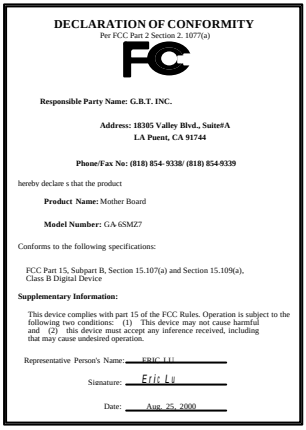
FCC Compliance Statement:



DECLARATION OF CONFORMITY
Per FCC Part 2 Section 2. 1077(a)

FC

Responsible Party Name: G.B.T. INC.

Address: 18305 Valley Blvd., Suite#A
LA Puent, CA 91744

Phone/Fax No: (818) 854- 9338/ (818) 854-9339

hereby declare s that the product

Product Name: Mother Board

Model Number: GA 6SMZ7

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109(a), Class B Digital Device

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 and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person's Name: ERIC LU

Signature: Eric Lu

Date: Aug. 25, 2000

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna

-Move the equipment away from the receiver

-Plug the equipment into an outlet on a circuit different from that to which the receiver is connected

-Consult the dealer or an experienced radio/television technician for additional suggestions

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void Your authority to operate such equipment.

This device complies with Part 15 of the FCC Rules. Operation is subjected 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.

Declaration of Conformity

We, Manufacturer/Importer
(full address)

G.B.T. Technology Träding GMbH
Ausschlager Weg 41, 1F, 20537 Hamburg, Germany

declare that the product
(description of the apparatus, system, installation to which it refers)

Mother Board
GA-6SMZ7

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

☐ **EN 55011**	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM high frequency equipment	☐ **EN 61000-3-2*** ☒ **EN60555-2**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics"
☐ **EN55013**	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	☐ **EN61000-3-3*** ☒ **EN60555-3**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"
☐ **EN 55014**	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus	☒ **EN 50081-1** ☒ **EN 50082-1**	Generic emission standard Part 1: Residual, commercial and light industry Generic immunity standard Part 1: Residual, commercial and light industry
☐ **EN 55015**	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	☐ **EN 55081-2**	Generic emission standard Part 2: Industrial environment
☐ **EN 55020**	Immunity from radio interference of broadcast receivers and associated equipment	☐ **EN 55082-2**	Generic immunity standard Part 2: Industrial environment
☒ **EN 55022**	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	☐ **ENV 55104**	Immunity requirements for household appliances tools and similar apparatus
☐ **DIN VDE 0855** ☐ **part 10** ☐ **part 12**	Cabled distribution systems; Equipment for receiving and/or **distribution** from sound and television signals	☐ **EN 50091- 2**	EMC requirements for uninterruptible power systems (UPS)
☒ **CE marking**		CE (EC conformity marking)	

The manufacturer also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD 73/23 EEC

☐ **EN 60065**	Safety requirements for mains operated electronic and related apparatus for household and similar general use	☐ **EN 60950**	Safety for information technology equipment including electrical business equipment
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	General and Safety requirements for uninterruptible power systems (UPS)

Manufacturer/Importer

(Stamp)

Date : Aug. 25, 2000

Signature : *Rex Lin*

Name : Rex Lin

6SMZ7

SiS 630E Socket 370 Motherboard

USER'S MANUAL

SiS 630 Socket 370 Processor Motherboard
REV. 2.3 First Edition

R-23-01-000922

How This Manual Is Organized

This manual is divided into the following sections:

1) Revision History	Manual revision information
2) Item Checklist	Product item list
3) Features	Product information & specification
4) Hardware Setup	Instructions on setting up the motherboard
5) Performance & Block Diagram	Product performance & block diagram
6) Suspend to RAM	Instructions on STR installation
7) @BIOS & Easy Tune///™	@BIOS & Easy Tune///™ introduction
8) BIOS Setup	Instructions on setting up the BIOS software
9) Appendix	General reference

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Revision History

Revision	Revision Note	Date
2.3	Initial release of the 6SMZ7 motherboard user's manual.	Sep.2000

Sep. 22, 2000 Taipei, Taiwan, R.O.C

Item Checklist

☑The 6SMZ7 Motherboard

☑Cable for IDE / Floppy device

☑CD (TUCD) for motherboard utilities

☑6SMZ7 User's Manual

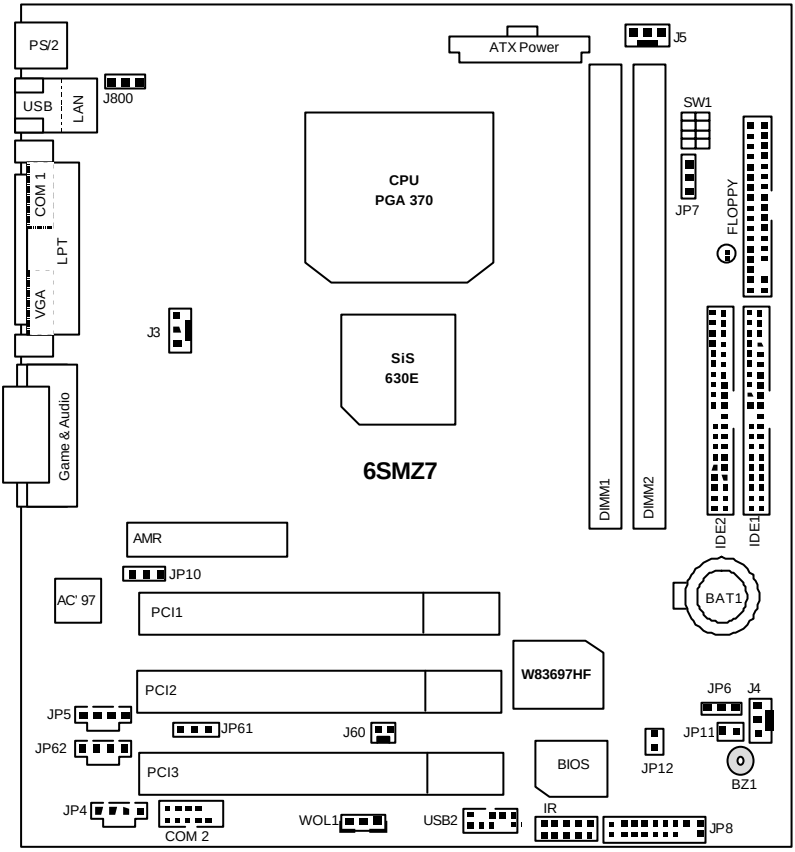
Summary Of Features

Form factor	• 24.3cm x 19 cm Micro ATX size form factor, 4 layer PCB
CPU	• Socket 370 processor Intel Pentium® !!! 100/133MHz FSB, FC-PGA Intel Celeron™ 66MHz FSB, FC-PGA VIA Cyrix® III 100/133MHz FSB, PPGA (Optional) • L2 cache in CPU (Depend on CPU)
Chipset	SiS 630E, consisting of: • North bridge • Advanced Hardware 2D/3D GUI engine • Super-South bridge • 10/100 Mbit Fast Ethernet
Clock Generator	• Supports 66 / 100 / 133MHz • ICS 9248-126
Memory	• 2 168-pin DIMM Sockets • Supports SDRAM 16MB~1GB(Max) • Supports only 3.3V SDRAM DIMM
I/O Control	• WinBond W83697HF
Slots	• 3 32-bit Master PCI Bus slots
On-Board IDE	• An IDE controller on the SiS 630E PCI chipset provides IDE HDD/ CD-ROM with PIO, Bus Master (Ultra DMA33/ATA66) operation modes • Support up to four IDE devices
On-Board Peripherals	• 1 Floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and 2.88M bytes • 1 Parallel ports supports SPP/EPP/ECP mode • 2 Serial Ports (COM A & COM B) • 4 USB ports • 1 IrDA connector for IR/CIR (CIR is Optional)
Hardware Monitor	• CPU/System Fan Revolution detect • CPU / Power / System Fan Control • CPU /System temperature detect • Display Actual Current Voltage
On-board Sound	• Hardware Audio and AC'97 codec • Line In / Line Out / Mic In / AUX In / CD In / TEL / Game Port

To be continued...

On-board LAN	• SiS 900 10M/100M Ethernet (Integrated in SiS 630)
PS/2 Connector	• PS/2® Keyboard interface and PS/2® Mouse interface
BIOS	• Licensed AWARD BIOS, 2M bit FLASH ROM
Additional Features	• Internal/External Modem Wake up • Keyboard Password Wake up • LAN Wake up • System after AC back

6SMZ7 Motherboard Layout



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Game & Audio Port	P.8
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CPU Speed Setup

The system bus frequency can be switched at 66MHz, 100MHz, 133MHz, 150MHz by adjusting SW1 (See Figure 1). The CPU Frequency is control by BIOS.

- The CPU speed must match with the frequency RATIO. It will cause system hanging up if the frequency RATIO is higher than that of CPU.

SW1: CPU Speed Setup

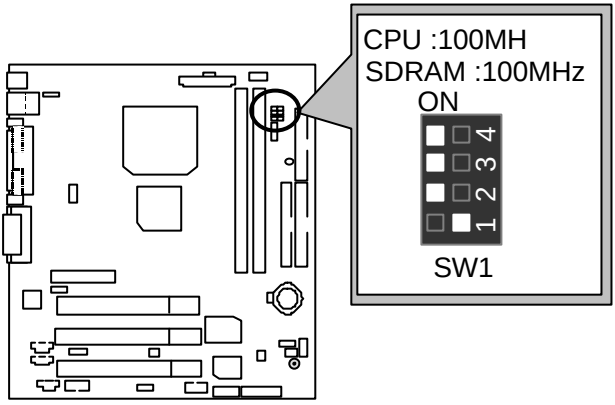


Figure 1

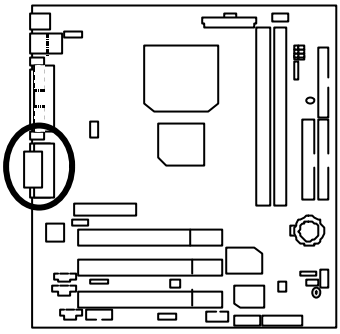
SW1: O: ON, X: OFF

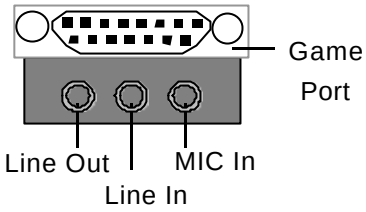
CPU	SDRAM	PCI	1	2	3	4
66	66	33	O	O	O	X
66	100	33	O	O	O	O
100	100	33	X	O	O	O
100	133	33	X	O	X	O
100	150	37	O	X	X	O
133	100	33	X	X	O	O
133	133	33	X	X	X	O
150	100	37	O	X	O	O

★ Note: Please set the CPU host frequency in accordance with your processor's specifications. We don't recommend you to set the system bus frequency over the CPU's specification because these specific bus frequencies are not the standard specifications for CPU, chipset and most of the peripherals. Whether your system can run under these specific bus frequencies properly will depend on your hardware configurations, including CPU, Chipsets, SDRAM, cards….etc.

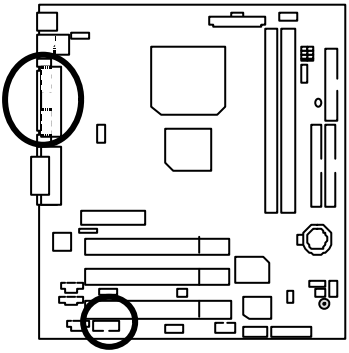
Connectors

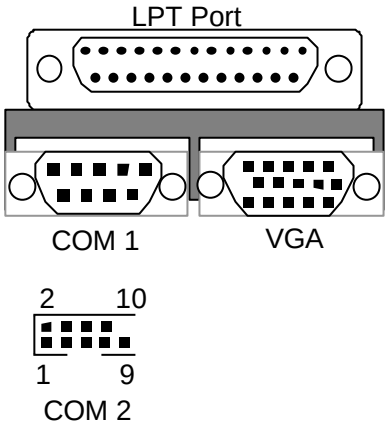
Game & Audio Port



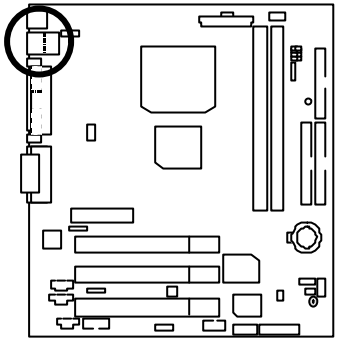


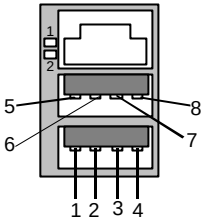
COM 1 / COM 2 / VGA / LPT Port





USB & LAN Connector

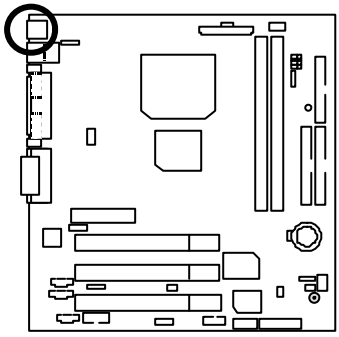




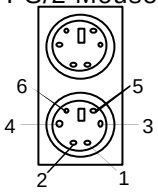
(LAN Active LED)
1 – Green LED
(LAN Link LED)
2 – Yellow LED
(LAN Active LED)

Pin No.	Definition
1	USB V0
2	USB D0-
3	USB D0+
4	GND
5	USB V1
6	USB D1-
7	USB D1+
8	GND

PS/2 Keyboard & PS/2 Mouse Connector



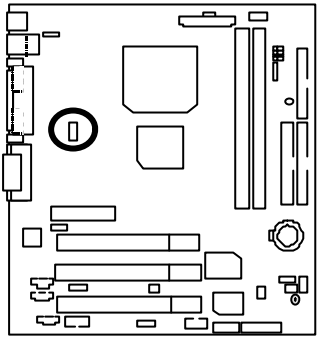
PS/2 Mouse



PS/2 Keyboard

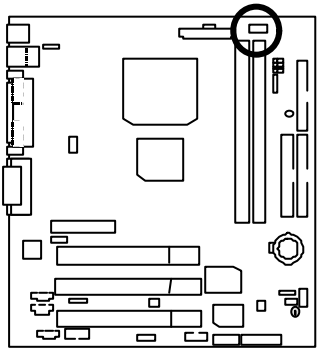
PS/2 Mouse/ Keyboard	
Pin No.	Definition
1	Data
2	NC
3	GND
4	VCC(+5V)
5	Clock
6	NC

J3 : CPU Fan Connector



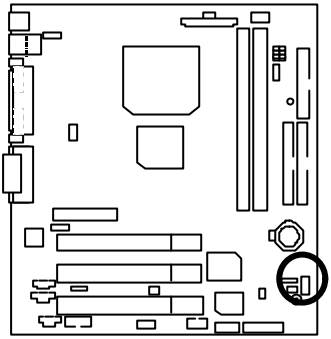
Pin No.	Definition
1	Control
2	+12V
3	SENSE

J5 : Power Fan Connector



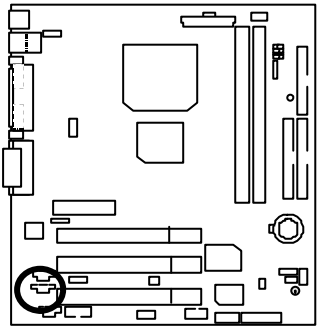
Pin No.	Definition
1	Control
2	+12V
3	SENSE

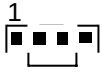
J4 : System Fan Connector



Pin No.	Definition
1	Control
2	+12V
3	SENSE

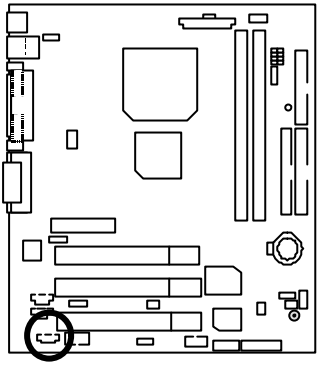
JP62 : CD IN

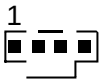




Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

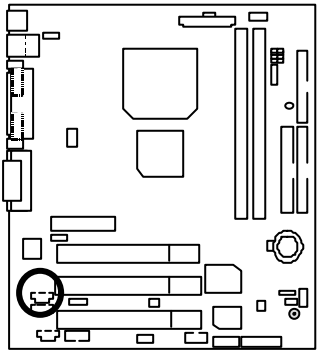
JP4 : TEL: The connector is for Modem with internal voice connector.





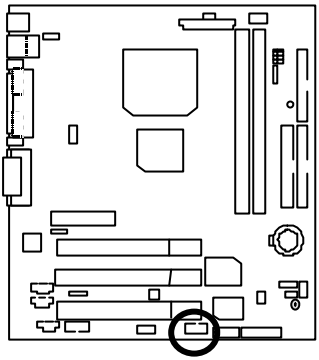
Pin No.	Definition
1	Signal-In
2	GND
3	GND
4	Signal-Out

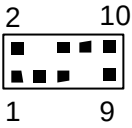
JP5 : AUX IN



Pin No.	Definition
1	AUX-L
2	GND
3	GND
4	AUX-R

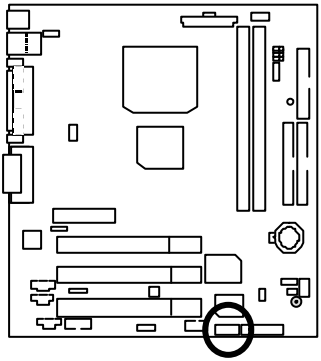
USB 2 Port

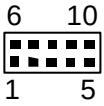




Pin No.	Definition
1,10	+5V
2,9	GND
3	USB D2-
4,7	NC
5	USB D2+
6	USB D3+
8	USB D3-

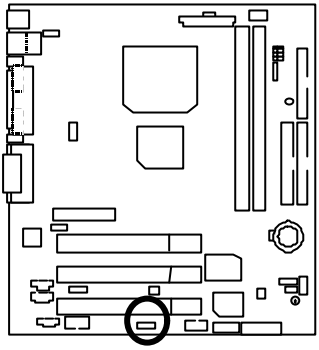
IR : IR/CIR





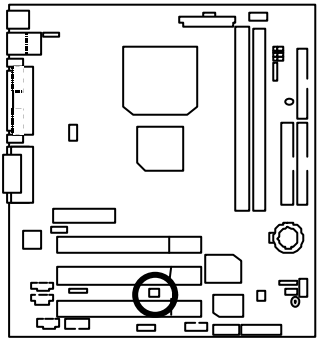
Pin No.	Definition
1	VCC
2	NC
3	IRRX
4	GND
5	IRTX
6	NC
7	CIRRX
8	NC
9	GND
10	NC

WOL1 : Wake On LAN



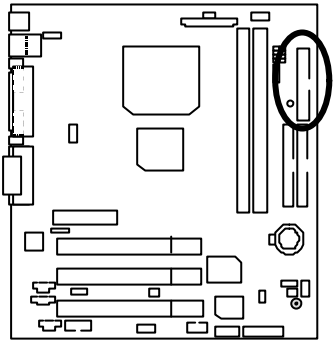
Pin No.	Definition
1	+5V SB
2	GND
3	Signal

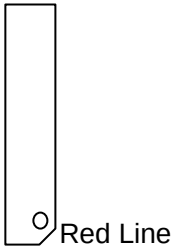
J60 : Ring Power On (Internal Modem Card Wake Up)



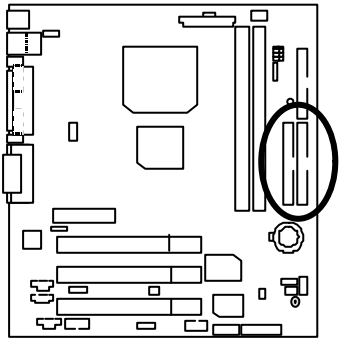
Pin No.	Definition
1	Signal
2	GND

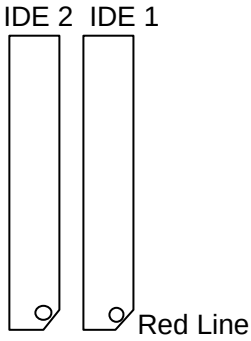
Floppy Port



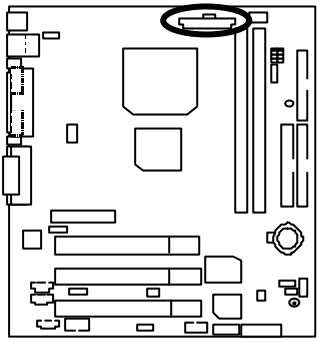


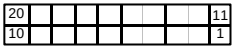
IDE1 (Primary), IDE2 (Secondary) Port





ATX Power

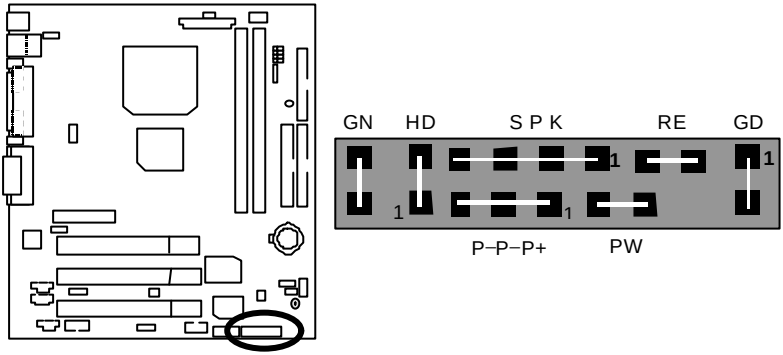




Pin No.	Definition
3,5,7,13, 15-17	GND
1,2,11	3.3V
4,6,19,20	VCC
10	+12V
12	-12V
18	-5V
8	Power Good
9	5V SB stand by+5V
14	PS-ON(Soft On/Off)

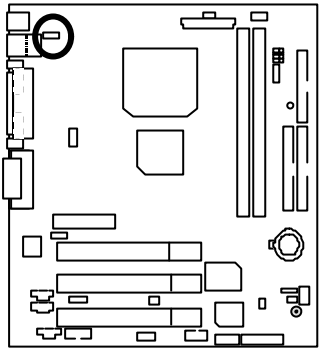
Panel And Jumper Definition

JP8 : For 2x11 Pins Jumper



GN (Green Switch)	Open: Normal Operation Close: Entering Green Mode
GD (Green LED)	Pin 1: LED anode(+) Pin 2: LED cathode(–)
HD (IDE Hard Disk Active LED)	Pin 1: LED anode(+) Pin 2: LED cathode(–)
SPK (Speaker Connector)	Pin 1: VCC(+) Pin 2- Pin 3: NC Pin 4: Data(–)
RE (Reset Switch)	Open: Normal Operation Close: Reset Hardware System
P+P–P–(Power LED)	Pin 1: LED anode(+) Pin 2: LED cathode(–) Pin 3: LED cathode(–)
PW (Soft Power Connector)	Open: Normal Operation Close: Power On/Off

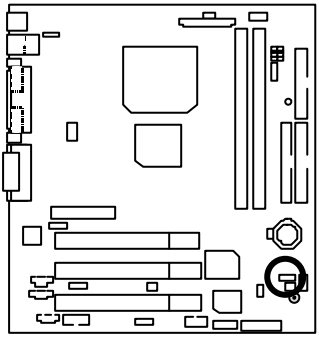
J800 : PS/2 Keyboard Power On Selection



1

Pin No.	Definition
1-2 close	PS/2 Keyboard Power On Enabled
2-3 close	Normal (Default)

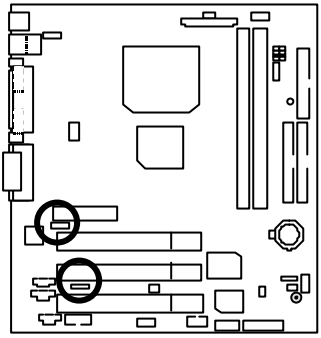
JP6 : Clear CMOS Function

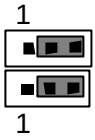


1

Pin No.	Definition
1-2 close	Clear CMOS
2-3 close	Normal (Default)

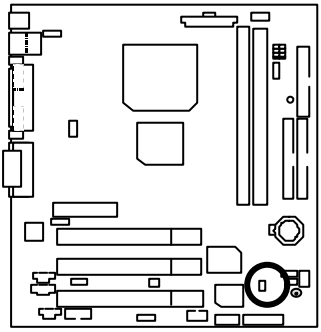
JP10/JP61 : AMR Select





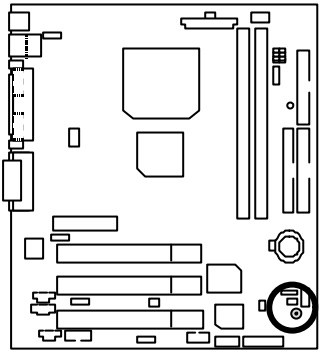
Definition	JP10	JP61
AMR Primary	2-3 close	2-3 close
Onboard AC' 97 MR(Secondary)	1-2 close	1-2 close

JP12 : Case Open



Pin No.	Definition
1	Signal
2	GND

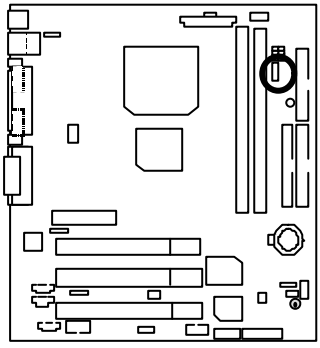
JP11 : Internal Buzzer (Optional)



1

Pin No.	Definition
Open	Internal Buzzer Disabled
Close	Internal Buzzer Enabled (Default)

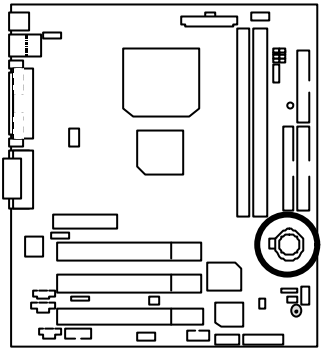
JP7 : STR Enable



1 

Pin No.	Definition
1-2 Close	STR Enable
2-3 Close	STR Disabled

BAT1 : Battery



- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.

Performance List

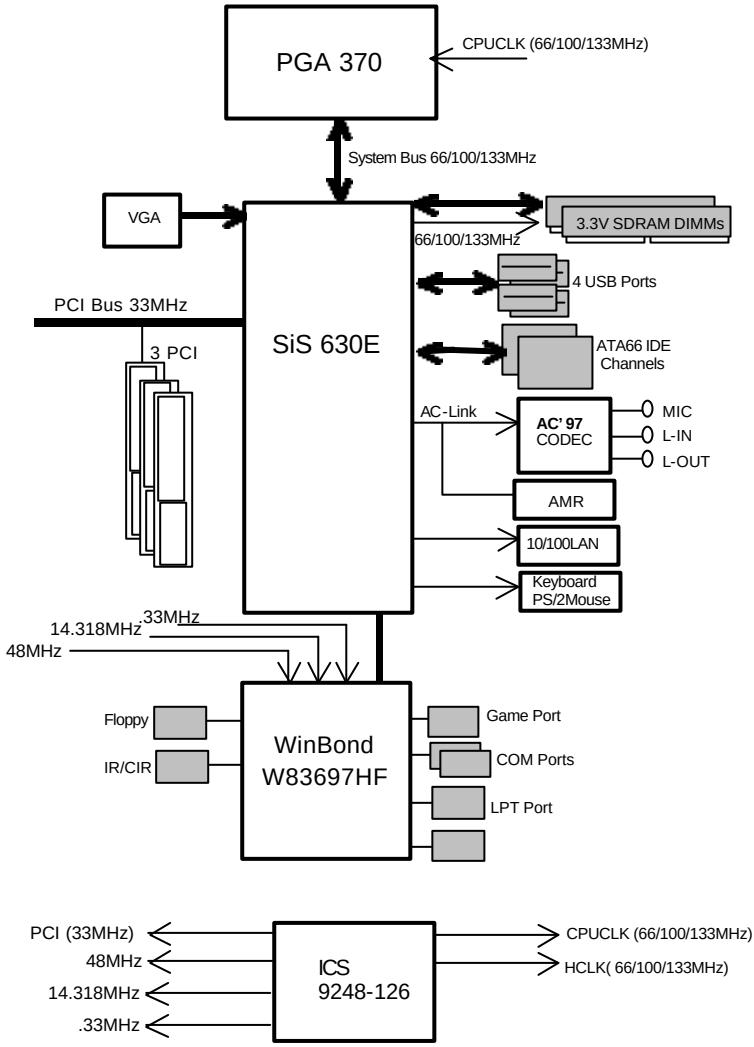
The following performance data list is the testing results of some popular benchmark testing programs.

These data are just referred by users, and there is no responsibility for different testing data values gotten by users. (The different Hardware & Software configuration will result in different benchmark testing results.)

- CPU Intel ® Pentium III 933MHz processor
- DRAM (128x2)MB SDRAM (Buffalo KM48S8030CT-GA)
- CACHE SIZE 256 KB included in CPU
- DISPLAY Onboard (SIS 630)
- STORAGE Onboard IDE (Seagate ST315323A)
- O.S. Windows NT™4.0 SPK6a
- DRIVER Display Driver at 1024 x 768 x 16bit colors x 75Hz.

Processor	Intel ® Pentium III 933MHz (133x7)
Winbench99	
CPU mark99	77.3
FPU Winmark 99	4950
Business Disk Winmark 99	3340
Hi-End Disk Winmark 99	7120
Business Graphics Winmark 99	172
Hi-End Graphics Winmark 99	696
Winstone99	
Business Winstone99	34.9
Hi-End Winstone99	40.6

Block Diagram



Suspend To RAM Installation (Optional)

A.1 Introduce STR function:

Suspend-to-RAM (STR) is a Windows 98 ACPI sleep mode function. When recovering from STR (S3) sleep mode, the system is able, to retrieve the last "state" of the system before it went to sleep and recover to that state in just a few seconds. The "state" is stored in memory (RAM) before the system goes to sleep. During STR sleep mode, the system uses only enough energy to maintain critical information and system functions, primarily the system state and the ability to recognize various "wake up" triggers or signals, respectively.

A.2 STR function Installation

Please use the following steps to complete the STR function installation.

Step-By-Step Setup

Step 1:

To utilize the STR function, the system must be in Windows 98 ACPI mode.

Putting Windows 98 into ACPI mode is fairly easy.

Setup with Windows 98 CD:

A. Insert the Windows 98 CD into your CD-ROM drive, select Start, and then Run.

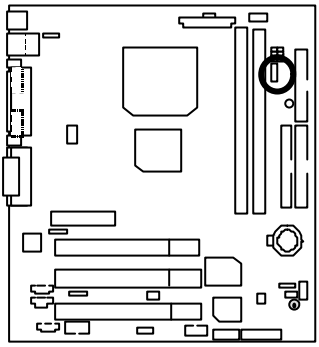
B. Type (without quotes) "D:\setup /p j" in the window provided. Hit the enter key or click OK. 『In Windows 98 second edition version, all the bios version dated 12/01/99 or later are ACPI compatible. Just type" D:\Setup", the operating system will be installed as ACPI mode.』

C. After setup completes, remove the CD, and reboot your system

(This manual assumes that your CD-ROM device drive letter is D:).

Step 2:

(If you want to use STR Function, please set jumper JP7 Pin 1-2 Closed.)



Pin No.	Definition
1-2 Close	STR Enable
2-3 Close	STR Disabled

Step 3:

Power on the computer and as soon as memory counting starts, press <Del>. You will enter BIOS Setup. Select the item "POWER MANAGEMENT SETUP", then select "ACPI Suspend Type:S3(STR)". Remember to save the settings by pressing "ESC" and choose the "SAVE & EXIT SETUP" option.

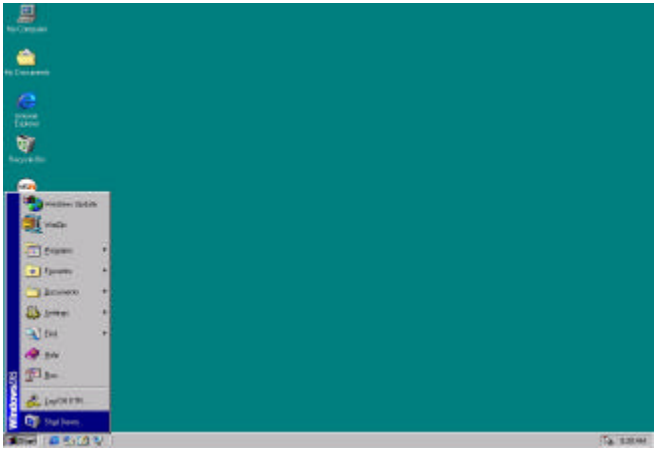
Congratulation! You have completed the installation and now can use the STR function.

A.3 How to put your system into STR mode?

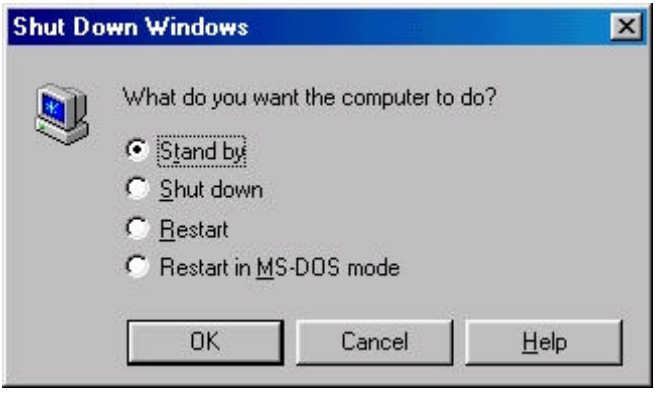
There are two ways to accomplish this:

1. Choose the "Stand by" item in the "Shut Down Windows" area.

   A. Press the "Start" button and then select "Shut Down"



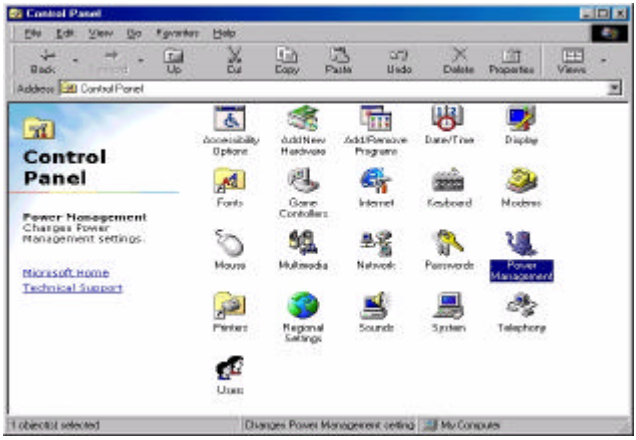
   B. Choose the "Stand by" item and press "OK"



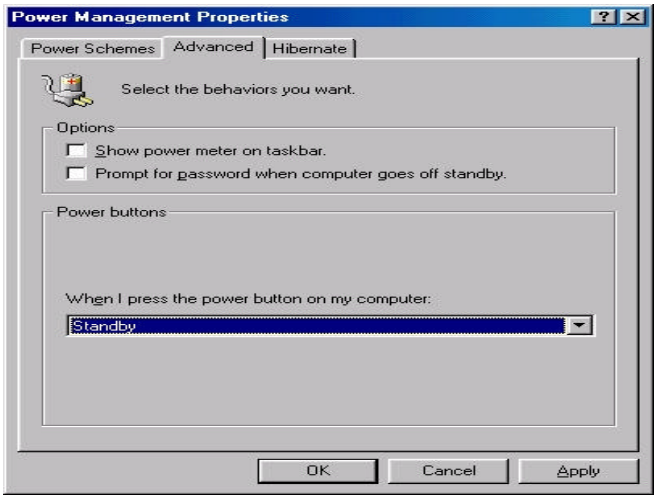
2. Define the system "power on" button to initiate STR sleep mode:

A. Double click "My Computer" and then "Control Panel"

B. Double click the " Power Management" item.



C. Select the "Advanced" tab and "Standby" mode in Power Buttons.



Step 4:

Restart your computer to complete setup.

Now when you want to enter STR sleep mode, just momentarily press the "Power on" button..

A.4 How to recover from the STR sleep mode?

There are six ways to "wake up" the system:

1. Press the "Power On" button.
2. Use the "PS/2 Keyboard Power On" function.
3. Use the "PS/2 Mouse Power On" function.
4. Use the "Resume by Alarm" function.
5. Use the "Modem Ring On" function.
6. Use the "Wake On LAN" function.

A.5 Notices:

In order for STR to function properly, several hardware and software requirements must be satisfied:

A. Your ATX power supply must comply with the ATX 2.01 specification (provide more than 720 mA 5V Stand-By current).

@ BIOS Introduction

Gigabyte announces @ BIOS Windows BIOS live update utility

Have you ever updated BIOS by yourself? Or like many other people, you just know what BIOS is, but always hesitate to update it? Because you think updating newest BIOS is unnecessary and actually you don't know how to update it.

Maybe not like others, you are very experienced in BIOS updating and spend quite a lot of time to do it. But of course you don't like to do it too much. First, download different BIOS from website and then switch the operating system to DOS mode. Secondly, use different flash utility to update BIOS. The above process is not a interesting job. Besides, always be carefully to store the BIOS source code correctly in your disks as if you update the wrong BIOS, it will be a nightmare.

Certainly, you wonder why motherboard vendors could not just do something right to save your time and effort and save you from the lousy BIOS updating work? Here it comes! Now Gigabyte announces @BIOS--the first Windows BIOS live update utility. This is a smart BIOS update software. It could help you to download the BIOS from internet and update it. Not like the other BIOS update software, it's a Windows utility. With the help of "@BIOS', BIOS updating is no more than a click.

Besides, no matter which mainboard you are using, if it's a Gigabyte's product*, @BIOS help you to maintain the BIOS. This utility could detect your correct mainboard model and help you to choose the BIOS accordingly. It then downloads the BIOS from the nearest Gigabyte ftp site automatically. There are several different choices; you could use "Internet Update" to download and update your BIOS directly. Or you may want to keep a backup for your current BIOS, just choose "Save Current BIOS" to save it first. You make a wise choice to use Gigabyte, and @BIOS update your BIOS smartly. You are now worry free from updating wrong BIOS, and capable to maintain and manage your BIOS easily. Again, Gigabyte's innovative product erects a milestone in mainboard industries.

For such a wonderful software, how much it costs? Impossible! It's free! Now, if you buy a Gigabyte's motherboard, you could find this amazing software in the attached driver CD. But please remember, connected to internet at first, then you could have a internet BIOS update from your Gigabyte @BIOS.

Easy Tune///™ Introduction

Gigabyte announces *EasyTuneIII* Windows overdrive utility

"Overdrive" might be one of the most common issues in computer field. But have many users ever tried it? The answer is probably "no". Because "overdrive" is thought to be very difficult and includes a lot of technical know-how, sometimes "overdrive" is even considered as special skills found only in some enthusiasts.

But as to the experts in "overdrive", what's the truth? They may spend quite a lot of time and money to study, try and use many different hardware and software tools to do "overdrive". And even with these technologies, they still learn that it's quite a risk because the safety and stability of an "overdrive" system is unknown.

Now everything is different because of a Windows overdrive utility EasyTuneIII--announced by Gigabyte. This utility has totally changed the gaming rule of "overdrive". This is the first overdrive utility suitable for both normal and power users. Users can choose either "Easy Mode" or "Advanced Mode" to run "overdrive" at their convenience. For users who choose "Easy Mode", they just need to click "Auto Optimize" to have auto and immediate CPU overclocking. This software will then overdrive CPU speed automatically with the result being shown in the control panel. If someone prefers to "overdrive" by oneself, there is also another choice. Click "Advanced Mode" to enjoy "sport drive" class overclocking. In "Advanced Mode", one can change the system bus speed in small increments to get ultimate system performance. And no matter which mainboard is used, if it's a Gigabyte's product*, EasyTuneIII helps to perform the best of system.

Besides, different from other traditional over-clocking methods, EasyTuneIII doesn't require users to change neither BIOS nor hardware switch/ jumper setting; on the other hand, they can do "overdrive" at only one click. Therefore, this is a safer way for "overdrive" as nothing is changed on software or hardware. If user runs EasyTuneIII over system's limitation, the biggest lost is only to restart the computer again and the side effect is then well controlled. Moreover, if one well-performed system speed been tested in EasyTuneIII, user can "Save" this bus speed and "Load" it in next time. Obviously, Gigabyte EasyTuneIII has already turned the "overdrive" technology toward to a newer generation.

This wonderful software is now free bundled in Gigabyte motherboard attached driver CD. Users may make a test drive of "EasyTuneIII" to find out more amazing features by themselves.

Memory Installation

The motherboard has 2 dual inline memory module (DIMM) sockets. The BIOS will automatically detects memory type and size. To install the memory module, just push it vertically into the DIMM Slot .The DIMM module can only fit in one direction due to the two notch. Memory size can vary between sockets.

Install memory in any combination table:

DIMM	168-pin SDRAM DIMM Modules	
DIMM1	Supports 16 / 32 / 64 / 128 / 256 / 512MB	X 1 pcs
DIMM2	Supports 16 / 32 / 64 / 128 / 256 / 512MB	X 1 pcs

Page Index for BIOS Setup	Page
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Advanced BIOS Features	P.42
Advanced Chipset Features	P.44
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PnP/ PCI Configurations	P.53
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Frequency / Voltage Control	P.56
Load Fail-Safe Defaults	P.57
Load Optimized Defaults	P.58
Set Supervisor / User Password	P.59
Save & Exit Setup	P.60
Exit Without Saving	P.61

BIOS Setup

BIOS Setup is an overview of the BIOS Setup Interface. The interface allows users to modify the basic system configuration, which is stored in battery-backed CMOS RAM so that it retains the Setup information can be retained when the power is turned off.

ENTERING SETUP

Power ON the computer and press <Del> immediately will allow you to enter Setup. If unsuccessful, you can restart the system and try again by pressing the "RESET" bottom on the system case. You may also restart by simultaneously pressing <Ctrl> – <Alt>– <Del> keys.

CONTROL KEYS

<↑>	Move to previous item
<↓>	Move to next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Esc>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
<+/PgUp>	Increase the numeric value or make changes
<-/PgDn>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F2>	Reserved
<F3>	Reserved
<F4>	Reserved
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
<F7>	Load the Optimized Defaults.
<F8>	Reserved
<F9>	Reserved
<F10>	Save all the CMOS changes, only for Main Menu

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>.

The Main Menu

Once you enter Award BIOS CMOS Setup Utility, the Main Menu (Figure 2) will appear on the screen. The Main Menu allows you to select from nine setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

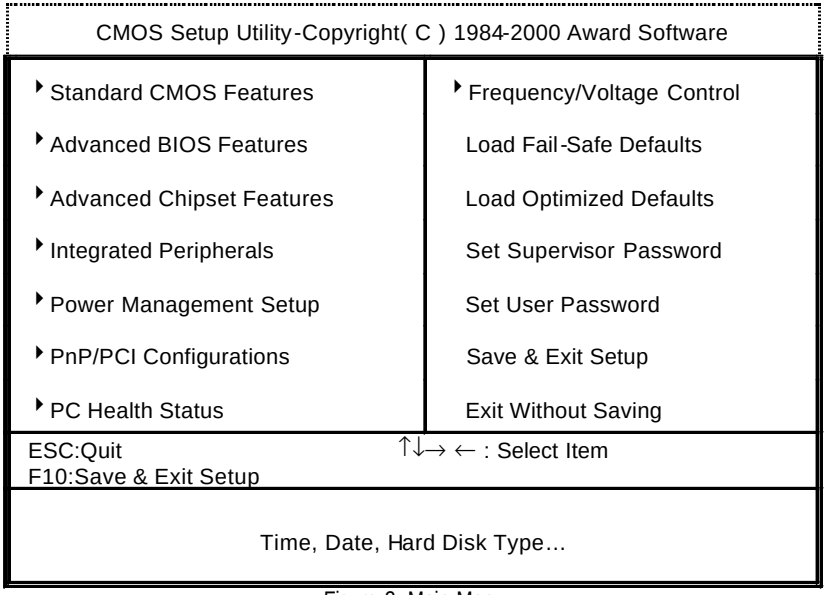


Figure 2: Main Menu

- Standard CMOS Features

  This setup page includes all the adjustable items in standard compatible BIOS.

- Advanced BIOS Features

  This setup page includes all the adjustable items of Award special enhanced features.

- Advanced Chipset Features

  This setup page includes all the adjustable items of chipset special features.

- Integrated Peripherals

  This setup page includes all onboard peripherals.

- Power Management Setup

  This setup page includes all the adjustable items of Green function features.

- PnP/PCI Configurations

  This setup page includes all the adjustable configurations of PCI & PnP ISA resources.

- PC Health Status

  This setup page is for monitoring system status such as temperature, voltage, and fan speed.

- Frequency/Voltage Control

  This setup page is for controlling CPU clock and frequency ratio.

- Load Fail-Safe Defaults

  Load Fail-Safe Defaults option loads preset system parameter values to set the system in its most stable configurations.

- Load Optimized Defaults

  Load Optimized Defaults option loads preset system parameter values to set the system in its highest performance configurations.

- Set Supervisor Password

  Set Change or disable password. It allows you to limit access to the system and/or BIOS setup.

- Set User Password

  Set Change or disable password. It allows you to limit access to the system.

- Save & Exit Setup

  Save CMOS value settings to CMOS and exit setup.

- Exit Without Saving

  Abandon all CMOS value changes and exit setup.

Standard CMOS Features

The items in Standard CMOS Setup Menu (Figure 2) are divided into 9 categories. Each category includes none, one or more than one setup items. Use the arrows to highlight the item and then use the <PgUp> or <PgDn> keys to select the value in each item.

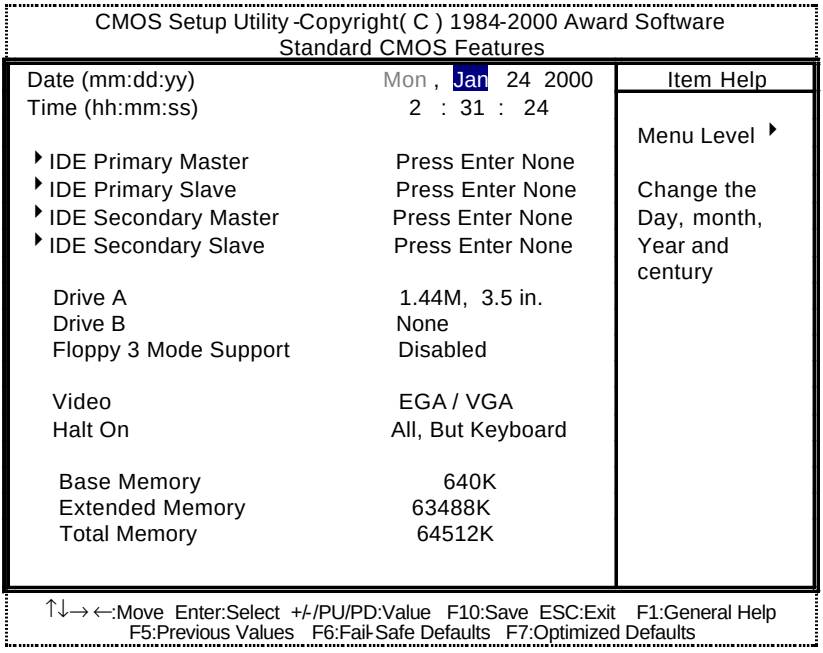


Figure 3: Standard CMOS Features

- Date

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

Week	The week, from Sun to Sat, determined by the BIOS and is display -only
Month	The month, Jan. Through Dec.
Day	The day, from 1 to 31 (or the maximum allowed in the month)
Year	The year, from 1994 through 2079

- Time

  The times format in <hour> <minute> <second>. The time is calculated base on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

- IDE Primary Master / Slave, Secondary Master / Slave

  The category identifies the type of hard disk from drive C to F that has been installed in the computer. There are two settings: Auto, and Manual. Manual: HDD type is user-definable; Auto will automatically detect HDD 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 you select User Type, related information will be asked to enter to the following items. Enter the information directly from the keyboard and press <Enter>. Such information should be provided in the documentation form your hard disk vendor or the system manufacturer.

CYLS.	Number of cylinders
HEADS	number of heads
PRECOMP	write precomp
LANDZONE	Landing zone
SECTORS	number of sectors

  If a hard disk has not been installed select NONE and press <Enter>.

- Drive A / Drive B

  The category identifies the type of floppy disk drive A or drive B that has been installed in the computer.

None	No floppy drive installed
360K, 5.25 in.	5.25 inch PC-type standard drive; 360K byte capacity.
1.2M, 5.25 in.	5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
720K, 3.5 in.	3.5 inch double-sided drive; 720K byte capacity
1.44M, 3.5 in.	3.5 inch double-sided drive; 1.44M byte capacity.
2.88M, 3.5 in.	3.5 inch double-sided drive; 2.88M byte capacity.

- Floppy 3 Mode Support (for Japan Area)

Disabled	Normal Floppy Drive.
Drive A	Drive A is 3 mode Floppy Drive.
Drive B	Drive B is 3 mode Floppy Drive.
Both	Drive A & B are 3 mode Floppy Drives.

- Video

The category detects the type of adapter used for the primary system monitor Which must match your video display card and monitor. Although secondary monitors are supported, you do not have to select the type in setup.

EGA/VGA	Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SVGA, or PGA monitor adapters
CGA 40	Color Graphics Adapter, power up in 40 column mode
CGA 80	Color Graphics Adapter, power up in 80 column mode
MONO	Monochrome adapter, includes high resolution monochrome adapters

- Halt on

The category determines whether the computer will stop if an error is detected during power up.

NO Errors	The system boot will not stop for any error that may be detected.
All Errors	The system boot will stop on any error detected.
All, But Keyboard	The system boot will not stop for a keyboard error; it will stop for all other errors
All, But Diskette	The system boot will not stop for a disk error; it will stop for all other errors
All, But Disk/Key	The system boot will not stop for a key board or disk error; it will stop for all other errors

- Memory

The category is display-only which is determined by POST (Power On Self Test) of the BIOS.

Base Memory

The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.

The value of the base memory is typically 512 K for systems with 512 K memory installed on the motherboard, or 640 K for systems with 640 K or more memory installed on the motherboard.

Extended Memory

The BIOS determines how much extended memory is present during the POST.

This is the amount of memory located above 1 MB in the CPU's memory address map.

Other Memory

This refers to the memory located in the 640 K to 1024 K address space. This is memory that can be used for different applications.

DOS uses this area to load device drivers to keep as much base memory free for application programs. Most use for this area is Shadow RAM

Advanced BIOS Features

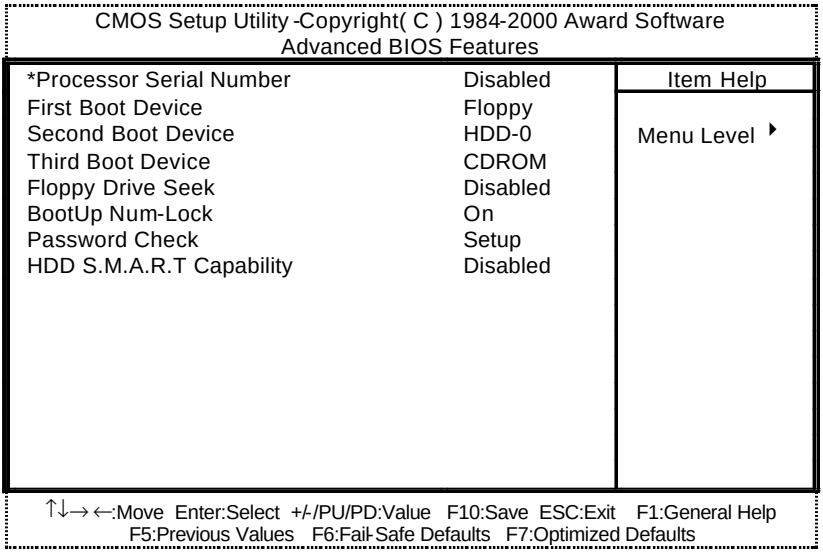


Figure 4: Advanced BIOS Features

*System will detect automatically and show up when you install the Pentium III processor.

- Processor Serial Number (Only Support Pentium® *!!!* Processor)

Disabled	Disable CPU Serial Number. (Default Value)
Enabled	Enable CPU Serial Number.

- First / Second / Third Boot Device

Floppy	Set your boot device priority to Floppy.
LS120	Set your boot device priority to LS120.
HDD-0~3	Set your boot device priority to HDD-0~3.
SCSI	Set your boot device priority to SCSI.
CDROM	Set your boot device priority to CDROM.
ZIP100	Set your boot device priority to ZIP100.
Disabled	Disabled this function.
LAN	Set your boot device priority to LAN.

- Floppy Drive Seek

During POST, BIOS will determine the floppy disk drive installed is 40 or 80 tracks. 360 K type is 40 tracks 720 K, 1.2 M and 1.44 M are all 80 tracks.

Enabled	BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not differentiate between 720 K, 1.2 M or 1.44 M drive type as they are all 80 tracks.
Disabled	BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360 K. (Default value)

- BootUp Num-Lock

On	Keypad is number keys. (Default value)
Off	Keypad is arrow keys.

- Password Check

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

System	The user must enter correct password in order to access the system and/or BIOS Setup.
Setup	The user must enter correct password in order to access the system. (Default value)

- HDD S.M.A.R.T. Capability

Enabled	Enable HDD S.M.A.R.T. Capability.
Disabled	Disable HDD S.M.A.R.T. Capability. (Default value)

Advanced Chipset Features

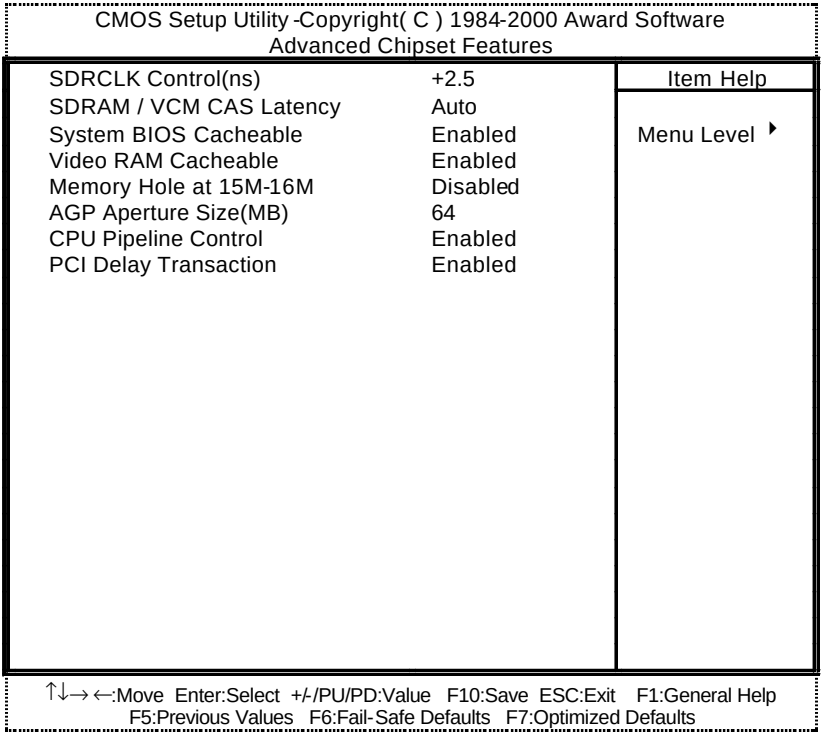


Figure 5: Advanced Chipset Features

- SDRCLK Control (ns)

-1.0/-0.5/0.0/0.5/1.0/1.5/2.0/2.5/3.0/3.5/4.0/4.5/5.0/5.5/6.0/6.5 (Default value: 2.5)

- SDRAM/VCM CAS Latency

2T	Set SDRAM/VCM CAS Latency to 2T.
3T	Set SDRAM/VCM CAS Latency to 3T.
Auto	Set SDRAM/VCM CAS Latency to Automatically. (Default value)

- System BIOS Cacheable

Enabled	Enable System BIOS cacheable. (Default value)
Disabled	Disable System BIOS cacheable.

- Video RAM Cacheable

Enabled	Enable video RAM cacheable. (Default value)
Disabled	Disable video RAM cacheable.

- Memory Hole at 15M-16M

Enabled	Set Address=15-16MB relocate to ISA BUS.
Disabled	Normal Setting. (Default value)

- AGP Aperture Size

4MB	Set AGP Aperture Size to 4MB.
8MB	Set AGP Aperture Size to 8MB.
16MB	Set AGP Aperture Size to 16MB.
32MB	Set AGP Aperture Size to 32MB.
64MB	Set AGP Aperture Size to 64MB. (Default value)
128MB	Set AGP Aperture Size to 128MB.
256MB	Set AGP Aperture Size to 256MB.

- CPU Pipeline Control

Disabled	Disable this function.
Enabled	Enable CPU Pipeline Control function to enhance the efficiency of the CPU. (Default value)

- PCI Delayed Transaction

Disabled	Normal operation.
Enabled	Enhance the efficiency of the PCI arbitrator. (Default value)

Integrated Peripherals

CMOS Setup Utility -Copyright(C) 1984-2000 Award Software
Integrated Peripherals

		Item Help
Onboard IDE	Both	
AC97 Audio	Auto	
AC97 Modem	Auto	Menu Level ▸
10/100M ETHERNET	Enabled	
USB Controller	Enabled	
USB Keyboard Support	Disabled	
USB Mouse Support	Disabled	
OnBoard FDC	Enabled	
OnBoard Serial PortA	Auto	
OnBoard Serial PortB	Auto	
Serial PortB Mode	Normal	
OnBoard Parallel Port	378/IRQ7	
Parallel Port Mode	ECP	
* Parallel Port DMA	3	
Game Port Address	201	
Midi Port Address	330	
Midi Port IRQ	10	
CIR Port Address	Disabled	
* CIR Port IRQ	11	
VGA Share Memory Size	8MB	
Extend Graphics Memory		

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

Figure 6: Integrated Peripherals

- Onboard IDE

Disabled	Disable Internal PCI/IDE.
Primary	Set Internal PCI/IDE to Primary.
Secondary	Set Internal PCI/IDE to Secondary.
Both	Set Internal PCI/IDE to Both. (Default value)

- AC97 Audio

Auto	BIOS will automatically detect onboard AC97 Audio or YAMAHA 744 audio. (Default value)
Disabled	Disable AC97 Audio.

- AC97 Modem

Auto	Bios will automatically detect onboard AC97 Modem. (Default value)
Disabled	Disable this function.

- 10/100M ETHERNET

Enabled	Enable 10/100 ETHERNET function. (Default value)
Disabled	Disable this function.

- USB Controller

Enabled	Enable USB Controller. (Default value)
Disabled	Disable this function.

- USB Keyboard Support

Enabled	Enable USB Keyboard Support.
Disabled	Disable this function. (Default value)

- USB Mouse Support

Enabled	Enable USB Keyboard Support.
Disabled	Disable this function. (Default value)

- Onboard FDC

Enabled	Enable onboard FDC port. (Default value)
Disabled	Disable this function.

- Onboard Serial PortA

Auto	BIOS will automatically setup the port 1 address. (Default value)
3F8/IRQ4	Set onboard Serial port 1 and address to 3F8.
2F8/IRQ3	Set onboard Serial port 1 and address to 2F8.
3E8/IRQ4	Set onboard Serial port 1 and address to 3E8.
2E8/IRQ3	Set onboard Serial port 1 and address to 2E8.
Disabled	Disable this function.

- Onboard Serial PortB

Auto	BIOS will automatically setup the port 2 address. (Default Value)
3F8/IRQ4	Set onboard Serial port 2 and address to 3F8.
2F8/IRQ3	Set onboard Serial port 2 and address to 2F8.
3E8/IRQ4	Set onboard Serial port 2 and address to 3E8.
2E8/IRQ3	Set onboard Serial port 2 and address to 2E8.
Disabled	Disable this function.

- Serial PortB Mode

(This item allows you to determine which Infra Red(IR) function of Onboard I/O chip)

ASKIR	Set onboard I/O chip UART to ASKIR Mode.
IrDA	Set onboard I/O chip UART to IrDA Mode.
Normal	Set onboard I/O chip UART to Normal Mode. (Default Value)

- Onboard Parallel port

378/IRQ7	Set onboard LPT port and address to 378/IRQ7. (Default Value)
278/IRQ5	Set onboard LPT port and address to 278/IRQ5.
Disabled	Disable this function.
3BC/IRQ7	Set onboard LPT port and address to 3BC/IRQ7.

- Parallel Port Mode

SPP	Using Parallel port as Standard Parallel Port.
EPP	Using Parallel port as Enhanced Parallel Port.
ECP	Using Parallel port as Extended Capabilities Port. (Default Value)
ECP+EPP	Using Parallel port as ECP & EPP mode.

- Parallel Port DMA

1	Set ECP Mode Use DMA to 1.
3	Set ECP Mode Use DMA to 3. (Default Value)

- Game Port Address

Disabled	Disable this function.
201	Set onboard game port to 201. (Default value)
209	Set onboard game port to 209.

- Midi Port Address

Disabled	Disable On Board Midi Port.
300	Set On Board Midi Port to 300.
290	Set On Board Midi Port to 290.
330	Set On Board Midi Port to 330. (Default value)

- Midi Port IRQ

5	Set 5 for Midi Port IRQ.
10	Set 10 for Midi Port IRQ. (Default value)

- CIR Port Address

Disabled	Disabled this function. (Default Value)
2E8	Set CIR Port Address to 2E8.
3E8	Set CIR Port Address to 3E8.
2F8	Set CIR Port Address to 2F8.
3F8	Set CIR Port Address to 3F8.

- CIR Port IRQ

5	Set 5 for CIR Port IRQ.
11	Set 11 for CIR Port IRQ. (Default Value)

- VGA Share Memory Size

2MB	Set VGA Share Memory Size to 2MB.
4MB	Set VGA Share Memory Size to 4MB.
8MB	Set VGA Share Memory Size to 8MB. (Default value)
16MB	Set VGA Share Memory Size to 16MB.
32MB	Set VGA Share Memory Size to 32MB.
64MB	Set VGA Share Memory Size to 64MB.

Power Management Setup

CMOS Setup Utility -Copyright(C) 1984-2000 Award Software
Power Management Setup

		Item Help
ACPI Suspend Type	S1(POS)	
Power Management	Enabled	
MODEM Use IRQ	3	Menu Level ▸
Hot Key Function	Disabled	
CPU Fan In Suspend	Off	
Soft-Off by PWRBTN	Instant Off	
System After AC Back	Soft Off	
IRQ [3-7,9-15],NMI Event	Enabled	
IRQ 8 Break Suspend	Disabled	
ModemRingOn/WakeOnLan	Enabled	
PME Event Wake Up	Enabled	
KB Power On Password	Enter	
RTC Alarm Power On	Disabled	
* Month Alarm	N/A	
* Day of Month	0	
* Time (hh:mm:ss)	0 0 0	

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

Figure 7: Power Management Setup

- ACPI Suspend Type

S1(POS)	Set ACPI Suspend type to S1. (Default value)
S3(STR)	Set ACPI Suspend type to S3.

- Power Management

Disabled	Disable this function.
Enabled	Enable Power Management function. (Default value)

- MODEM Use IRQ

NA	Set MODEM Use IRQ to NA.
3	Set MODEM Use IRQ to 3. (Default value)
4	Set MODEM Use IRQ to 4.
5	Set MODEM Use IRQ to 5.
7	Set MODEM Use IRQ to 7.
9	Set MODEM Use IRQ to 9.
10	Set MODEM Use IRQ to 10.
11	Set MODEM Use IRQ to 11.

- Hot Key Function

Disabled	Disabled this function. (Default value)
Power Off	When user pressed <Ctrl><Alt><Backspace>, he can turn off the system.
Suspend	When user press <Ctrl><Alt><Backspace>, the system will enter suspend mode.

- CPU Fan In Suspend

Off	Disabled this function. (Default value)
On	Enabled CPU Fan In Suspend function.

- Soft-off by PWRBTN

Instant-off	If the user pressed the power button once, he can turn off the system. (Default Value)
Suspend	The user needs to press the power button at least 4 sec, then he can turn off the system. Otherwise, your system will enter suspend mode.

- System After AC Back

Memory	This function depends on computer status.
Soft-Off	Set System Soft-Off Status. (Default value)
Full-On	Set System Full-On Status.

- IRQ [3-7,9-15] , NMI Event

Disabled	Disabled this function.
Enabled	Enabled monitor IRQ [3-7, 9-15],NMI for Green event. (Default value)

- IRQ 8 Break Suspend

Disabled	Disabled this function. (Default value)
Enabled	Enabled IRQ 8 Break Suspend function.

- ModemRineOn / WakeOnLan

Disabled	Disabled this function.
Enabled	Enabled Resume Modem & PCI LAN card function. (Default value)

- PME Event Wake Up

Disabled	Disabled this function.
Enabled	Enabled on board LAN / PCI LAN card (with PME) Wake Up On function. (Default value)

- KB Power ON Password

Enter	Enter from 1 to 5 characters to set the Keyboard Power On Password.

- RTC Alarm Power On

You can set "RTC Alarm Power On" item to Enabled and key in date/time to power on system.

Disabled	Disable this function. (Default Value)
Enabled	Enable alarm function to POWER ON system.

If the "RTC Alarm Power On" is Enabled.

Month Alarm:	1~12.
Day of Month Alarm:	0~31.
Time (hh:mm:ss) Alarm:	00:00:00-23:59:59

PnP/PCI Configurations

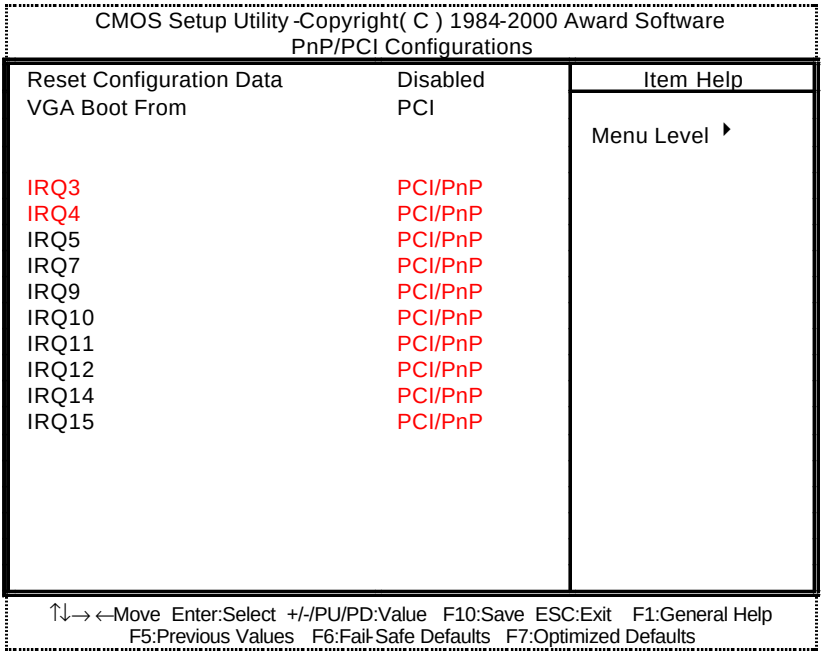


Figure 8: PnP/PCI Configuration

- Reset Configuration Data

Disabled	Disable this function. (Default value)
Enabled	Clear PnP information in ESCD & update DMI data.

- VGA Boot From PCI

PCI	Set Init Display First to PCI Slot. (Default value)
AGP	Set Init Display First to onboard AGP.

- IRQ (3,4,5,7,9, 10,11,12,14,15) assigned to ("Legacy ISA" or "PCI/PnP")

Legacy ISA	The resource is used by Legacy ISA device.
PCI /PnP	The resource is used by PCI PnP device. (Default value)

PC Health Status

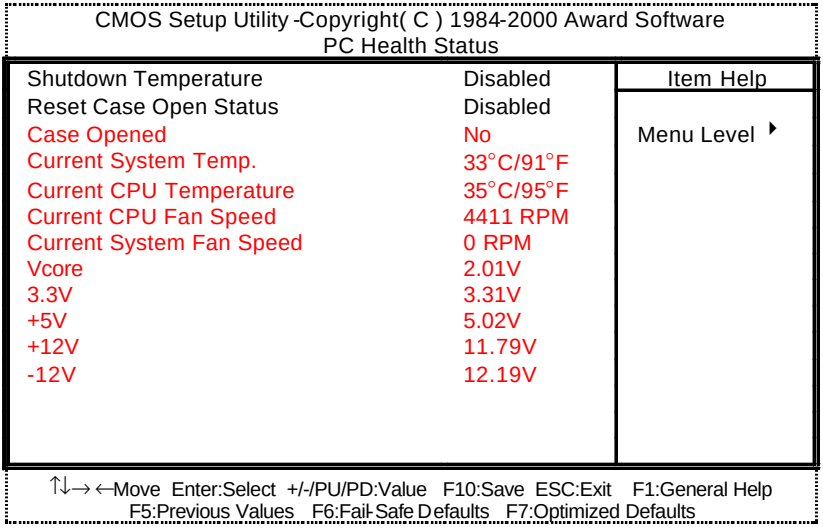


Figure 9: PC Health Status

- Shutdown Temperature (°C / °F)

(This function will be effective only for the operating systems that support ACPI Function.)

Disabled	Disabled this function. (Default value)
60°C / 140°F	Monitor CPU Temp. at 60°C / 140°F, if Temp. > 60°C / 140°F system will automatically power off.
70°C / 158°F	Monitor CPU Temp. at 70°C / 158°F, if Temp. > 70°C / 158°F system will automatically power off.
80°C / 176°F	Monitor CPU Temp. at 80°C / 176°F, if Temp. > 80°C / 176°F system will automatically power off.
90°C / 194°F	Monitor CPU Temp. at 90°C / 194°F, if Temp. > 90°C / 194°F system will automatically power off.

- Reset Case Open Status
- Case Opened

  If the case is closed, "Case Opened" will show "No".
  If the case have been opened, "Case Opened" will show "Yes".
  If you want to reset "Case Opened" value, set "Reset Case Open Status" to "Enabled" and save CMOS, your computer will restart.

- CPU/System Fan Speed

  Detect CPU/System Fan speed status automatically.

- Current Voltage (V) Vcore / 3.3V / +5V / +12V / -12V

  Detect system's voltage status automatically.

Frequency/Voltage Control

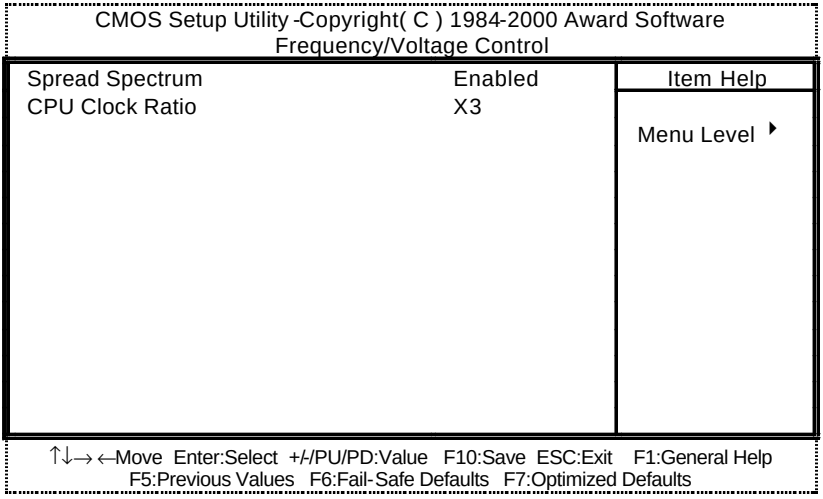


Figure 10: Frequency/Voltage Control

- Spread Spectrum

Disabled	Disabled Spread Spectrum.(Center Spread). (Default value)
Enabled	Enabled Spread Spectrum.(Center Spread).

- CPU Clock Ratio

This option will not be shown if you are using a CPU with the locked ratio.

X3/X3.5/X4/X4.5/X5/X5.5/X6/X6.5/X7/X7.5/X8

Load Fail-Safe Defaults

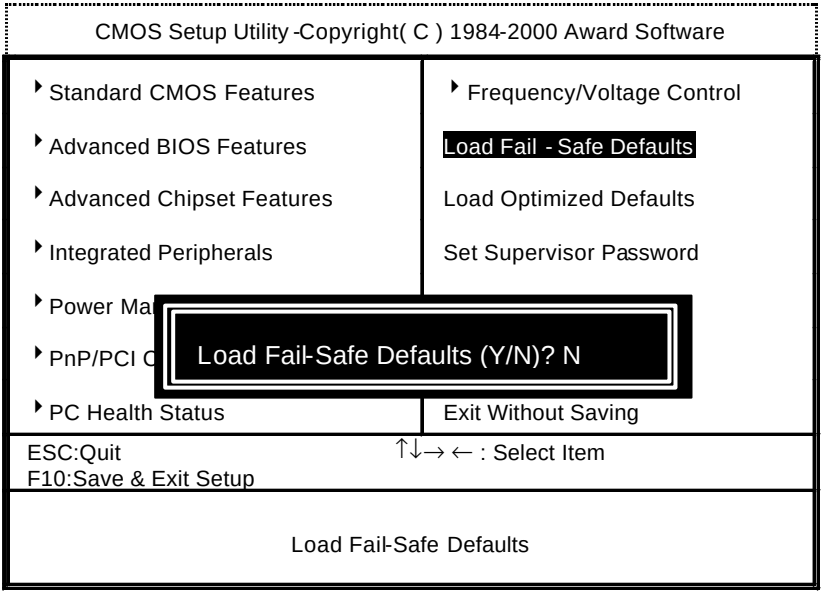


Figure 11: Load Fail-Safe Defaults

- Load Fail-Safe Defaults

  Fail–Safe defaults contain the most appropriate system parameter values of to configure the system to achieve maximum stability.

Load Optimized Defaults

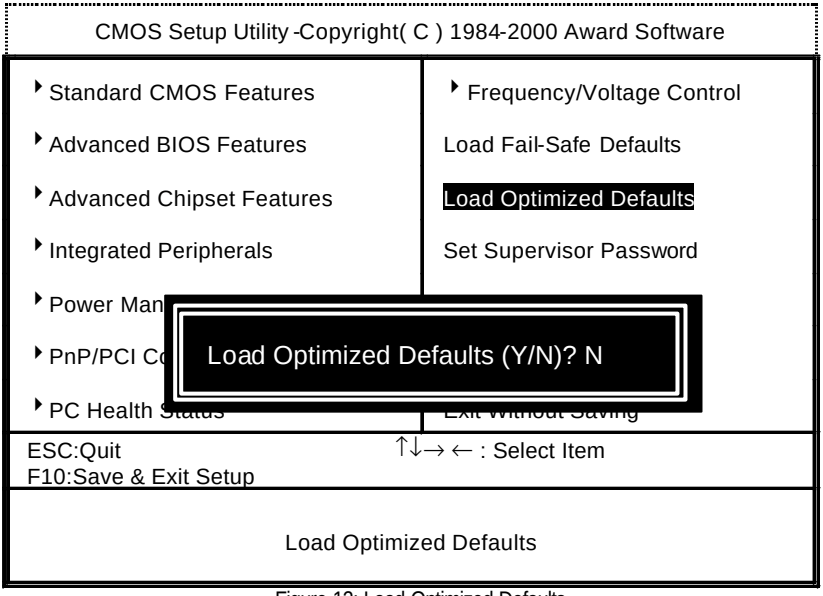


Figure 12: Load Optimized Defaults

- Load Optimized Defaults

  Optimized defaults contain the most appropriate system parameter values to configure the system to achieve maximum performance.

Set Supervisor / User Password

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

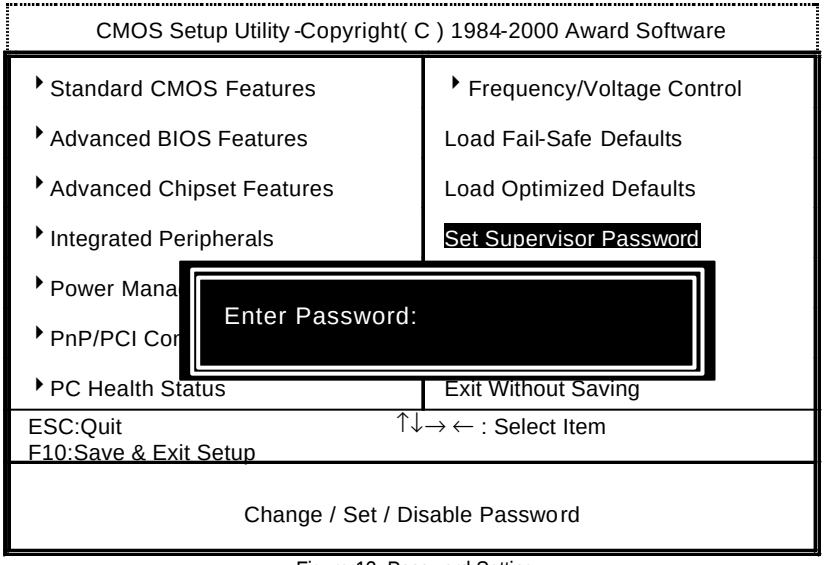


Figure 13: Password Setting

Type the password, up to six characters, and press <Enter>. The password typed now will clear the 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 password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

The BIOS Setup program allows you to specify two separate passwords: a SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program function. When enabled, the Supervisor password is required for entering the BIOS Setup program and having full configuration fields, the user password is required to access only basic items.

If you select "System" at "Password Check" in BIOS Features Setup Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup Menu.

If you select "Setup" at "Password Check" in BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

Save & Exit Setup

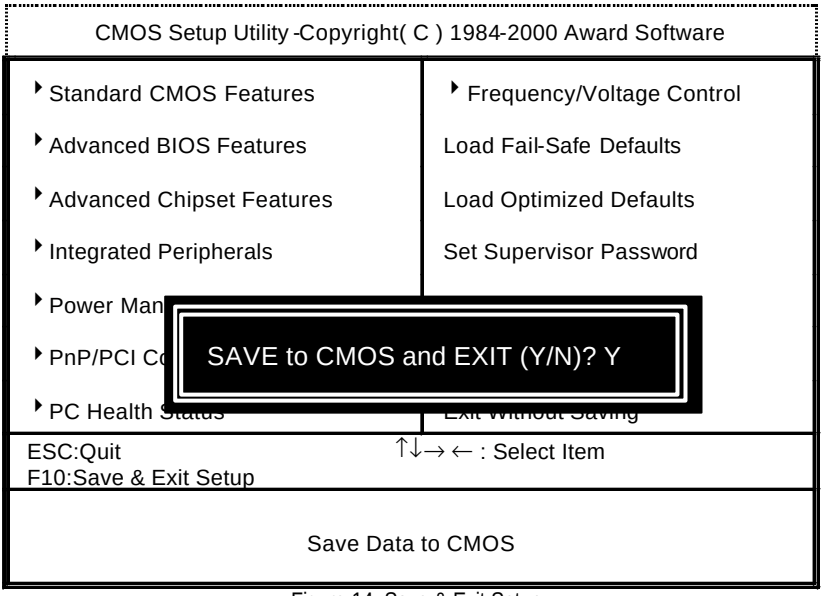


Figure 14: Save & Exit Setup

Type "Y" will quit the Setup Utility and save the user setup value to RTC CMOS.

Type "N" will return to Setup Utility.

Exit Without Saving

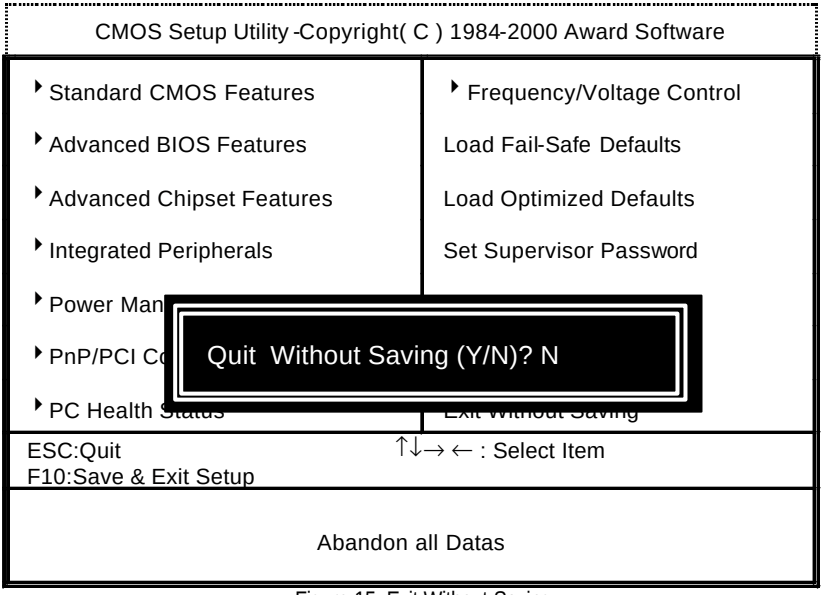


Figure 15: Exit Without Saving

Type "Y" will quit the Setup Utility without saving to RTC CMOS.

Type "N" will return to Setup Utility.

Appendix

Appendix A: SiS 630 Chipset Driver Installation

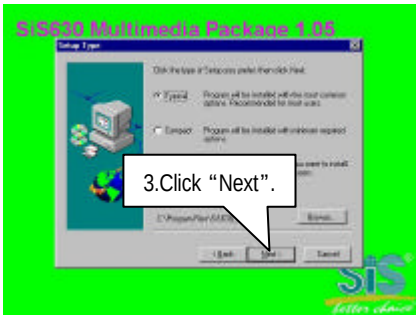
SiS630 Multimedia Package Driver

Insert the support CD that came with your motherboard into your CD-ROM drive or double-click the CD drive icon in My Computer to bring up the setup screen.

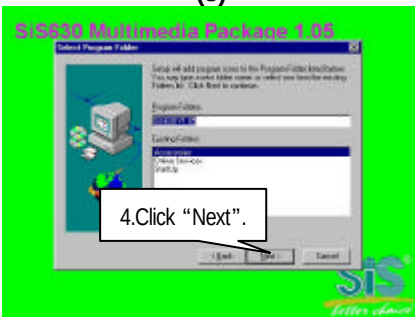
(1)

(2)

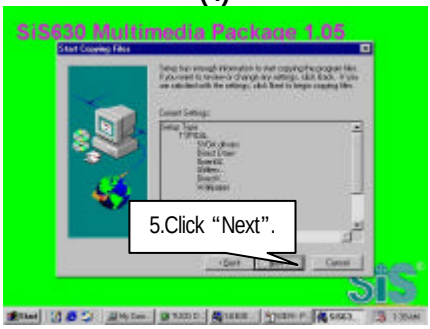
(3)



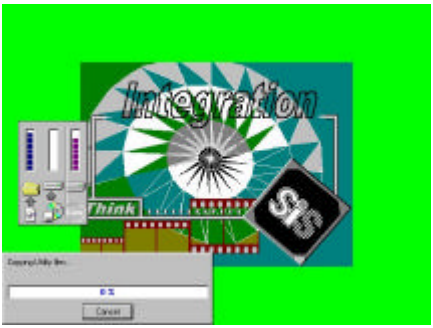
(4)



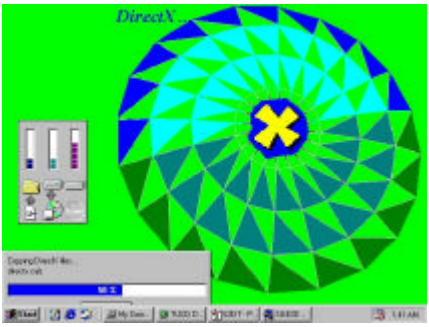
(5)



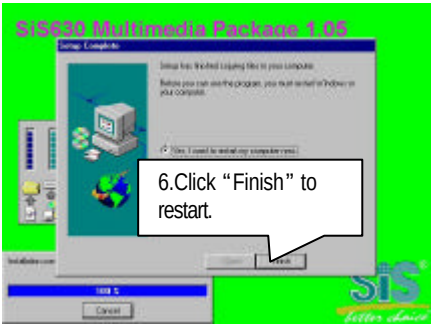
(6)


Integration
Think

(7)


DirectX

(8)

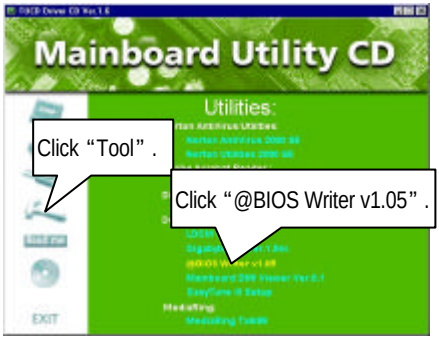

SIS630 Multimedia Package 1.05
6.Click “Finish” to restart.

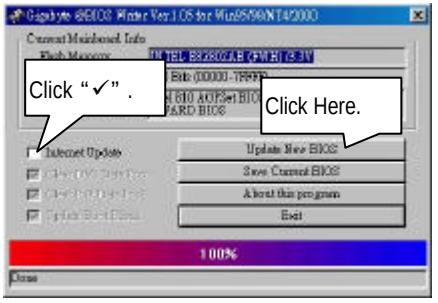
(9)

Appendix B: BIOS Flash Procedure

BIOS update procedure:

If your OS is Win9X, we recommend that you used Gigabyte @BIOS Program to flash BIOS.





Methods and steps :

I. Update BIOS through Internet

a. Click "Internet Update" icon

b. Click "Update New BIOS" icon

c. Select @BIOS sever ("Gigabyte @BIOS sever 1 in Taiwan" and "Gigabyte @BIOS sever 2 in Taiwan" are available for now, the others will be completed soon)

d. Select the exact model name on your motherboard

e. System will automatically download and update the BIOS.

II. Update BIOS NOT through Internet :

a. Do not click "Internet Update" icon

b. Click "Update New BIOS"

c. Please select "All Files" in dialog box while opening the old file.

d. Please search for BIOS unzip file, downloading from internet or any other methods (such as: 6OXM7E.F1).

e. Complete update process following the instruction.

III. Save BIOS

In the very beginning, there is "Save Current BIOS" icon shown in dialog box. It means to save the current BIOS version.

IV. Check out supported motherboard and Flash ROM :

In the very beginning, there is "About this program" icon shown in dialog box. It can help you check out which kind of motherboard and which brand of Flash ROM are supported.

Note :

a. In method I, if it shows two or more motherboard's model names to be selected, please make sure your motherboard's model name again. Sellecting name will cause the system unbooted.

b. In method II, be sure that motherboard's model name in BIOS unzip file are the same as your motherboard's. Otherwise, your system won't boot.

c. In method I, if the BIOS file you need cannot be found in @BIOS server, please go onto Gigabyte's web site for downloading and updating it according to method II.

d. Please note that any intercorruption during updating will cause system unbooted

Or else you can select flash BIOS in DOS mode.

- Please check your BIOS vendor (AMI or AWARD),your motherboard name and PCB version on the motherboard.

1. Format a bootable system floppy diskette by the command "format a:/s" in command mode.
2. Visit the Gigabyte website at http:// www.gigabyte.com.tw ,Select the BIOS file you need and download it to your bootable floppy diskette.
3. Insert the bootable diskette containing the BIOS file into the floppy diskette driver.
4. Assuming that the floppy diskette driver is A, reboot the system by using the A: driver. At the A: > prompt, run the BIOS upgraded file by executing the Flash BIOS utility and the BIOS file with its appropriate extension.

   Example: *(AMI tool) (Where 6smz7.f1 is name of the BIOS BIOS file name)*

   A:>*flashxxx.exe 6smz7.f1* ↵

   Example: *(Award tool) (Where 6smz7.f1 is name of the BIOS BIOS file name)*

   A:>wdflash.exe 6smz7.f1 ↵
5. Upon pressing the <Enter> key, a flash memory writer menu will appear on screen. Enter the new BIOS file name with its extension filename into the text box after file name to program.
6. If you want to save the old BIOS file(perform as soon as system is operational, this is recommended), select Y to DO YOU WANT TO SAVE BIOS, then type the old BIOS filename and the extension after filename to save: This option allows you to copy the contents of the flash memory chip onto a diskette, giving you a backup copy of the original motherboard BIOS in case you need to re-install it. Select N to DO YOU WANT TO SAVE BIOS, if you don't want to save the old BIOS file.
7. After the decision to save the old BIOS file or not is made, select Y to ARE YOU SURE TO PROGRAM when the next menu appear; wait until a message showing Power Off or Reset the system appears. Then turn off your system.
8. Remove the diskette and restart your system.
9. Hold down <Delete> key to enter BIOS setup. You must select "Load Setup BIOS Default" to activate the new BIOS, then you may set other item from the main menu.

Appendix C: Acronyms

Acronyms	Meaning
ACPI	Advanced Configuration and Power Interface
APM	Advanced Power Management
AGP	Accelerated Graphics Port
AMR	Audio Modem Riser
ACR	Audio Communication Riser
BIOS	Basic Input / Output System
CPU	Central Processing Unit
CMOS	Complementary Metal Oxide Semiconductor
CRIMM	Continuity RIMM
CNR	Communication and Networking Riser
DMA	Direct Memory Access
DMI	Desktop Management Interface
DIMM	Dual Inline Memory Module
DRM	Dual Retention Mechanism
DRAM	Dynamic Random Access Memory
DDR	Double Data Rate
ECP	Extended Capabilities Port
ESCD	Extended System Configuration Data
ECC	Error Checking and Correcting
EMC	Electromagnetic Compatibility
EPP	Enhanced Parallel Port
ESD	Electrostatic Discharge
FDD	Floppy Disk Device
HDD	Hard Disk Device
IDE	Integrated Dual Channel Enhanced
IRQ	Interrupt Request
I/O	Input / Output
IOAPIC	Input Output Advanced Programmable Input Controller
ISA	Industry Standard Architecture
LAN	Local Area Network
LBA	Logical Block Addressing
LED	Light Emitting Diode
MHz	Megahertz
MIDI	Musical Interface Digital Interface
MTH	Memory Translator Hub
MPT	Memory Protocol Translator
NIC	Network Interface Card
OS	Operating System

To be continued...

Acronyms	Meaning
OEM	Original Equipment Manufacturer
PAC	PCI A.G.P. Controller
POST	Power-On Self Test
PCI	Peripheral Component Interconnect
RIMM	Rambus in-line Memory Module
SCI	Special Circumstance Instructions
SECC	Single Edge Contact Cartridge
SRAM	Static Random Access Memory
SMP	Symmetric Multi-Processing
SMI	System Management Interrupt
USB	Universal Serial Bus
VID	Voltage ID