## 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 <Del> immediately will allow you to enter Setup.

The other way to enter Setup is to power on the computer, when the below message appears briefly at the bottom of the screen during the POST (Power On Self Test), press <Del> Key or simultaneously press <Ctrl>, <Alt>, and <Esc> keys.

#### • Press DEL 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 <Del> 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      | Calendar, only for Status Page Setup Menu.                                                                                                     |
| 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 setup functions and 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 a 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 items of PNP/PCI configuration features.

#### Load BIOS defaults

BIOS defaults indicates the most appropriate value of the system parameter which the system would be in safe configuration.

#### Load Performance defaults

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

### • Integrated Peripherals

This setup page includes all the items of peripherals features.

#### 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 parameter.

### Save & exit setup

Save CMOS value changes to CMOS and exit setup.

### Exit without save

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>, <date> <month> <year>. Press <F3> to show the calendar.

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

#### Time

The time 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 identify the types of hard disk from drive C to drive F

4 devices that has been installed in the computer.

There are three options for definable type; User, Auto and None.

Type User is user-definable; and type Auto means automatically detecting HDD's type and None means No IDE HDD installed.

If you select Type User, related information is asked to be entered to the following items.

Enter the information directly from the keyboard and press <Enter>.

Those information should be provided in the documentation from 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 identify 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. | 5-1/4 inch PC-type standard drive; 360 kilobyte      |  |
|                | capacity.                                            |  |
| 1.2M, 5.25 in. | 5-1/4 inch AT-type high-density drive; 1.2 megabyte  |  |
|                | capacity (3-1/2 inch when 3 Mode is Enabled).        |  |
| 720K, 3.5 in.  | 3-1/2 inch double-sided drive; 720 kilobyte capacity |  |
| 1.44M, 3.5 in. | 3-1/2 inch double-sided drive; 1.44 megabyte         |  |
|                | capacity.                                            |  |
| 2.88M, 3.5 in. | 3-1/2 inch double-sided drive; 2.88 megabyte         |  |
|                | capacity.                                            |  |

## 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 be stopped 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, 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 64K 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 to 1024 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

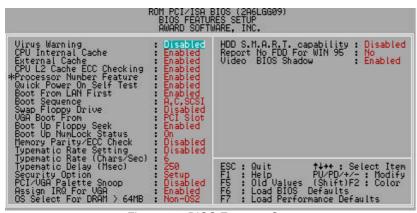


Figure 4.3: BIOS Features Setup

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

This category flashes on the screen. During and after the system boots up, any attempt to write to the boot sector or partition table of the hard disk drive will halt the system and the following error message will appear, in the mean time, you can run anti-virus program to locate the problem.

The 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 appears 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.

| Enabled  | Enable cache function.  |
|----------|-------------------------|
| Disabled | Disable cache function. |

## CPU L2 Cache ECC Checking

The default value is Enabled.

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

### Processor Number Feature

This item will show up 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 set to Enable, BIOS will skip some check items during POST.

The default value is Enabled.

| Enabled  | Enable quick POST. |
|----------|--------------------|
| Disabled | Normal POST.       |

### Boot From LAN First

The default value is Enabled.

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

## Swap Floppy Drive

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

## VGA Boot From

The default value is PCI Slot

| AGP      | System will boot from AGP Display Card  |
|----------|-----------------------------------------|
| PCI Slot | System will boot from PCI Slot VGA Card |

### 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.  |

# Memory Parity/ECC Check

The default value is Disabled.

| Enabled  | Enabled Memory Parity/ECC Check Function.  |
|----------|--------------------------------------------|
| Disabled | Disabled Memory Parity/ECC Check Function. |

# Typematic Rate Setting

| 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 characters. 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

The default value is Setup.

| Setup  | The system will boot and access to Setup will be denied if   |
|--------|--------------------------------------------------------------|
|        | the correct password is not entered at the prompt.           |
| System | The system will not boot and 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. If the user does 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 freely.
- PCI/VGA Palette Snoop

The default value are Disabled.

| Enable | ed  | For having Video Card on ISA Bus and VGA Card on PCI |
|--------|-----|------------------------------------------------------|
|        |     | Bus.                                                 |
| Disab  | led | For VGA Card only.                                   |

## Assign IRQ For VGA

| Enabled  | Assign IRQ For VGA     |
|----------|------------------------|
| Disabled | Not assign IRQ 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 Disable.

| Enable  | Enable HDD S.M.A.R.T. Capability  |
|---------|-----------------------------------|
| Disable | Disable 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 will copied to RAM, however, it is optional from chipset design. Video Shadow will increase the video speed.

The default value is Enable.

| Enabled  | Video shadow is enabled.  |
|----------|---------------------------|
| Disabled | Video shadow is disabled. |

## 4.7. CHIPSET FEATURES SETUP

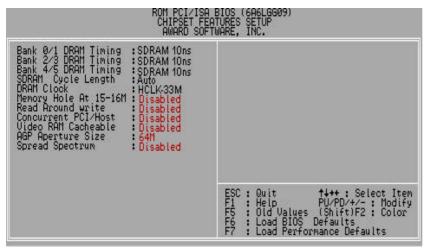


Figure 4.4: Chipset Features Setup

Bank 0/1 DRAM Timing

The default value is SDRAM 10ns.

| SDRAM 10ns | For SDRAM 10ns DRAM timing operation. |
|------------|---------------------------------------|
| Turbo      | For Turbo DRAM timing operation.      |

Bank 2/3 DRAM Timing

The default value is SDRAM 10ns.

| SDRAM 10ns | For SDRAM 10ns DRAM timing operation. |
|------------|---------------------------------------|
| Turbo      | For Turbo DRAM timing operation.      |

Bank 4/5 DRAM Timing

The default value is SDRAM 10ns.

| SDRAM 10ns | For SDRAM 10ns DRAM timing operation. |
|------------|---------------------------------------|
| Turbo      | For Turbo DRAM timing operation.      |

# • SDRAM Cycle Length

The default value is Auto.

| 3    | For Slower SDRAM DIMM module.                                       |
|------|---------------------------------------------------------------------|
| 2    | For Fastest SDRAM DIMM module.                                      |
| Auto | CAS latency time will be st automatically if you have SPD on SDRAM. |

## DRAM Clock

The default value is HCLK-33M.

| Host CLK | Set DRAM CLK equal to Host CLK. |
|----------|---------------------------------|
| HCLK-33M | Set DRAM CLK to HCLK-33M.       |

# Memory Hole AT 15-16M

The default value is Disabled.

| 15M-16M  | Set Address=15-16MB relocate to ISA BUS. |
|----------|------------------------------------------|
| Disabled | Normal Setting.                          |

## Read Around write

The default value is Disabled.

| Enabled  | When set Enabled this feature speeds up data read performance. |
|----------|----------------------------------------------------------------|
| Disabled | Normal operation.                                              |

## Concurrent PCI/Host

The default value is Disabled.

| Enabled  | Enabled Concurrent PCI/Host.  |
|----------|-------------------------------|
| Disabled | Disabled Concurrent PCI/Host. |

## • Video RAM Cacheable

| 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).                                         |

# AGP Aperture Size

The default value is 64MB.

| 64MB  | Set AGP Aperture Size to 64MB.  |
|-------|---------------------------------|
| 32MB  | Set AGP Aperture Size to 32MB.  |
| 16MB  | Set AGP Aperture Size to 16MB.  |
| 8MB   | Set AGP Aperture Size to 8MB.   |
| 4MB   | Set AGP Aperture Size to 4MB.   |
| 128MB | Set AGP Aperture Size to 128MB. |

# Spread Spectrum

| Disabled | Normal                     |
|----------|----------------------------|
| 0. 50%   | Set Spread Spectrum 0. 50% |
| 0. 25%   | Set Spread Spectrum 0. 25% |

# 4.8. POWER MANAGEMENT SETUP



Figure 4.5: Power Management Setup

### Power Management

The default value is User Define.

| User Define | For configuring our own power management features. |
|-------------|----------------------------------------------------|
| Min Saving  | Enable Green function.                             |
| Man Saving  | Disable Green function.                            |

# PM Control by APM

The default value is Yes.

| Yes | Enabled software APM function.  |
|-----|---------------------------------|
| No  | Disabled software APM function. |

# Video off Option

The default value is Suspend->Off.

| Suspend->Off   | Set Video off if system enter Suspend Mode. |
|----------------|---------------------------------------------|
| Always On      | Set Video always on.                        |
| All Modes->Off | Set Video All Modes.                        |

## Video Off Method

The default value is DPMS Support.

| 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 Support     | BIOS will use DPMS Standard to control VGA       |
|                  | card. (The Green type VGA card will turn of V/H- |
|                  | SYNC automatically.)                             |

# Soft-off by PWRBTN

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

# CPU FAN In Suspend

The default value is Off.

| On  | Disable this function.                   |
|-----|------------------------------------------|
| Off | Stop CPU FAN when entering Suspend mode. |

# HDD Power Down

| Disabled   | Disabled HDD Power Down mode function.            |
|------------|---------------------------------------------------|
| 1-15 mins. | Enabled HDD Power Down mode between 1 to 15 mins. |

# Suspend Mode

The default value is Disabled.

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

### VGA

The default value is OFF.

| OFF | Disable monitor VGA activity. |
|-----|-------------------------------|
| ON  | Enable monitor VGA activity.  |

## LPT & COM

The default value is LPT/COM.

| LPT/COM | Enabled LPT/COM Ports Activity. |
|---------|---------------------------------|
| NONE    | Normal Operation.               |
| LPT     | Enabled LPT Ports Activity.     |
| COM     | Enabled COM Ports Activity.     |

## HDD & FDD

The default value is ON.

|   | NC  | Enabled HDD & FDD Ports Activity  |
|---|-----|-----------------------------------|
| С | )FF | Disabled HDD & FDD Ports Activity |

### DMA/master

The default value is OFF.

| ON  | Don't detect DMA/master PM event. |
|-----|-----------------------------------|
| OFF | Normal Operation.                 |

# Wake Up On LAN/Ring

| Enabled  | Enable Wake Up On LAN/Ring  |
|----------|-----------------------------|
| Disabled | Disable Wake Up On LAN/Ring |

# RTC Alarm Resume

The default value is Disabled.

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

# If the "RTC Alarm Resume" is Enabled.

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

# Primary INTR

The default value is ON.

| ON  | Primary INTR function is on. |
|-----|------------------------------|
| OFF | Normal Operation.            |

# • IRQ [3-7,9-15]

The default value is Primary/Secondary/Disabled.

| Disabled  | Disable this function.                     |
|-----------|--------------------------------------------|
| Primary   | The resource is used by Primary device .   |
| Secondary | The resource is used by Secondary device . |

# 4.9. PNP/PCI CONFIGURATION

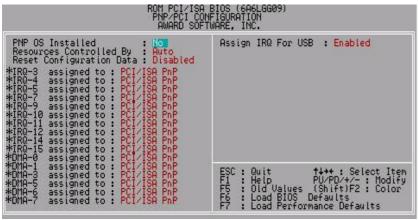


Figure 4.6: PCI Slot Configuration

 $\mbox{\ensuremath{\$}}\mbox{These}$  item will show up when "Resources Controlled By :Manual" is select.

## 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 Auto.

| 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

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

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

The default value is "PCI/ISA PnP".

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

Assign IRQ For USB

| 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 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**

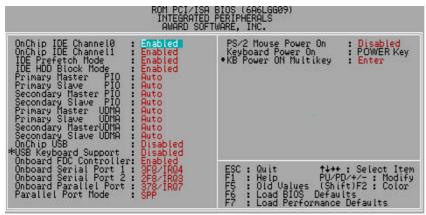


Figure 4.9: Integrated peripherals

\*When OnChip USB select "Enabled", "USB Keyboard Support" will show up.

- This item will show up when "Keyboard Power On: Multikey" is selected.
- OnChip IDE Channel 0

The default value is Enabled.

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

OnChip IDE Channel 1

The default value is Enabled.

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

IDE Prefetch Mode

| Enabled  | Enabled IDE Prefetch Mode.  |
|----------|-----------------------------|
| Disabled | Disabled IDE Prefetch Mode. |

## • IDE HDD Block Mode

The default value is Enabled.

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

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.                 |

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.                 |

• 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.                 |

• 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.                       |

# Primary Master UDMA.

The default value is Auto.

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

# Primary Slave UDMA.

The default value is Auto.

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

# Secondary Master UDMA.

The default value is Auto.

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

# • Secondary Slave UDMA.

The default value is Auto.

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

# OnChip USB

The default value is Disabled

| Enabled  | Enabled OnChip USB Controller.  |  |
|----------|---------------------------------|--|
| Disabled | Disabled OnChip USB Controller. |  |

# USB Keyboard Support

| ı | Cooblad  | Franklad LICD Kaybaard Curanart |
|---|----------|---------------------------------|
|   | Enabled  | Enabled USB Keyboard Support.   |
|   | Disabled | Disabled 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. |  |  |
| 3BC/IRQ7 | Enable onboard LPT port and address is 3BC/IRQ7. |  |  |
| Disabled | Disable onboard LPT port.                        |  |  |

## 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 | Double click twice on PS/2 left or right bottom. |  |

## Keyboard Power on

The default value is POWER Key.

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

# KB Power ON Multikey

| Enter | 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 / 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 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 will confirm the password being disabled.

Once the password is disabled, the system will boot and you can enter Setup freely.

### PASSWORD DISABLED

If you select System at Security Option of 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.

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

### 4.14. IDE HDD AUTO DETECTION

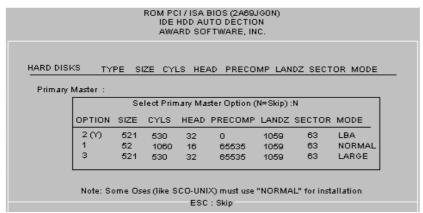


Figure 4.11: IDE HDD Auto Detection

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 NO. is over 1024, then the user can select LBA mode or LARGE 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: VIA Chipset Driver Installation**

When loading the VIA drivers for the system, the Windows version should be OSR 2.1 or later or Windows 98 Bata3 or later.

If your system version is Win95 or OSR 2.0, You must use the **USB support update** (make sure the update language is the same with your system language) to upgrade your system to OSR 2.1.

● You can found the USB support update in the April 1997 MSDN Disc1\OSR2\USBSUPP.



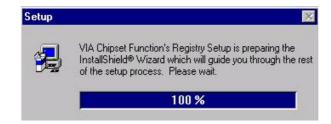
# A.1 VIA Patch 95/98 Driver Ver1.1 (Win95/98 ONLY)

## **Step By Step Installation**

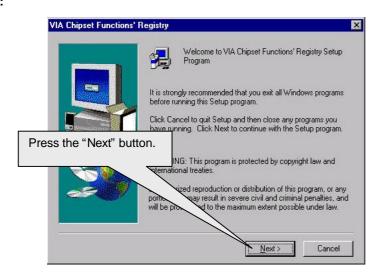
## Step 1:



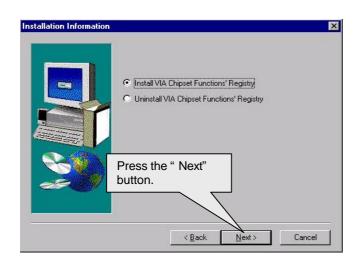
# Step 2:



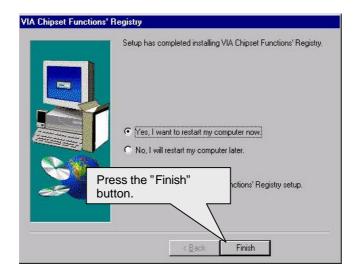
# Step 3:



#### Step 4:



# Step 5:



# Step 6:

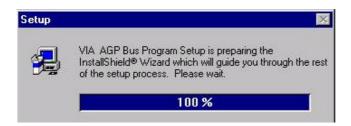
System will restart and start up using the VIA chipset driver.

#### A.2 VIA AGP Driver Ver.3.2 (Win95/98 ONLY)

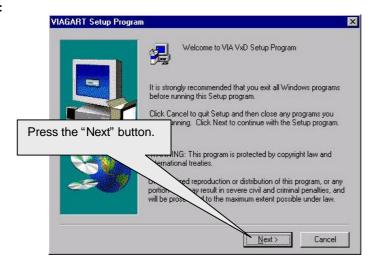
#### Step 1:



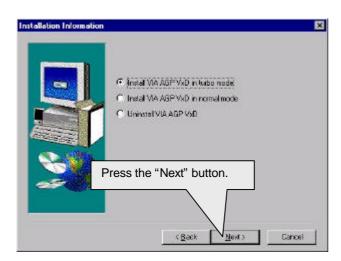
#### Step 2:



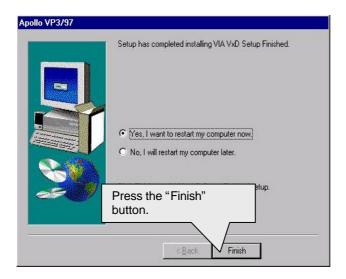
#### Step 3:



# Step 4:



# Step 5:

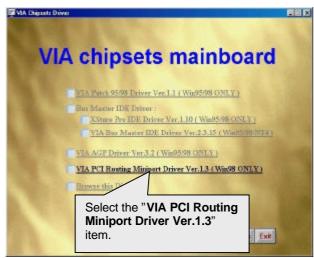


# Step 6:

System will restart and start up using the VIA chipset driver.

# A.3 VIA PCI Routing Miniport Driver Ver.1.3 (Win98 ONLY)

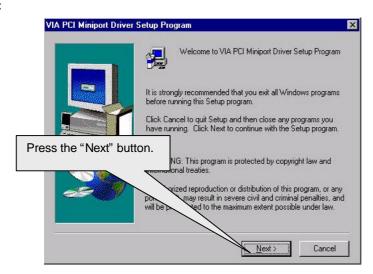
#### Step 1:



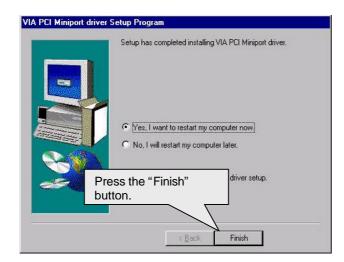
#### Step 2:



#### Step 3:



#### Step 4:

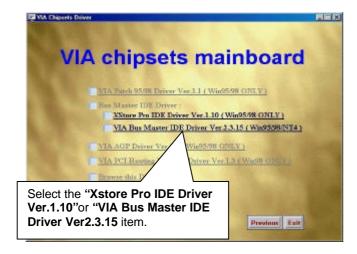


#### Step 5:

System will restart and start up using the VIA chipset driver.

#### A.4 Bus Master IDE Driver

We support two kinds of high performance IDE Bus master (Ultra DMA) Drivers. You could install one of them to enable the DMA operation of your hard disk/CD-ROM drives.





#### **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 Trading 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-6VXE

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<br>of radio disturbance characteristics of<br>industrial, scientific and medical (ISM<br>high frequency equipment | ☐ EN 61000-3-2*<br>☑ EN60555-2 | Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics"            |  |  |  |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|--|--|--|
| ☐ EN55013                                | Limits and methods of measurement<br>of radio disturbance characteristics of<br>broadcast receivers and associated<br>equipment                     | ☐ EN61000-3-3*<br>☑ EN60555-3  | Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations" |  |  |  |
| □EN 55014                                | Limits and methods of measurement<br>of radio disturbance characteristics of<br>household electrical appliances,                                    | ⊠ EN 50081-1                   | Generic emission standard Part 1:<br>Residual, commercial and light industry                                          |  |  |  |
|                                          | portable tools and similar electrical apparatus                                                                                                     | ☑ EN 50082-1                   | Generic immunity standard Part 1:<br>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:<br>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<br>☐ part 10<br>☐ part 12 | Cabled distribution systems; Equipment for receiving and/or <b>distribution</b> from sound and television signals                                   | ☐ EN 50091- 2                  | EMC requirements for uninterruptible power systems (UPS)                                                              |  |  |  |
| □ CE marking                             |                                                                                                                                                     | (EC conformity r               | narking)                                                                                                              |  |  |  |
|                                          | The manufacturer also declar with the actual required safet                                                                                         | res the conformity of abo      | ve mentioned product                                                                                                  |  |  |  |
| ■ EN 60065                               | Safety requirements for mains operated electronic and related apparatus for household and similar general use                                       | ☐ EN 60950                     | Safety for information technology equipmer 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)                                               |  |  |  |
|                                          | <u>Manufacturer/Importer</u>                                                                                                                        |                                |                                                                                                                       |  |  |  |
|                                          |                                                                                                                                                     |                                | Signature : Rex Lin                                                                                                   |  |  |  |
|                                          | (Stamp)                                                                                                                                             | Date: Jan. 16, 1999            | Name : Rex Lin                                                                                                        |  |  |  |