

4. BIOS CONFIGURATION

Award's BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS SRAM so that it retains the Setup information when the power is turned off.

4.1. ENTERING SETUP

Power ON the computer and press immediately will allow you to enter Setup. If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" bottom on the system case. You may also restart by simultaneously press <Ctrl>, <Alt>, and keys.

4.2. CONTROL KEYS

Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item in the left hand
Right arrow	Move to the item in the right hand
Esc key	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 key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
F1 key	General help, only for Status Page Setup Menu and Option Page Setup Menu
F2 key	Change color from total 16 colors
F3 key	Reserved
F4 key	Reserved
F5 key	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
F6 key	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
F7 key	Load the default
F8 key	Reserved
F9 key	Reserved
F10 key	Save all the CMOS changes, only for Main Menu

4.3. GETTING HELP

4.3.1. Main Menu

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

4.3.2. 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>.

4.4. THE MAIN MENU

Once you enter Award BIOS CMOS Setup Utility, the Main Menu (Figure 4.1) 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 4.1: Main Menu

- Standard CMOS setup
This setup page includes all the items in standard compatible BIOS.
- BIOS features setup
This setup page includes all the items of Award special enhanced features.

- Chipset features setup
This setup page includes all the items of chipset special features.
- Power management setup
This setup page includes all the items of Green function features.
- PNP/PCI configuration
This setup page includes all the configurations of PCI & PnP ISA resources.
- Load bios defaults
Bios Defaults indicates the value of the system parameter which the system would be in the safe configuration.
- Load setup defaults
Setup Defaults indicates the value of the system parameter which the system would be in the most appropriate configuration.
- Integrated peripherals
This setup page includes all onboard peripherals.
- Supervisor password
Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup.
- User password
Change, set, or disable password. It allows you to limit access to the system.
- IDE HDD auto detection
Automatically configure hard disk parameters.
- Save & exit setup
Save CMOS value settings to CMOS and exit setup.
- Exit without saving
Abandon all CMOS value changes and exit setup.

4.5. STANDARD CMOS SETUP MENU

The items in Standard CMOS Setup Menu (Figure 4.2) are divided into 9 categories. Each category includes no, 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 you want in each item.



Figure 4.2: Standard CMOS Setup Menu

- Date

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

day	The day, from Sun to Sat, determined by the BIOS and is display-only
month	The month, Jan. through Dec.
date	The date, 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.

- Primary HDDs / Secondary HDDs

The category identifies the types of hard disk from drive C to F that has been installed in the computer. There are two types: auto type, and user definable type. User type is user-definable; Auto type which 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 type / Drive B type

The category identifies the types 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 that 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 and you will be prompted
All Errors	Whenever the BIOS detects a non-fatal error the system will be stopped
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 keyboard 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.

Expanded Memory

Expanded Memory is memory defined by the Lotus/Intel/Microsoft (LIM) standard as EMS.

Many standard DOS applications can not utilize memory above 640 K; the Expanded Memory Specification (EMS) swaps memory, which not utilized by DOS with a section, or frame, so these applications, can access all of the system memory.

Memory can be swapped by EMS is usually 64 K within 1 MB or memory above 1 MB, depends on the chipset design.

Expanded memory device driver is required to use memory as Expanded Memory.

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.

4.6. BIOS FEATURES SETUP



Figure 4.3: BIOS Features Setup

- Virus Warning

If it is set to enable, the category will flash on the screen when there is any attempt to write to the boot sector or partition table of the hard disk drive. The system will halt and the warning message will appear in the mean time. You can run anti-virus program to locate the problem.

Default value is Disabled.

Enabled	Activate automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector or hard disk partition table
Disabled	No warning message to appear when anything attempts to access the boot sector or hard disk partition table

- CPU Internal Cache / External Cache

These two categories speed up memory access. However, it depends on CPU / chipset design. The default value is Enabled.

Enabled	Enable cache
Disabled	Disable cache

- CPU L2 Cache ECC Checking

The default value is Disabled.

Enabled	Enable CPU L2 Cache ECC Checking
Disabled	Disable CPU L2 Cache ECC Checking

- Quick Power On Self Test

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

The default value is Enabled.

Enabled	Enable quick POST
Disabled	Normal POST

- CPU Update Data

The default value is Enabled.

Enabled	Enable CPU Update Data
Disabled	Normal CPU Update Data

- Boot From LAN First

The default value is Enabled.

Auto	Enable Boot From LAN First
Enabled	Enable Boot From LAN First
Disabled	Disable Boot From LAN First

☞ You can set "Auto" or "Enabled" to boot from LAN first.

- Boot Sequence

This category determines which drive computer searches first for the disk operating system (i.e., DOS). Default value is A, C, SCSI.

X1, X2, X3	System will first search for X1 disk drive then X2 disk drive and then X3 disk drive.
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- Swap Floppy Drive

The default value is Disabled.

Enabled	Floppy A & B will be swapped under DOS
Disabled	Floppy A & B will be normal definition

- VGA Boot From

The default value is AGP.

AGP	VGA Boot From AGP
PCI	VGA Boot From PCI

- Boot Up Floppy 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. The default value is Enabled.

Enabled	BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 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

- Boot Up NumLock Status

The default value is On.

On	Keypad is number keys
Off	Keypad is arrow keys

- Typematic Rate Setting

The default value is Disabled.

Enabled	Enable Keyboard Typematic rate setting.
Disabled	Disable Keyboard Typematic rate setting.

- Typematic Rate (Chars / Sec)

The default value is 6.

6-30	Set the maximum Typematic rate from 6 chars. Per second to 30 chars. Per second.
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- Typematic Delay (Msec)

The default value is 250.

250-1000	Set the time delay from first key to repeat the same key in to computer.
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- Security Option

This category allows you to limit access to the system and Setup, or just to Setup. The default value is Setup.

System	The system can not boot and can not access to Setup page will be denied if the correct password is not entered at the prompt
Setup	The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt

- **To disable security, select PASSWORD SETTING at Main Menu and then you will be asked to enter password. Do not type anything and just press <Enter>, it will disable security. Once the security is disabled, the system will boot and you can enter Setup page freely.**

- PCI/VGA Palette Snoop

The default value is Disabled.

Enabled	For having Video Card on ISA Bus and VGA Card on PCI Bus.
Disabled	For VGA Card only.

- Assign IRQ For VGA

The default value is Enabled.

Enabled	For having Video Card on ISA Bus and VGA Card on PCI Bus.
Disabled	For VGA Card only.

- OS Select For DRAM>64MB

The default value is Non-OS2.

Non-OS2	Using non-OS2 operating system.
OS2	Using OS2 operating system and DRAM>64MB.

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

The default value is Disable.

Enable	Enable HDD S.M.A.R.T. Capability
Disable	Disable HDD S.M.A.R.T. Capability

- Video BIOS Shadow

It determines whether video BIOS is able to copy to RAM, however, it is optional from chipset design. Video Shadow will increase the video speed. The default value is Enabled.

Enabled	Video shadow is enabled
Disabled	Video shadow is disabled

- Report No FDD For WIN 95

The default value is No.

No	Function disabled
Yes	Report No FDD For WIN 95

4.7. CHIPSET FEATURES SETUP

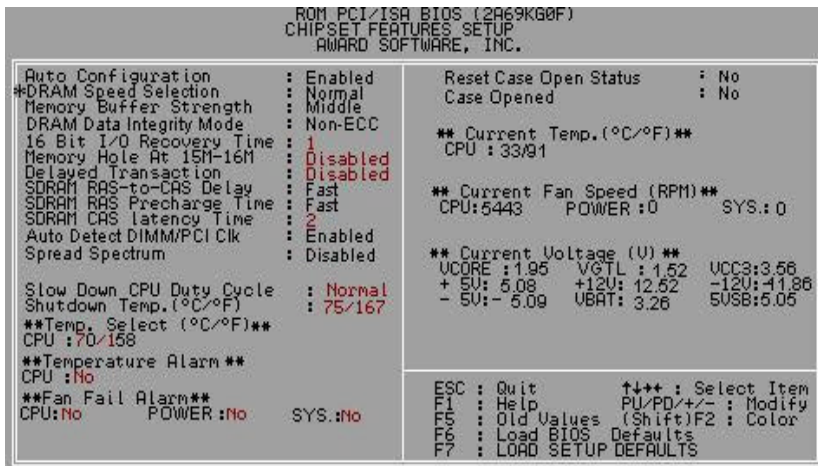


Figure 4.4: Chipset Features Setup

* When Auto Configuration set Enabled, “DRAM Speed Selection” will show up.

- Auto Configuration

The default value is Enabled.

Enabled	For 50 - 60ns EDO DRAM Timing.
Disabled	For slow speed DRAM Timing.

- DRAM Speed Selection

The default value is Normal.

Normal	For normal DRAM operation.
Fast	For Fastest DRAM timing operation.

- Memory Buffer Strength

The default value is Middle.

Middle	For Middle Memory Buffer strength.
Low	For Low Memory Buffer strength.
High	For High Memory Buffer strength.

- DRAM Data Integrity Mode

The default value is Non-ECC.

Non-ECC	For 64bit standard type DIMM module.
ECC	For 72bit ECC type DIMM module.

- 16 Bit I/O Recovery Time

The default value is 1.

1-4	Set 16 Bit I/O recovery time from 1 to 4.
NA	None.

- Memory Hole At 15M-16M

The default value is Disabled.

Disabled	Normal Setting.
Enabled	Set Address=15~16MB remap to ISA BUS.

- Delayed Transaction

The default value is Disabled.

Disabled	Normal operation.
Enabled	For slow speed ISA device in system.

- SDRAM RAS-to-CAS Delay

The default value is Fast

Slow	For 67 / 83 MHz SDRAM DIMM module.
Fast	For 100 MHz SDRAM DIMM module.

- SDRAM RAS Precharge Time

The default value is Fast.

Slow	For 67 / 83 MHz SDRAM DIMM module.
Fast	For 100 MHz SDRAM DIMM module.

- SDRAM CAS latency Time

The default value is 2.

3	For 67 / 83 MHz SDRAM DIMM module.
2	For 100 MHz SDRAM DIMM module.

- Auto Detect DIMM/PCI Clk

The default value is Enabled.

Disabled	Disabled Auto Detect DIMM/PCI Clk
Enabled	Enabled Auto Detect DIMM/PCI Clk

- Spread Spectrum

The default value is Disabled.

Disabled	Disabled this function
Enabled	Enabled Spread Spectrum

- Slow Down CPU Duty Cycle (Optional)

The default value is Normal.

Normal	Normal Operation
12.5%~75.0%	Monitor CPU Temp. will cause system slow down CPU Duty Cycle to 12.5%~75.0%.

- Shutdown Temp. (°C / °F) (Optional)

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

The default value is 75°C / 167°F

Disabled	Normal Operation
60°C / 140°F	Monitor CPU Temp. at 60°C / 140°F, if Temp. > 60°C / 140°F system will automatically power off .
65°C / 149°F	Monitor CPU Temp. at 65°C / 149°F, if Temp. > 65°C / 149°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 .
75°C / 167°F	Monitor CPU Temp. at 75°C / 167°F, if Temp. > 75°C / 167°F system will automatically power off .

- Temp. Select (°C / °F) (Optional)

The default value is 70°C / 158°F

65°C / 149°F	Monitor CPU Temp. at 65°C / 149°F
70°C / 158°F	Monitor CPU Temp. at 70°C / 158°F
75°C / 167°F	Monitor CPU Temp. at 75°C / 167°F
80°C / 176°F	Monitor CPU Temp. at 80°C / 176°F
85°C / 185°F	Monitor CPU Temp. at 85°C / 185°F
90°C / 194°F	Monitor CPU Temp. at 90°C / 194°F
95°C / 203°F	Monitor CPU Temp. at 95°C / 203°F

- Temperature Alarm (Optional)

The default value is No

No	When CPU Temp. overheat, then system won't alarm.
Yes	When CPU Temp. overheat, then system will alarm.

- Fan Fail Alarm (Optional)

CPU/POWER/SYS.

No	Fan Fail Alarm Function Disabled.
Yes	Fan Fail Alarm Function Enabled.

- Reset Case Open Status (Optional)
- Case Opened (Optional)

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 "Yes" and save CMOS, your computer will restart.

- Current Temp. (°C / °F) (Optional)
Detect CPU Temp. automatically.
- Current FAN Speed (RPM) (Optional)
Detect Fan speed status automatically and detect system's voltage status automatically.
- Current Voltage (v) VCORE / VGTL/ VCC3 / ±12V / ±5V /VBAT /5VSB (Optional)
Detect system's voltage status automatically.

4.8. POWER MANAGEMENT SETUP

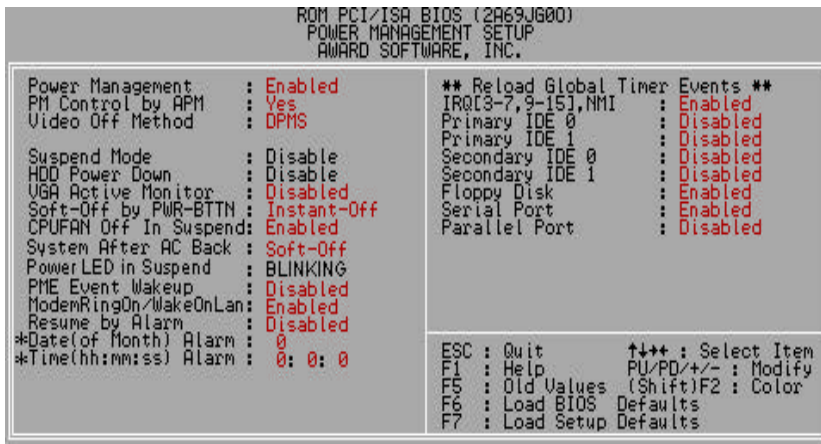


Figure 4.5: Power Management Setup

* These two items will show up when Resume by Alarm is enabled.

- Power Management

The default value is Enabled.

Enabled	Enable Green function.
Disabled	Disable Green function.

- PM Control by APM

The default value is Yes.

Yes	Enable software APM function.
No	Disable software APM function.

- Video off Method

The default value is DPMS.

V/H SYNC + Blank	BIOS will turn off V/H-SYNC when gets into Green mode for Green monitor power saving.
Blank Screen	BIOS will only black monitor when gets into Green mode.
DPMS	BIOS will use DPMS Standard to control VGA card. (The Green type VGA card will turn of V/H-SYNC automatically.)

- Suspend Mode

The default value is Disable.

Disabled	Disable Suspend Mode.
1 min - 1 Hour	Setup the timer to enter Suspend Mode.

- HDD Power Down

The default value is Disable.

Disable	Disable HDD Power Down mode function.
1-15 mins.	Enable HDD Power Down mode between 1 to 15 mins.

- VGA Active Monitor

The default value is Disabled.

Disabled	Disable monitor VGA activity.
Enabled	Enable monitor VGA activity.

- Soft-off by PWR-BTTN

The default value is Instant-Off.

Instant-off	Soft switch ON/OFF for POWER ON/OFF
Delay 4 Sec.	Soft switch ON 4sec. for POWER OFF.

- CPUFAN Off In Suspend

The default value is Enabled.

Disabled	Disable this function.
Enabled	Stop CPU FAN when entering Suspend mode.

- System After AC Back

The default value is Soft-Off.

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

- Power LED in Suspend

The default value is BLINKING.

BLINKING	Set Power LED in Suspend at BLINKING mode.
ON	Set Power LED in Suspend at ON mode.
OFF/DUAL	Set Power LED in Suspend at OFF/DUAL mode.

- PME Event Wakeup

The default value is Disabled.

Disabled	Disable PME Event Wakeup.
Enabled	Enable PME Event Wakeup.

- ModemRingOn / WakeOnLan

The default value is Enabled.

Disabled	Disable these functions.
Enabled	Enable these functions.

- Resume by Alarm

The default value is Disabled.

Disabled	Disable this function.
Enabled	Enable alarm function to POWER ON system.

If the default value is Enabled.

Date (of Month) Alarm :	0~31
Time (hh: mm: ss) Alarm :	(0~23) : (0~59) : (0~59)

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

The default value is Enabled.

Disabled	Disable this function.
Enabled	Enable monitor IRQ [3-7,9-15] for Green event.

- Primary IDE 0/1

The default value is Disabled.

Disabled	Disable this function.
Enabled	Enable monitor Primary IDE 0/1 for Green event.

- Secondary IDE 0/1

The default value is Disabled.

Disabled	Disable this function.
Enabled	Enable monitor Secondary IDE 0/1 for Green event.

- Floppy Disk

The default value is Enabled.

Disabled	Disable this function.
Enabled	Enable monitor Floppy Disk for Green event.

- Serial Port

The default value is Enabled.

Disabled	Disable this function.
Enabled	Enable monitor Serial Port for Green event.

- Parallel Port

The default value is Disabled.

Disabled	Disable this function.
Enabled	Enable monitor Parallel Port for Green event.

4.9. PNP/PCI CONFIGURATION

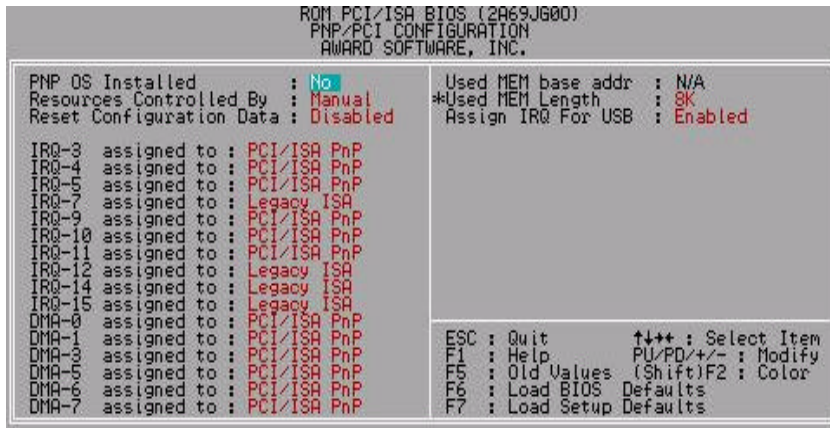


Figure 4.6: PCI Slot Configuration

* This item will show up when "Used MEM base addr" has been set.

- PNP OS Installed

The default value is No.

Yes	Enable PNP OS Installed function.
No	Disable PNP OS Installed function.

- Resources Controlled by

The default value is Manual.

Manual	User can set the PnP resource (I/O Address, IRQ & DMA channels) used by legacy ISA DEVICE.
Auto	BIOS automatically use these PnP rescuers.

- Reset Configuration Data

The default value is Disabled.

Disabled	Disable this function.
Enabled	Enable clear PnP information in ESCD.

- IRQ (7,12,14,15) & IRQ (3,4,5,9,10,11,DMA(0,1,3,5,6,7)) assigned to

The default value is "Legacy ISA" or "PCI/ISA PnP".

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

- Used MEM base addr

The default value is N/A.

N/A	Disable the MEM. block using.
C800 ~ DC00	Select the MEM. block starting address.

- Used MEM Length

The default value is 8K.

8K ~ 64K	Select the MEM. block size.
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- Assign IRQ For USB

The default value is Enabled.

Enabled	Assign a specific IRQ for USB
Disabled	No IRQ is assigned for USB

4.10. LOAD BIOS DEFAULTS

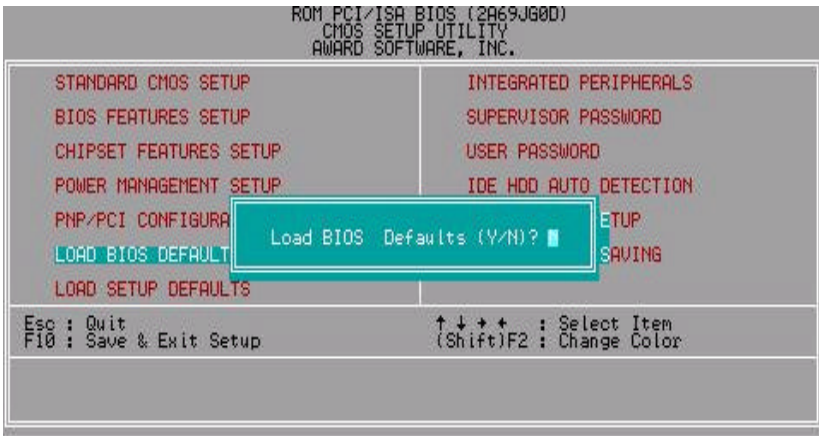


Figure 4.7: Load Bios Defaults

- Load BIOS Defaults

To load BIOS defaults value to CMOS SRAM, enter "Y". If not, enter "N".

4.11. LOAD SETUP DEFAULTS

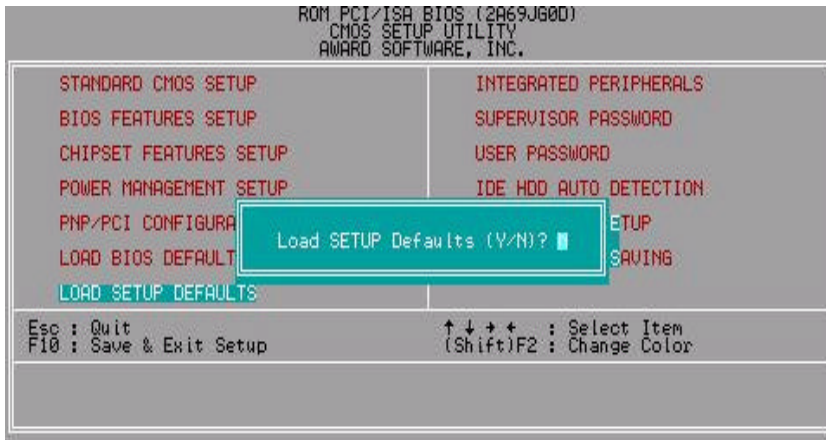


Figure 4.8: Load Setup Defaults

- Load SETUP Defaults
 To load SETUP defaults value to CMOS SRAM, enter "Y". If not, enter "N".

4.12. INTEGRATED PERIPHERALS



Figure 4.9: Integrated Peripherals

* This item will show up when “Keyboard Power On: Multikey” is selected.

- IDE HDD Block Mode

The default value is Enabled.

Enabled	Enable IDE HDD Block Mode
Disabled	Disable IDE HDD Block Mode

- IDE Primary Master PIO (for onboard IDE 1st channel).

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Mode0~4	Manually set the IDE Accessing mode.

- IDE Primary Slave PIO (for onboard IDE 1st channel).

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Mode0~4	Manually set the IDE Accessing mode.

- IDE Secondary Master PIO (for onboard IDE 2nd channel).

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Mode0~4	Manually set the IDE Accessing mode.

- IDE Secondary Slave PIO (for onboard IDE 2nd channel).

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Mode0~4	Manually set the IDE Accessing mode.

- IDE Primary Master UDMA.

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disable UDMA function.

- IDE Primary Slave UDMA.

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disable UDMA function.

- IDE Secondary Master UDMA.

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disable UDMA function.

- IDE Secondary Slave UDMA.

The default value is Auto.

Auto	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disable UDMA function.

- On-Chip Primary PCI IDE

The default value is Enabled.

Enabled	Enable onboard 1st channel IDE port.
Disabled	Disable onboard 1st channel IDE port.

- On-Chip Secondary PCI IDE

The default value is Enabled.

Enabled	Enable onboard 2nd channel IDE port.
Disabled	Disable onboard 2nd channel IDE port.

- USB Keyboard Support

The default value is Disabled.

Enabled	Enable USB Keyboard Support.
Disabled	Disable USB Keyboard Support.

- Onboard FDD Controller

The default value is Enabled.

Enabled	Enable onboard FDD port.
Disabled	Disable onboard FDD port.

- Onboard Serial Port 1

The default value is 3F8/IRQ4.

Auto	BIOS will automatically setup the port 1 address.
3F8/IRQ4	Enable onboard Serial port 1 and address is 3F8.
2F8/IRQ3	Enable onboard Serial port 1 and address is 2F8.
3E8/IRQ4	Enable onboard Serial port 1 and address is 3E8.
2E8/IRQ3	Enable onboard Serial port 1 and address is 2E8.
Disabled	Disable onboard Serial port 1.

- Onboard Serial Port 2

The default value is 2F8/IRQ3.

Auto	BIOS will automatically setup the port 2 address.
3F8/IRQ4	Enable onboard Serial port 2 and address is 3F8.
2F8/IRQ3	Enable onboard Serial port 2 and address is 2F8.
3E8/IRQ4	Enable onboard Serial port 2 and address is 3E8.
2E8/IRQ3	Enable onboard Serial port 2 and address is 2E8.
Disabled	Disable onboard Serial port 2.

- Onboard Parallel port

The default value is 378/IRQ7.

378/IRQ7	Enable onboard LPT port and address is 378/IRQ7.
278/IRQ5	Enable onboard LPT port and address is 278/IRQ5.
Disabled	Disable onboard LPT port.
3BC/IRQ7	Enable onboard LPT port and address is 3BC/IRQ7.

- Parallel Port Mode

The default value is SPP.

SPP	Using Parallel port as Standard Printer Port.
EPP	Using Parallel port as Enhanced Parallel Port.
ECP	Using Parallel port as Extended Capabilities Port.
ECP/EPP	Using Parallel port as ECP & EPP mode.

- PS/2 Mouse Power on

The default value is Disabled.

Disabled	Disable PS/2 Mouse Power on .
Left Double	Click twice on PS/2 mouse left button to Power on system.
Right Double	Click twice on PS/2 mouse right button to Power on system.

- Keyboard Power on

The default value is POWER Key.

Disabled	Disable Keyboard Power on .
Multikey	Enter multikey combination to Power on system.
POWER Key	If your keyboard have "POWER Key" button, you can press the key to power on your system.

- KB Power ON Multikey

Enter	Enter from 1 to 5 characters to set the Keyboard Power On Password.
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4.13. 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.

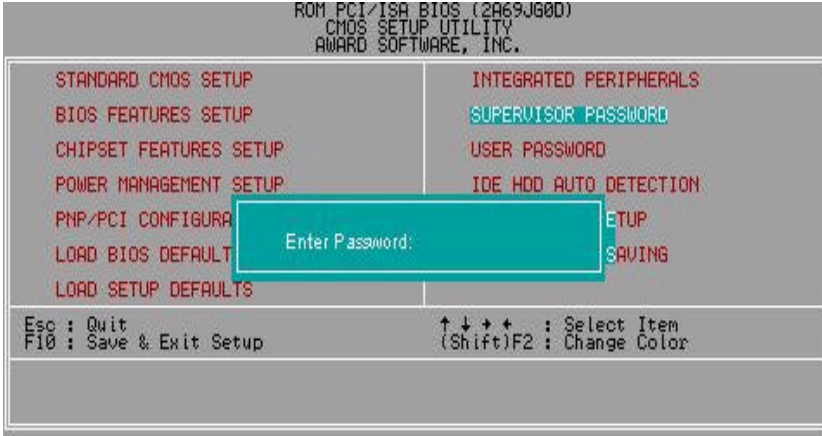


Figure 4.10: Password Setting

Type the password, up to eight 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>.

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.

If you select System at Security Option 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 Security Option in BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

4.14. IDE HDD AUTO DETECTION

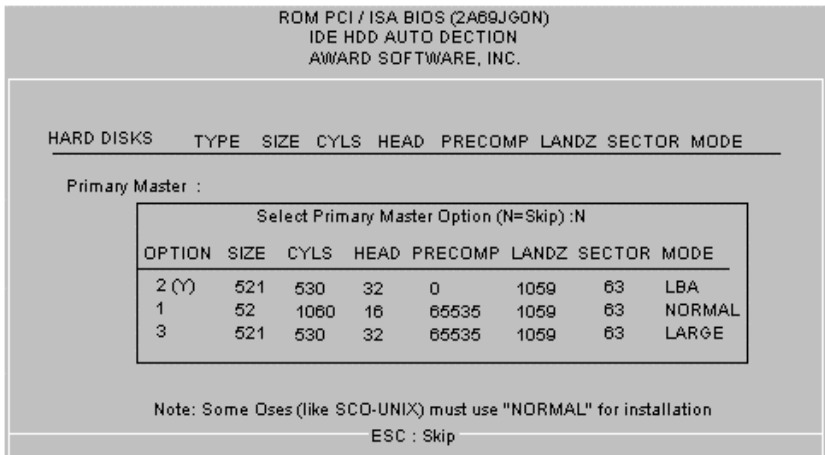


Figure 4.11: IDE HDD Auto Detection

Type "Y" will accept the H.D.D. parameter reported by BIOS.

Type "N" will keep the old H.D.D. parameter setup. If the hard disk cylinder number is over 1024, then the user can select LBA mode or LARGER mode for DOS partition larger than 528 MB.

4.15. SAVE & EXIT SETUP



Figure 4.12: Save & Exit Setup

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

Type "N" will return to Setup Utility.

4.16. EXIT WITHOUT SAVING



Figure 4.13: Exit Without Saving

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

Type "N" will return to Setup Utility.

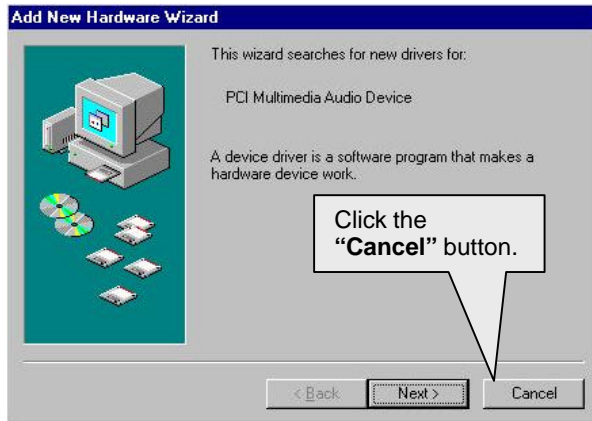
APPENDIX A: Audio Driver Installation

A.1. ESS Solo-1 PCI sound driver installation:

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

When starting Windows 95/98, the operation system will detect that you have a new PCI Multimedia Audio Device, and the **Add New Hardware Wizard** will show up.

STEP 1:



After the system finishes loading. You must insert the **UUCD** Installation CD disk into your CD-ROM, then you can see the AUTORUN window. If it does not show up, please run “D:\Setup.exe”

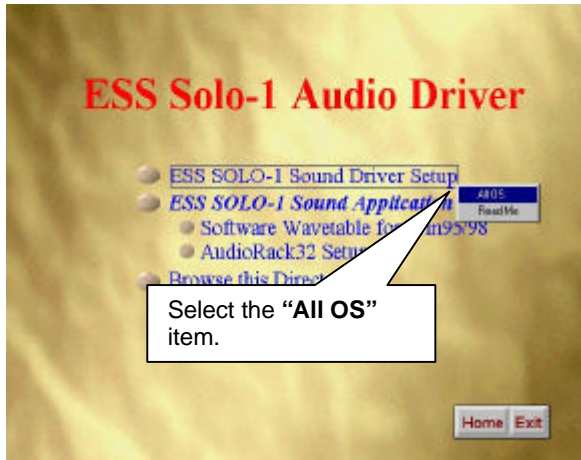
STEP 2:



STEP 3:



STEP 4:

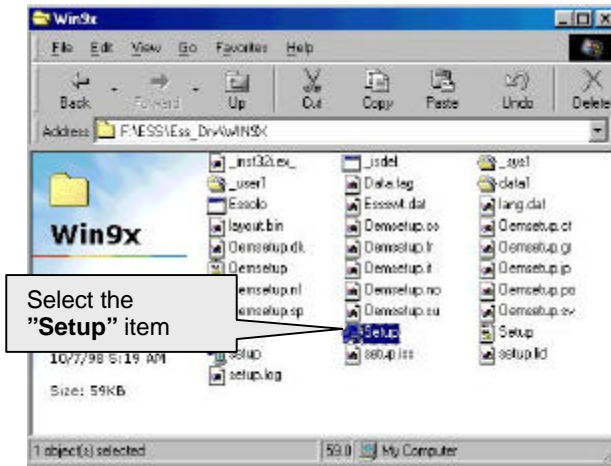


Please select the Operation System you want to install.
(Ex.If you are using windows 98, select the Win9x file folder.
If you are using Windows NT4.0, select the Nt4.0 file folder.)

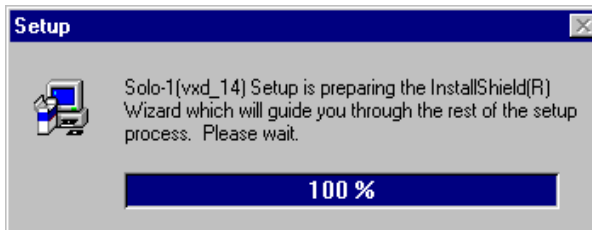
STEP 5:



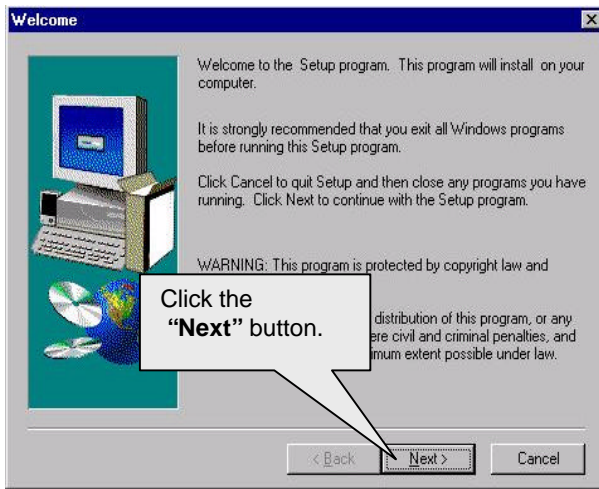
STEP 6:



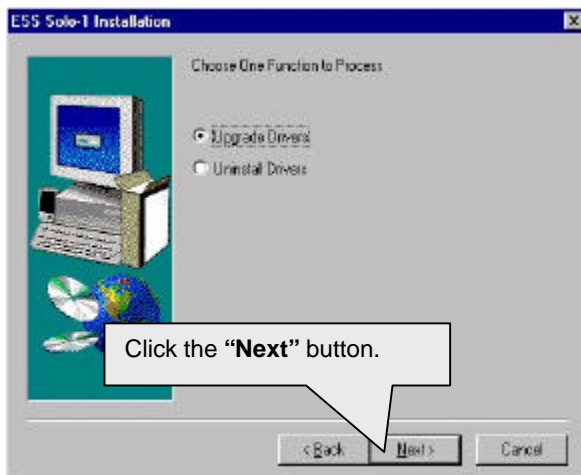
STEP 7:



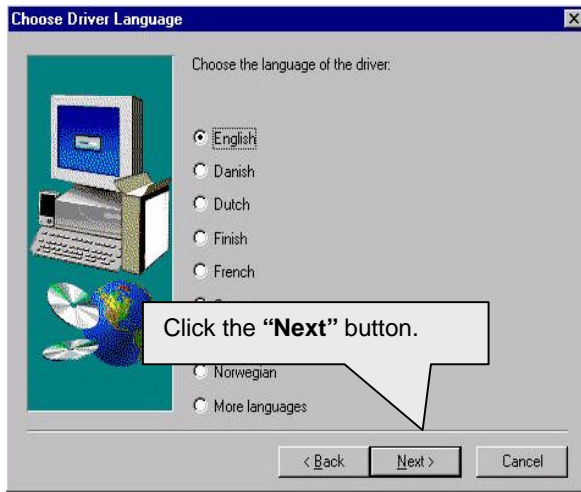
STEP 8:



STEP 9:



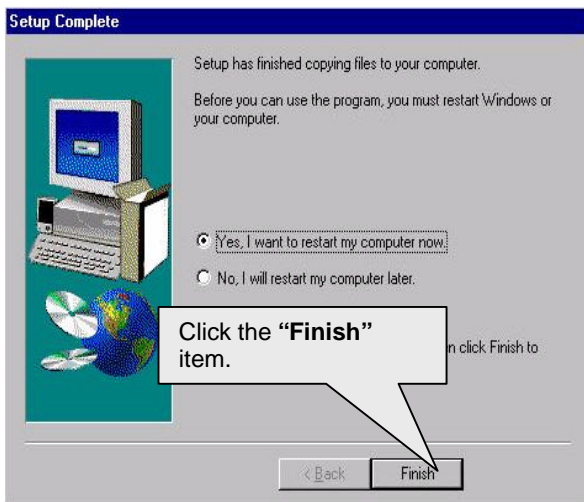
STEP 10:



STEP 11:



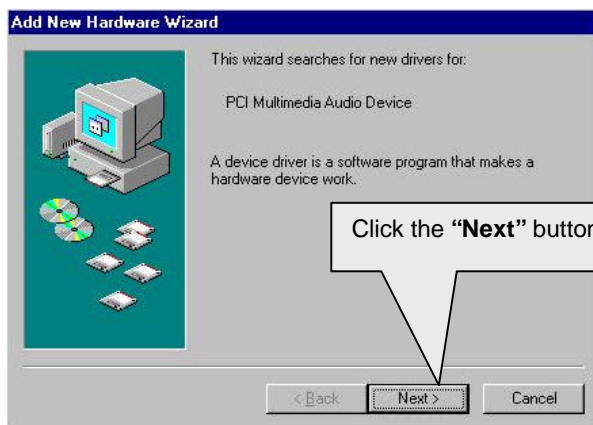
STEP 12:



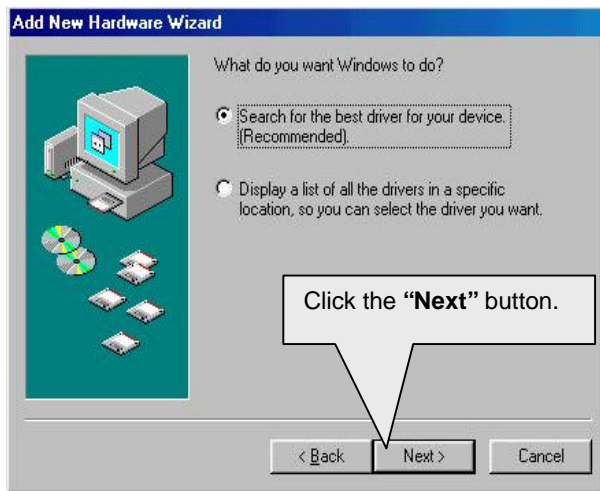
When restarting Windows95/98, the operation system will detect that you have "PCI Multimedia Audio Device", and the **Add New Hardware Wizard** will show up.

Please follow the steps below:

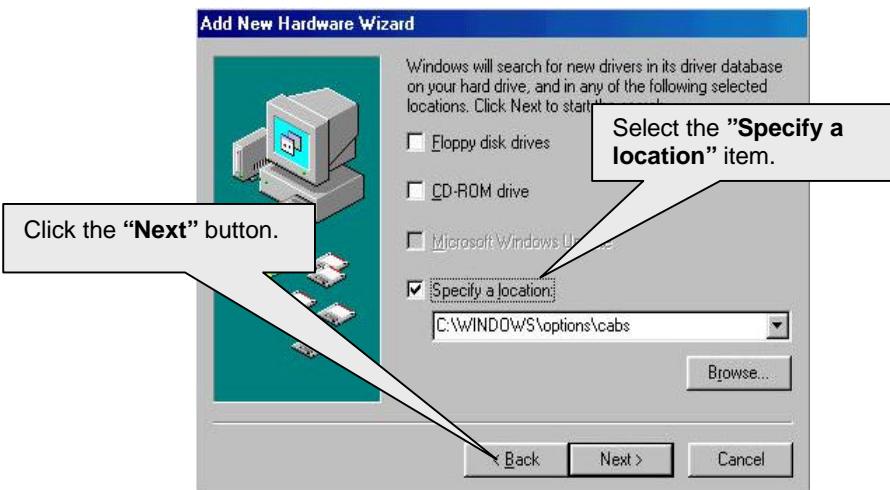
STEP 13:



STEP 14:



STEP 15:



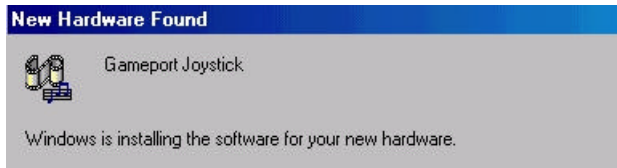
STEP 16:



STEP 17:



STEP 18:

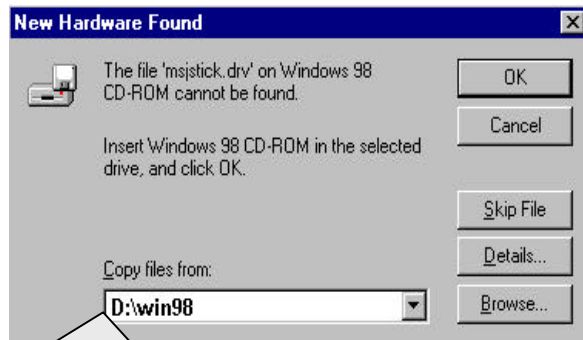


STEP 19:



Click "OK" button

STEP 20:



Please insert Windows 98 CD-ROM and type the path "D:\win98" then click "OK".

Then the sound driver installation is completed.

<p align="center">DECLARATION OF CONFORMITY <small>Per FCC Part 2, Section 2.107(a)</small></p> <p align="center">FC</p> <p>Responsible Party Name: G.B.T. INC. Address: 18365 Valley Blvd., Suite A LA Puente, CA 91744 Phone/Fax No: (818) 854-9338 (818) 854-9339</p> <p>herby declares that the product Product Name: Mother Board Model Number: GA-6LM76LMTA</p> <p>Conforms to the following specifications: FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109(a), Class B Digital Device</p> <p>Supplementary Information: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>Representative Person's Name: <u>ERIC LU</u> Signature: <u>Eric Lu</u> Date: <u>Dec. 25, 1998</u></p>

FCC Compliance Statement:

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 Trädng 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-6LM7/6LM7A

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

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



(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

- | | | | |
|-----------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> EN 60065 | Safety requirements for mains operated electronic and related apparatus for household and similar general use | <input type="checkbox"/> EN 60950 | Safety for information technology equipment including electrical business equipment |
| <input type="checkbox"/> EN 60335 | Safety of household and similar electrical appliances | <input type="checkbox"/> EN 50091-1 | General and Safety requirements for uninterruptible power systems (UPS) |

Manufacturer/Importer

Signature : Rex Lin

(Stamp)

Date : Dec. 25, 1998

Name : Rex Lin