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.

ROM PCI/ISA E CMOS SETUF AWARD SOFTV	
STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	USER PASSWORD
CHIPSET FEATURES SETUP	IDE HDD AUTO DETECTION
POWER MANAGEMENT SETUP	SAVE & EXIT SETUP
PNP/PCI CONFIGURATION	EXIT WITHOUT SAVING
LOAD BIOS DEFAULTS	
LOAD PERFORMANCE DEFAULTS	
Esc : Quit F10 : 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.

• Chipset features setup

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

• Power management setup

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

• PNP/PCI configuration

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

Load bios defaults

Bios Defaults indicates the value of the system parameters 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 onboard peripherals.

User password

Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup.

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.

	S	PCI/ISA TANDARD WARD SOF	CMOS	SETUP	>			
Date (mm:dd:yy) : Time (hh:mm:ss) :								
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANUZ	SECTOR	MODE
Primary Master Primary Slave Secondary Master Secondary Slave	: Auto : Auto : Auto : Auto : Auto	0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	AUTO AUTO AUTO AUTO
Drive A : 1.44M, Drive B : None Floppy 3 Mode Sup Video : EGA/VGA	port : Di	sabled		E×	tended	Memory:	640 15360 384	К
Halt On : No Erro					Total	Memory:	16384	к
ESC : Quit F1 : Help	t 1 (Shi	ft)F2 :	Selec Chang	t Ite e Col	or	PU/PD/	/+/- : M	lodify

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/KeyThe 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 address space. This is memory that can be used for different applications.

4-7

6BXDS

Bios Configuration

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

	ROM PCI/ISA E BIOS FEATUR AWARD SOFT	
CPU Internal Cache External Cache CPU L2 Cache ECC Checking Quick Power On Self Test CPU Update Data Boot From LAN First Boot Sequence Swap Floppy Drive VGA Boot From Boot Up Ploppy Seek Boot Up NumLock Status Typematic Rate Setting Typematic Rate (Chars/Sec)	: Enabled : Enabled : Disabled : Enabled : Enabled : Ac,sCSI : Disabled : AGP : Enabled : On : Disabled : 6	Video BIOS Shadow : Enabled
MPS Version Control For US	1.1	ESC: Quit (1+++: Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIDS Defaults F7 : LOAD PERFORMANCE DEFAULTS

Figure 4.3: BIOS Features Setup

Virus Warning

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

Default value is Disabled.

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

CPU Internal Cache / External Cache

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

Enabled	Enable cache
Disabled	Disable cache

CPU L2 Cache ECC Checking

The default value is Disabled.

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

Quick Power On Self Test

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

The default value is Enabled.

Enabled	Enable quick POST
Disabled	Normal POST

• CPU Update Data

The default value is Enabled.

Enabled	Enable CPU Update Data
Disabled	Normal CPU Update Data

Boot From LAN First

The default value is Enabled.

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.

X1, X2, X3	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	System will boot from AGP Display Card
PCI	System will boot from PCI 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

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 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

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

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

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

The default value is Disabled.

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

Assign IRQ For VGA

The default value is Enabled.

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

MPS Version Control For OS

The default value is 1.1.

1.1	MPS Version Control For OS : 1.1
1.4	MPS Version Control For OS : 1.4

OS Select For DRAM>64MB

The default value is Non-OS2.

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

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

	ROM PCI/ISA E CHIPSET FEATUR AWARD SOFTW		
EDD CASx# MA Wait State EDD RASx# Wait State SDRAM CAS Latency Time DRAM Data Integrity Mode System BIOS Cacheable Video BIOS Cacheable 16 Bit I/O Recovery Time Memory Hole At 15M-16M Delayed Transaction Clock Spread Spectrum Slow Down CPU Duty Cycle Alarm When CPU Overheat CPU1 Temperature Select	: 1 : Auto : Non-ECC : Enabled : Disabled : 1 : Disabled : Disabled : Disabled : Normal : Disabled : S5°C/149°F	Current CPU1 Temperature Current CPU2 Temperature Current CPU Fan1 Speed Current CPUV Fan2 Speed Current CPUVCore A Current CPUVCore B Current +3.3V Current +5V Current +12V Current +12V Current +12V Current +12V Current Stery Life	:40 ⁹ C/104 ⁹ F :40 ⁹ C/104 ⁹ F :5625 RPM :5625 RPM :1.98V :1.98V :3.46V :5.02V :12.28V :11.81V :5.09V :0K
CPUFan1 Control * CPUI Fan Fail Alarm CPU2 Temperature Select CPUFan2 Control * CPU2Fan Fail Alarm	: Disabled : Disabled : 65°C/149°F : Disabled : Disabled	F1 : Help PU/PD/-	

Figure 4.4: Chipset Features Setup

* This item will show up when CPUFan Control set to Enabled.

• 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.
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

• Slow Down CPU Duty Cycle (Optional)

The default value is Normal.

Normal	Disable Slow Down CPU Duty Cycle.
12.5%	Set Slow Down CPU Duty Cycle to 12.5%.
25.0%	Set Slow Down CPU Duty Cycle to 25.5%.
37.5%	Set Slow Down CPU Duty Cycle to 37.5%.
50.0%	Set Slow Down CPU Duty Cycle to 50.0%.
62.5%	Set Slow Down CPU Duty Cycle to 62.5%.
75.0%	Set Slow Down CPU Duty Cycle to 75.0%.

• Alarm When CPU Overheat (Optional)

The default value is Disabled.

Disabled	Disable this function.
Enabled	Alarm When the temperature of CPU exceeds the limit.

• CPU Temperature Select (Optional)

The default value is 75°C / 167°F. (Selectable from 65°C/ 158°F to 95°C / 203°F)

75°C / 167°F	Monitor CPU Temp. at 75°C / 167°F, if Temp. > 75°C
	/ 167°F will cause system alarming & slow down CPU
	speed.

• CPUFan1&2 Control (Optional)

The default value is Disabled.

Disabled	Disable this function.
Enabled	System will check the CPUFAN status.

Bios Configuration

• CPUFan1&2 Fail Alarm (Optional)

The default value is Disabled.

Disabled	Disable this function.
Enabled	Alarm When CPUFAN Failed.

- Current CPU1&2 Temperature (Optional)
 Detect CPU Temperature automatically.
- Current CPUFAN1&2 Speed (Optional)
 Detect CPU Fan speed status automatically.
- Current CPU Vcore A / B ,+3.3V , ±12V , ±5V (Optional)
 Detect system's voltage status automatically.
- Current Battery Life (Optional)

The default value depends on system monitoring Battery status.

Fail	The Battery (3V) voltage is out of SPEC.
OK	The Battery (3V) voltage is in SPEC.

4.8. POWER MANAGEMENT SETUP

ROM PCI/ISA E POWER MANAGI AWARD SOFT	
Power Management : Enabled PM Control by APM : Yes Video Off Method : DPMS Suspend Mode : Disable HDD Power Down : Disable VGA Active Monitor : Disabled Soft-Off by PWR-BITN : Instant-Off CPUFAN Off In Suspend: Enabled Resume by Alarm : Enabled *Date(of Month) Alarm : 0 *Time(hh:mm:ss) Alarm : 0:0:0	** Reload Global Timer Events ** IRQ[3-7,9-15],NMI : Enabled Primary IDE 0 : Disabled Secondary IDE 1 : Disabled Secondary IDE 1 : Disabled Floppy Disk : Enabled Serial Port : Enabled Parallel Port : Disabled
	ESC : Quit 11+++ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : LOAD PERFORMANCE DEFAULTS

Figure 4.5: Power Management Setup

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

Power Management

The default value is Enabled.

Enabled	Enable Green function.
Disabled	Disable Green function.

• PM Control by APM

The default value is Yes.

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

• Video off Method

The default value is DPMS Supported.

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

Suspend Mode

The default value is Disable.

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

HDD Power Down

The default value is Disable.

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

VGA Active Monitor

The default value is Disabled.

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

• Soft-off by PWR-BTTN

The default value is Instant-Off.

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

CPUFAN Off In Suspend

The default value is Enabled.

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

Resume by Alarm

The default value is Disabled.

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

If the default value is Enabled.

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

• IRQ [3-7,9-15], NMI

The default value is Enabled.

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

• Primary IDE 0 / 1

The default value is Disabled.

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

Secondary IDE 0 / 1

The default value is Disabled.

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

Floppy Disk

The default value is Enabled.

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

Serial Port

The default value is Enabled.

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

Parallel Port

The default value is Disabled.

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

4.9. PNP/PCI CONFIGURATION

ROM PCI/ISA E PNP/PCI CONF AWARD SOFTW	
PNP OS Installed : No Resources Controlled By : Manual Reset Configuration Data : Disabled IRQ-3 assigned to : Legacy ISA IRQ-5 assigned to : Legacy ISA IRQ-7 assigned to : PCI/ISA PnP IRQ-7 assigned to : PCI/ISA PnP IRQ-10 assigned to : PCI/ISA PnP IRQ-11 assigned to : PCI/ISA PnP IRQ-14 assigned to : PCI/ISA PnP IRQ-14 assigned to : PCI/ISA PnP IRQ-15 assigned to : Legacy ISA IRQ-15 assigned to : Legacy ISA IRQ-15 assigned to : Legacy ISA IRQ-15 assigned to : Legacy ISA	Used MEM base addr : 2800 *Used MEM Length : 8K Assign IRQ For USB : Enabled
DMA-1 assigned to : PCI/ISA PhP DMA-3 assigned to : PCI/ISA PhP DMA-5 assigned to : PCI/ISA PhP DMA-6 assigned to : PCI/ISA PhP DMA-7 assigned to : PCI/ISA PhP	ESC : Quit 11+++ : 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.
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 "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



Figure 4.7: Load Bios Defaults

Load BIOS Defaults

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

Bios Configuration



Figure 4.8: Load Performance Defaults

Load PERFORMANCE Defaults

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

4.12. INTEGRATED PERIPHERALS

IN	PCI/ISA BIOS (2A09KGO1) EGRATED PERIPHERALS ARD SOFTWARE, INC.
IDE HDD Block Mode : En IDE Primary Master PIO : Au IDE Primary Slave PIO : Au IDE Secondary Master PIO : Au IDE Secondary Slave PIO : Au IDE Primary Slave UDMA : Au IDE Primary Slave UDMA : Au IDE Secondary Master UDMA : Au IDE Secondary Slave UDMA : Au IDE Secondary Slave UDMA : Au On-Chip Primary PCI IDE: En On-Chip Secondary PCI IDE: En On-Chip Secondary PCI IDE: En Onboard PCI SCSI Chip : En Channel A Termination : Bo	no *KB Power On Multikey : Enter no no no no bled bled bled bled bled
USB Keyboard Support : Di Onboard FDC Controller : En Onboard Serial Port 1 : 3F Onboard Serial Port 2 : 2F Onboard Parallel Port : 37 Parallel Port Mode : SP	/IR04 F1 : Help PU/PD/+/- : Modify /IR03 F5 : Old Values (Shift)F2 : Color /IR07 F6 : Load BIOS 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.

• 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.

Onboard PCI SCSI chip

The default value is Enabled.

Enabled	Enable onboard PCI SCSI chip.
Disabled	Disable onboard PCI SCSI chip.

Channel A Termination

The default value is Both.

Both	Support All SCSI Device.
None	Disable SCSI Device Support.
Low Byte	Low Byte-ON.
High Byte	High Byte-ON.

Channel B Termination

The default value is Enabled.

Enabled	Enable Channel B Termination
Disabled	Disable Channel B Termination

Bios Configuration

 ${}^{\!\!\!\otimes}$ If you don't have SCSI devices connecting to the mainboard, please set up the functions below :

- 1. Onboard PCI SCSI chip: Enabled
- 2. Channel A Termination: None
- 3. Channel B Termination: Disabled

Otherwise, the HD LED of the mainboard will always light on.

• 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 FDD port.
Disabled	Disable onboard FDD port.

• Onboard Serial Port 1

The default value is 3F8/IRQ4.

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

Onboard Serial Port 2

The default value is 2F8/IRQ3.

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

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• 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 any button to Power on system.

Keyboard Power on

The default value is Disabled.

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 choose to power on your system by entering password and then pressing the ENTER key from your keyboard.

4.13. 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.

ROM PCI/ISA E CMOS SETUR AWARD SOFT	
STANDARD CMOS SETUP BIOS FEATURES SETUP	INTEGRATED PERIPHERALS USER PASSWORD
CHIPSET FEATURES SETUP POWER MANAGEMENT SETUP PNP/PCI CONFIGURA LOAD BIOS DEFAULT	IDE HDD AUTO DETECTION SAVE & EXIT SETUP SAVING
LOAD PERFORMANCE DEFAULTS	
Esc : Quit F10 : Save & Exit Setup	†↓→+ : Select Item (Shift)F2 : Change Color

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>. You may also press <Esc> to abort the selection and not enter a password.

To disable password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

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

					O DECETI WARE, IN			
HARD D	ISKS	TYPE	312	E C	VLS HEAD	PRECO	MP LANDS	SECTOR MOI
Primary Master :								
		Sele	ct. Primar	y Maste	r Option (N	≡Skip):	ы	
	OPTION	SIZE	CYLS	HE AD	PRECOMP	l and z	SECTOR	MODE
	1(1)	521	530	32	0	1059	63	LBA
	2	521	1060	16	65535	1059	63	NORMAL
		60.1	530	32	65535	1059	63	LARGE
	3	521	550	24				

Figure 4.11: IDE HDD Auto Detection

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

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

4.15. SAVE & EXIT SETUP



Figure 4.12: Save & Exit Setup

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

Type "N" will return to Setup Utility.

4.16. EXIT WITHOUT SAVING



Figure 4.13: Exit Without Saving

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

Type "N" will return to Setup Utility.



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 installations. residential 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)

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

EN 55011	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM high frequency equipment	EN 61000-3-2* EN60555-2	Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics"			
EN55013	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	EN61000-3-3* EN60555-3	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"			
EN 55014	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus	I EN 50081-1	Generic emission standard Part 1: Residual, commercial and light industry			
		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			
	(Stamp)	Date : May. 13, 1998	Name : <u>Rex Lin</u>			