# Chapter 1

# Motherboard Feature Introduction

# **SPECIFICATIONS**

System Chipset	Intel® 440EX chip set ,ALi 513X		
СРИ	Pentium® II CPU 233MHz ~333 MHz		
Memory Subsystem	Expandable to 256MB(2 banks) with 168-Pin SDRAM(DIMM) Socket X2, SIMM Socket X 4		
AGP Slot	AGP Interface Specification Rev 1.0 Compliant		
	Two high speed 16550 compatible serial ports, one Multi-Mode Parallel Port fixed SPP/EPP/ECP standard		
	Two PCI Bus master Ultra DMA/33 IDE port (up to 4 IDE Devices)		
Integrated I / O	Support two 360KB / 720KB / 1.2MB / 1.44MB / 2.88MB / floppy disk driver		
	Support LS120 drives & ZIP 100 Drives		
	One PS/2 Mouse port		
	Support two USB ports		
	Support IrDA TX / RX header		

	1MB Flash ROM	
BIOS	Award AGP BIOS with green, plug and play, ACPI,	
ыоз	DMI feature support	
	Support secondary device boot	
Expansion slot	Three 32-bit PCI Slots & Two 16-bit ISA Slots	
Expansion slot	Support 3.3/5V PCI 2.1 bus Interface	
	Suspend LED on/off	
EXTRA Function	Win95 soft power off	
EXTRA FUNCTION	External SMI	
	Wake up by ring	
Power Supply	Support AT & ATX power	
Others	Windows 95 Compatible	
Dimension	Baby AT size (250mm x 220mm), 4-layer PCB	

# POWER OFF CONTROL SOFTWARE

The motherboard design supports software power off Control feature through the SMM code in the BIOS under Win95 operating system environment. This is INTEL ATX form factor feature and you should use ATX power supply.

First, you should connect the power switch cable (provided by the ATX case Supplier) to the connector [ PW\_ON ] on the motherboard. In the BIOS screen of "POWER MANAGEMENT SETUP", choose "User Defined" (or min power saving or Max power saving) in "POWER MANAGEMENT" and choose "Yes" in "PM Control by APM".

In Windows 95 the "SHUT DOWN" option, the computer's Power will switch off automatically and put the PC in a suspend mode. A bunking power light will indicate this. To restart the system, simply press the Power Button.

# **PACKAGING CHECK LIST**

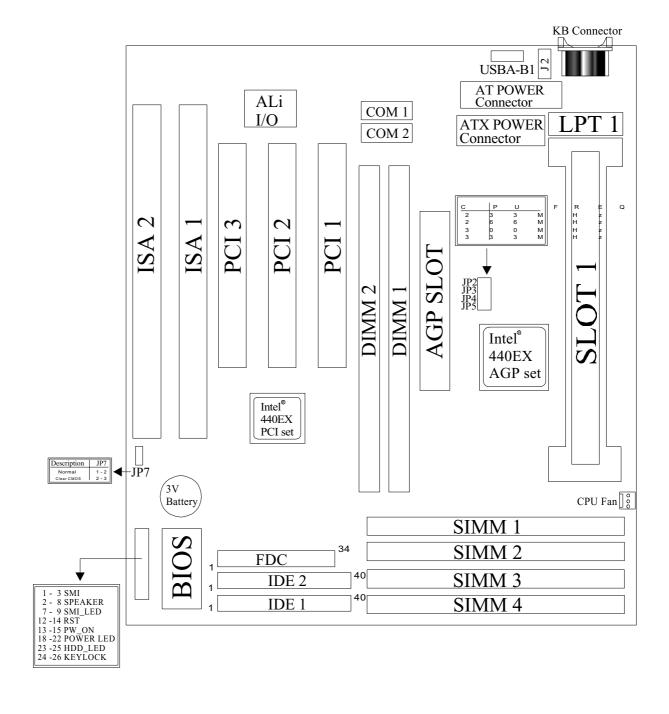
The motherboard comes securely packed in a gift box and shipping carton. If any of the above items are missing or damaged, please contact your supplier.

#### The motherboard contains:

Q'TY			Description
1	Motherboard	:	B681
1	Diskette	:	Bus master driver
1	Cable	:	FDD. IDE. COM1/2. PS2. LPT
			Connector
1	Manual	•	User's manual

# Chapter 2 Setup Guide

# **Motherboard Layout Drawing**



# **Jumper & Connector Setting**

# **CPU TYPE SELECTION**

	or Core FREQ M BUS FREQ	JP2	JP3	JP4	JP5
3.5	233 MHz	Short	Open	Open	Short
4	266 MHz	Short	Short	Short	Open
4.5	300 MHz	Short	Open	Short	Open
5	333 MHz	Short	Short	Open	Open

	Short
	Open

# **CONNECTOR SETTING**

**U1- Keyboard Connector** 

Pin	Description		
1	Keyboard Clock		
2	Keyboard Data		
3	NC		
4	GND		
5	+5V		

**J3 - ATX Power Supply Connector** 

Pin	Description
1,2,11	+ 3.3 V
3,5,7,13,15,16,17	Ground
4,6,19,20	+ 5 V
8	POWER GOOD
9	5VSB
10	+12 V
12	-12 V
14	PS-ON
18	- 5 V

# J2 - Mini PS/2 Mouse Connector

Pin	Description
1	Mouse Data
2	N.C.
3	Ground
4	+5V
5	Mouse Clock

JP1 – AT Power Supply Connector

Pin	Description	Pin	Description
1	Power Good	7	Ground
2	+5V DC	8	Ground
3	+12V DC	9	-5V DC
4	-12V DC	10	+5V DC
5	Ground	11	+5V DC
6	Ground	12	+5V DC

**LPT1 - Printer Connector** 

Pin	Signal Name	Pin	Signal Name
1	Strobe-	14	AFD
2	Data Bit 0	15	Error
3	Data Bit 1	16	INIT
4	Data Bit 2	17	SLCTIN
5	Data Bit 3	18	GND
6	Data Bit 4	19	GND
7	Data Bit 5	20	GND
8	Data Bit 6	21	GND
9	Data Bit 7	22	GND
10	ACK	23	GND
11	Busy	24	GND
12	PE	25	GND
13	SLCT	26	GND

**COM1,COM2 –Serial Connectors** 

Pin	Signal Name	Pin	Signal Name
1	DCD	6	DSR
2	SIN	7	RTS
3	SOUT	8	CTS
4	DTR	9	RI
5	GND	10	NC

**USBA – B1 - Universal Serial Bus (USB) Connectors** 

<b>USB1</b> Pin	Signal Name	<b>USB2</b> Pin	Signal Name
1	USB VCC 0	1	USB VCC 1
2	USB Data -	2	USB Data -
3	USB Data +	3	USB Data +
4	USB GND 0	4	USB GND 1

# 5135SIR - Infrared Connector: IR

Pin	Signal Name
1	VCC
2	NC
3	IRRX
4	GND
5	IRTX

# **FAN CONNECTOR**

**JP6:** This fan is used in CPU COOL FAN.

# JP9 - OTHER JUMPER SETTING

Pin	Name	Description
1-3	EXTSMI	Suspend mode
7-9	SUS - LED	Suspend mode LED
13-15	PWR _ BTN	Power buttem
23-25	HD - LED	Hard Disk LED
2-8	SPKR	Speaker
12-14	RESET	Reset buttom
18-22	PWR - LED	Power LED
24-26	KEYLOCK	Key Lock

JP7 - CMOS Clear

JP7	Description	
1-2	Normal (default)	
2-3	Clear CMOS	

# **MEMORY INSTALLATION**

No jumper setting is necessary for DRAM setting, BIOS will check DRAM type and size automatically. B681 motherboard contains 4 by 72-pin SIMM sockets (SIMM1,SIMM2,SIMM3,and SIMM4) or 2 by 168-pin DIMM socket (DIMM). SIMM module sockets are divided in two banks: SIMM1, SIMM2 in one bank and SIMM3, SIMM4 in another bank, minimum user has to install two DRAM SIMMs of the same kind into one bank or install one DIMM into DIMM socket. B681 motherboard has table-free ( or auto-bank ) feature and user can install SIMMs into any bank. But cannot mix up SIMM since chip limitation.

**NOTE: Samples of System Memory Combinations Options** 

SIMM4	SIMM3	SIMM2	SIMM1	DIMM1	DIMM2	TOTAL
		8MB	8MB			16MBytes
8MB	8MB					16MBytes
				32MB		32MBytes
					32MB	32MBytes
		8MB	8MB	16MB		32MBytes
8MB	8MB				16MB	32MBytes
		16MB	16MB	16MB		48MBytes
16MB	16MB				16MB	48MBytes
		16MB	16MB	32MB		64MBytes
16MB	16MB				32MB	64MBytes
		32MB	32MB	16MB		80MBytes
64MB	64MB					128MBytes
		64MB	64MB			128MBytes
				64MB	64MB	128MBytes
:					:	:
:			:		:	:
				128MB	128MB	256MBytes

# Chapter 3 Award BIOS Setup

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

## **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.

# TO ENTER SETUP BEFORE BOOT PRESS CTRL-ALT-ESC OR DEL KEY

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" button on the system case. You may also restart by simultaneously press <Ctrl>, <Alt> and <Del> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to,

# PRESS F1 TO CONTINUE, CTRL-ALT-ESC OR DEL TO ENTER SETUP

# 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 to save changes to 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
	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 BIOS, 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

# **Getting Help**

### Main Menu

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

# Status Page Setup Menu/Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window press <Esc>.

# The Main Menu

Once you enter Award BIOS CMOS Setup Utility, the Main Menu will appear on the Screen.. Use arrow keys to select among the items and press to accept or enter the sub-menu.

# ROM PC/ISA BIOS (2A69JPNB) **CMOS SETUP UTILITY** AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS		
BIOS FEATURE SETUP	SUPERVISOR PASSWORD		
CHIPSET FEATURES SETUP	USER PASSWORD		
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION		
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP		
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING		
LOAD SETUP DEFAULTS			
Esc : Quit $\leftarrow \uparrow \downarrow \rightarrow$ : Select Item			

F10 : Save & Exit Setup (Shift) F2: Change Color

# **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 menu provides functions for Green products by allowing users to set the timeout value for monitor and HDD.

#### PNP / PCI CONFIGURATION SETUP

This menu allows the user to modify PNP / PCI configuration function.

#### **Load BIOS Defaults**

BIOS defaults indicates the most appropriate value of the system parameter which the system would be in minimum performance.

### **Load Setup Defaults**

Chipset defaults indicates the values required by the system for the maximum performance.

#### INTEGRATED PERIPHERALS

This section page includes all the items of IDE hard drive and Programmed Input / Output features.

### **Supervisor / User Password Setting**

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.

#### **HDD Low Level Format**

If supported by your system, this provides a hard disk low level format utility.

#### Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

#### **Exit Without Saving**

Abandon all CMOS value changes and exit setup.

# **Standard CMOS Setup**

The items in Standard CMOS Setup Menu are divided into several categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

# **BIOS Features Setup**

# ROM PCI/ISA BIOS (2A69JPNB) BIOS FEATURE SETUP AWARD SOFTWARE, INC

Virus Warning	:	Disabled	Video BIOS Shadow	:	Enabled
CPU Internal Cache	:	Enabled	C8000-CBFFF Shadow	:	Disabled
External Cache	:	Enabled	CC000-CFFFF Shadow	:	Disabled
Quick Power On Self Test	:	Enabled	D0000-D3FFF Shadow	:	Disabled
Boot Sequence	:	A, C ,SCSI	D4000-D7FFF Shadow	:	Disabled
Swap Floppy Drive	:	Disabled	D8000-DBFFF Shadow	:	Disabled
Boot Up Floppy Seek	:	Enabled	DC000-DFFFF Shadow	:	Disabled
Boot Up NumLock Status	:	On			
Boot Up System Speed	:	High			
Gate A20 Option	:	Fast			
Typematic Rate Setting	:	Disabled			
Typematic Rate (Chars/Sec)	:	6			
Typematic Delay (Msec)	:	250			
Security Option	:	Setup			
PCI/VGA Palette Snoop	:	Enabled			
OS Select For DRAM > 64MB	:	Non-OS2		<b>Δ</b> Ι	G 1
			Esc : Quit	$\downarrow \downarrow \rightarrow \leftarrow$	: Selection
			Item	ъ	II/DD / - /
			F1: Help	Р	U/PD/+/-:
			Modify F5 : Old Values (Sh	:6) E2 . <i>(</i>	Calan
			F6: Load BIOS Default	ift) F2 : (	COIOI
			F7: Load Setup Default		
			1 / . Load Scrup Derault		

## Virus Warning

This category flashes on the screen. During and after 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 programs to locate the problem.

#### !WARNING!

Disk boot sector is to be modified
Type "Y" to accept write or "N" to abort write
Award Software, Inc.

**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 attempt 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**: Enabled cache

**Disabled**: Disabled cache

## **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.

**Enabled**: Enable quick POST

**Disabled**: Normal POST

## **Boot Sequence**

This category determines which drive computer searches first for the hard disk operation system (i.e., DOS).

A, C,SCSI: System will first search for floppy disk drive then second

search hard disk driver, then SCSI driver.

### C,A,SCSI/ D,A,SCSI/ E,A,SCSI/ F,A,SCSI:

System will first search for IDE hard disk driver (C: D: or E: or F© then second search floppy disk driver then SCSI hard disk driver.

SCSI,A,C: System will first search SCSI hard disk driver then second search for floppy disk driver then IDE hard disk driver.

#### CDROM,C,A:

System will first search for the CDROM driver (If the CDROM has a bootable CD title.) and second search hard disk driver then floppy disk driver.

### C,CDROM,A:

System will first search for the hard disk driver and second search for CDROM driver (If the CDROM has a bootable CD title,) then searches floppy disk driver.

**LS120,C:** System will first search LS120 disk driver and second search for IDE hard disk driver.

## **Swap Floppy Drive**

Users can enable this item so that the BIOS will see the hardware "Drive A:" as "Drive B:"", and hardware "Drive B:"" as "Drive A:"".

## **Boot Up Floppy Seek**

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

Enabled: BIOS searches for floppy disk drive to determine if it is 40 or 80 tracks. Note that BIOS can not tell from 720K, 1.2M or 1.44M 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 360K.

## **Boot Up NumLock Status**

The default value is On.

**On**: Keypad is number keys

**Off**: Keypad is arrow keys

## **Boot Up System Speed**

It selects the default system speed – the speed that the system will run at immediately after power up.

High: Set the speed to high

**Low**: Set the speed to low

# **Gate A20 Option**

The Gate A20 Option default setting is fast.". This is the optimum setting for this mainboard.

# **Typematic Rate Setting**

This determines the typematic rate.

**Enabled**: Enable typematic rate

**Disabled**: Disable typematic rate

# Typematic Rate (Chars/Sec)

6 : 6 characters per second

8 : 8 characters per second

10 : 10 characters per second

12 : 12 characters per second

15 : 15 characters per second
20 : 20 characters per second
24 : 24 characters per second
30 : 30 characters per second

## **Typematic Delay (Msec)**

When holding the key, the time between the first and second character will be displayed.

250 : 250 msec 500 : 500 msec 750 : 750 msec 1000 : 1000 msec

## **Security Option**

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

**System:** The system will not boot and access to Setup 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.

**Note:** 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 freely.

#### **Video BIOS Shadow**

It determines whether video BIOS will be copied to RAM, however, it is optional from chipset design. Video shadow will increase the video speed.

**Enabled**: Video shadow is enabled

**Disabled**: Video shadow is disabled

#### C8000-CBFFF Shadow/DC000-DFFFF Shadow

These categories determine whether optional ROM will be copied to RAM by 16K byte.

**Enabled**: Optional shadow is enabled

**Disabled**: Optional shadow is disabled

# **Chipset Features Setup**

# ROM PCI/ISA BIOS (2A69JPNB) CHIPSET FEATURES SETUP AWARD SOFTWARE, INC

Auto Configuration	: Enabled	Auto Detect DIMM/I	PCI Clk	: Enabled
DRAM Speed Selection	: 60ns	Spread Spectrum Mo	dulated	: Enabled
MA Wait State	: Slow			
EDO RAS# To CAS#	: 3			
EDO RAS# Precharge Time	: 3			
EDO DRAM Read Burst	: x333			
EDO DRAM Write Burst	: x222			
DRAM Data Integrity Mode	: Non-ECC			
CPU-To-PCI IDE Posting	: Enabled			
System BIOS Cacheable	: Disabled			
Video BIOS Cacheable	: Disabled			
Video RAM Cacheable	: Disabled			
8 Bit I/O Recovery Time	: 1			
16 Bit I/O Recovery Time	: 1			
Memory Hole At 15M-16M	: Disabled	Esc : Quit	$\uparrow \downarrow \rightarrow \leftarrow : S$	election Item
Passive Release	: Enabled	F1: Help	PU/PD/+/-	: Modify
Delayed Transaction	: Disabled	F5 : Old Values	(Shift) F2	: Color
AGP Aperture Size (MB)	: 64	F6: Load BIOS Defa	ult	
SDRAM RAS-to-CAS Delay	: Slow	F7: Load Setup Defa	ıult	
SDRAM RAS Precharge Time	: Slow	·		
SDRAM CAS latency Time	: 3			

This setup menu is optimized for this motherboard by your computer vendor. Unless you are a qualified engineer & know the items, functions you are going to modify. We do not recommend you to change the default setting.

# **Power Management**

ROM PCI/ISA BIOS (2A69JPNB) POWER MANAGEMENT SETUP AWARD SOFTWARE, INC.

Power Management PM Control by APM Video Off Method Video Off After MODEM Use IRQ Doze Mode Suspend Mode HDD Power Down Throttle Duty Cycle ZZ Active in Suspend VGA Active in Suspend Soft-off by PWR-BTTN	<ul><li>: Disabled</li><li>: 62.5 %</li><li>: Disabled</li><li>: Enabled</li><li>: Delay 4 Sec</li></ul>	** Reload Global Timer Events IRQ [3-7,9-15],NMI : Enabled Primary IDE 0 : Disabled Primary IDE 1 : Disabled Secondary IDE 0 : Disabled Secondary IDE 1 : Disabled Floppy Disk : Disabled Serial Port : Enabled Parallel Port : Disabled
CPUFAN off In Suspend Resume by Ring IRQ 8 Break Suspend	: Enabled : Disabled : Disabled	
		ESC: Quit ↑↓→←: Select Item F1 : Help PU / PD / + / - : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults

This category determines the power consumption for the system after selecting below items. Default value is Disabled. The following pages tell you the options of each item & describe the meanings of each options.

Item	Options	Descriptions	
A. Power Management	1. Disable	Global Power Management will be disabled	
	2. User Define	Users can configure their own power management	
	3. Min Saving	Pre-defined timer values are used such that all timers are in their MAX value	
	4. Max Saving	Pre-defined timer values are used such that all timers MIN value	

Item	Options	Descriptions	
3 PM Control by APM	1. No	System BIOS will ignore APM when power managing the system	
	2. Yes	System BIOS will wait for APM's prompt before it enter any PM mode e.g. DOZE, STANDBY or SUSPEND	
	even the timer is time	stalled, & if there is a task running, e out, the APM will not prompt the	
	BIOS to put the system into any power saving mode!		
	Note: – if APM is not installed, this option has no effect  To make the APM function work, users have to install power.exe (supported by MS-DOS 5.0 or higher) in Config.exe. To make the Windows 3.1 work regularly, in "Windows Setup", users have to set the "Computer" item to "MS-DOS System with APM"		
C. Video Off Option	1. Always On	System BIOS will never turn off the screen	
	2. Suspend -> Off	Screen off when system is in SUSPEND mode	
	3. Susp, Stby -> Off	Screen off when system is in STANDBY or SUSPEND mode	

	4. All Modes -> Off	Screen off when system is in DOZE, STANDBY or SUSPEND mode
D. Video	1. Blank Screen	The system BIOS will only blanks off the screen when disabling video
	2. V/H SYN C+Blank	In addition to (1), BIOS will also turn off the V-SYNC & H- SYNC signals form VGA cards to monitor

Item	Options	Descriptions	
D. Video	3. DPMS	This function is enabled for only the VGA card supporting DPM	
E. HDD Power Down	1. Disable	HDD's motor will not off	
(#) Remark 2	2. 1 Min 2 Min 3 Min 4 Min 5 Min 6 Min 7 Min 8 Min 9 Min 10 Min 11 Min 12 Min 13 Min 14 Min 15 Min	Defines the continuous HDD idle time before the HDD entering power saving mode (motor off)	
	3. When Suspend BIOS will turn the HDD's mode off when system is in SUSPEN mode  Note:  - (2) & (3) can't be selected at the same time - When HDD is in power saving mode, any access to the HDD will wake the HDD up		

Item	Options	Descriptions			
3 Doze Mode	1. Disable	System will never enter DOZE			
(*) Remark 1		mode			
	2. 10 Sec	Defines the continuous idle time			
	20 Sec	before the system entering DOZE			
	30 Sec	mode.			
	40 Sec				
	1 Min	If any item defined in (J) is			
	3 Min	enabled & active, DOZE timer			
	5 Min	will be reloaded.			
	10 Min				
	15 Min				
	20 Min				
	30 Min				
	40 Min				
	1 Hr				
	2 Hr 3 Hr				
		NIDDV as a de assets the secretaria			
	Note: Normally, STANDBY mode puts the system				
	into low speed or 8 MHz, screen may be off depend on (E)				
3 Standby Mode	1. Disable	System will never enter			
(*) Remark 1	1. Disable	STANDBY mode			
( ) Itemark 1	2. 10 Sec	Defines the continuous idle time			
	20 Sec	before the system entering			
	30 Sec	STANDBY mode.			
	40 Sec				
	1 Min	If any item defined in (J) is			
	3 Min	enabled & active, STANDBY			
	5 Min	timer will be reloaded			
	10 Min				
	15 Min				
	20 Min				
	30 Min				
	40 Min				
	1 Hr				
	2 Hr				
	3 Hr				
	Normally, STANDBY mode puts the system into low				
	speed or 8, screen may be off depend on (E)				

Item	Options	Descriptions
H. Suspend Mode (*) Remark 1	1. Disable	System will never enter SUSPEND mode
	2. 10 Sec 20 Sec 30 Sec 40 Sec	Defines the continuous idle time before the system entering SUSPEND mode.
	1 Min 3 Min 5 Min 10 Min 15 Min 20 Min 30 Min 40 Min 1 Hr 2 Hr 3 Hr	if any item defined in (J) is enabled & active, SUSPEND timer will be reloaded
	into low spec	JSPEND mode puts the system ed or 8 MHz, clock is stopped, be off depend on (E)
I. PCI Master Activity COM Ports Activity LPT Ports Activity	1. Disable	The specified event's activity will not affect the PM timers
HDD Ports Activity DMA Ports Activity VGA Activity IRQ3 (COM 2) IRQ4 (COM 1) IRQ5 (LPT 2) IRQ6 (Floppy Disk) IRQ7 (LPT 1) IRQ8 (RTC Alarm) IRQ9 (IRQ2 Redir) IRQ10 (Reserved) IRQ11 (Reserved) IRQ12 (PS/2 Mouse) IRQ13 (Coprocessor) IRQ14 (Hard Disk) IRQ15 (Reserved)	2. Enable	The specified event's activity causes the PM Timers to be reloaded. i.e. the Power Management Unit(PMU) monitors the specified activities as PM events

\* Remark 1: All items mark with (\*) in this menu, will be loaded with predefined values as long as the item "Power Management" is not configured to "User Defined"

#### These items are:

Item "System Doze", "System Standby" & "System Suspend"

# Remark 2: Although the item "HDD Power Down" is not controlled by item "Power Management" in terms of timer value, the HDD (s) will not power down if the global power management is disabled!

# PNP / PCI Configuration Setup

ROM PCI/ISA BIOS(2A69JPNB) PNP/PCI CONFIGURATION AWARD SOFTWARE, INC.

PNP OS Installed	:	No	PCI IDI	7	IRQ Map	OTO	:ISA
Resources Controlled By	:	Auto					
Reset Configuration Data	:						
reset Comiguration Bata	•	Disablea					
			ESC: Q	uit		$\uparrow\downarrow$	→ : Select Item
			F1 :	Не	lp		/ + / - : Modify
					d Values		·
			(Shift)F			: Color	
					ad BIOS		
					ad Setup		
			1 /	ட்	ua setup .	Deraults	

The following pages tell you the options of each item & describe the meanings of each options.

Item	Options	Descriptions
A. 1st Available IRQ	3	The system BIOS will assign these 4
2nd Available IRQ	4	available IRQs to the found PCI devices
3rd Available IRQ	5	
4th Available IRQ	7	
	9	
	10	
	11	
	12	
	14	
	15	
	NA	

Item	Options	Descriptions
B. PCI IDE 2nd Channel	Enable Disable	Enable/disable 2nd channel of PCI/IDE card. It includes I/O port (170H~177H) and IRQ 15 assignment
C. PCI IDE IRQ Map To	PCI- AUTO PCI- SLOT1 PCI- SLOT2 ISA	PCI-AUTO The BIOS will:    - scan for PCI IDE devices &     determine the location of the PCI    IDE device
	PCI- AUTO PCI- SLOT1 PCI- SLOT2 ISA	PCI-SLOT1 PCI-SLOT2  - assign IRQ 14 for primary IDE INT# IRQ 15 for secondary IDE INT# for the specified slot  ISA  - The BIOS will not assign any IRQs even if PCI IDE card is found! Because some IDE cards connect the IRQ 14 & 15 directly from ISA slot through a cord. (This cord is called Legacy Header)
F. Primary IDE INT# Secondary IDE INT#	A B	To tell which INT# does the PCI IDE card is using for its interrupts

Your computer vendor optimizes the other items, please do not modify them unless you know its function exactly.

# INTEGRATED PERIPHERALS

ROM PC/ISA BIOS(2A69JPNB) INTEGRATED PERIPHERALS AWARD SOFTWARE, INC.

IDE HDD Block Mode	: Enable	Parallel Port Mod	e ECPEPP 1.9
IDE Primary Master PIO	: AUTO		
IDE Primary Slave PIO	: AUTO		
IDE Secondary Master PIO	: AUTO	ECP Mode use DM	A : 3
IDE Secondary Slave PIO	: AUTO	KBC clock source	: 8MHz
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		
On-Chip Secondary PCI IDE	: Enabled		
USB keyboard Support	: Disabled		
Init AGP Display First	: Disabled		
Onboard FDC Controller	: Enabled	Esc : Quit	$\uparrow\downarrow\rightarrow\leftarrow$ : Selection Item
Onboard Serial 1	: 3F8/IRQ4	F1: Help	PU/PD/+/-: Modify
Onboard Serial 2	: 2F8/IRQ3	F5 : Old Values	(Shift) F2 : Color
UART Mode	: Normal	F6: Load BIOS Dea	` /
On board Port	: 378/IRQ 7	F7: Load Setup De:	fault

This setup menu is optimized for this motherboard by your computer vendor. Unless you are a qualified engineer & know the items, function you are going to modify. We do not recommend you to change the default setting.

# **Load BIOS Default**

When you access "Load BIOS Default", the following message appears:

## Load BIOS Default (Y/N) ?N

The BIOS Default values are the "worst case" default, and are the most stable values for the system. Use them if the system is performing erratically due to hardware problems. To load the BIOS Default values, press <Y> then <Enter>.

# **Load Setup Default**

When you access "Load Setup Default", you are shown the following message:

## Load Setup Default (Y/N) ?N

The Setup Default values represent the "best case" default, and should provided optimum system performance. To load the Setup Default values, press <Y> then <Enter>.

# Supervisor / User Password Setting

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

#### ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any 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.

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

anytime 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.

# **IDE HDD Auto Detection**

This feature allows you to check all the information on your hard disk formation. When you access "IDE HDD Auto Detection", the system executes auto detection.

At the prompt, it represents all the information on your HDD, and you are asked:

## Do you accept this drive C: (Y/N)?

- If you accept the test result, press [Y] then [Enter] and the result is saved, then the system continues to detect another HDD.
- If not, press [N] then [enter] and the system continues to detect another HDD.