Break/Wake and disabled.

❖ **MODEM Use IRQ (Default: NA)**
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.

❖ **Hot key Function As (Default:Power Off)**
The option is used to define the hot key function. The available setting values are Disabled, Power off, Suspend.

❖ **HDD Off After (Default: Disabled)**
This option is used to define the continuous HDD idle time before the HDD enters power saving mode. The setting values are Disabled and 1 Min -15 Min.

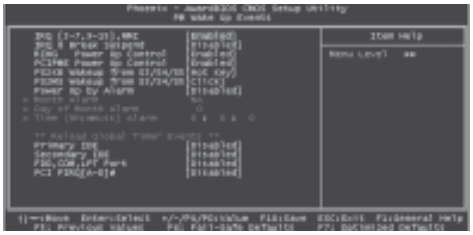
❖ **Power Button Override (Default: Instant Off)**
This option is used to set the power down method. This function is only valid for systems using an ATX power supply.
When “Instant Off” is selected, press the power switch to immediately turn off power.
When “Delay 4 Sec” is selected, press and hold the power button for four seconds to turn off power.

❖ **Power State Resume control (Default: Always Off)**
This option is used to control power resume state. The available setting val ues are Always Off, Always On, Keep Pre-State.

❖ **PM Wake Up Events**
Press enter to set the items of PM wake up Events. Please refer to page 52.

❖ **AMD K8 Cool&Quiet Control (Default: Auto)**
This option is used to control AMD K8 Cool&Quiet function.

755A01-032604.p65 51 2004-3-26, 15:28



PM Wake UP Events Menu

❖**IRQ [3-7,9-15], NMI (Default: Enabled)**

This option is used to enable or disable IRQ[3-7,9-15], NMI.

❖**IRQ 8 Break Suspend (Default: Disabled)**

This option is used to enable or disable IRQ8 break suspend.

❖**RING Power Up Control (Default: Enabled)**

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

❖**PCIPME Power Up Control (Default: Enabled)**

This option is used to enable or disable the system to be waken up by PCI card.

❖**PS2KB Wakeup from S3/S4/S5 (Default: Hot Key)**

This option used to set which action will wake up PS/2 keyboard from S3/S4/S5 status. The hotkey is Ctrl+Alt+Backspace. The setting values are Any Key, Hot Key, Password.

❖**PS2MS Wakeup from S3/S4/S5 (Default: Click)**

This option used to set which action will wake up PS/2 mouse from S3/S4/S5 status. The setting values are: Disabled, Click, Move & Click.

❖**Power UP by Alarm (Default: Disabled)**

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 canceled. Also, the PC power source must not be turned off. The setting values are: Disabled and Enabled.

❖**Month Alarm**

This option is used to set the timing for the start-up month. The setting values contain 1 - 12 and NA.

❖**Day of Month Alarm**
This option is used to set the timing for the start-up day of the month. The setting values contain 0 - 31.

❖**Time (hh:mm:ss) Alarm**
This option is used to set the timing for the start-up time. The setting values contain hh:0 – 23; mm:0 – 59; ss:0 – 59.

❖**Primary/Secondary IDE (Default: Disabled)**
When these items are enabled, the system will restart the power saving timeout counters when any activity is detected on any of the drives or devices on the primary or secondary IDE channels. The setting values are Disabled and Enabled.

❖**FDD, COM, LPT Port (Default: Disabled)**
When this option is enabled, the system will restart the power saving timeout counters when any activity is detected on the floppy disk drive, serial ports, or the parallel port.

❖**PCI PIRQ [A-D]# (Default: Disabled)**
When this option is disabled, any PCI devices set as the master will not power on the system.

755A01-032604.p65 53 2004-3-26, 15:28

PnP/PCI Configurations

PnP/PCI Configurations Menu

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

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

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

This option is used to define the system resource control scheme. If all cards you use support PnP, then select Auto (ESCD) and the BIOS will automatically 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**

Press the <Enter> key, then manually set IRQ resources.

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

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.

❖ **Raid Card Boot First (Default: Disabled)**

This option is used to set Raid card boot first. The setting values are: Disabled and Enabled

755A01-032604.p65 54 2004-3-26, 15:28

PC Health Status

PC Health Status Menu

❖**Smart Fan Control (Default: Disabled)**

This option is used to control the smart fan.

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

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

❖**Vccp/ +3.3v/+5v/+12v**

The current voltages will be automatically detected by the system.

❖**CPU Temp**

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

❖**System Temp1**

The system temperature1 will be automatically detected by the system.

❖**System Temp2**

The system temperature2 will be automatically detected by the system.

❖**CPU FAN Speed**

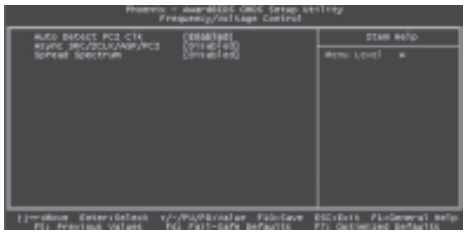
The CPU fan speed will be automatically detected by the system.

❖**System FAN1 Speed**

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

755A01-032604.p65 55 2004-3-26, 15:28

Frequency/Voltage Control



Frequency/Voltage Control Menu

❖Auto Detect PCI Clk (Default: Enabled)

This option is used to set whether the clock of an unused PCI slot will be disabled to reduce electromagnetic interference. The setting values are Disabled and Enabled.

❖Async SRC/ZCLK/AGP/PCI (Default:Disabled)

The setting values are: 100/133/66/33Mhz, 100/150/75/37Mhz, 100/133/80/40Mhz and Disabled.

❖Spread Spectrum (Default: Disabled)

If you enable spread spectrum, it can significantly reduce the EMI (ElectroMagne tic Interference) generated by the system.

755A01-032604.p65 56 2004-3-26, 15:28

Load Fail-Safe Defaults

Select this option to press Enter, it will pop out a dialogue box to allow you to load default set by BIOS. Select <Y> and then press Enter to load default. Select <N> and press Enter, it will not load. The defaults set by BIOS have set the basic functions of system in order to ensure the stability of system. But if your computer fails to properly run, you may load the default to make the system recover normal, then carry out failure testing in next step. If you only want to load the default in an option, you can select this option and press the key F6.

Load Optimized Defaults

Select this option and press Enter, it will pop out a dialogue box to let you load the optimized defaults set by BIOS. Select <Y> and then press Enter to load the optimized defaults. Select <N> and press Enter, it will not load. The defaults set by BIOS have set the optimized performance parameters of system to improve the performances of system components. But if the optimized performance parameters to be set cannot be supported by your hardware devices, it will cause system to make mistakes or not stable. If you only want to load the optimized defaults in an option, you can select this option and press the key F7.

Set Supervisor/User Password

The preferential grade of supervisor password is higher than user password. You can use supervisor password to start into system or enter into CMOS setting program to amend setting. You can also use user password to start into system, or enter into CMOS setting menu to check, but if you have set supervisor password, you cannot amend setting.
When you select Set Supervisor / User Password, it will appear the following message in the center of screen, which will help you to set password.

Enter Password:

Enter your password, not exceeding 8 characters, then press <Enter>, the password you have been enter now will replace the previous password. When the system requires you to determine this password, you can enter this password and press <Enter>.
If you do not need this setting, you can press <Enter> when the screen prompts you to enter password, and the screen will appear the following message to show this function invalid. In this case, you can freely enter into system and CMOS setting program.

PASS WORD DISABLED!!!

Press any key to continue...

755A01-032604.p65 57 2004-3-26, 15:28

Under the menu “Advanced BIOS Features Setup”, if you select “System” in Security Option, the screen will prompt you to enter password once the system is started or you want to enter CMOS setting program. If the password is wrong, it will refuse you to continue.
Under the menu “Advanced BIOS Features Setup”, if you select “Setup” in Security Option, the screen will prompt you to enter password only when you enter CMOS setting program.

Save & Exit Setup

Select this option and press Enter, it will show the following message in the center of screen:

SAVE to CMOS and EXIT (Y/N)?

At this time, press <Y> to save your amendment in CMOS and exit from this program; press <N>/<ESC> to return main menu.

Exit Without Saving

Select this option and press Enter, it will show the following message in the center of screen:

Quit Without Saving (Y/N)?

At this time, press <Y> to exit CMOS but it does not save your amendment in CMOS; press <N>/<ESC> to return main menu.

755A01-032604.p65 58 2004-3-26, 15:28

Chapter 4

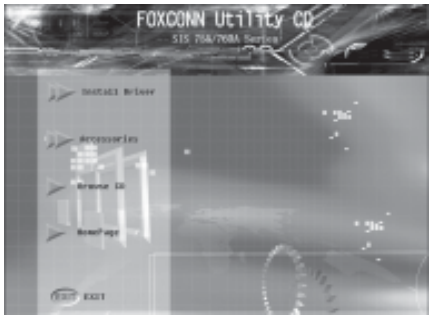
The utility CD that came with the motherboard contains useful software and several utility drivers that enhance the motherboard features.

This chapter includes the following information:

- Utility CD content
- Start to install drivers
  - Install IDE Driver
  - Install SiS SATA RAID
  - Install AGP Driver
  - Install Direct X 9.0b
  - Install USB2.0 Driver
  - Using 4-/6-Channel Audio
  - Install LAN Driver
  - Install Sil3112 SATA RAID
- Install SuperUtility
- Install Adobe Reader
- Install Norton Internet Security 2004

Utility CD content

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



1. Install Driver

Using this option to install all the drivers for your motherboard. You should install the drivers sequentially, from first to last.

A. IDE Driver
B. SiS SATA RAID
C. AGP Driver
D. Direct X 9.0b
E. USB 2.0 Driver
F. Audio Driver
G. LAN Driver
H. Sil3112 SATA RAID

2.Accessories

Use this option to install additional software programs.

A. SuperUtility
B. Adobe Reader
C. Norton Internet Security 2004

3. Browse CD

Click to browse this CD.

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.

755A01-032604.p65 60 2004-3-26, 15:28

Start to Install divers

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

Note:

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

Install IDE Driver

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <IDE Driver> to start the installation.

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755A01-032604.p65 61 2004-3-26, 15:28

Install SiS SATA RAID

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig.1). Click<SiS SATA RAID> to start the installation.

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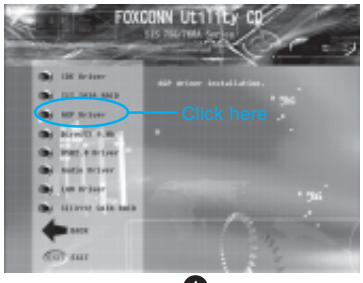
Install AGP Driver

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <AGP Driver> to start the installation.



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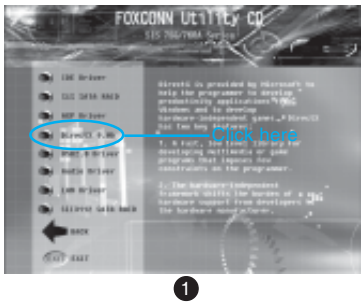
755A01-032604.p65 62 2004-3-26, 15:28

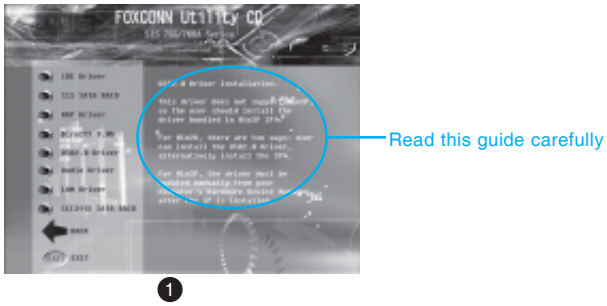
Install DirectX 9.0b

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <DirectX 9.0b> to start the installation.



Install USB 2.0 Driver

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <USB 2.0 Driver> to open the USB 2.0 Installation guide. Please read the guide carefully and select the relevant installation method.



755A01-032604.p65 63 2004-3-26, 15:28

Using 4-/6-Channel Audio

The motherboard is equipped with the Realtek ALC655 chip, which provides support for 6-Channel audio output, including 2 front, 2 rear, 1 center and 1 subwoofer channel. ALC655 allows the board to attach 4 or 6 speakers for a better surround sound effect. This section will tell you how to install and use the 4-/6-Channel audio function on the board.

Installing the Audio Driver

You need to install the driver for the Realtek ALC655 chip before you can use the 4-/6-Channel audio function.

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <Audio Driver> to start the installation.

1

755A01-032604.p65 64 2004-3-26, 15:28

Attaching Speakers

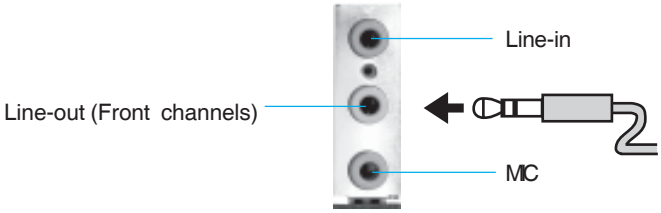
To perform multichannel audio operation, connect multiple speakers to the system. You should connect the same number of speakers as the audio channels you will select in the software utility.

2-Channel Analog Audio Output

The audio connectors on the rear panel already provide 2-Channel analog audio output. The rear panel's audio connectors can be transformed to 4-/6-Channel analog audio connectors automatically when you select the correct setting in the software utility. For information about the setting, refer to Selecting 4- or 6-Channel Setting later in this section.

Make sure all speakers are connected to Line-out connectors. Diverse connector configurations for 2-, 4- and 6-Channel using rear panel connectors are described below:

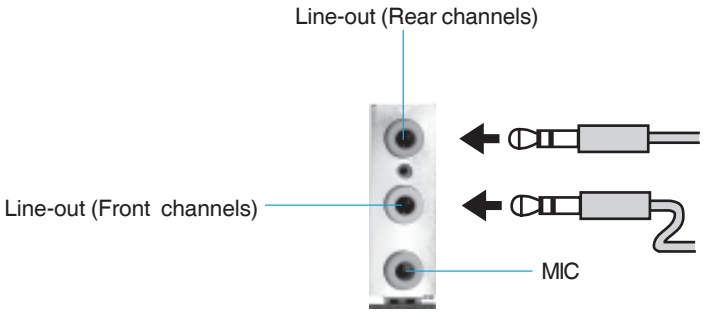
2-Channel Analog Audio Output



Description: Line-out, Line-in and Microphone functions all exist under 2-Channel configuration.

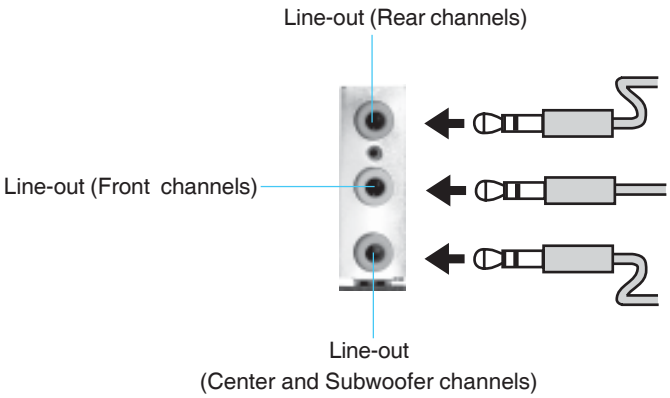
755A01-032604.p65 65 2004-3-26, 15:28

4-Channel Analog Audio Output



Description: Line-in is converted to Line-out under the 4-Channel configuration.

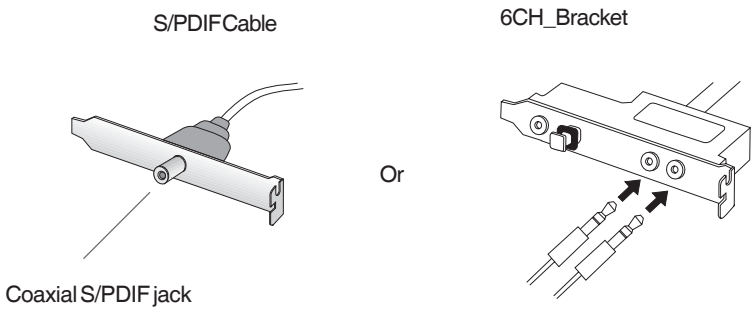
6-Channel Analog Audio Output



Description: Both Line-in and Microphone are converted to Line-out under the 6-Channel configuration.

755A01-032604.p65 66 2004-3-26, 15:28

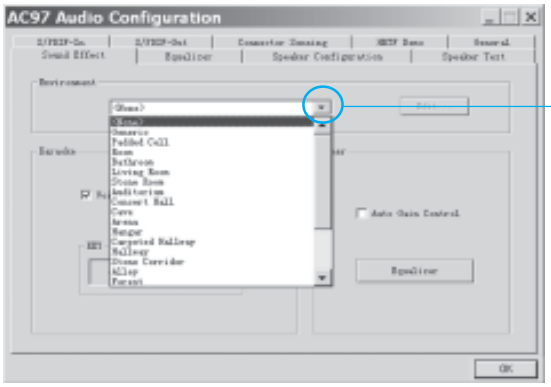
Digital Audio Output



Description: Connect the S/PDIF speakers to the Coaxial S/PDIF jack.

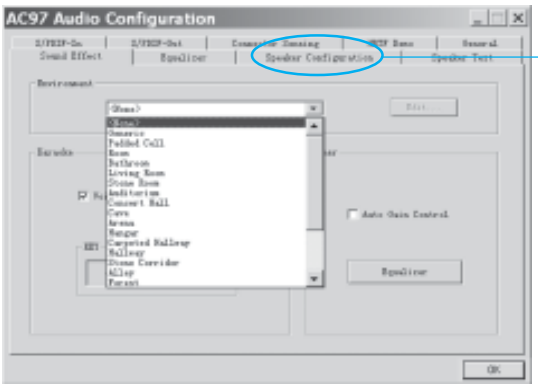
Selecting 4- or 6-Channel Setting

1. Click the audio icon from the Windows tray bar at the bottom of the screen.
2. Select any surround sound effect you prefer from the “Environment” pull-down menu under the **Sound Effect** tab.

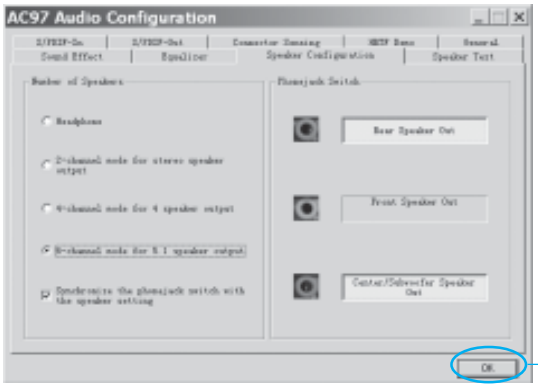


755A01-032604.p65 67 2004-3-26, 15:28

3. Click the **Speaker Configuration** tab.



4. The following window appears.



5. Select the multi-Channel operation you prefer from **Number of Speakers.**
6. Click **OK**.

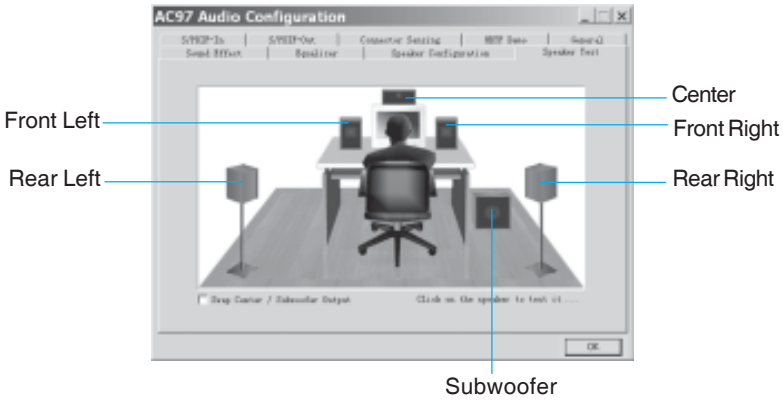
755A01-032604.p65 68 2004-3-26, 15:28

Testing the Connected Speakers

To ensure 4- or 6-Channel audio operation works properly, you may need to test each connected speaker to make sure every speaker works properly. If any speaker fails to sound, then check whether the cable is inserted firmly to the connector or replace the bad speakers with good ones.

Testing Each Speaker

1. Click the audio icon from the window tray bar at the bottom of the screen.
2. Click the **Speaker Test** tab.
3. The following window appears.



4. Select the speaker which you want to test by clicking on it.

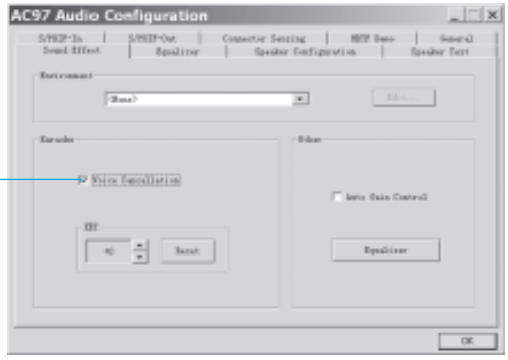
Playing Karaoke

The Karaoke function will automatically remove human voice (lyrics) and leave melody for you to sing the song. **The function can only be used with the 2-Channel audio configuration**, so make sure “2 channels mode” is selected in the “Number of Speakers” column before playing Karaoke.

Playing Karaoke

1. Click the audio icon from the window tray at the bottom of the screen.
2. Make sure the **Sound Effect** tab is selected.
3. Select **Voice Cancellation** in the “Karaoke” column.

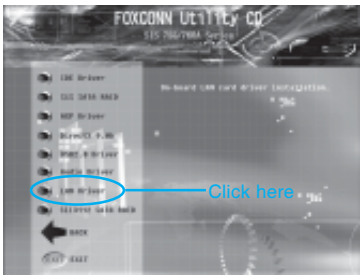
755A01-032604.p65 69 2004-3-26, 15:28



4. Click **OK**.

Install LAN Driver

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <LAN Driver> to start the installation.



1

755A01-032604.p65 70 2004-3-26, 15:28

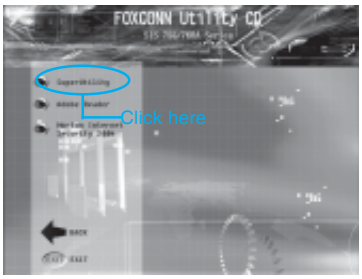
Install Sil3112 SATA RAID Driver

Click <Install Driver> from the main menu and enter the install driver menu (as shown in fig. 1). Click <Sil3112 SATA RAID> to start the installation.

1

Install SuperUtilily

From the main menu, select <Accessories> (as shown in following fig. 1). Click <SuperUtilily> to start the setup.

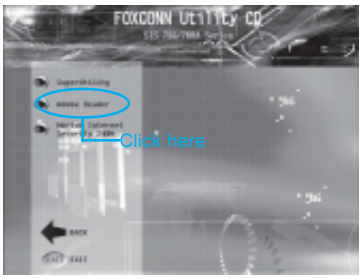


1

755A01-032604.p65 71 2004-3-26, 15:28

Install Adobe Reader

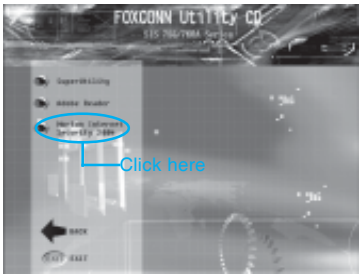
From the main menu, select <Accessories> (as shown in following fig. 1). Click <Adobe Reader> to start the setup.



1

Install Norton Internet Security 2004

From the main menu, select <Accessories> (as shown in following fig. 1). Click <Norton Internet Security 2004> to start the setup.



1

Note:

If your system is Windows 98 or Windows ME, please make sure that your Internet Explorer version is 5.01 with service pack 2 or higher.

Chapter 5

This chapter will introduce how to use attached software.

This chapter includes the following information:

- SuperStep
- SuperUpdate
- SuperLogo

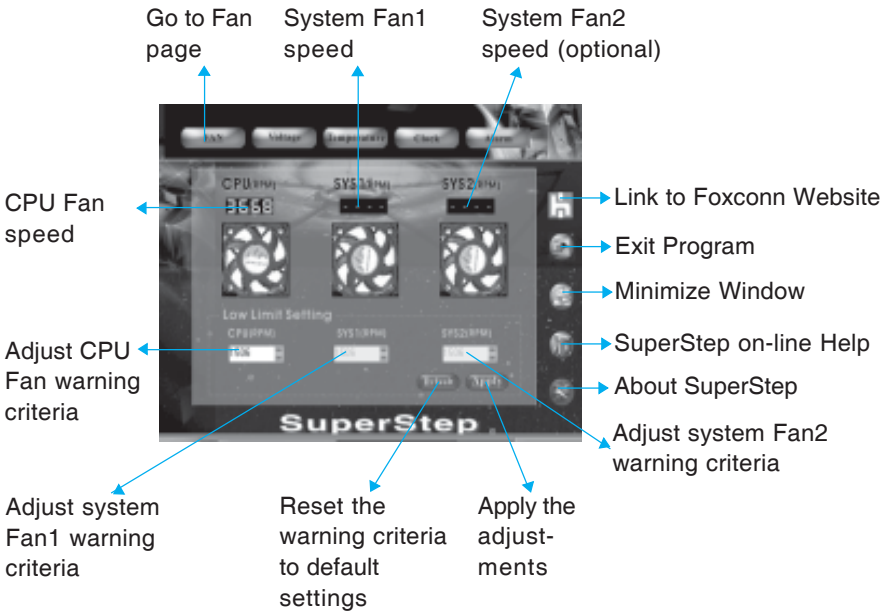
SuperStep

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/AGP clock.

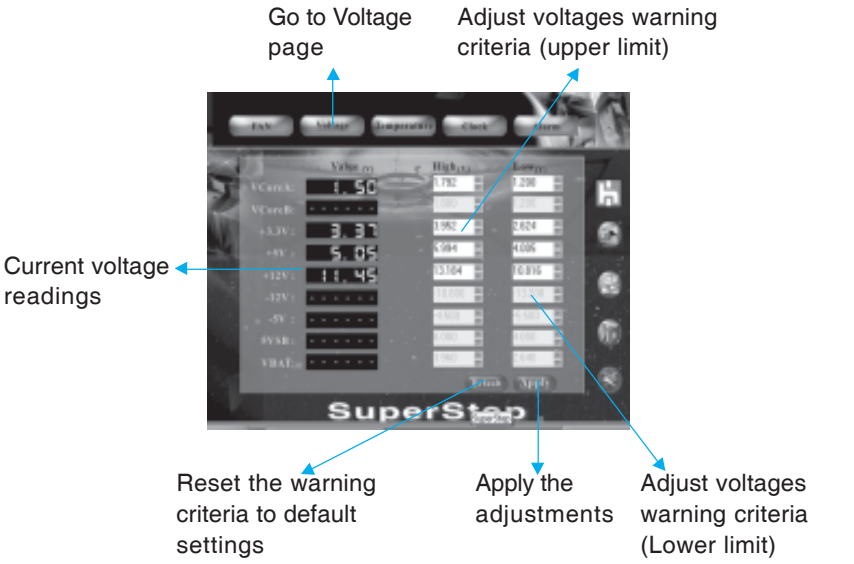
SuperStep features:

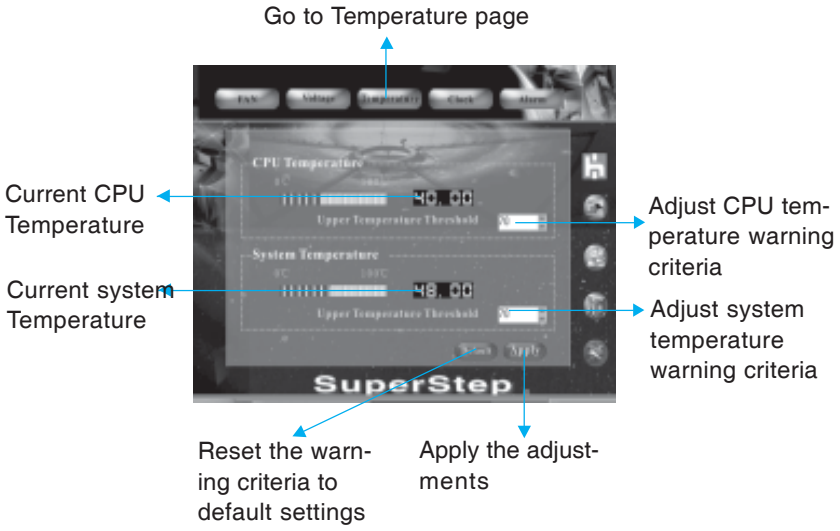
1. Supports Win98SE, WinME, Win2000 and WinXP.
2. Automatic alarm mechanism when system runs irregularly
3. Adjusts the CPU frequency to speed up your system and achieve better system performance.
4. Simple and easy to operate, with a user-friendly graphics interface.

Using SuperStep:

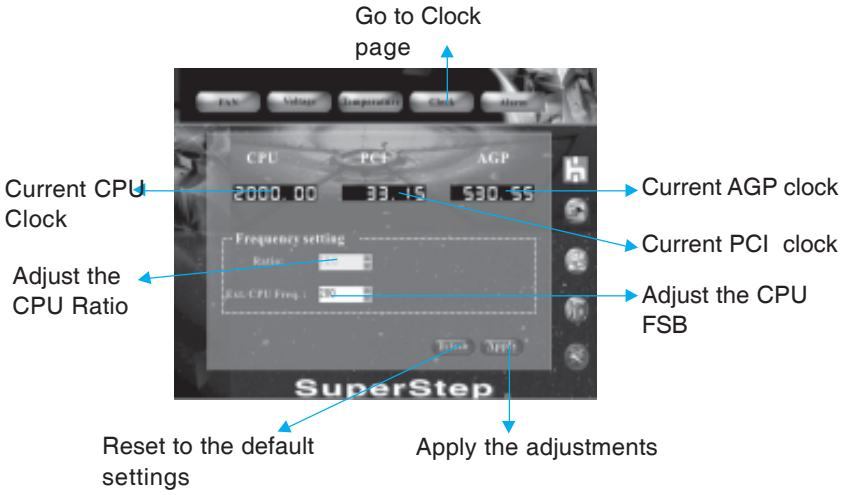


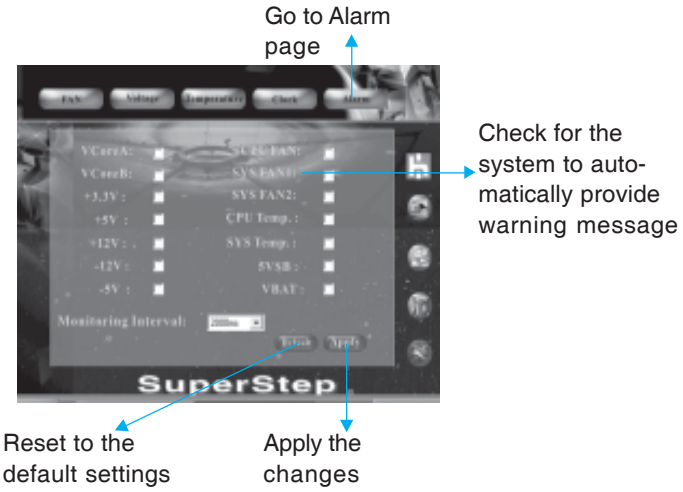
755A01-032604.p65 74 2004-3-26, 15:28





755A01-032604.p65 75 2004-3-26, 15:28





755A01-032604.p65 76 2004-3-26, 15:28

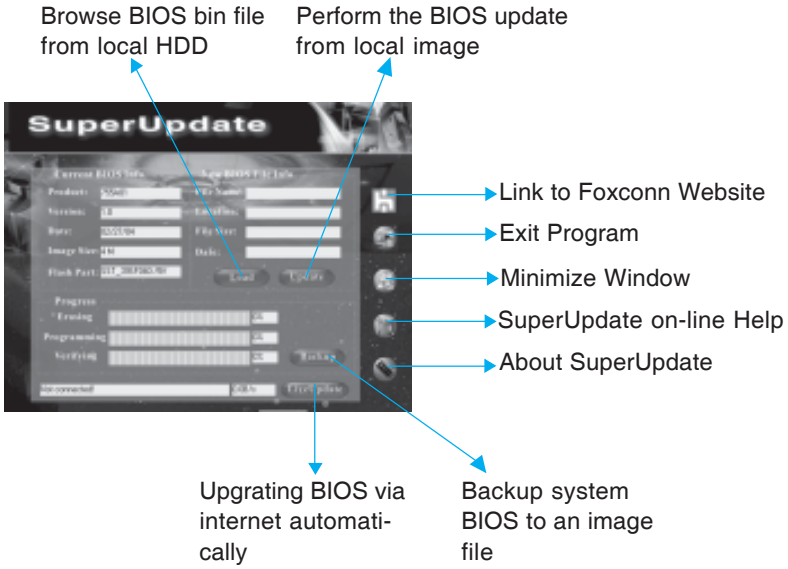
SuperUpdate

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.

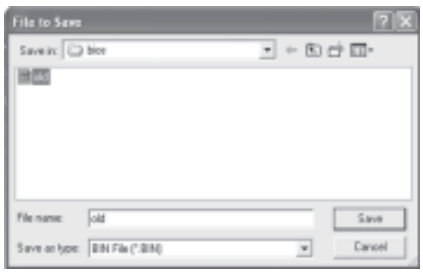
Using SuperUpdate:



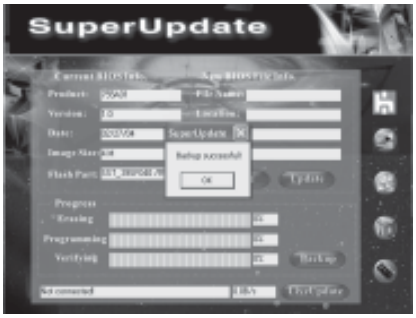
755A01-032604.p65 77 2004-3-26, 15:28

Bakeup BIOS to local image:

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



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

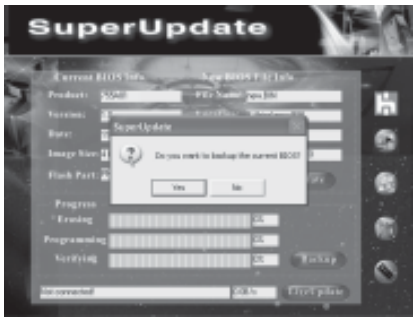


Update BIOS from local image:

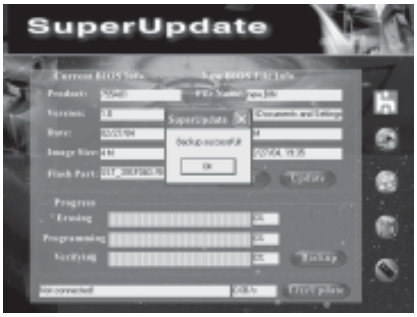
1. Click <Load> to load the BIOS file.

755A01-032604.p65 78 2004-3-26, 15:28

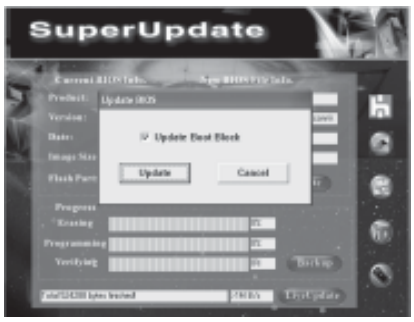
2. Click <Update>, the following message will appear.



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

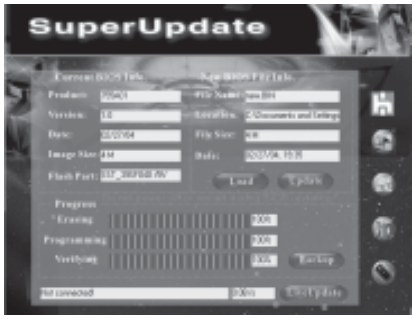


4. Click <OK >, then click <Update>.



755A01-032604.p65 79 2004-3-26, 15:28

5. Now is updating.

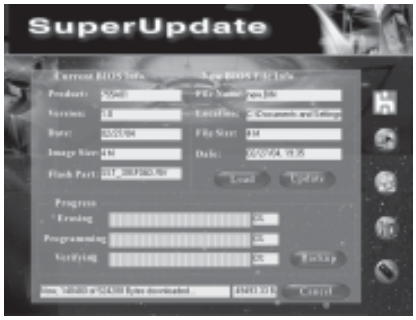


6. Click <Restart>.

755A01-032604.p65 80 2004-3-26, 15:28

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**.

755A01-032604.p65 81 2004-3-26, 15:28

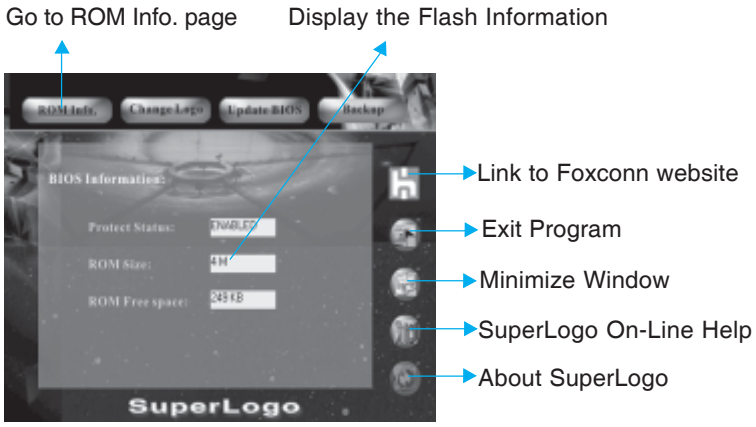
SuperLogo

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.

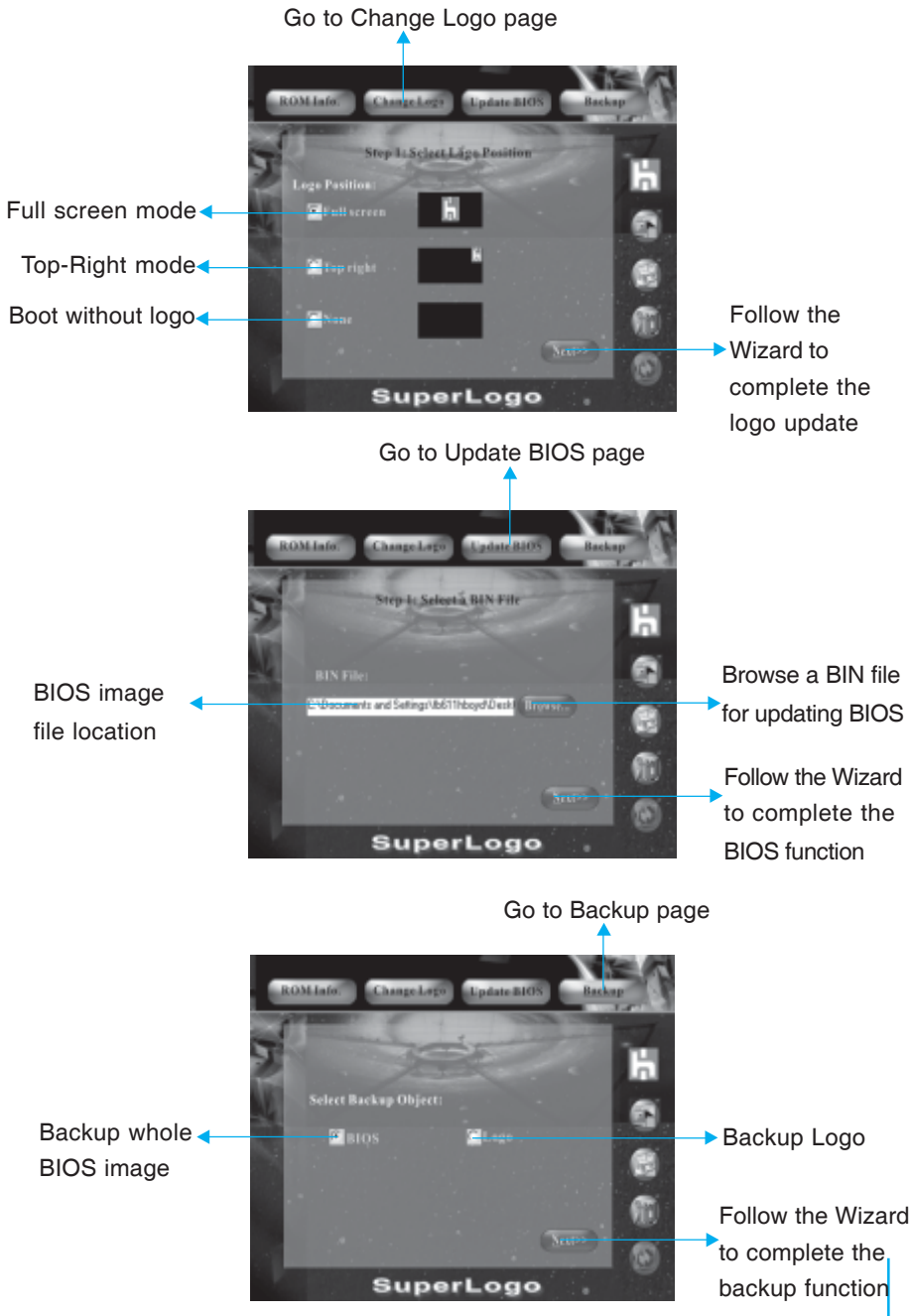
SuperLogo features:

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:



755A01-032604.p65 82 2004-3-26, 15:28



755A01-032604.p65 83 2004-3-26, 15:28

Chapter 6

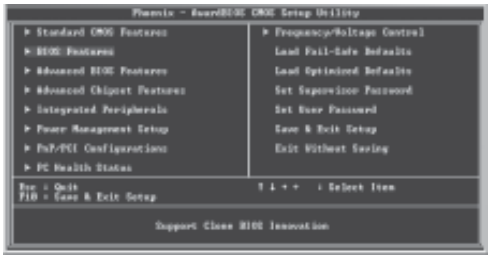
This chapter will introduce new functions of BIOS and how to use them in detail. It can further exert the max potential of motherboard to bring you super-value enjoyment.

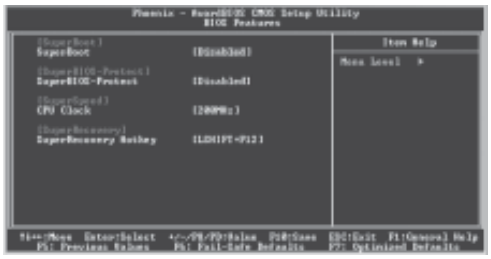
This chapter introduces the following new functions of BIOS:

- SuperBoot
- SuperBIOS-Protect
- SuperSpeed
- SuperRecovery

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 boot up 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 at the first time and restores the parameters for the system, thus letting the PC boot freely and rapidly.





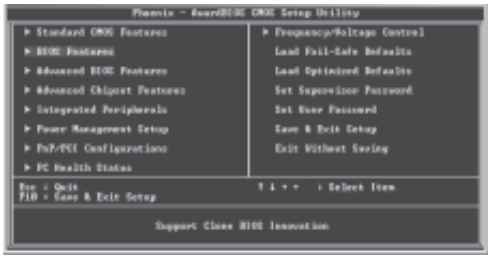
Notes:

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

755A01-032604.p65 85 2004-3-26, 15:28

SuperBIOS-Protect

The BIOS of the motherboard is contained inside the Flash ROM. Severe viruses such as CIH virus are so dangerous that it may overwrite the BIOS of the motherboard. 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.



There are two choices which implement this function.

1. Set the jumper (FWH_EN) as disabled (pin 1-2 closed), the BIOS can not be overwritten.
2. Set the jumper (FWH_EN) as enabled (pin 2-3 closed), meanwhile set Flash Write Protect as Enabled in CMOS Setup. In this way, the BIOS can not be overwritten, but the DMI information can be updated.

Note: FWH_EN default is enabled.

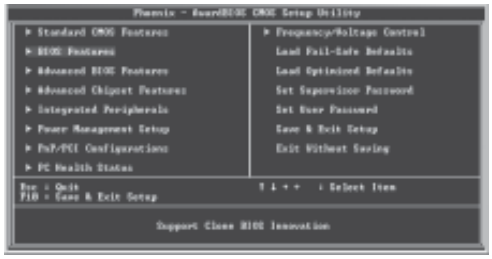
755A01-032604.p65 86 2004-3-26, 15:28

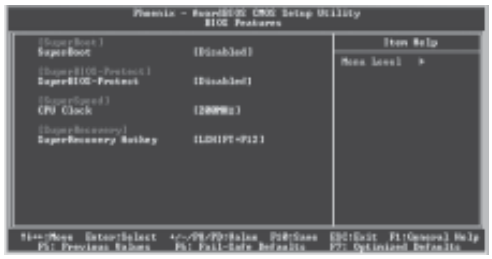
SuperSpeed

SuperSpeed is a powerful and efficient Easy Technology for PC DIY fans. It offers a friendly interface. The users can also realize in the BIOS setup the CPU core voltage adjustability.

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 up the CPU clock.
5. Save and exit BIOS Setup, your system will now boot successfully.





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

Warning:

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

755A01-032604.p65 87 2004-3-26, 15:28

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.

755A01-032604.p65 88 2004-3-26, 15:28

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 the HDDs lower than ATA5, there will be a message of “No Support” in the HDD list menu listing beside the name of it.
3) Only one HDD can be opreated at a time.

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

755A01-032604.p65 89 2004-3-26, 15:28

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’s a Hidden Partition:

SuperRecovery can be used to divide a hidden partition, which is to be reserved for backing up HDD data. The operation of Division 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 area of hidden partition, such as virus, windows system breaking down and data loss. SuperRecovery can recover all the data backed up in hidden partition. The user can therefore easily get the computer on track again.

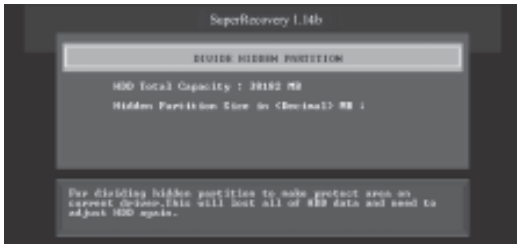
2. Divide Hidden Partition:

1) 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;
2) 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 be taken into effect after the system is restarted.

755A01-032604.p65 90 2004-3-26, 15:28

Attention :

1) All the data will be cleared after division is in process. So you'd better do the division against an empty HDD.
2) At the same time, the HDD capacity will decrease to make space for the hidden partition, which is unavailable for your 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.

755A01-032604.p65 91 2004-3-26, 15:28

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:

1) Supports backing up of the CMOS data.
2) The backing up or recovery of CMOS data should be operated on a motherboard of the same model.

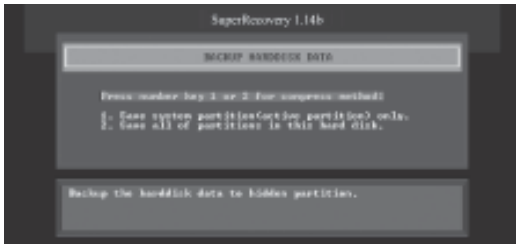
2. Backup Partition Table:

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

755A01-032604.p65 92 2004-3-26, 15:28

3. Backup Harddisk Data:

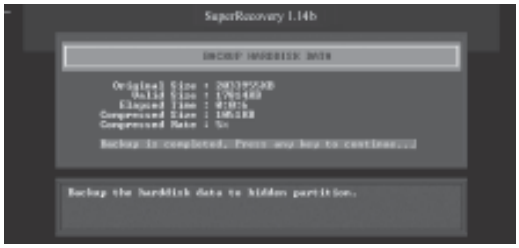
1) If there are active partitions (system partition), you can choose an active partition or the whole disk for backing up. But only one can be taken between the two choices. Old data will be replaced by the newly backed up.



2) Backing up with the progress bar showing.

755A01-032604.p65 93 2004-3-26, 15:28

3) A report with all the critical data on this operation will be listed after backing up is completed.
Original Size: The data size loaded in selected partition.
Valid Size: The size of valid data.
Elapsed Time: How long the process took to complete.
Compressed Size: The size of data after compression.
Compressed Rate: Compressed Size/Valid Size.



4. Back to Main:
This item is used to quit the Backup interface.

Recovery:

Select RECOVERY to enter the Recovery interface. The following sub-function are available : as 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.

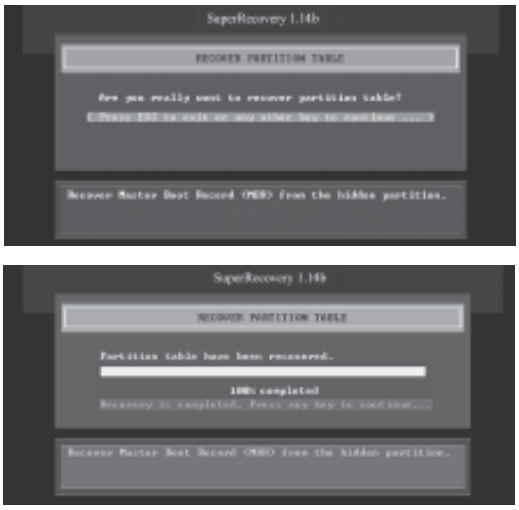
755A01-032604.p65 94 2004-3-26, 15:28

1. Recover CMOS Setup:

This function can help to restore the latest backup of CMOS settings you made.

2. Recover Partition Table:

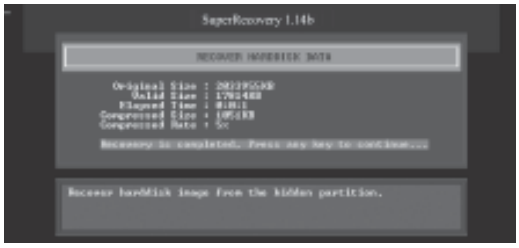
This function can help to recover all partition tables including extended partitions.



755A01-032604.p65 95 2004-3-26, 15:28

3. Recover Hard disk Data:

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



4. Back to Main:

This option is used to quit the Recovery interface.

CHANGE PASSWORD Introduction:

Select CHANGE PASSWORD to enter the Change Password interface.

1) Enter the old password first. Press “ENTER” if password is null.
2) Enter the new password. Then enter the same again to confirm it.
3) Press “Enter” for null password.
4) The password will be saved in the hidden partition.

755A01-032604.p65 96 2004-3-26, 15:28