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 batterybacked 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.

| STANDARD CMOS SETUR | INTEGRATED PERIPHERALS |
|-------------------------------------|--|
| BIOS FEATURES SETUP | SUPERVISOR PASSWORD |
| CHIPSET FEATURES SETUP | USER PASSWORD |
| POWER MANAGEMENT SETUP | IDE HOD AUTO DETECTION |
| PNP/PCI CONFIGURATION | SAVE & EXIT SETUP |
| LOAD BIOS DEFAULTS | EXIT WITHOUT SAVING |
| LOAD PERFORMANCE DEFAULTS | |
| sc : Quit 10 : Save & Exit Setup | ↑↓++ : Select Item (Shift)F2 : Change Color |

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.

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• 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 most appropriate value of the system parameters that the system would be in safe configuration.

Load Performance defaults

Performance Defaults indicates the value of the system parameters that the system would be in the best performance 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.

| Date (mm:dd:yy) : Thu, Oct 15 19 Time (hh:mm:ss) : 16 : 5 : 52 | 98 | | | | | |
|--|------|------|---------|---------|-------------------------------|--------------------------------------|
| HARD DISKS TYPE SIZE | CYLS | HEAD | PRECOMP | LANDZ | SECTOR | MODE |
| Primary Master : AUTO 0 Primary Slave : AUTO 0 Secondary Master : AUTO 0 Secondary Slave : AUTO 0 | ଉଉଉଡ | 0000 | 0000 | ଉଉଉଡ | 0000 | AUTO AUTO AUTO AUTO AUTO |
| Drive A : 1.44M, 3.5 in. Drive B : None Floppy 3 Mode Support : Disabled | 1 | | Ext | ended i | Memory: Memory: Memory: | 640) 15360) 384) |
| Video : EGA/UGA Halt On : No Errors | | | - | Total | Memory: | 163848 |

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 |
|-------------------|---|
| All Errors | Whenever the BIOS detects a non-fatal error the system will be stopped and you will be prompted |
| 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 in 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

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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

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

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 |

• Processor Number Feature

This item will set Enabled when you install the Pentium III processor

The default value is Enabled.

| Enabled | Pentium III Processor Number Feature. |
|----------|---------------------------------------|
| Disabled | Disable this function |

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 |

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Boot From LAN First

The default value is Enabled.

| Enabled | Enable Boot From LAN First Function |
|----------|--------------------------------------|
| Disabled | Disable Boot From LAN First Function |

Boot Sequence

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

| System will first search for X1 disk drive then X2 disk |
|---|
| drive and then X3 disk drive. |

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. |

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. |

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.

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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 | Assign a specific IRQ for VGA |
|----------|-------------------------------|
| Disabled | No IRQ is assigned for VGA |

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 Disabled.

| Enabled | Enabled HDD S.M.A.R.T. Capability |
|----------|------------------------------------|
| Disabled | Disabled HDD S.M.A.R.T. Capability |

• Report No FDD For WIN 95

The default value is No.

| No | Assign IRQ6 For FDD. |
|-----|--------------------------------|
| Yes | FDD Detect IRQ6 Automatically. |

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 |

4.7. CHIPSET FEATURES SETUP

| CHÍPSET FÉÁ AWARD SO | TWARE, INC. |
|--|--|
| Reset Case Open Status : No Case Opened : No Slow Down CPU Duty Cycle : Normal Shutdown Temp.(°C/°F) : 75/167 **Temp. Select (°C/°F)** CPU :70/158 **Temperature Alarm ** CPU :No **Current Temp.(°C/°F)** CPU : 33/91 **Fan Fail Alarm ** CPU : 0 POWER :No PANEL:No **Current Fan Speed (RPM)** CPU:5443 POWER :0 PANEL:0 **Current Voltage (U) ** | EDO CASX# MA Wait State EDO RASX# Wait State SDRAM CAS Latency Time DRAM Data Integrity Mode System BIOS Cacheable Video BIOS Cacheable Video RAM Cacheable 16Bit I/O Recovery Time Memory Hole At 15M-16M Delayed Transaction Clock Spread Specturm |
| UCORE :1.95 VGTL :1.52 UCC3:3.35 + 5U: 5.08 +12U: 12.52 -12U:-11.86 - 5U:- 5.09 UBAT: 3.26 5USB:5.05 | ESC: Quit ++++: Select Iter F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : LOAD PERFORMANCE DEFAULTS |

Figure 4.4: Chipset Features Setup

- 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 "Yes" and restart your computer.

Slow Down CPU Duty Cycle

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 $75^\circ C\,/\,167^\circ F$

| 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

| 60°C / 140°F | Monitor CPU Temp. at 60°C / 140°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 |

• 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. |

• Current Temp. (Optional)

Detect Temp. automatically.

• Fan Fail Alarm (Optional)

CPU/POWER/PANEL

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

• Current FAN Speed (RPM) (Optional)

Detect Fan speed status automatically.

 Current Voltage (v) VCORE / VGTL/ VCC3 / ±12V / ±5V /VBAT /5VSB (Optional)

Detect system's voltage status automatically.

• EDO CASx# MA Wait State

The default value is 1

| 1 | Set EDO CASx# MA Wait State to 1. |
|---|-----------------------------------|
| 2 | Set EDO CASx# MA Wait State to 2. |

• EDO RASx# Wait State

The default value is 1

| 1 | Set EDO RASx# Wait State to 1. |
|---|--------------------------------|
| 2 | Set EDO RASx# Wait State to 2. |

SDRAM CAS latency Time

The default value is Auto

| 3 | For 67 / 83 MHz SDRAM DIMM module. |
|------|---|
| 2 | For 100 MHz SDRAM DIMM module. |
| Auto | CAS latency time will be set automatically if you have SPD on SDRAM |

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. |

• System BIOS Cacheable

The default value is Enabled.

| Enabled | Enable System BIOS Cacheable. |
|----------|--------------------------------|
| Disabled | Disable System BIOS Cacheable. |

• Video BIOS Cacheable

The default value is Enabled.

| Enabled | Enable video BIOS Cacheable. |
|----------|-------------------------------|
| Disabled | Disable video BIOS Cacheable. |

• Video RAM Cacheable

The default value is Disabled.

| Disabled | Disable this function. |
|----------|---|
| Enabled | Enable this function to get better VGA performance; while some brands of VGA must be disabled this function (e.g.ET4000W32P). |

• 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.

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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. |

Clock Spread Spectrum

The default value is Disabled.

| Disabled | Disabled this function. |
|----------|--------------------------------|
| Enabled | Enabled Clock Spread Spectrum. |

4.8. POWER MANAGEMENT SETUP

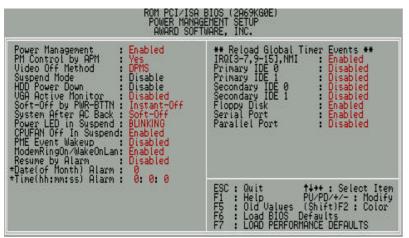


Figure 4.5: Power Management Setup

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

Power Management

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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.) |
| | 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 | Setup the timer to enter Suspend Mode. |
| Hour | |

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. |

• System After AC Back

The default value is Soft-Off.

| Memory By S/W | 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.

| OFF/ Dual | Set Power LED In Suspend to OFF/Dual. |
|-----------|---------------------------------------|
| ON | Set Power LED In Suspend to ON. |
| BLINKING | Set Power LED In Suspend to BLINKING. |

This function is support in PCB version 2.0 and above.

CPUFAN Off In Suspend

The default value is Enabled.

| Disabled | Disable this function. |
|----------|--|
| Enabled | Stop CPU FAN when entering Suspend 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 "Resume by Alarm" 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. |
|----------|------------------------|
| | |

BIOS Configuration

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 | Disabled this function. |
|----------|--|
| Enabled | Enabled monitor Parallel Port for Green event. |

4.9. PNP/PCI CONFIGURATION

| ROM PCI/ISA PNP/PCI CON AWARD SOFT | |
|--|---|
| PNP OS Installed : No Resources Controlled By : Manual Reset Configuration Data : Disabled | Used MEM base addr : N/A *Used MEM Length : 8K Assign IRQ For USB : Enabled |
| IR0-3 assigned to : PCI/ISA PnP IR0-5 assigned to : PCI/ISA PnP IR0-5 assigned to : PCI/ISA PnP IR0-7 assigned to : PCI/ISA PnP IR0-9 assigned to : PCI/ISA PnP IR0-10 assigned to : PCI/ISA PnP IR0-11 assigned to : PCI/ISA PnP IR0-12 assigned to : Legacy ISA IR0-14 assigned to : Legacy ISA IR0-15 assigned to : Legacy ISA IR0-15 assigned to : Legacy ISA IR0-16 assigned to : Legacy ISA | |
| DMA-1 assigned to : PCI/ISA PnP DMA-3 assigned to : PCI/ISA PnP DMA-5 assigned to : PCI/ISA PnP DMA-5 assigned to : PCI/ISA PnP DMA-6 assigned to : PCI/ISA PnP DMA-7 assigned to : PCI/ISA PnP | ESC : Quit 14++ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : LOAD PERFORMANCE DEFAULTS |

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. |
|----------|--|
| ESCD | Clear PnP information in ESCD. |
| DMI | Update Desktop Management Information data. |
| Both | Clear PnP information in ESCD & update DMI data. |

• IRQ (3,4,5,7,9,10,11,12,14,15), 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. |
|----------|-----------------------------|
| | |

• 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

| STANDARD CMOS SETUP | INTEGRATED PERIPHERALS |
|---------------------------------------|--|
| BIOS FEATURES SETUP | SUPERVISOR PASSWORD |
| CHIPSET FEATURES SETUP | USER PASSWORD |
| POWER MANAGEMENT SETUP | IDE HDD AUTO DETECTION |
| PNP/PCI CONFIGURA | Faults (V/N)? M SRVING |
| LOAD PERFORMANCE DEFAULTS | |
| Esc : Quit F10 : Save & Exit Setup | ↑↓ + + : Select Item (Shift)F2 : Change Color |

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 PERFORMANCE DEFAULTS

Figure 4.8: Load PERFORMANCE Defaults

Load PERFORMANCE Defaults

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

4.12. INTEGRATED PERIPHERALS

| ROM PCI∕ISA E | BIOS (2669KG0E) |
|--|--|
| INTEGRATED F | PERIPHERALS |
| AWARD SOFTU | WARE, INC. |
| IDE HDD Block Mode : Enabled IDE Primary Master PIO : Auto IDE Primary Slave PIO : Auto IDE Secondary Master PIO : Auto IDE Secondary Slave PIO : Auto IDE Primary Master UDMA : Auto IDE Primary Slave UDMA : Auto IDE Secondary Master UDMA : Auto IDE Secondary Slave UDMA : Auto On-Chip Primary PCI IDE: Enabled USB Keyboard Support : Disabled | PS∕2 Mouse Power On : Disabled Keyboard Power On : POWER Key *KB Power On Multikey : Enter |
| Onboard FDC Controller : Enabled | ESC : Quit 14++ : Select Item |
| Onboard Serial Port 1 : 3F8/IR04 | F1 : Help PU/PD/+/- : Modify |
| Onboard Serial Port 2 : 2F8/IR03 | F5 : Old Values (Shift)F2 : Color |
| Onboard Parallel Port : 378/IR07 | F6 : Load BIOS Defaults |
| Parallel Port Mode : SPP | F7 : LOAD PERFORMANCE DEFAULTS |

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. |

6BXE

• 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 FDC Controller

The default value is Enabled.

| Enabled | Enable onboard FDC port. |
|----------|---------------------------|
| Disabled | Disable onboard FDC 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 . |
|----------|--|
| DblClick | Click twice on PS/2 mouse left/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 you keyboard have "POWER Key " button, you can |
| | press the key to power on your system . |

• KB Power ON Multikey

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

You can power on your system by entering the keyboard power on password. If your password consists of more than one character, you have to press the ENTER key after entering the password.

4.13. SUPERVISOR PASSWORD / 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.

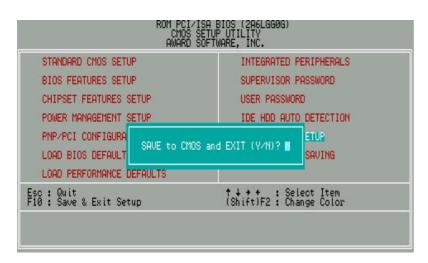
4.14. IDE HDD AUTO DETECTION

| ROM PCI / ISA BIOS (2A69JGON) IDE HDD AUTO DECTION AWARD SOFTWARE, INC. | | | | | | | | |
|--|--------|------|------|------|---------|-------|--------|--------|
| HARD DISKS TYPE SIZE CYLS HEAD PRECOMP LANDZ SECTOR MODE | | | | | | | | |
| Primary Master : | | | | | | | | |
| Select Primary Master Option (N=Skip) :N | | | | | | | | |
| | OPTION | SIZE | CYLS | HEAD | PRECOMP | LANDZ | SECTOR | MODE |
| | 2 (Y) | 521 | 530 | 32 | 0 | 1059 | 63 | LBA |
| | 1 | 52 | 1060 | 16 | 65535 | 1059 | 63 | NORMAL |
| | 3 | 521 | 530 | 32 | 65535 | 1059 | 63 | LARGE |
| | | | | | | | | |
| Note: Some Oses (like SCO-UNIX) must use "NORMAL" for installation ESC : Skip | | | | | | | | |

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.

BIOS Configuration

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.

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 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-6BXE

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, | I EN 50081-1 | Generic emission standard Part 1: Residual, commercial and light industry | | | | | | |
| | portable tools and similar electrical apparatus | I EN 50082-1 | 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 | | (EC conformity | r 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 | | | | | | | | | |
| | | | Signature Rex Lin | | | | | | |
| | Date | · Aug 05 1998 | Name : Rev Lin | | | | | | |

(Stamp)

Date : Aug. 05, 1998

Name : Rex Lin