

USER'S MANUAL
Of
SiS 741CX North Bridge Chipset
&
SiS 964 South Bridge Chipset
M/B For AMD Geode™ processor family

NO. G03-7F3E-F

Rev:3.0

Release date: April 2007

Trademark:

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Environmental Protection Announcement

Do not dispose this electronic device into the trash while discarding. To minimize pollution and ensure environment protection of mother earth, please recycle.



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Manual Revision Information

Reversion	Revision History	Date
3.0	Third Edition	April 2007

Item Checklist

- Motherboard
- Cable for IDE
- CD for motherboard utilities
- Cable for USB Port 2/3 (Option)
- User's Manual
- Cable for COM2 Serial Port (Option)
- AMD Geode™ Processor

Chapter 1

Introduction of SiS 741CX Chipset Motherboards

1-1 Feature of motherboard

The SiS 741CX north bridge chipset motherboard series are designed for the new generation AMD Geode™ processor family guaranteed both of the performance and stability of general purpose IPC and dedicated IPC platform solutions. The SiS 741CX north bridge chipset is fully optimized to provide the variety IPC platform solutions by featuring the high compatibilities and cost-effective support for DDR333 memory modules which is expandable to 1.0GB, low power consumption, high performance, and superior core graphics engine

The SiS 741CX north bridge chipset motherboard series support DDR266MHz front side bus and provide 133MHz / 166MHz Memory clock frequency for DDR 266 / 333 system RAM Modules. The motherboard series are embedded with SiS 964 south bridge chipset that offers **ULTRA ATA 133** and **Serial ATA with RAID 0, 1** functions of providing effective-acceleration of HDD that increases the performance of whole system. Optional Realtek RT8201CL 10 / 100 Ethernet compatible LAN PHY which supports the Fast Ethernet LAN function of 10 / 100 Mb/s data transfer rate for internet or intranet connections. The motherboard series are also integrated optional Realtek ALC655 AC'97 6-channel Audio CODEC on system which is fully compatible with Sound Blaster Pro® that gives you the best sound quality and compatibility.

The motherboard can be combined with three different AMD Geode NX processors, including the AMD Geode™ NX 1250@6W processor, AMD Geode™ NX 1500@6W processor and AMD Geode™ NX 1750@14W processor, enabling development of a wider variety of products for different market segments. It also incorporates SiS's revolutionary HyperStreaming™ Technology, which provides multiple divided pipelines for data, allows data to be sent concurrently, and separates data for easier memory retrieval, resulting in a remarkable reduction in latency versus traditional chipsets. The integrated superior core graphics engine with MPEG2 / 1 Video Accelerator and together with the advanced 2D/3D graphics processing engine that offers exceptional playback and streaming of various digital video formats while maintaining ultra low power consumption and exerting minimal load on the processor. It also provides extensive display support with outputs to CRT and LCD.

Embedded USB and optional VIA VT6307S IEEE1394 controllers as well as capability of expanding to 8 of USB2.0 functional ports and one IEEE1394 port delivering 480Mb/s and 400Mb/s bandwidth of rich connectivity, these motherboards meet USB2.0 demands and the high speed IEEE1394 data transport demands which are also equipped with hardware monitor function on system to monitor and protect your system and maintain your non-stop business computing.

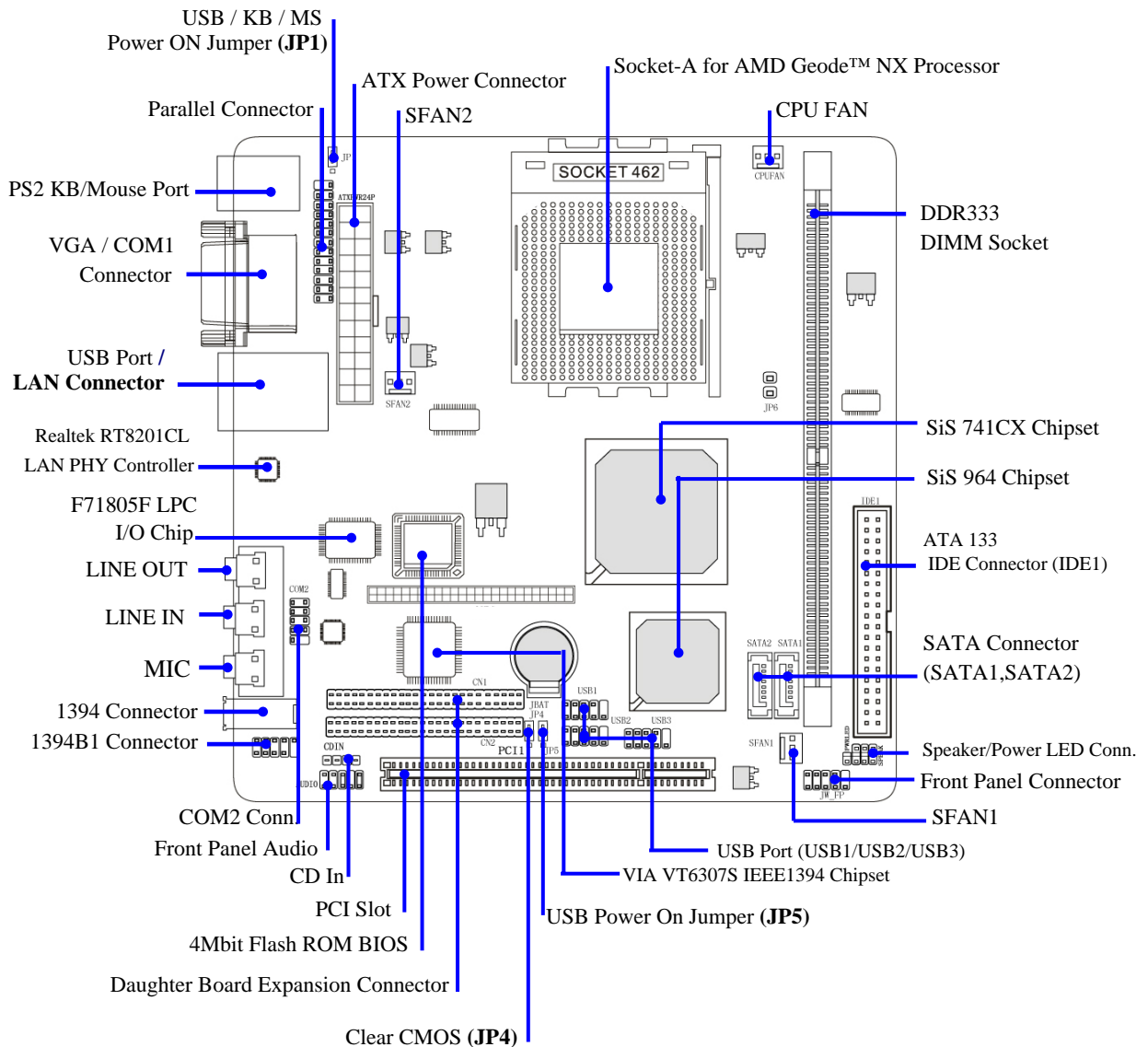
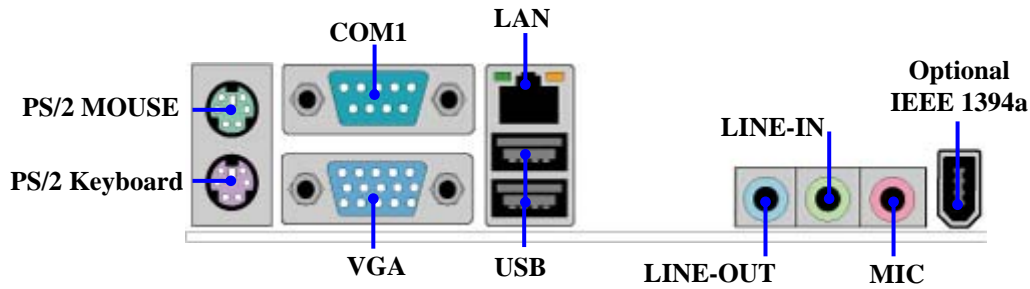
Targets at High Growth Markets: Digital Home / Digital Office / Digital World

- Personal electronics such as personal video recorders (PVR), set top boxes, home theatres, digital audio centers, etc.
- Mini PCs / Green clients / Quiet desktop PCs / High density servers
- Home server appliances / Public information/entertainment kiosks / Point-of-Sales systems / Intelligent displays / Edge networking devices / Hospital monitoring systems / Municipal control & monitoring systems

1-2 Specification

Spec	Description
Design	* 17 x 17 cm 6-Layer Mini ITX Form Factor Motherboard
Chipset	* SiS 741CX North Bridge Chipset * Featuring Integrated AGP Compliment Graphics * SiS 964 South Bridge Chipset
CPU	* Support 133MHz Front Side Bus AMD Geode™ NX processor * Low Power Consumption and Optional Fanless * Socket-A AMD Geode™ NX Series processor (NX1250, 1500, 1750) * 128K L1 and 256K L2 Cache
Memory Socket	* 184-pin DDR DIMM socket x1 * Support DDR 333 / 266 system RAM Modules DDR memory * Expandable to 1GB
Expansion Slot	* 32-bit PCI slot x 1cs
Integrate VGA	* Integrate 2D/3D graphic Engines * Internal AGP 8x performance * Video Accelerator of MPEG-2 / 1 Video Decoder
Integrate IDE and Serial ATA RAID	* Two PCI IDE controllers support PCI Bus Mastering, ATA PIO/DMA and the ULTRA DMA 33/66/100/133 functions that deliver the data transfer rate up to 133 MB/s; Two Serial ATA ports provide 150 MB/sec data transfer rate for two Serial ATA Devices and offer RAID 0, 1 functions
Integrate LAN (Option)	* Integrated Realtek RT8201CL LAN-PHY Controller * Support 10/100 BASE-T Transfer rate
Audio	* AC'97 Digital Audio controller integrated * 6-channel AC'97 Audio CODEC onboard * Audio driver and utility included
BIOS	* Award 4Mb Flash ROM
Multi I/O	* PS/2 keyboard and PS/2 mouse connectors * Hard disk drive connector x1 * VGA x1, Serial port x1 * USB 2.0 connector x2 * USB 2.0 Pin-header x3 (connecting cable is option) * Optional IEEE1394a Pin-header x1(connecting cable is option) * Audio connector (Line-in, Line-out, MIC) * Optional 2xAD Connectors for Expansion Daughter Board
1394 (Option)	* Integrated VIA VT6307S 1394 controller * Compliant with IEEE 1394a-2000 standard, support 400 M-bit / s data transfer rate.

1-3 Layout Diagram & Jumper Setting



Jumpers

Jumper	Name	Description	Page
JP1	Keyboard Power ON Function Setting	3-pin Block	p.5
JP5	USB Power On Function Setting	3-pin Block	p.5
JP4	CMOS RAM Clear Function Setting	3-pin Block	p.6

Connectors

Connector	Name	Description	Page
ATXPWR24P	24-pin ATX Power Connector	20-pin Block	p.12
PS2KBS1	PS/2 Mouse & PS/2 Keyboard Connector	6-pin Female	p.12
UL1	RJ45 Over USB Port Connector	4-pin Connector	p.13
COM1	Serial Port Connector	25-pin Female	p.13
VGA	VGA Port Connector	15-pin Female	p.13
CN4	Line-Out/Line-In/MIC Audio Connector	Phone Jack	p.13
U11 (Option)	Optional IEEE1394 Port Connector	9-pin Connector	p.13
IDE1	Primary IDE Connector	40-pin Block	p.13
SATA1/2	Serial ATA IDE Connector	7-pin Connector	p.14

Headers

Header	Name	Description	Page
COM2	COM2 Serial Port Headers	10-pin Block	p.14
PARALLEL	Parallel Port Headers	25-pin Block	p.15
AUDIO	Line-Out/MIC output Header	4-pin Block	p.15
USB1/USB2/ USB3	USB2.0 Port Headers	10-pin Block	p.16
1394C1(Optional)	Optional IEEE1394 Port Headers	9-pin Block	p.15
HD_LED	Hard drive LED connector	3-pin Block	p.16
RESET	Reset switch lead	2-pin Block	p.16
SPEAK	Speaker connector	4-pin Block	p.16
PWR_LED	Power LED Headers	2-pin Block	p.16
PWR_BTN	Power Button Headers	2-pin Block	p.17
CPUFAN, SFAN1/2	FAN Speed Headers	3-pin Block	p.17
CDIN	CD Audio-In Headers	4-pin Block	p.17
CNI/CN2	<i>Daughter Board Expansion Headers</i>	50-pin Block	p.18

Expansion Sockets

Socket/Slot	Name	Description	Page
DDR	DDR SDRAM Module Socket	184-pin DDR SDRAM Module Socket	p.9
PCI1	PCI Slot	32-bit PCI Local Bus Expansion slots	p.10

Chapter 2

Hardware installation

2-1 Hardware installation Steps

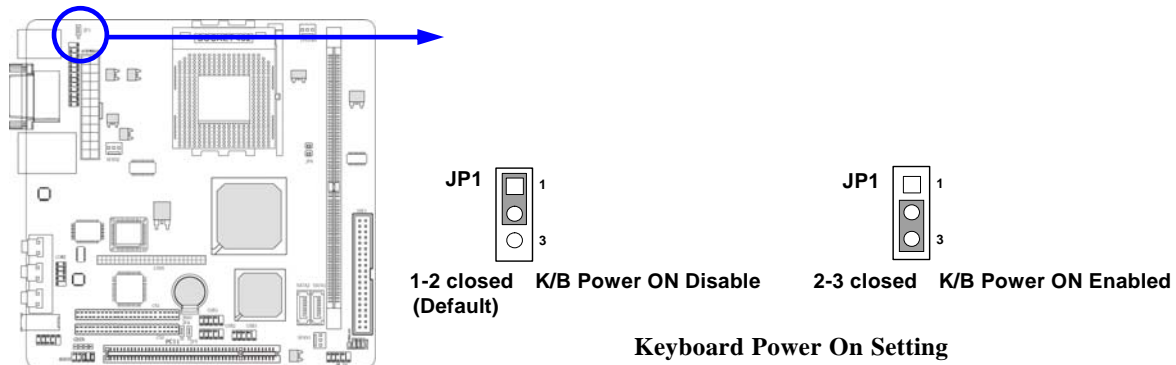
Before using your computer, you had better complete the following steps:

1. Check motherboard jumper setting
2. Install CPU and Fan
3. Install System Memory (DIMM)
4. Install Expansion cards
5. Connect IDE and Floppy cables, Front Panel /Back Panel cable
6. Connect ATX Power cable
7. Power-On and Load Standard Default
8. Reboot
9. Install Operating System
10. Install Driver and Utility

2-2 Checking Motherboard's Jumper Setting

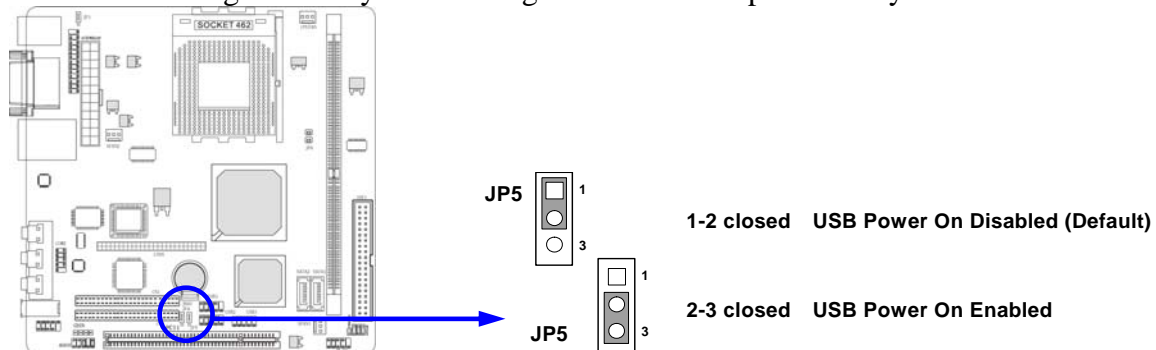
(1) Keyboard Power On function Enabled/Disabled (3-pin): JP1

When setting Enabled you can using keyboard by key in password to power on system.



(2) USB Power On function Enabled/Disabled (3-pin): JP5

When setting Enabled you can using USB Device to power on system.



(3) CMOS RAM Clear (3-pin): JP4

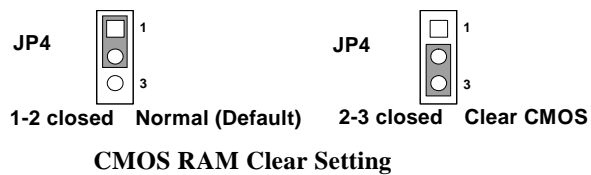
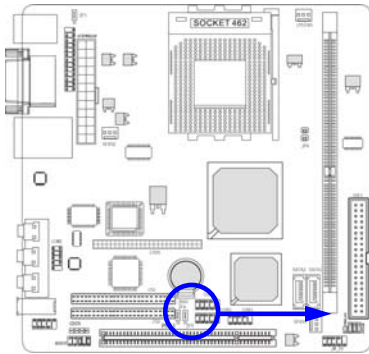
A battery must be used to retain the motherboard configuration in CMOS RAM short 1-2 pins of JP4 to store the CMOS data.

To clear the CMOS, follow the procedure below:

1. Turn off the system and unplug the AC power
2. Remove ATX power cable from ATX power connector
3. Locate JP4 and short pins 2-3 for a few seconds
4. Return JP4 to its normal setting by shorting pins 1-2
5. Connect ATX power cable back to ATX power connector

Note: When should clear CMOS

1. **Troubleshooting**
2. **Forget password**
3. **After over clocking system boot fail**



2-3 Glossary

Chipset (core logic) - two or more integrated circuits which control the interfaces between the system processor, RAM, I/O devices, and adapter cards.

Processor socket - the socket used to mount the system processor on the motherboard.

Slot (AGP, PCI, ISA, RAM) - the slots used to mount adapter cards and system RAM.

AGP - Accelerated Graphics Port - a high speed interface for video cards; runs at 1X (66MHz), 2X (133MHz), or 4X (266MHz).

PCI - Peripheral Component Interconnect - a high speed interface for video cards, sound cards, network interface cards, and modems; runs at 33MHz.

Serial Port - a low speed interface typically used for mouse and external modems.

Parallel Port - a low speed interface typically used for printers.

PS/2 - a low speed interface used for mouse and keyboards.

USB - Universal Serial Bus - a medium speed interface typically used for mouse, keyboards, scanners, and some digital cameras.

Sound (interface) - the interface between the sound card or integrated sound connectors and speakers, MIC, game controllers, and MIDI sound devices.

BIOS (Basic Input/Output System) - the program logic used to boot up a computer and establish the relationship between the various components.

Driver - software, which defines the characteristics of a device for use by another device or other software.

Processor - the "Central Processing Unit" (CPU); the principal integrated circuit used for doing the "computing" in "personal computer"

Front Side Bus Frequency - The working frequency of the motherboard, which is generated by the clock generator for CPU, DRAM and PCI BUS.

CPU L2 Cache - The flash memory inside the CPU, normally Pentium III CPU has 256K or above, while Celeron CPU will have 128K.

2-3-1 Setting CPU Bus Clock & Memory Clock Jumper

Setting the front side bus frequency and SDRAM frequency

The motherboard uses jumper less function for the front side bus frequency and SDRAM frequency users don't need setting any jumper when plug the CPU in motherboard

For experience user looking for over clocking possibility, please refer to sec 2-3-2.

2-3-2 Over clock Running

WARNING! This section is for experienced motherboard installer only. Over clocking can result in system instability or even shortening life of the processor.

Users can choose over clock running by BIOS CMOS SETUP UTILITY. When you entered CMOS SETUP UTILITY, choose "Miscellaneous Control" you will see the screen as below then.

Phoenix - AwardBIOS CMOS Setup Utility
Miscellaneous Control

Auto Detect PCI Clock	Enabled	Item Help
Spread Spectrum	Disabled	
** Current Host Clock	100MHZ	
Host Clock at Next Boot	100MHZ	Menu Level >
** Current DRAM CLOCK	266MHz **	
DRAM Clock at Next Boot	266MHz (By SPD)	
VDIMM Select	1.90V(Default)	
VAGP Select	1.55V(Default)	
Flash Part Write Protect	Disabled	

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

WARNING! The Design of this motherboard follows chipset and CPU vender's design guideline. Any attempts to push beyond product specification are not recommended and you are taking your own risk to damage your system or important data. Before over clocking, you must make sure your components are able to tolerate such abnormal setting, especially CPU, memory, hard disks, and VGA cards.

2-4 Install Memory

The motherboards provide **one** 184-pin DUAL INLINE MEMORY MODULES (DIMM) sites for memory expansion available from minimum memory size of 64MB to maximum memory size of 1.0GB DDR2 SDRAM.

Valid Memory Configurations

Bank	184-Pin DIMM	PCS	Total Memory
Bank 0, 1 (DDR1)	DDR 333/ DDR 266 DDR SDRAM Module	X1	64MB~1.0GB
Total	System Memory (Max. 1.0GB)	1	64MB~1.0GB

Generally, installing DDR SDRAM modules to your motherboard is very easy, you can refer to figure 2-4 to see what a 240-Pin DDR 333 / DDR 266 DDR SDRAM module looks like.

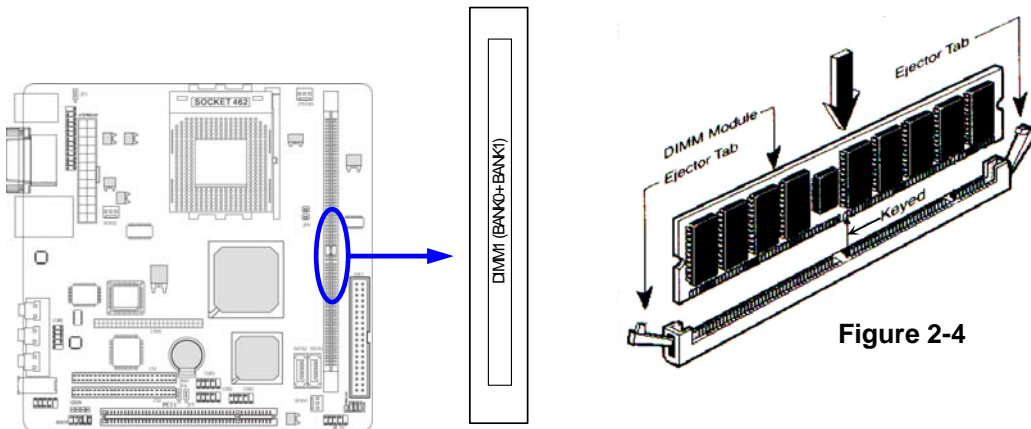


Figure 2-4

NOTE! When you install DIMM module fully into the DIMM socket the eject tab should be locked into the DIMM module very firmly and fit into its indentation on both sides.

WARNING! For the DDR SDRAM CLOCK is set at 166MHz, use only DDR333-compliant DDR Modules. When this motherboard operate at 133MHz, most system will not even boot if non-compliant modules are used because of the strict timing issues, if your SDR Modules are not DDR333-compliant, set the DDR SDRAM clock to 133MHz to ensure system stability.

2-5 Expansion Cards

WARNING! Turn off your power when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both your motherboard and expansion cards.

2-5-1 Procedure For Expansion Card Installation

1. Read the documentation for your expansion card and make any necessary hardware or software setting for your expansion card such as jumpers.
2. Remove your computer's cover and the bracket plate on the slot you intend to use.
3. Align the card's connectors and press firmly.
4. Secure the card on the slot with the screen you remove above.
5. Replace the computer system's cover.
6. Set up the BIOS if necessary.
7. Install the necessary software driver for your expansion card.

2-5-2 Assigning IRQs For Expansion Card

Some expansion cards need an IRQ to operate. Generally, an IRQ must exclusively assign to one use. In a standard design, there are 16 IRQs available but most of them are already in use.

Standard Interrupt Assignments

IRQ	Priority	Standard function
0	N/A	System Timer
1	N/A	Keyboard Controller
2	N/A	Programmable Interrupt
3 *	8	Communications Port (COM2)
4 *	9	Communications Port (COM1)
5 *	6	Sound Card (sometimes LPT2)
6 *	11	Floppy Disk Controller
7 *	7	Printer Port (LPT1)
8	N/A	System CMOS/Real Time Clock
9 *	10	ACPI Mode when enabled
10 *	3	IRQ Holder for PCI Steering
11 *	2	IRQ Holder for PCI Steering
12 *	4	PS/2 Compatible Mouse Port
13	N/A	Numeric Data Processor
14 *	5	Primary IDE Channel
15 *	1	Secondary IDE Channel

* These IRQs are usually available for ISA or PCI devices.

2-5-3 Interrupt Request Table For This Motherboard

Interrupt request are shared as shown the table below:

	INT A	INT B	INT C	INT D	INT E	INT F	INT G	INT H
Slot 1		√						
Onboard VGA	√							
Onboard USB 1	√							
Onboard USB 2		√						
Onboard USB 3			√					
LAN			√					
AC97/MC97			√					

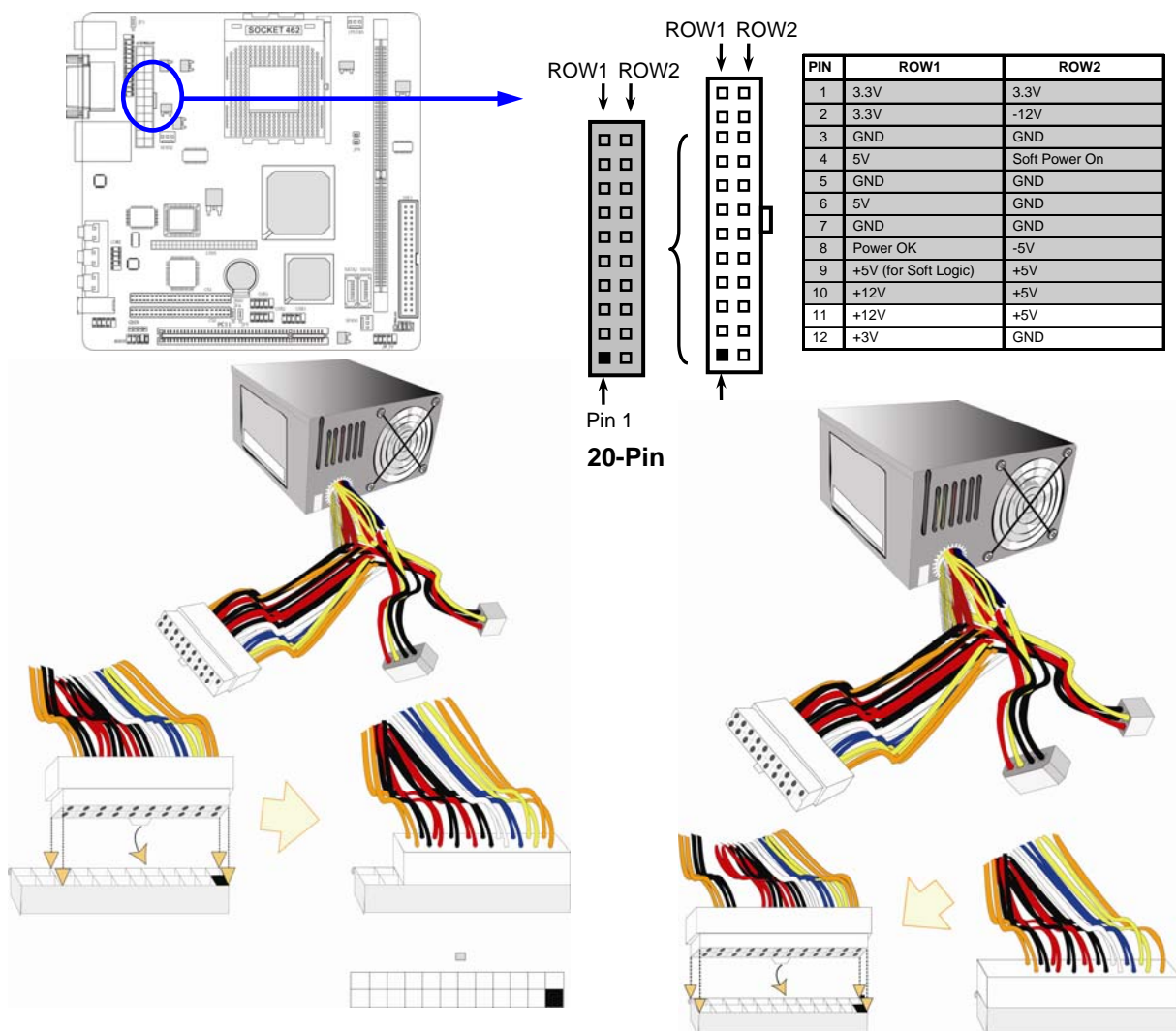
IMPORTANT! If using PCI cards on shared slots, make sure that the drivers support “Shared IRQ” or that the cards don’t need IRQ assignments. Conflicts will arise between the two PCI groups that will make the system unstable or cards inoperable.

2-6 Connectors, Headers

2-6-1 Connectors

(1) Power Connector (24-pin block) : ATXPWR24P

ATX Power Supply connector. This is a new defined 24-pins connector that usually comes with ATX case. The ATX Power Supply allows to use soft power on momentary switch that connect from the front panel switch to 2-pins Power On jumper pole on the motherboard. When the power switch on the back of the ATX power supply turned on, the full power will not come into the system board until the front panel switch is momentarily pressed. Press this switch again will turn off the power to the system board.



(2) PS/2 Mouse & PS/2 Keyboard Connector: PS2KBMS1

If you are using a PS/2 mouse, you must purchase an optional PS/2 mouse set which connects to the 5-pins block and mounts to an open slot on your computer's case.

(3) RJ45 Over USB Port connector: UL1

The connectors are 4-pins connector that connect USB devices to the system board, and standard RJ45 connector for Network supports 10/100 BASE-T transfer rate.

(4) **Serial Port Connector (9-pin female): VGA_COM1**

Serial Port connector is a 9-pin D-Subminiature connector. The On-board Serial Port can be disabled through the BIOS SETUP. Please refer to Chapter 3 “INTEGRATED PERIPHERALS SETUP” section for more detail information.

(5) **VGA Connector (15-pin female): VGA_COM1**

VGA Connector is a 15-pin D-Subminiature Receptacle connector. This connector is for connection Monitor and System to display.

(6) **Audio Connector: CN4 (Line-Out/ Line-IN/ MIC)**

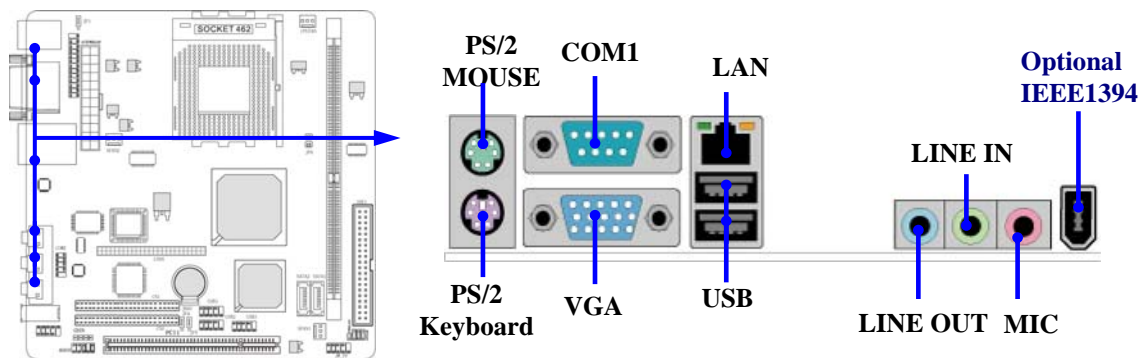
This Connector are 3 phone Jack for LINE-OUT/ LINE-IN/ MIC.

Line-out : Audio output to speaker

Line-In : Audio input to Audio controller

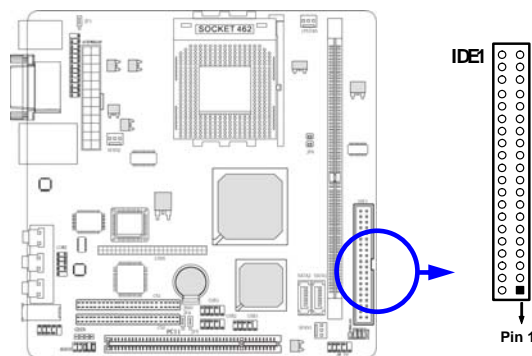
MIC : Microphone Connector

(7) **IEEE 1394 Port Connector: U11**



(8) **Primary IDE Connector (40-pin block): IDE1**

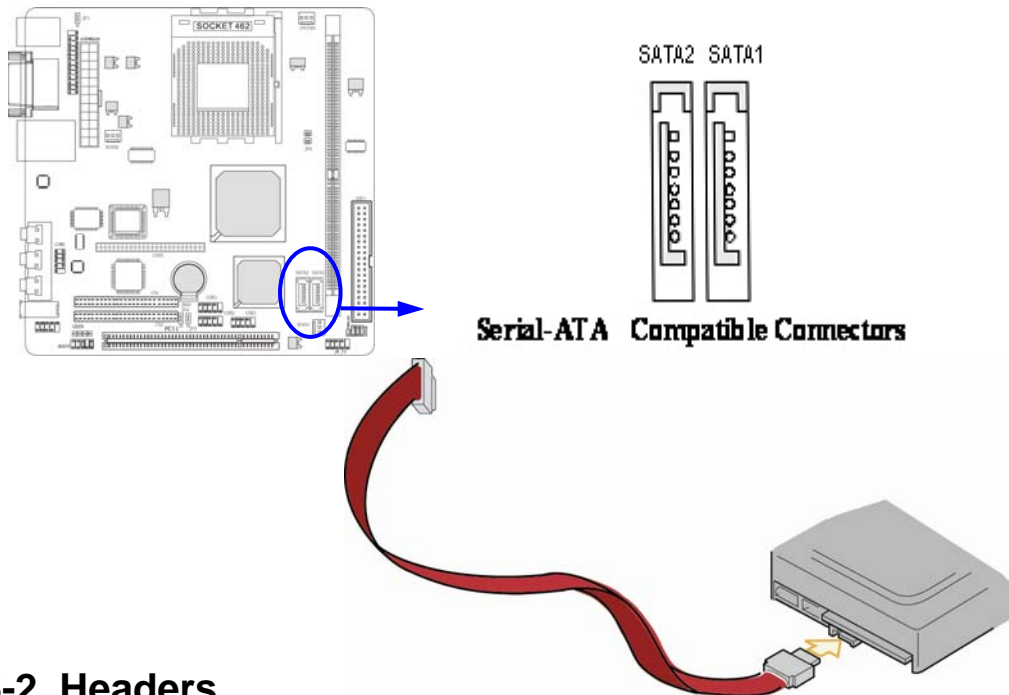
This connector supports the provided IDE hard disk ribbon cable. After connecting the single plug end to motherboard, connect the two plugs at other end to your hard disk(s). If you install two hard disks, you must configure the second drive to Slave mode by setting its jumpers accordingly. Please refer to the documentation of your hard disk for the jumper settings.



- Two hard disks can be connected to each connector. The first HDD is referred to as the “Master” and the second HDD is referred to as the “Slave”.
- For performance issues, we strongly suggest you don’t install a CD-ROM or DVD-ROM drive on the same IDE channel as a hard disk. Otherwise, the system performance on this channel may drop.

(9) Serial-ATA Port connector: SATA1 / SATA2

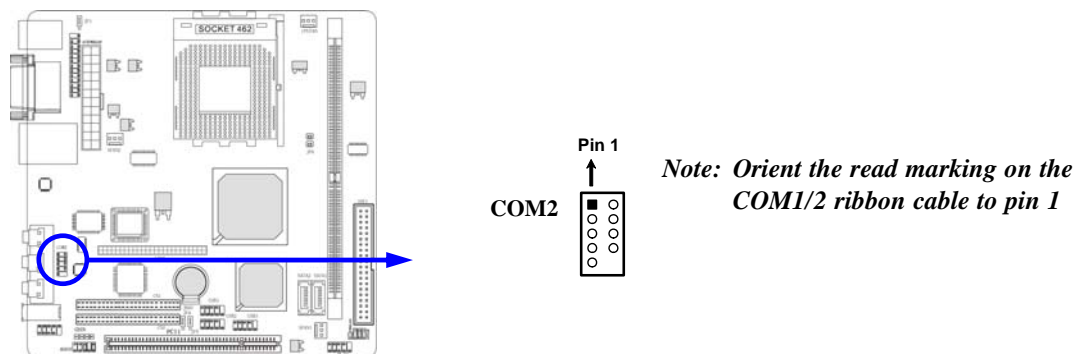
This connector supports the provided Serial ATA IDE hard disk cable to connecting the motherboard and serial ATA hard disk.



2-6-2 Headers

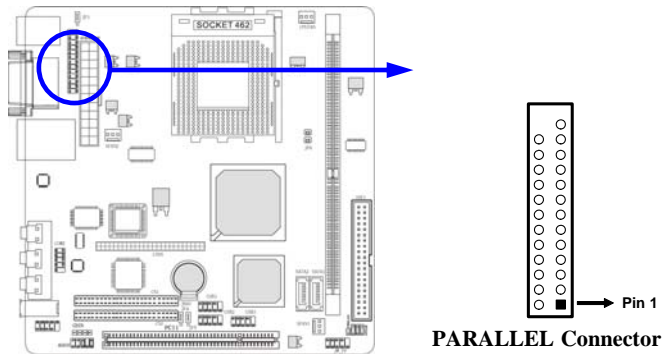
(1) COM2 Serial Port Headers (9-pin) : COM2

This board has two serial port COM1 (Connector)/COM2(Headers), it come with cable providing serial port COM1/COM2. The On-board serial port can be disabled through BIOS SETUP. Please refer to Chapter 3 “INTEGRATED PERIPHERALS SETUP“ section for more detail information.



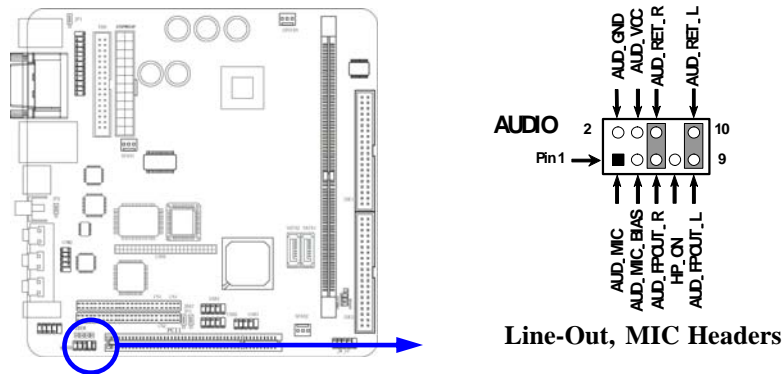
(2) Parallel Port Headers (25-pin Block): Parallel

The On-board Parallel Port can be disabled through the BIOS SETUP. Please refer to Chapter 3 “INTEGRATED PERIPHERALS SETUP” section for more detail information.

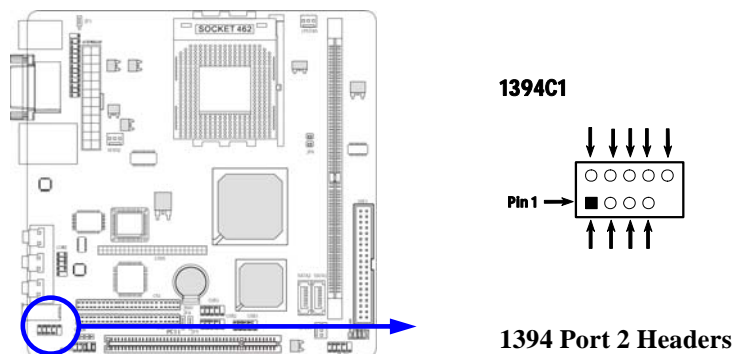


(3) Line-Out, MIC Header (9-pin): AUDIO

This header connects to Front Panel Line-out, MIC connector with cable.

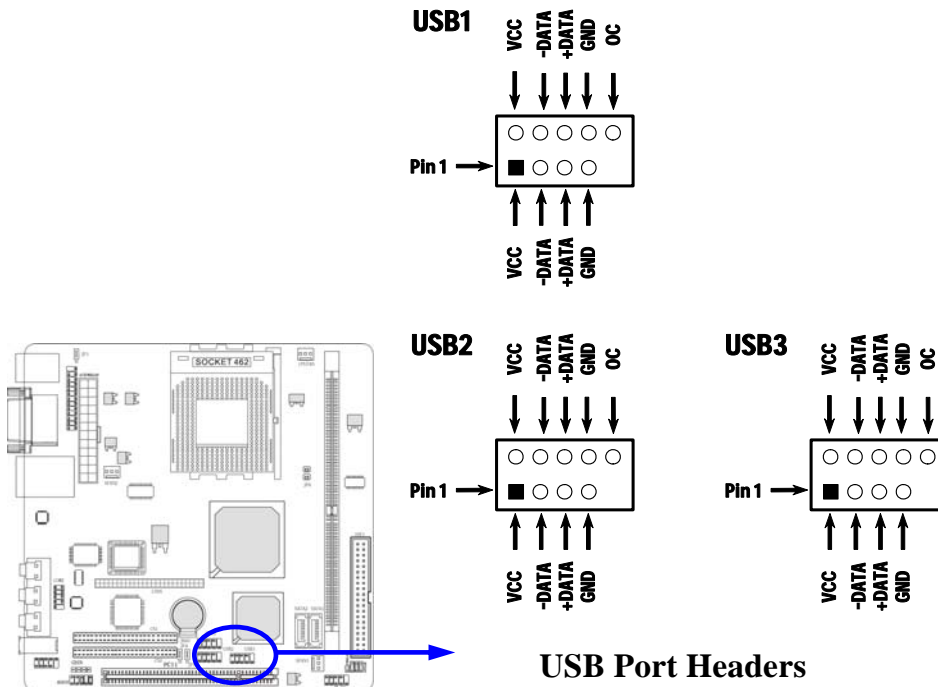


(4) IEEE 1394 Port Headers (9-pin) : 1394C1



(5) **USB Port Headers (9-pin) : USB1/USB2/ USB3**

These headers are used for connecting the additional USB port plug. By attaching an option USB cable, your can be provided with two additional USB plugs affixed to the back panel.



(6) **IDE Activity LED: HD_LED**

This connector connects to the hard disk activity indicator light on the case.

(7) **Reset switch lead: RESET**

This 2-pin connector connects to the case-mounted reset switch for rebooting your computer without having to turn off your power switch. This is a preferred method of rebooting in order to prolong the life of the system's power supply. See the figure below.

(8) **Speaker connector: SPEAK**

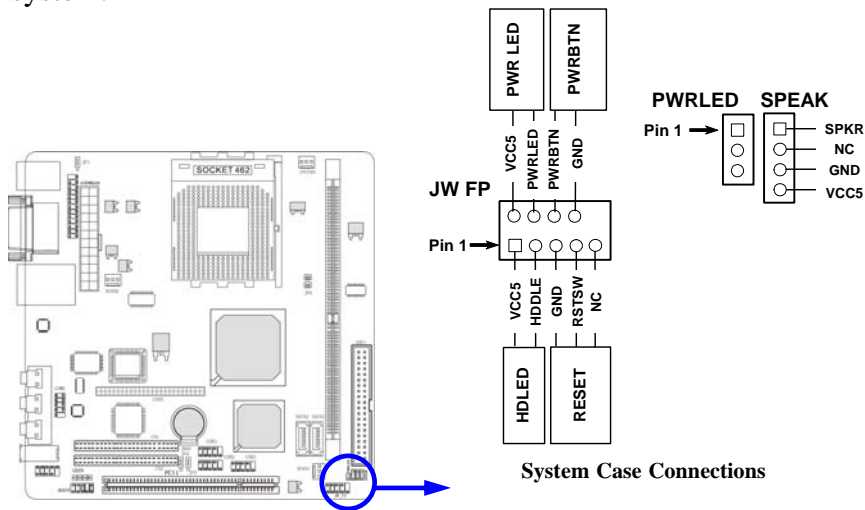
This 4-pin connector connects to the case-mounted speaker. See the figure below.

(9) **Power LED: PWR_LED**

The Power LED is light on while the system power is on. Connect the Power LED from the system case to this pin.

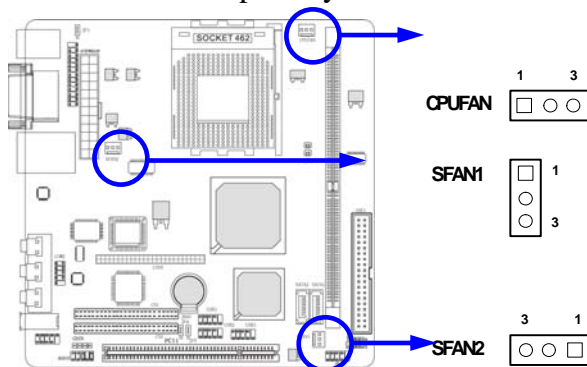
(10) Power switch: PWR BTN

This 2-pin connector connects to the case-mounted power switch to power ON/OFF the system.



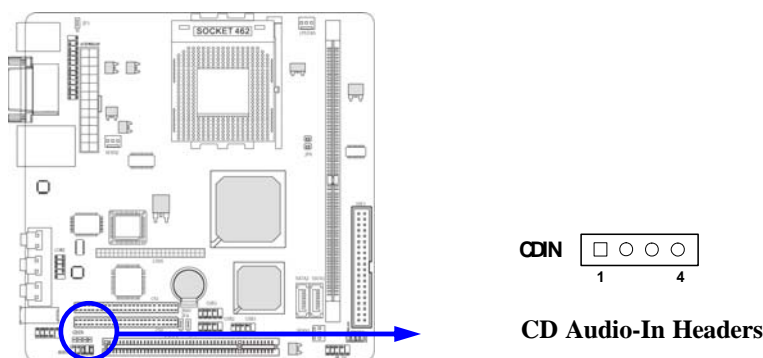
(11) FAN Speed Headers (3-pin) : CPUFAN, SFAN1/SFAN2

These connectors support cooling fans of 350mA (4.2 Watts) or less, depending on the fan manufacturer, the wire and plug may be different. The red wire should be positive, while the black should be ground. Connect the fan's plug to the board taking into consideration the polarity of connector.



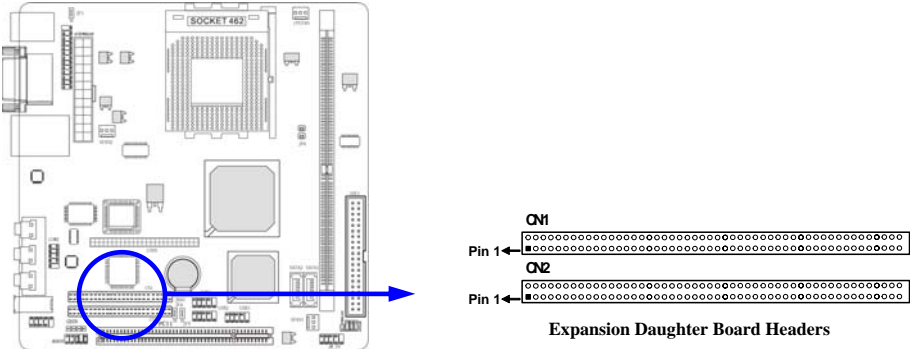
(12) CD Audio-In Headers (4-pin) : CDIN

CDIN is the connectors for CD-Audio Input signal. Please connect it to CD-ROM CD-Audio output connector.

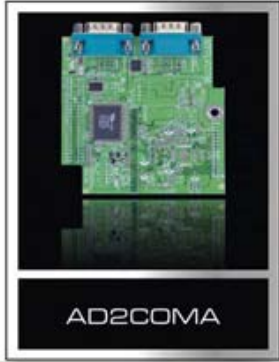


(13) Expansion Daughter Board Headers :CN1/CN2

These two Headers can add the COM Port card/ LAN card/ PCMCIA card.



**(14) Optional Expansion cards:
Expansion Daughter-boards (optional)**



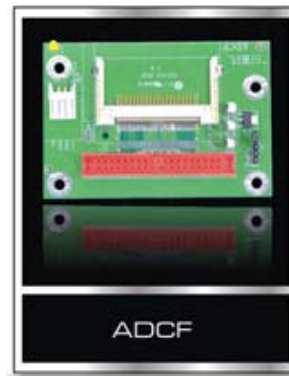
For 2xCOM Ports Added



For 4xCOM Port Added



Card Bus Type I + II Supported Expansion Interface With CF Compatible Card Reader



IDE Interface Supported CF Compatible Disk On Module



-Extended D-Sub 15-pin and DVI Connectors
-SiS 301 controller Supports both analog D-Sub 15-pin and DVI digital video signal Output



For 2nd or 2nd, 3th, 4th 10/100 or 10/100/1000 Ethernet LAN

2-7 Starting Up Your Computer

1. After all connections are made, close your computer case cover.
2. Be sure all the switch are off, and check that the power supply input voltage is set to proper position, usually in-put voltage is 220V~240V or 110V~120V depending on your country's voltage used.
3. Connect the power supply cord into the power supply located on the back of your system case according to your system user's manual.
4. Turn on your peripheral as following order:
 - a. Your monitor.
 - b. Other external peripheral (Printer, Scanner, External Modem etc...)
 - c. Your system power. For ATX power supplies, you need to turn on the power supply and press the ATX power switch on the front side of the case.
5. The power LED on the front panel of the system case will light. The LED on the monitor may light up or switch between orange and green after the system is on. If it complies with green standards or if it is has a power standby feature. The system will then run power-on test. While the test are running, the BIOS will alarm beeps or additional message will appear on the screen.

If you do not see any thing within 30 seconds from the time you turn on the power. The system may have failed on power-on test. Recheck your jumper settings and connections or call your retailer for assistance.

Beep	Meaning
One short beep when displaying logo	No error during POST
Long beeps in an endless loop	No DRAM install or detected
One long beep followed by three short beeps	Video card not found or video card memory bad
High frequency beeps when system is working	CPU overheated System running at a lower frequency

6. During power-on, press <Delete> key to enter BIOS setup. Follow the instructions in BIOS SETUP.
7. **Power off your computer:** You must first exit or shut down your operating system before switch off the power switch. For ATX power supply, you can press ATX power switching after exiting or shutting down your operating system. If you use Windows 9X, click "**Start**" button, click "**Shut down**" and then click "**Shut down the computer?**" The power supply should turn off after windows shut down.

Chapter 3

Introducing BIOS

The BIOS is a program located on a Flash Memory on the motherboard. This program is a bridge between motherboard and operating system. When you start the computer, the BIOS program gain control. The BIOS first operates an auto-diagnostic test called POST (power on self test) for all the necessary hardware, it detects the entire hardware device and configures the parameters of the hardware synchronization. Only when these tasks are completed done it gives up control of the computer to operating system (OS). Since the BIOS is the only channel for hardware and software to communicate, it is the key factor for system stability, and in ensuring that your system performance as its best.

In the BIOS Setup main menu of Figure 3-1, you can see several options. We will explain these options step by step in the following pages of this chapter, but let us first see a short description of the function keys you may use here:

- Press <Esc> to quit the BIOS Setup.
- Press ↑↓←→ (up, down, left, right) to choose, in the main menu, the option you want to confirm or to modify.
- Press <F10> when you have completed the setup of BIOS parameters to save these parameters and to exit the BIOS Setup menu.
- Press Page Up/Page Down or +/- keys when you want to modify the BIOS parameters for the active option.

3-1 Entering Setup

Power on the computer and by pressing immediately allows you to enter Setup.

If the message disappears before your respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the “RESET” button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt> and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to

Press <F1> to continue, <Ctrl-Alt-Esc> or to enter Setup

3-2 Getting Help

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu/Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

3-3 The Main Menu

Once you enter Award® BIOS CMOS Setup Utility, the Main Menu (Figure 3-1) will appear on the screen. The Main Menu allows you to select from fourteen setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

Phoenix - AwardBIOS CMOS Setup Utility

Standard CMOS Features	Miscellaneous Control
Advanced BIOS Features	Load optimized Defaults
Advanced Chipset Features	Load Standard Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PnP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	
Time, Date, Hard Disk Type...	

Figure 3-1

Standard CMOS Features

Use this Menu for basic system configurations.

Advanced BIOS Features

Use this menu to set the Advanced Features available on your system.

Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize your system's performance.

Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.

Power Management Setup

Use this menu to specify your settings for power management.

PnP/PCI configurations

This entry appears if your system supports PnP/PCI.

PC Health Status

This entry shows your PC health status.

Miscellaneous Control

Use this menu to specify your settings for Miscellaneous Control.

Load Optimized Defaults

Use this menu to load the BIOS default values that are factory settings for optimal performances system operations.

Load Standard Defaults

Use this menu to load the BIOS default values for the minimal/stable performance system operation.

Set Supervisor/User Password

Use this menu to set User and Supervisor Passwords.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

3-4 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into several categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

Phoenix - AwardBIOS CMOS Setup Utility

Standard CMOS Features

Date (mm:dd:yy)	Thu, Nov, 27 2003	Item Help
Time (hh:mm:ss)	16 : 18 : 49	
IDE Channel 0 Master	None	Menu Level > Change the day, month, Year and century
IDE Channel 0 Slave	None	
IDE Channel 2 Master	None	
IDE Channel 3 Master	None	
Video	EGA/VGA	
Halt On	All Errors	
Base Memory	640K	
Extended Memory	64512K	
Total Memory	65536K	
↑↓→← Move Enter:Select Item +/-/PU/PD=Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

Date

The date format is <day><month><date><year>.

Day Day of the week, from Sun to Sat, determined by BIOS. Read-only.

Month The month from Jan. through Dec.

Date The date from 1 to 31 can be keyed by numeric function keys.

Year The year depends on the year of the BIOS.

Time

The time format is <hour><minute><second>.

IDE Channel 0 Master / IDE Channel 0 Slave

IDE Channel 2 Master / IDE Channel 3 Master

Press PgUp/<+> or PgDn/<-> to select Manual, None, Auto type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use Manual to define your own drive type manually.

If you select Manual, related information is asked to be entered to the following items. Enter the information directly from the keyboard. This information should be provided in the documentation from your hard disk vendor or the system manufacturer.

If the controller of HDD interface is SCSI, the selection shall be "None".

If the controller of HDD interface is CD-ROM, the selection shall be "None"

3-5 Advanced BIOS Features

Phoenix - AwardBIOS CMOS Setup Utility

Advanced BIOS Features

Virus Warning	Disabled	Item Help
CPU Internal Cache	Enabled	
External Cache	Enabled	
Quick Power On Self Test	Enabled	Menu Level >
Hard Disk Boot Priority	Press Enter	
First Boot Device	Floppy	
Second Boot Device	HDD-0	
Third Boot Device	CDROM	
Boot Other Device	Enabled	
Boot Up NumLock Status	On	
Gate A20 option	Normal	
Typematic Rate Setting	Disabled	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	Setup	
APIC Mode	Enabled	
MPS Version Control For OS	1.4	
OS Select For DRAM > 64MB	Non-OS2	
HDD S.M.A.R.T. Capability	Disabled	
Video BIOS Shadow	Enabled	
↑↓→← Move Enter:Select Item +/-/PU/PD=Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

Virus Warning

Allows you to choose the VIRUS Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.

Disabled (default) No warning message to appear when anything attempts to access the boot sector or hard disk partition table.

Enabled Activates automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector of hard disk partition table.

Quick Power On Self-Test

This category speeds up Power On Self Test (POST) after you power on the computer. If this is set to Enabled. BIOS will shorten or skip some check items during POST.

Enabled (default) Enable quick POST

Disabled Normal POST

First/Second/Third/Fourth Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items. The settings are LS/ZIP, HDD-0/HDD-1/HDD-3, CDROM, LAN and Disabled.

Swap Floppy Drive

Switches the floppy disk drives between being designated as A and B. Default is Disabled.

Boot Up NumLock Status

The default value is On.

On (default) Keypad is numeric keys.

Off Keypad is arrow keys.

Gate A20 Option

- Normal** The A20 signal is controlled by keyboard controller or chipset hardware.
Fast (default) The A20 signal is controlled by port 92 or chipset specific method.

Typematic Rate Setting

Keystrokes repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be selected. The settings are: Enabled/Disabled.

Typematic Rate (Chars/Sec)

Sets the number of times a second to repeat a keystroke when you hold the key down. The settings are: 6, 8, 10, 12, 15, 20, 24, and 30.

Typematic Delay (Msec)

Sets the delay time after the key is held down before it begins to repeat the keystroke. The settings are 250, 500, 750, and 1000.

Security Option

This category allows you to limit access to the system and Setup, or just to Setup.

- System** The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.
Setup (default) The system will boot, but access to Setup will be denied if the correct password is not entered prompt.

OS Select For DRAM > 64MB

Allows OS2[®] to be used with >64MB or DRAM. Settings are Non-OS/2 (default) and OS2. Set to OS/2 if using more than 64MB and running OS/2[®].

Report No FDD For Windows

Whether report no FDD for Win 95 or not. The settings are: Yes, No.

3-6 Advanced Chipset Features

The Advanced Chipset Features Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

Phoenix - AwardBIOS CMOS Setup Utility
Advanced Chipset Features

DRAM Timing Setting	Press Enter	Item Help
AGP and P2P Bridge Control	Press Enter	
Onchip AGP Control	Press Enter	
System BIOS Cacheable	Disabled	Menu Level >
Video RAM Cacheable	Enabled	
Memory Hole at 15M-16M	Disabled	
AGP Aperture Size	128MB	
AGP Fast Write Support	Disabled	

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

Note: Change these settings only if you are familiar with the chipset.

DRAM Timing Setting

Please refer to section 3-6-1

AGP and P2P Bridge Control

The selection allows you to modify the AGP bus related settings and functions for better graphics performance.

System BIOS Cacheable

Selecting Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are: Enabled and Disabled.

Video BIOS Cacheable

Select Enabled allows caching of the video BIOS, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are: Enabled and Disabled.

3-6-1 DRAM Timing Setting

Phoenix - AwardBIOS CMOS Setup Utility

DRAM Timing Setting

Auto Configuration	Nomal	Item Help
DDR SDRAM Latency	Auto	
DDR Input Terminate Ctrl	Off	
		Menu Level >>
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

DDR SDRAM Latency

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. The settings are: 2T, 2.5T and 3T. For more stable performance. This field applies only when synchronous DRAM is installed in the system. The settings are: 2T and 3T.

DDR Input Terminate Ctrl

To activate the “DDR Input Terminate Ctrl” function by selecting “On”, and disable it by “Off”.

3-6-2 AGP Timing Settings

Phoenix - AwardBIOS CMOS Setup Utility

AGP Timing Settings

AGP Data Transfer Rate	Auto	Item Help
		Menu Level >>
↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

AGP Data Transfer Rate

To define the AGP bus data transfer Rate for your system, and the default setting is "AUTO".

3-6-3 On Chip AGP Control

Phoenix - AwardBIOS CMOS Setup Utility

PCI Timing Settings

Dual Display Support	Disabled	Item Help
VGA Shared Memory Size	64MB	Menu Level >>
Hot Key Support	Disabled	
OSD Support	Disabled	
Display LOGO While Post	Disabled	
Display Device Setting	Disabled	
Display Device	CRT	
LCD Setting	None	
LCD Display Type	Full Screen	
LCD Panel Resolution	1024x768	
Graphic Engine Clock	133MHZ	
↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

Dual Display Support

The selection is for you to activate dual view functions in clone mode while you need to display the same way in two different displaying devices.

VGA Shared Memory Size

The selection is for you to choose how many volume of the system memory you need to share for accelerating the performance of the integrated graphics core.

OSD Support

The selection is for you to activate the "On Screen Display" support.

LCD Display Type

The selection is for you to choose the type and size of the LCD display, the default setting is "Full Screen".

3-7 Integrated Peripherals

Phoenix - AwardBIOS CMOS Setup Utility

Integrated Peripherals

OnChip IDE Function	Press Enter	Item Help
OnChip Device Function	Press Enter	
OnChip SIO Function	Press Enter	Menu Level >
Init Display First	PCI Slot	
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

OnChip IDE Function

Please refer to section 3-7-1

OnChip Device Function

Please refer to section 3-7-2

OnChip SIO Function

Please refer to section 3-7-3

Init Display First

This item allows you to decide to activate whether PCI Slot or on-chip VGA first. The settings are: PCI Slot, AGP Slot, On-Chip VGA.

3-7-1 OnChip IDE Function

Phoenix - AwardBIOS CMOS Setup Utility

OnChip IDE Function

Primary Master	PIO	Auto	Item Help
Primary Slave	PIO	Auto	
Primary Master	UDMA	Auto	Menu Level >>
Primary Slave	UDMA	Auto	
IDE DMA Transfer Access		Enabled	
IDE Burst Mode		Enabled	
IDE HDD Block Mode		Enabled	
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults			

Primary Master/Slave PIO

The two IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-2) for each of the two IDE devices that the onboard IDE interface supports. Modes 0 through 2 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device. The settings are: Auto, Mode 0, Mode 1, Mode 2.

Primary Master/Slave UDMA

Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/33 and Ultra DMA/66, select Auto to enable BIOS support. The settings are: Auto, Disabled.

IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support. The settings are: Enabled, Disabled.

3-7-2 OnChip Device Function

Phoenix - AwardBIOS CMOS Setup Utility
OnChip Device Function

AC97 Audio Device	Enabled	Item Help Menu Level >>
SIS Serial ATA Controller	Enabled	
SIS Serial ATA Mode IDE	Enabled	
USB Controller	Enabled	
USB 2.0 Support	Enabled	
USB Device Legacy Support	Always Off	
USB Keyboard Legacy Support	Disabled	
USB Mouse Legacy Support	Disabled	
ETHERNET Function	Disabled	
ETHERNET Address ID Input	Press Enter	
Current ETHERNET Address is	xxxxxx-xxxxxx	
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

AC97 Audio Device

This item allows you to decide to enable/disable the chipset family to support AC97 Audio. The settings are: Enabled, Disabled, Auto.

USB Controller

Select *Enabled* if your system contains a Universal Serial Bus (USB) controller and you have a USB peripherals. The settings are: Enabled, Disabled.

USB Keyboard/Mouse Legacy Support

Select *Enabled* if your system contains a Universal Serial Bus (USB) controller and you have a USB keyboard. The settings are: Enabled, Disabled.

3-7-3 Onboard Super IO Function

Phoenix - AwardBIOS CMOS Setup Utility

Onboard Super IO Function

Onboard FDD Controller	Enabled	Item Help
Onboard Serial Port 1	3F8/IRQ4	
Onboard Serial Port 2	2F8/IRQ3	Menu Level >>
VART Mode Select	Normal	
Onboard Parallel Port	378/IRQ7	
Parallel Port Mode	SPP	
ECP Mode Use DMA	3	
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

Onboard FDD Controller

Select Enabled if your system has a floppy disk controller (FDD) installed on the system board and you wish to use it. If you install add-on FDC or the system has no floppy drive, select Disabled in this field. The settings are: Enabled and Disabled.

Onboard Serial Port 1/Port 2

Select an address and corresponding interrupt for the first and the second serial ports. The settings are: 3F8/IRQ4, 2E8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled, Auto.

Onboard Fast IR

This item allows you to Enabled Fast InfraRed (IR) function of the onboard I/O chip, when enabled this function user must install driver the driver is in CD Pack\VIA\VIAFIR.

Onboard Parallel Port

There is a built-in parallel port on the on-board Super I/O chipset that Provides Standard, ECP, and EPP features. It has the following option:

Disabled

- (3BCH/IRQ7)/ Line Printer port 0
- (278H/IRQ5)/ Line Printer port 2
- (378H/IRQ7) Line Printer port 1

Parallel Port Mode

- SPP : Standard Parallel Port
- EPP : Enhanced Parallel Port
- ECP : Extended Capability Port

SPP/EPP/ECP/ECP+EPP

To operate the onboard parallel port as Standard Parallel Port only, choose "SPP." To operate the onboard parallel port in the EPP modes simultaneously, choose "EPP." By choosing "ECP", the onboard parallel port will operate in ECP mode only. Choosing "ECP+EPP" will allow the onboard parallel port to support both the ECP and EPP modes simultaneously. The ECP mode has to use the DMA channel, so choose the onboard parallel port with the ECP feature. After selecting it, the following message will appear: "ECP Mode Use DMA" at this time, the user can choose between DMA channels 3 to 1. The onboard parallel port is EPP Spec. compliant, so after the user chooses the onboard parallel port with the EPP function, the following message will be displayed on the screen: "EPP Mode Select." At this time either EPP 1.7 spec. or EPP 1.9 spec. can be chosen.

3-8 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy saving while operating in a manner consistent with your own style of computer use.

Phoenix - AwardBIOS CMOS Setup Utility
Power Management Setup

ACPI Function	Enabled	Item Help	
ACPI Suspend Type	Enabled		
Video Off Option	Always Off	Menu Level >	
Video Off Method	V/H SYNC+Blank		
Switch Function	Break/Wake		
MODEM Use IRQ	3		
Hot key Function as	Power off		
Power Button Function	Instant Off		
Power State Resume Control	Always Off		
> PM Wake Up Events	Press Enter		
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults			

ACPI Function

This item allows you to Enabled/Disabled the Advanced Configuration and Power Management (ACPI). The settings are Enabled and Disabled.

Video Off Method

This determines the manner in which the monitor is blanked.

V/H SYNC+Blank (Default) This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.

Blank Screen This option only writes blanks to the video buffer.

DPMS Initial display power management signaling.

Modem Use IRQ

This determines the IRQ in which the MODEM can use.

The settings are: 3, 4, 5, 7, 9, 10, 11, NA.

Power Button Function

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state. The settings are: Delay 4 Sec, Instant-Off.

Power State Resume Control

This determines the manner when the power recovery after power failure. The setting are: Always Off, Always On.

3-8-1 Wake Up Events

Phoenix - AwardBIOS CMOS Setup Utility

Wake Up Events

IRQ [3-7,9-15]	Enabled	Item Help Menu Level >>
IRQ 8 Break Suspend	Disabled	
Ring Power Up Control	Disabled	
MACPME Power Up Control	Disabled	
PCPME Power Up Control	Disabled	
PS2KB Power Up Control	Disabled	
PS2MS Power Up Control	Disabled	
Power Up by Alarm	Disabled	
Month Alarm	NA	
Day Of Month Alarm	NA	
Time (hh:mm:ss)	0:0:0	
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

Power Up by Alarm

During Disabled, the system will ignore any incoming call from the modem/LAN. During Enabled, the system will boot up if there's an incoming call from the modem/LAN.

Month Alarm / Day Of Month Alarm

This function is for setting date and time for your computer to boot up. During Disabled, you cannot use this function. During Enabled, choose the Date and Time Alarm:

Date(of month) Alarm

You can choose which month the system will boot up. Set to 0, to boot every day.

Time(hh:mm:ss) Alarm

You can choose what hour, minute and second the system will boot up.

Note: If you have change the setting, you must let the system boot up until it goes to the operating system, before this function will work.

3-9 PnP/PCI Configuration Setup

This section describes configuring the PCI bus system. PCI, or **P**ersonal **C**omputer **I**nterconnect, is a system which allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

Phoenix - AwardBIOS CMOS Setup Utility
PnP/PCI Configurations

<p>> IRQ Resources</p> <p>PCI/VGA Palette Snoop</p>	<p>Press Enter</p> <p>Disabled</p>	<p>Item Help</p>
<p>↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults</p>		

Reset Configuration Data

Normally, you leave this field Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system can not boot. The settings are: Enabled and Disabled.

Resource Controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows®95/98. If you set this field to “manual” choose specific resources by going into each of the sub menu that follows this field (a sub menu is preceded by a “>”).

The settings are: Auto(ESCD), Manual.

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

PCI/VGA Palette Snoop

Leave this field at *Disabled*. The settings are Enabled, Disabled.

3-10 PC Health Status

This section shows the Status of you CPU, Fan, Warning for overall system status. This is only available if there is Hardware Monitor onboard.

Phoenix - AwardBIOS CMOS Setup Utility

PC Health Status

		Item Help	
Shutdown Temperature	Disabled	Menu Level >	
Show PC Healthy in Post	Enabled		
Vcore	1.07V		
VDIMM	1.90V		
+3.3V	3.26V		
+5V	5.00V		
+12V	11.96V		
3VSB	3.33V		
VBat	3.28V		
5VSB	4.91V		
CPU Temperature	48/118F		
System Temperature	35/95F		
CPUFAN	6849RPM		
SFAN1	0RPM		
SFAN2	0RPM		
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults			

Current FAN1, FAN2 Speed/CPU Vcore/3.3V/+12V/Internal VCC

This will show the CPU/FAN/System voltage chart and FAN Speed.

3-11 Miscellaneous Control

This section is for setting CPU Miscellaneous Control.

Phoenix - AwardBIOS CMOS Setup Utility

Miscellaneous Control

		Item Help
Auto Detect PCI Clock	Enabled	Menu Level >
Spread Spectrum	Disabled	
CPU Clock	133	
VDIMM Select	1.90V(Default)	
Flash Part Write Protect	Disabled	
CPU DRAM Frequency Ratio	SPD	
DRAM Frequency	200MHZ	
↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

CPU Clock

This item allows you to select the CPU ratio.

Auto Detect PCI Clock

This item allows you to enable/disable auto detect PCI Clock.

The settings are: Enabled, Disabled.

Spread Spectrum

This item allows you to set the Spread Spectrum.

3-12 Load Standard/Optimized Defaults

Load Standard Defaults

When you press <Enter> on this item, you get confirmation dialog box with a message similar to:

Load Standard Defaults (Y/N)? N

Pressing <Y> loads the BIOS default values for the most stable, minimal-performance system operations.

Load Optimized Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

Load Optimized Defaults (Y/N)? N

Pressing <Y> loads the default values that are factory settings for optimal performance system operations.

3-13 Set Supervisor/User Password

You can set either supervisor or user password, or both of them. The differences are:

Supervisor password: Can enter and change the options of the setup menus.

User password: Can only enter but do not have the right to change the options of the setup menus. When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

ENTER PASSWORD:

Type the password, up to eight characters in length, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To disable a password, just press <Enter> when you are prompted to enter the password. A message will confirm that the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

PASSWORD DISABLED.

When a password has been enabled, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Additionally, when a password is enabled, you can also require the BIOS to request a password every time your system is rebooted. This would prevent unauthorized use of your computer.

You determine when the password is required within the BIOS Features Setup Menu and its Security option. If the Security option is set to “System”, the password will be required both at boot and at entry to Setup. If set to “Setup”, prompting only occurs when trying to enter Setup.

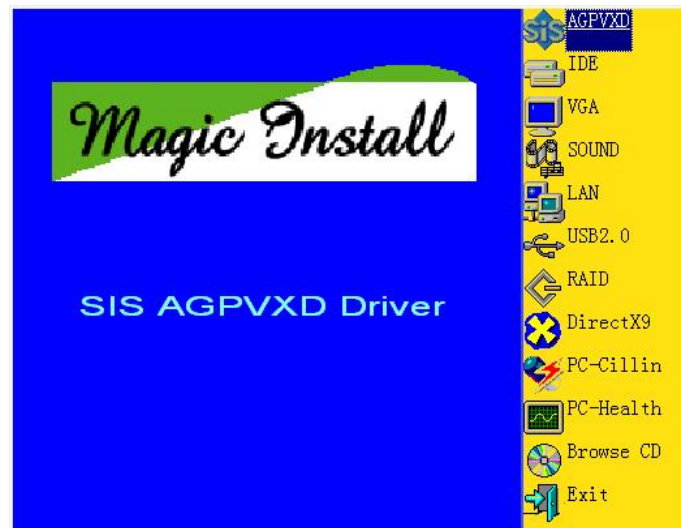
Chapter 4

DRIVER & FREE PROGRAM INSTALLATION

Check your package and there is A MAGIC INSTALL CD included. This CD consists of all DRIVERS you need and some free application programs and utility programs. In addition, this CD also include an auto detect software which can tell you which hardware is installed, and which DRIVERS needed so that your system can function properly. We call this auto detect software MAGIC INSTALL.

MAGIC INSTALL supports WINDOWS 95/98/98SE/NT4.0/2000/XP

Insert CD into your CD-ROM drive and the MAGIC INSTALL Menu should appear as below. If the menu does not appear, double-click MY COMPUTER / double-click CD-ROM drive or click START / click RUN / type X:\SETUP.EXE (assuming X is your CD-ROM drive).



From MAGIC INSTALL MENU you may make 10 selections:

1. AGPVXD install AGPVXD file when use External AGP card
2. IDE install SiS MINI IDE driver
3. VGA install SiS Mirage VGA driver
4. SOUND install ALC Audio driver
5. LAN install Realtek LAN controller driver
6. USB2.0 install USB 2.0 driver
7. DIRECTX9 install Microsoft DirectX 9 driver
8. PC-CILLIN install PC-CILLIN2006 anti-virus program
9. PC-HEALTH installs My Guard hardware monitoring utility
10. BROWSE CD to browse the contents of the CD
11. EXIT to exit from MAGIC INSTALL menu

4-1 AGPXD Install SiS AGPXD Driver

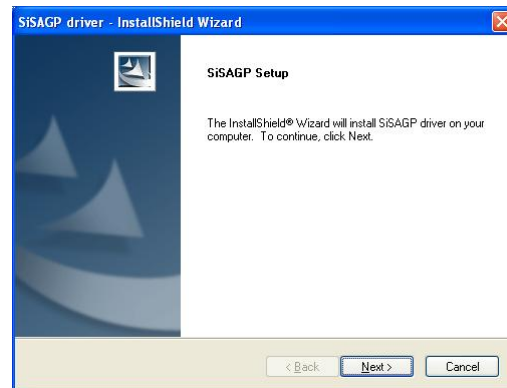
The AGPVXD Driver is Only For AGP Slot VGA CARD User, before install AGP card driver please install this AGPVXD driver first.

The path of the file:

for WINDOWS 9X/2000/XP is X:\SIS\AGPVXD\SETUP.EXE



1. Click AGPVXD when Magic Install MENU appears



2. Click Next when SiS AGP Setup window appear .



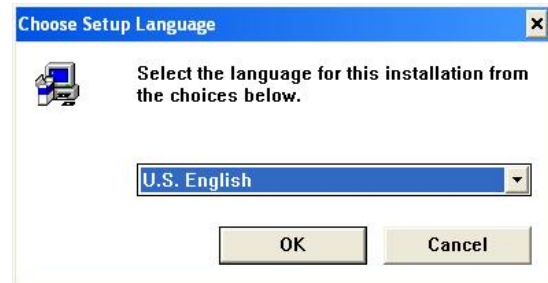
3. After Setup complete please select restart my computer now and click Finish to complete setup

4-2 IDE Install SiS MINI IDE Driver

For WINDOWS 9X/ME/NT4.0/2000/XP



1. Click IDE when Magic Install main menu appears



2. Select appropriate language you want to install then click OK



3. Click FINISH and Restart Computer

4-3 VGA Install SiS Mirage VGA Driver



1. Click VGA when MAGIC INSTALL MENU appears
2. Click Next when SiS Compatible Multimedia Package appears



3. Multimedia Package supports three types of Setup: Typical, Compact, Custom Please choice Typical and Click Next to continue.
4. System will add program icons to the Program Files. Click Next to continue, then the “Start Copying Files” window will appear, and click Next again to continue.



5. After the Installation was complete. Please select “restart my computer now” and click Finish to reboot your system and finish the setup procedures.

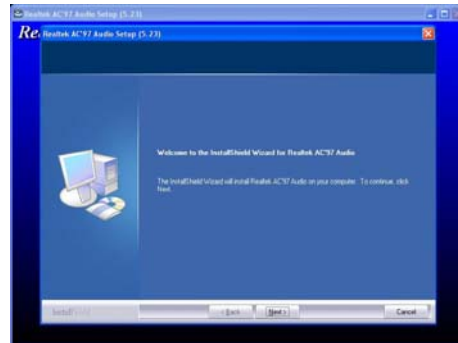
Note: The path of the file

For WIN98/NT4.0/WIN2K/XP is X: \SIS\VGA\SETUP.EXE

4-4 SOUND Install ALC AC97' Codec Audio Driver



3. Click SOUND when MAGIC INSTALL MENU appears



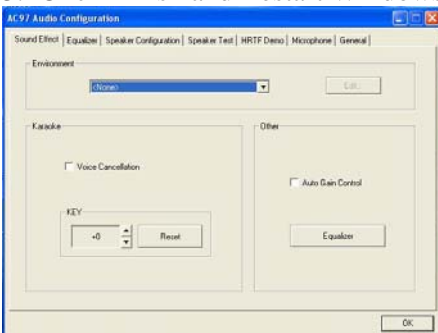
4. Click NEXT when the Realtek AC97 Audio Setup windows appear



3. Click Finish and Restart Windows



4. Realtek AVRACK utility



5. Sound Effect select and KaraOK Mode Function



6. Manual Sound Effect Setting



7. This is 2/4/6 channel speakers configuration



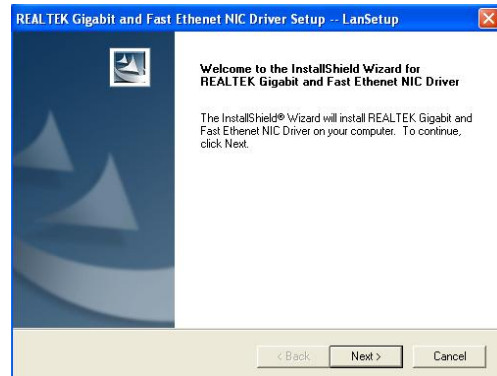
8. This is 2/4/6 channel speakers position test setting

Note: The path of the file

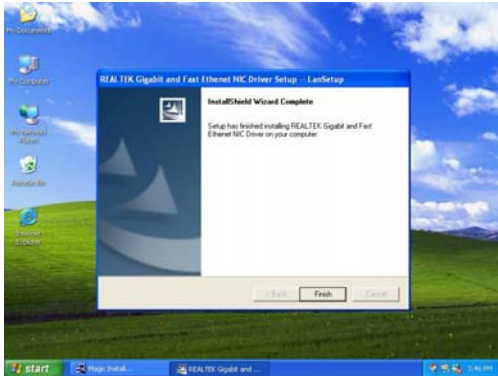
For WIN98/NT4.0/WIN2K/XP is X:\CODEC\ALC\SETUP.EXE

4-5 LAN Install Realtek LAN Controller Driver

The Realtek 10/100Mb PCI Ethernet Adapter Driver path is X:\VIA\LANDRV



1. Click LAN when Magic Install Menu appear
2. Click NEXT, install REALTEK LAN and Fast Ethernet NIC Driver



3. After driver installation completed, Click Finish

4-6 USB2.0 Install SiS USB2.0 DEVICE DRIVER

Windows 2000 OS

Please install Windows 2000 service pack 4 or later .

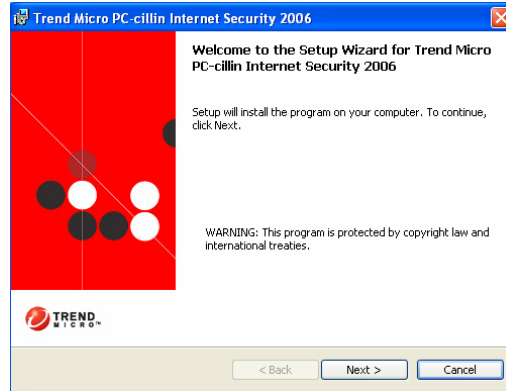
Windows XP OS

Please install Windows XP service pack 1 or later .

4-7 PC-CILLIN Install PC-CILLIN 2006 Anti-virus program



1. Click PC-CILLIN when MAGIC INSTALL MENU appears



2. Please select "Install program" when the "Trend Micro internet security" installshield wizard windows appears



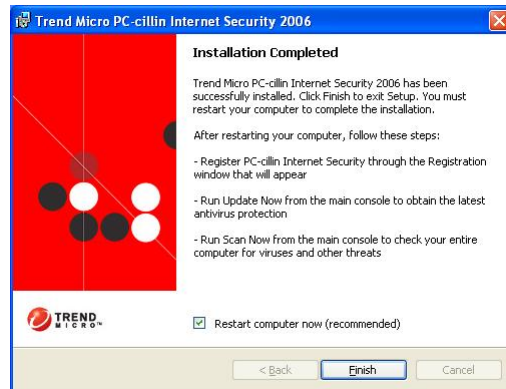
3. This is license agreement, select "I Accept the terms" and Click NEXT



4. Click NEXT or choose Change to change the path for the file to be stored



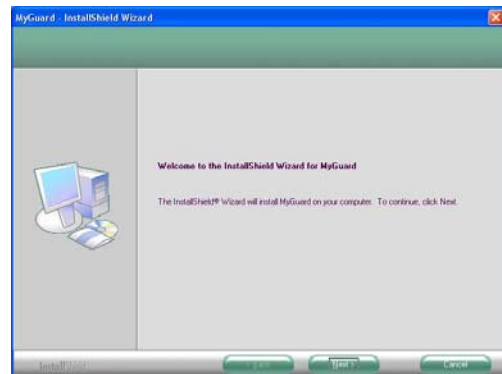
5. Click INSTALL, Start to install the software



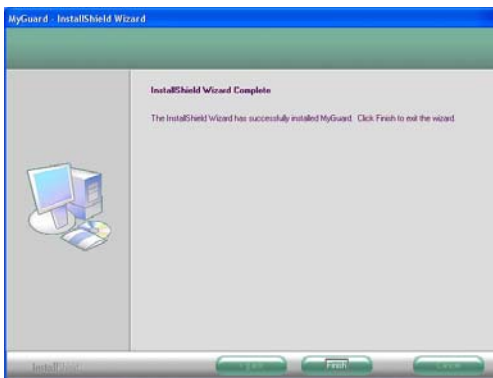
Setup Complete and click FINISH

Note : Please install ACROBAT READER for reading PC-CILLIN 2006 User Manual which locates at the path "X:\acrobat\adberdr6_enu_full.exe".

4-8 PC-HEALTH Install MyGuard Hardware monitor Utility



1. Click PC-HEALTH when MAGIC INSTALL MENU appears
2. Click Next when Install shield wizard Window appears, Choose destination location and click Next, when the start copy file windows appear, click next



3. Select Finish after setup complete
4. Execute MY GUARD utility, On-time Monitoring your system health

NOTE:

MAGIC INSTALL will auto detect file path X:\SiS\MYGUARD\SETUP.EXE

4-9 HOW TO DISABLE ON-BOARD SOUND

Enter BIOS SETUP choose INTEGRATE PERIPHERALS choose ON-CHIP DEVICE FUNCTION choose AC97 AUDIO

Disable on-board sound function by press PAGE DOWN KEY to Disable

4-10 HOW TO UPDATE BIOS

Before update BIOS users have to “Disable”, “Flash Part Write Protect” item which in “Miscellaneous Control” of BIOS SETUP. Otherwise the system will not allow you to upgrade BIOS by Award Flash Utility.

STEP 1. Prepare a boot disc. (you may make one by click START click RUN type SYS A: click OK)

STEP 2. Copy utility program to your boot disc. You may copy from DRIVER CD X:\FLASH\AWDFLASH.EXE or download from our web site.

STEP 3. Copy latest BIOS for S755MAX from our web site to your boot disc.

STEP 4. Insert your boot disc into A:,

start the computer, type “Awdflash A:\7F3Axxx.BIN /SN/PY/CC/R”
7F3Axxx.BIN is the file name of latest BIOS it can be 7F3A03.BIN or 7F3AXB02.BIN

SN means don't save existing BIOS data

PY means renew existing BIOS data

CC means clear existing CMOS data

R means restart computer

STEP 5. Push ENTER and the BIOS will be updated, computer will be restarted automatically.