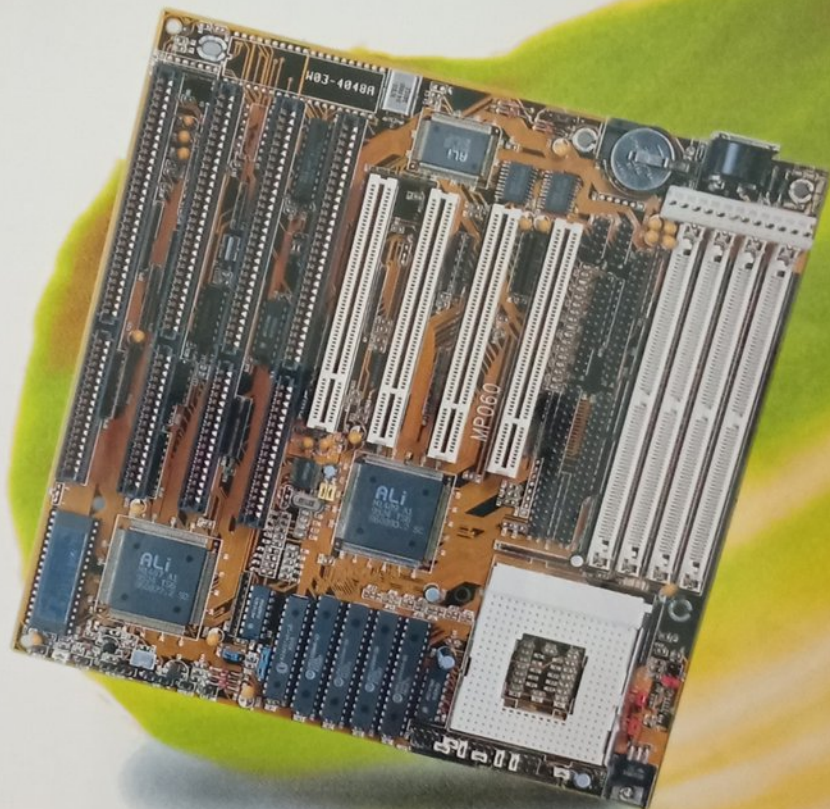


486 PCI/ISA SYSTEM BOARD (MP060)



USER'S MANUAL

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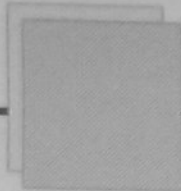
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Introduction



1

Foreword

This manual is designed to provide the basic necessary information for the end user to understand and properly use the MP060 mainboard. The mainboard ensures superlative performance and complete compatibility with industry standards, which incorporating many technical enhancements.

Trademarks

WTC is a registered trademark of Win Technologies Co., Ltd. All trademarks belong to their registered owner.

Checklist

Your MP060 Cache package contains the following:

- * MP060 Cache mainboard
- * User's Manual.
- * HDD Cable
- * FDD Cable
- * Serial & Printer Cable

1

Introduction

Precautions

Make sure you ground yourself before handling the mainboard or other system components. Electrostatic discharge will damage mainboard. Note that you must take special precaution when handling the mainboard in dry or air-conditioned environments.

The precaution below is to protect the mainboard from electrostatic discharge.

- * Do not remove the anti-static packaging until you are ready to install the mainboard and other system components.
- * Ground yourself before removing any system component from its protective anti-static packaging. To ground yourself, grasp the expansion slot covers or other unpainted portion of the computer chassis.
- * Frequently ground yourself while working, or use a grounding strap.
- * Handle the mainboard by the edges and avoid touching its components.

Introduction

1

Mainboard Features

- * ALI chipset M1487 and M1489
- * Support Intel, AMD, Cyrix CPU
- * Support EDO DRAM, Symmetrical and Asymmetrical DRAM
- * Memory expandable upto 128MB
- * External Cache option 128KB, 256KB and 512KB
- * Onboard FDC, Serial port and Normal / ECP / EPP Parallel port
- * Support Four 16bit slot and Four PCI slot (3 Master and 1 Slave)
- * Support deep green SMM and SMI
- * Chipset built in keyboard controller
- * Dimension : 22 x 22 cm with 4 layer PCB

2

Mainboard Setup

Jumper and Connectors Reference

Before installing the mainboard, make sure that the jumper setting are properly set for your configuration. The function of different jumpers are respectively as follows:

CPU Type Configuration	JP19, JP20, JP22, JP23, JP24, JP25, JP26, JP27, JP28, JP29
CPU Clock Configuration	JP5, JP6
CPU Voltage Configuration	JP13, JP14, JP16
Cache Configuration	JP15, JP17
CMOS Charge / Discharge	J1
I/O Chip Configuration	JP31
Flash ROM Voltage Configuration	JP8
Mainboard Connectors:	
Turbo Switch Connector	J3
Turbo LED Connector	J4
Reset Switch Connector	J2
Speaker Connector	J6
Keylock and Power LED Connector	J5
Keyboard Connector	KB1
Power Supply Connector	P1/P2
External Battery Connector	J1
SMI Switch Connector	JP21

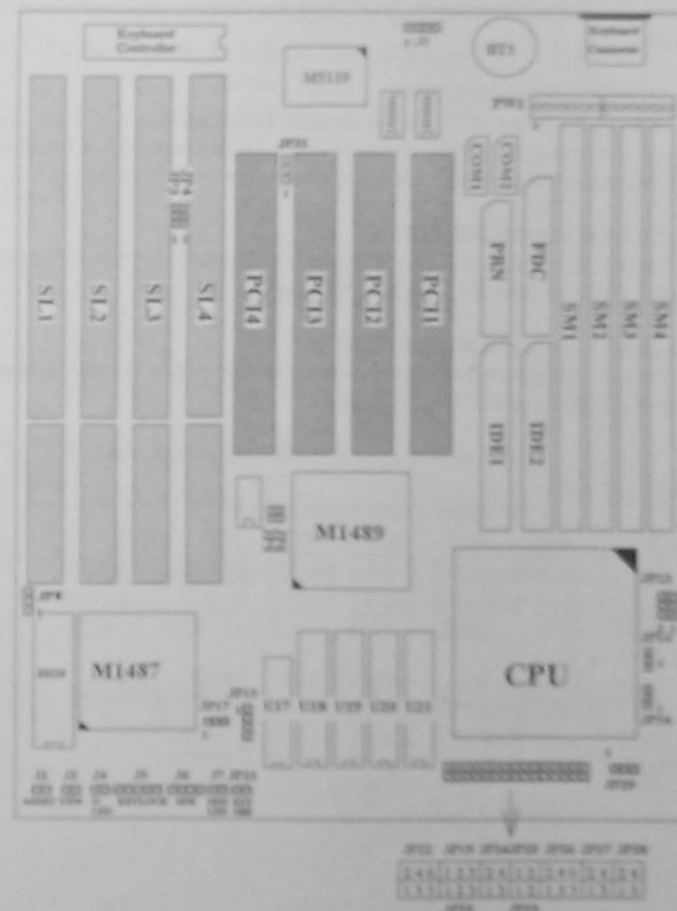
Jumper Caps reference

Red	Jumper for	Voltage Selector
White	Jumper for	Cpu Type
Yellow	Jumper for	Clock Selector
Blue	Jumper for	Cache Option
Black	Jumper for	Other

Mainboard Setup

2

Mainboard Component Layout



2

Mainboard Setup

Before turning on your power supply, make sure that the following configuration are set properly.

A. CPU TYPE CONFIGURATION

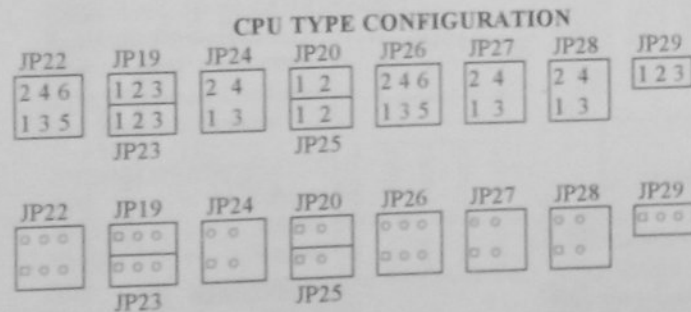
CPU type configuration will give you detailed information to install the jumper setting of different type of CPU. If the CPU type you are using is not listed in our user's manual, please contact your dealer for the correct jumper setting.

B. CPU CLOCK CONFIGURATION

CPU Clock configuration will give you detailed information to install the jumper setting of different types of CPU Clock frequency.

C. CPU VOLTAGE CONFIGURATION

CPU Voltage configuration will give you detailed information to install the jumper setting of different types of CPU Voltage.

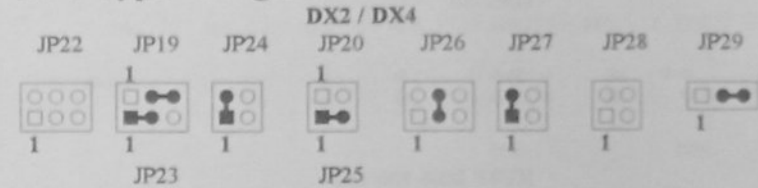


Mainboard Setup

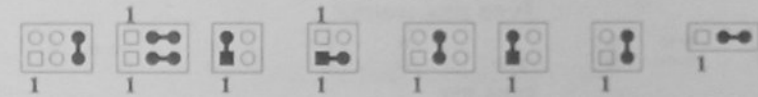
2

INTEL

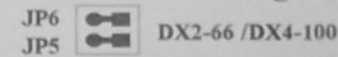
CPU Type Configuration White jumper Cap



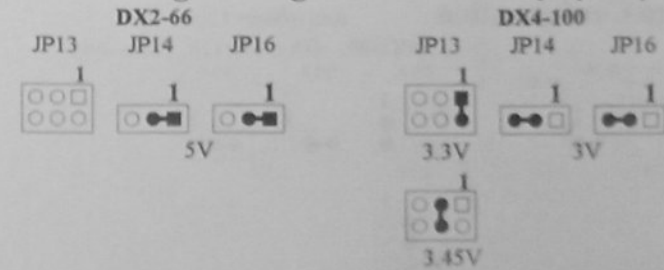
WRITE BACK CPU



CPU Clock Configuration Yellow jumper Cap

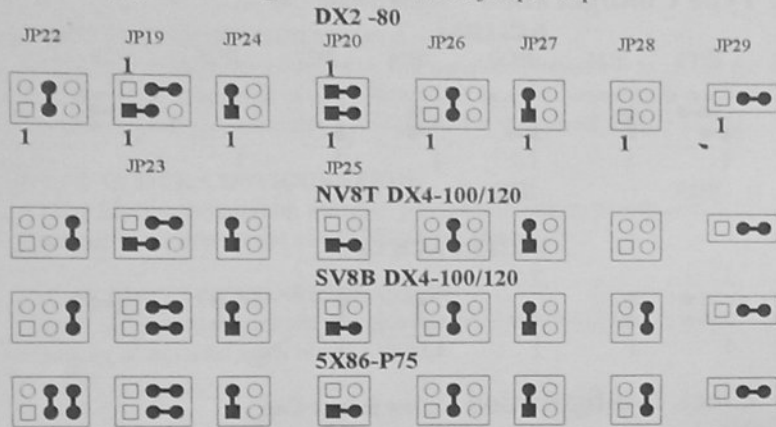


CPU Voltage Configuration

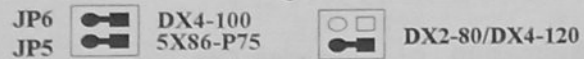


AMD

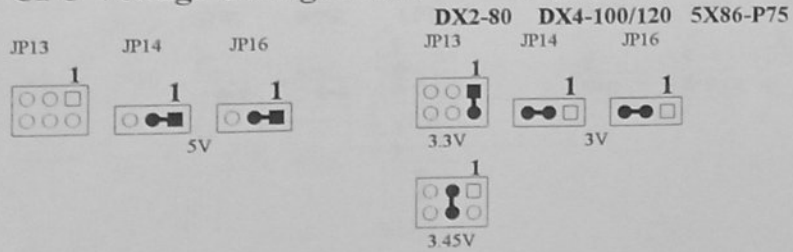
CPU Type Configuration White jumper Cap



CPU Clock Configuration Yellow jumper Cap

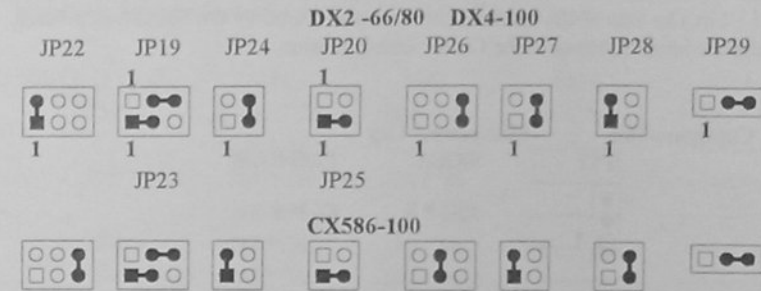


CPU Voltage Configuration Red jumper Cap

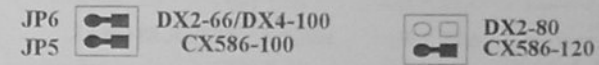


CYRIX

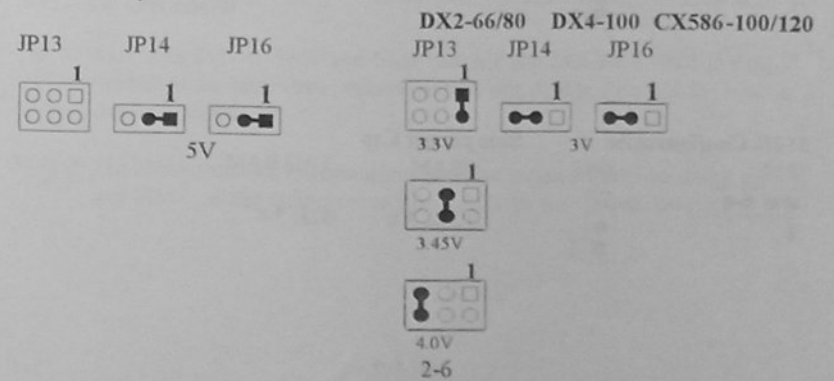
CPU Type Configuration White jumper Cap



CPU Clock Configuration Yellow jumper Cap



CPU Voltage Configuration Red jumper Cap



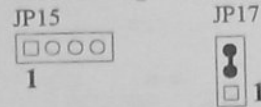
2

Mainboard Setup

SRAM Configuration

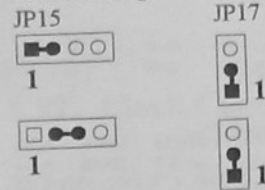
Cache Configuration is used to configure the external cache of the mainboard. External cache can be configured by using 32K*8, 64K*8 and 128K*8 SRAM Chip. The size of the external cache is configured by the SRAM chip being used and the jumper setting of the Cache Configuration.

128K Configuration



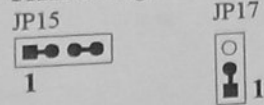
Blue jumper Cap
SRAM TAG RAM
32K * 8 8K * 8

256K Configuration



Blue jumper Cap
SRAM TAG RAM
64K * 8 16K * 8 ASTER 88128AK
64K * 8 16K * 8 ASTER 58128AK / WINBOND W24129A

512K Configuration



Blue jumper Cap
SRAM TAG RAM
128K * 8 32K * 8

Mainboard Setup

2

Memory Configuration

Mainboard memory composes four 72 pin SIMM sockets with only four banks and can be expandable upto 128MB. Memory can be installed by using EDO DRAM or Symmetrical and Asymmetrical DRAM SIMM RAM module.

MEMORY SIZE	SM1	SM2	SM3	SM4
4M	256K * 36 1M * 36	256K * 36 -----	256K * 36 -----	256K * 36 -----
8M	1M * 36 2M * 36	1M * 36 -----	----- -----	----- -----
12M	2M * 36	1M * 36	-----	-----
16M	2M * 36 4M * 36	2M * 36 -----	----- -----	----- -----
20M	4M * 36	1M * 36	-----	-----
32M	4M * 36 8M * 36	4M * 36 -----	----- -----	----- -----
36M	8M * 36	1M * 36	-----	-----
48M	8M * 36	4M * 36	-----	-----
64M	16M * 36	-----	-----	-----

NOTE: SM1 and SM3 or SM2 and SM4 can not use DOUBLE SIDED SIMM module at the same time, otherwise only one double sided SIMM module can be detected.

NOTE: The above memory configuration can also be configured by using SIM3 and SIM4, as the memory configuration is an auto detect design.

2

Mainboard Setup

Mainboard Connectors

Mainboard has Six connectors that will be connected in your computer case front panel. Other connectors for power supply, keyboard and external battery.

- J3 Turbo Switch connector will be connected in your computer case front panel. This is used to toggle the system speed between fast and slow processing speed.
- J4 Turbo LED connector will be connected in your computer case front panel. This will light up when the system is running in high speed. (Note the polarity of the LED)
- J5 Keylock and Power LED connector will be connected in your computer case front panel. Keylock is used to lock the keyboard. Power LED will light up when you turn on your power supply.
- J6 Speaker connector will be connected in the speaker of your computer case.
- J2 Reset Switch connector will be connected in your computer case front panel. Resetting the system, it will restart the computer from self-test without turning off the power supply. This connection is always off position.
- JP21 External SMI switch will be connected in your computer case front panel. This is used to activate the SMI function without waiting the setup time of the Powermanagement setup.
Note : Some case does not include this switch.
- KB1 Keyboard connector, this is used for inputting signal from the keyboard.

Mainboard Setup

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- J1 External Battery connector is used for the external battery. This is used when internal battery is not connected.
- P1/P2 Power Supply connector is connected from the output of the power supply. Most of the power supply has two connectors which will be connected to the mainboard. Each connector has six wires, two of the wires are black. To connect to the mainboard, make sure that the black wire is in the middle. Wrong connection will cause damage to the mainboard.

J1 CMOS Charge / Discharge

Black jumper Cap

CMOS Charge / Discharge is used to discharge and charge CMOS. If you discharge the CMOS all the data will be erased. To discharge CMOS, place a jumper cap in pin 1 and 2, then turn on the power supply for 1 to 2 seconds then turn off the power supply. In this procedure the CMOS is discharged, all the data in the CMOS is erased. Place the jumper cap in pin 2 and 3 for CMOS charge, then run setup.

Note: J1 is also used as External Battery Connector

- J1
- 2-3 Charge CMOS
- 1-2 Discharge CMOS
- 1-4 External Battery Connector

Note : Jumpers Not For End User's Purpose Unless Advised By The Manufacturer

- JP8 Flash ROM Voltage Configuration
- 1-2 5 Volts Sst Or Winbond Flash ROM
- 2-3 12 Volts Intel Flash ROM
- JP31 I/O Chip Configuration
- 1-2 5119 I/O Chip
- 2-3 5113 I/O Chip

Note : JP8 and JP31 are set to default setting respectively during production. changing the default setting will cause abnormal function or damage the mainboard.

3

Award BIOS Setup

AWARD BIOS SETUP

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

1. Turn on or reboot the system, when the below message appears at the bottom of the screen during the POST (Power On Self Test) press DEL key to enter setup.
2. Press the DEL key to enter the Award BIOS program and the main menu will appear on the screen.

ROM PC/ISA BIOS (A846279A)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	SUPERVISOR PASSWORD
BIOS FEATURES SETUP	USER PASSWORD
CHIPSET FEATURES SETUP	IDE HD/AUTO DETECTION
POWER MANAGEMENT SETUP	HD LCKW LEVEL FORWARD
PCI CONFIGURATION SETUP	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING
LOAD SETUP DEFAULTS	
ESC: QUIT	↑ ↓ → ← Select Item
F10: Save/Exit Setup	(Shift) F2: Change Color
Time, Date, Hard Disk Type	

3. Use the arrow key to highlight the item you wish to modify and then press enter.
4. Press <ESC> key at anytime to return to the main menu.
5. In the main menu, choose "SAVE & EXIT SETUP" to save the changes and reboot the system. Choosing "EXIT WITHOUT SAVING" ignores the changes and exit the setup program.

Award BIOS Setup

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STANDARD CMOS Setup

This setup includes all the items in a standard compatible BIOS.

1. Choose "STANDARD CMOS SETUP" from the main menu and a Standard CMOS Setup menu will appear on the screen.

ROM PC/ISA BIOS (A846279A)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm/dd/yy) Wed Mar 8 1995								
Time (hh:mm:ss) 17:16:33								
HARD DISKS	TYPE	SIZE	CYL	HEAD	SECTOR	LANE	SECTORS	MB
Primary Master	User	134	1024	14	65535	1020	17	338MB
Primary Slave	None	0	0	0	0	0	0	-----
Secondary Master	None	0	0	0	0	0	0	-----
Secondary Slave	None	0	0	0	0	0	0	-----
Cache A: 32K x 1 25ns						Base Memory	640K	
Cache B: 16K x 1 5ns						Extended Memory	1024K	
Video: VGA/VGA						Other Memory	384K	
Mail On: All Drives						Total Memory	2272K	
ESC: QUIT	↑ ↓ → ← Select Item					Pg/PgDn/+- Modify		
F1: Help	(Shift) F2: Change Color					F3: Toggle Calendar		

2. Use arrow key to move between items and selected values. Use PgUp/PgDn/+- keys to modify the selected item. Some items let you key in the value directly.

Date (mm/dd/yy)

Type the current date.

3

Award BIOS Setup

Time (hh/mm/ss)

Type the current time.

Hard Disk

Choose from the standard hard disk types 1 to 45 or Auto. Type ser is for user definable. If you select User type , enter the information directly from the keyboard and press < Enter > . This information is provided in the documentation from your hard disk vendor. If a hard disk is not installed choose " None ".

Drive A & B

Choose 360KB , 5.25 in.
1.2MB , 5.25 in.
720KB , 5.25 in.
1.4MB , 3.5 in.
2.88MB, 3.5 in.
Not installed

Video

Choose Monochrome
Color 40 x 25
EGA/VGA
Color 80 x 25

3. When you finish, press the <ESC> key to return to the main menu.

Award BIOS Setup

3

BIOS FEATURES SETUP

This setup includes items of special enhanced features.

1. Choose "BIOS FEATURES SETUP " from the main menu and BIOS Features Setup menu will appear on the screen with the default values.

ROM PCI/ISA BIOS (2A4KDW0A)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning	:Disabled	Video BIOS Shadow	:Enabled
CPU Internal Cache	:Enabled	C8000-CFFFF Shadow	:Disabled
External Cache	:Enabled	D0000-D7FFF Shadow	:Disabled
Quick Power On Self Test	:Enabled	D8000-DFFFF Shadow	:Disabled
Boot Sequence	:A,C		
Swap Floppy Drive	:Disabled		
Boot Up Floppy Seek	:Enabled		
Boot Up NumLock Status	:On		
Boot Up System Speed	:High		
Gate A20 Option	:Fast		
Memory Parity Check	:Enabled		
Typematic Rate Setting	:Disabled	ESC:QUIT	↑↓→←:Select Item
Typematic Rate(Chars/Sec)	:6	F1:Help	Pu/PD/+/-:Modify
Typematic Delay(Msec)	:250	F5: Old Values	(Shift)F2:Color
Security Option	:Setup	F6: Load BIOS Defaults	
PCI/VGA Palette Snoop	:Disabled	F7:Load Setup Defaults	

3

Award BIOS Setup

2. Use arrow key to move between items and selected values. Use PgUp/PgDn/+/- keys to modify the selected item. <F> functions are explained below:

<F1>	Help, gives options available for each item.
Shift-<F2>	Change Color
<F5>	Get the old values, for the user to start the current session.
<F6>	Load all option with the BIOS default values.
<F7>	Load all option with the Setup default values.
Virus Warning	This option enabled/disabled virus warning message if any attempt to write to the boot sector or hard disk partition.
CPU Internal Cache	This option enabled/disabled the CPU internal cache memory.
External Cache	This option enabled/disabled the external cache memory.
Quick Power On Self Test	This option enabled/disabled the BIOS past POST at boot up.
Boot Sequence	This option A,C / C,A the computer search the first drive for the operating system.
Swap Floppy Drive	This option enabled/disabled the boot up sequence from B to A drives.
Boot Up Floppy Seek	This option enabled/disabled the search of floppy disk drive.
Boot Up Numlock Status	This option on/off the numlock mode at boot up.
Boot Up System Speed	This option high/low speed that the system will run at after power on.
Gate A20 Option	This option fast for chipset, normal for keyboard use of Gate A20.

Award BIOS Setup

3

Memory Parity Check	This option enabled/disabled the memory parity check function.
Typematic Rate Setting	This option enabled/disabled the typematic rate function.
Typematic Rate(Char/Sec)	This option set the rate of character repeat per second.
Typematic Delay (Msec)	This option set the delay time between the first and second character displayed.
Security Option	This option system/setup System - each time the system is booted the password prompt appears. Setup- If a password is set, the password prompt only appears if you try to enter the setup program.
Video or Adaptor BIOS Shadow	This option enabled/disabled video or adaptor BIOS shadow that will copy BIOS code from slower ROM to faster RAM.

3. After you finished the BIOS Features Setup program, press <ESC> to return to the main menu.

3

Award BIOS Setup

CHIPSET FEATURES SETUP

This setup includes the items of chipset register features.

Note : Change the setting only if you are familiar with the chipset.

1. Choose "CHIPSET FEATURES SETUP " from the main menu and CHIPSET Features Setup menu will appear on the screen with the default values

ROM PCI/ISA BIOS (2A4KDW0A)
 CHIPSET FEATURES SETUP
 AWARD SOFTWARE, INC.

Auto Configuration	:Enabled	Onboard FDC Controller	:Enabled
AT-BUS Colck	:CLK/4	Onboard Serial Port 1	:COM1 /3F8
DRAM Read Timing	:Normal	Onboard Serial Port 2	:COM2 /2F8
DRAM Write Timing	:Normal	Onboard Parallel Port	:378H
SRAM Read Timing	:3-2-2-2	Parallel Port Mode	:ECP
SRAM Write Timing	:0 Wait		
Hidden Refresh	:Enabled		
ISA I/O Recovery	:Enabled		
Fast-Back-Tto-Back	:Enabled		
On-Chip Local Bus IDE	:Enabled		
IDE Buffer for DOS&Win	:Enabled		
The 2nd Channel IDE	:Enabled		
IDE HDD Block Mode	:Enabled		
IDE Primary Master PIO	:Auto		
IDE Primary Slave PIO	:Auto	ESC:QUIT	↑↓→← :Select Item
IDE Secondary Master PIO	:Auto	F1:Help	Pu/PD/+/-:Modify
IDE Secondary slave PIO	:Auto	F5: Old Values	(Shift)F2:Color
		F6: Load BIOS Defaults	F7:Load Setup Defaults

Award BIOS Setup

3

2. Use arrow key to move between items and selected values. Use PgUp/PgDn/+/- keys to modify the selected item. <F> functions are explained below:

- <F1> Help, gives options available for each item.
- Shift<F2> Change Color
- <F5> Get the old values , for the user to start the current session.
- <F6> Load all option with the BIOS default values.
- <F7> Load all option with the Setup default values.

- Auto Configuration This option enabled/disabled the system automatically set option of the chipset register value. Set to Enabled is strongly recommended .
- AT Bus Clock This option selects the clock frequency for the AT Bus clock.
- DRAM Read Timing This option set the DRAM Read timing time.
- DRAM Write Timing This option set the DRAM Write timing time.
- SRAM Read Timing This option set the SRAM Read timing time.
- SRAM Write Timing This option set the SRAM Write timing time.
- Hidden Refresh This option enabled/ disabled hidden refresh function.
- ISA I/O Recovery This option enabled/disabled ISA I/O recovery function.
- Fast -Back-to-Back This option enabled/disabled Fast-Back-to-back function.
- On-Chip Local BUS IDE This option enabled/disabled Onboard IDE function.

3

Award BIOS Setup

- IDE Buffer for DOS & Win This option enabled/disabled IDE Buffer for DOS & Win function.
 - The 2nd Channel IDE This option enbaled/disabled onboard IDE 2nd channel.
 - IDE HDD Block Mode This option enabled/disabled the IDE HDD Block mode function. Not all HDD support this function.
 - IDE Primary Master/Slave, Secondary Master / Slave This option select different PIO mode from mode 0 to mode 4 for onboard IDE mode processor input / output mode.
 - Onboard FDC Controller This option enabled/disabled onboard FDC controller.
 - Onboard Serial Port 1 This option select different address port for onboard serial port 1.
 - Onboard Serial Port 2 This option select different address port for onboard serial port 2.
 - Onboard Parallel Port This option select different address port for onboard Paralle port.
 - Parallel Port Mode This option select different parallel port mode.
3. After you finished the CHIPSET Features Setup program, press <ESC> to return to the main menu.

Award BIOS Setup

3

POWER MANAGEMENT SETUP

This setup includes the items of power management setup features.

1. Choose "POWER MANAGEMENT SETUP" from the main menu and Power Management Setup Features menu will appear on the screen with the default values

ROM PCI/ISA BIOS (2A4KDW0A)
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC.

Power Management	User Define	IRQ 6 (Floppy Disk)	ON
PM Control by APM	No	IRQ 7 (LPT 1)	ON
Video off Option	Stup,Stiby ⇒ Off	IRQ 8 (RTC Alarm)	OFF
Video off Method	V/H SYNC+Blank	IRQ 9 (IRQ2 Redir)	ON
** PM Timers **			
HDD Power Down	Disabled	IRQ 10 (Reserved)	ON
Doze Mode	10 Sec	IRQ 11 (Reserved)	ON
Standby Mode	10 Sec	IRQ 12 (PS/2 Mouse)	ON
Suspend Mode	10 Sec	IRQ 13 (Coproccesor)	ON
** PM Events **			
VGA	OFF	IRQ 14 (Hard Disk)	ON
FDD (3FXh)	ON	IRQ 15 (Reserved)	ON
LPT & COM	.LPT/COM		
HDD (1FXh)	ON		
NMI	OFF		
IRQ 3 (COM 2)	ON		
IRQ 4 (COM 1)	ON		
IRQ 5 (LPT 2)	ON		
		ESC:QUIT	↑↓→← Select Item
		F1:Help	Pu/PD+/- Modify
		F5: Old Values	(Shif)F2:Color
		F6: Load BIOS Defaults	
		F7:Load Setup Defaults	

2. Use arrow key to move between items and selected values. Use PgUp/PgDn/+/- keys to modify the selected item. <F> functions are explained below:

3

Award BIOS Setup

- <F1> Help, gives options available for each item.
- Shift-<F2> Change Color
- <F5> Get the old values, for the user to start the current session.
- <F6> Load all option with the BIOS default values.
- <F7> Load all option with the Setup default values.

Power Management

Option are as follows:

- Disable Global Power management will be disabled.
- User Define Let's you define time HDD and System will power down.
- Min Saving Pre-defined timer values of 1hr and 40 minutes.
- Max Saving Pre-defined timer values of 10 seconds.
- Optimize Pre-defined timer values are in reasonable time.

PM Control by APM This option yes/no for Advanced Power Management. If APM is used you must run "power.exe" under DOS v6.0 or later version.

Video off Option This select different option to turn off the monitor.

Video off Method This select different method in turning off the monitor.

PM Timer This option set the time or disabled the function. If PM timer is set, make sure that the power management is not set to disable, otherwise PM Timer have no effect.

PM Event This option enabled/disabled the BIOS monitors' activities. If activity occurs from the enabled item then the system will not enter into the green function mode. (Power Saving)

Award BIOS Setup

3

PCI CONFIGURATION SETUP

This setup includes the items of PCI Configuration setup .

1. Choose "PCI CONFIGURATION SETUP " from the main menu and PCI Configuration Setup menu will appear on the screen with the default values
ROM PCI/ISA BIOS (2A4KDWOA)
PCI CONFIGURATION SETUP
AWARD SOFTWARE, INC.

PNP BIOS Auto- Config	:Disable	
Slot 1 Using INT#	:Auto	
Slot 2 Using INT#	:Auto	
Slot 3 Using INT#	:Auto	
Slot 4 Using INT#	:Auto	
1st Available IRQ	:10	
2nd Available IRQ	:11	
3rd Available IRQ	:12	
4th Available IRQ	:9	
PCI IRQ Activity By	:Level	
PCI IDE 2nd Channel	:Enabled	
PCI IDE IRQ Map To	:PCI-AUTO	ESC:QUIT
Primary IDE INT#	:A	F1:Help
Secondary IDE INT#	:B	F5: Old Values
		F6: Load BIOS Defaults
		F7:Load Setup Defaults

↑↓→← :Select Item
Pu/PD/+/-:Modify
(Shift)F2:Color

2. Use arrow key to move between items and selected values. Use PgUp/PgDn/+/- keys to modify the selected item. <F> functions are explained below:

<F1>	Help, gives options available for each item.
Shift<F2>	Change Color
<F5>	Get the old values, for the user to start the current session.
<F6>	Load all option with the BIOS default values.
<F7>	Load all option with the Setup default values.
PnP BIOS Auto Config	This option enabled/disabled PnP BIOS Auto Config. Enabled will automatic set the 1st,2nd,3rd and 4th IRQ for slot 1~4 INT#.
Slot 1,2,3,4 Using INT#	This option assign the PCI INT# number A,B,C,D or Auto. If set to Auto it will automatic assign PCI INT#.
1st,2nd,3rd,4th Available IRQ	This option assign the IRQ for slot 1~4 PCI INT#. If PnP BIOS Auto Config set to disabled the BIOS will automatically route the INT# to specified IRQ following the 1st,2nd,3rd and 4th IRQ order your assign.
PCI IRQ Activied By	This option set the IRQ assign to LEVEL or EDGE trigger.
PCI IDE IRQ Map To	This option selet PCI-AUTO, ISA or assign a PCI slot number (depending on which slot the PCI IDE is inserted)
Primary IDE INT#	This option set the Primary IDE INT# to A,B,C or D. The default setting is A.
Secondary IDE INT#	This option set the Secondary IDE INT# to A,B,C or D. The default setting is B.

LOAD BIOS DEFAULTS

This item loads the BIOS default indicating the most appropriate value of the system parameter which the system would be in minimum performance. Choose this item and the following message appears:

"Load BIOS Defaults (Y/N)? N"

To use the SETUP defaults, change the prompt to "Y" and press <Enter>.

LOAD SETUP DEFAULTS

This item loads the SETUP default indicating the most appropriate value of the system parameter which the system would be in maximum performance. Choose this item and the following message appears:

"Load SETUP Defaults (Y/N)? N"

To use the SETUP defaults, change the prompt to "Y" and press <Enter>.

SUPERVISOR PASSWORD

This allows you to limit access to the system and setup.

1. Choose "SUPERVISOR PASSWORD" in the main menu and press <Enter>. The following message appears on the screen.
"Enter Password."
2. Enter a password and press <Enter>.
(If you do not wish to use the password function, just press <Enter> and a "password disable" message appears.)
3. After you enter your password, the following message appears, prompting you to confirm the new password:
"Confirm Password."
4. Re-enter your password and then press <ESC> to exit the main menu.

Important : If you forget the password, the only way to access the system is to reset the CMOS.

Note : resetting the CMOS, all setup will lost and you must run BIOS setup program again.

USER PASSWORD

This allows you to limit access to the system and setup.

Note : If supervisor password is set , you can not enter the BIOS setup.

1. Choose "USER PASSWORD " in the main menu and press <Enter>. The following message appears on the screen.

"Enter Password:"

2. Enter a password and press <Enter>. (If you do not wish to use the password function, just press <Enter> and a "Password disabled " message appears.)

3. After you enter your password, the following message appears, prompting you to confirm the new password:

"Confirm Password:"

4. Re-enter your password and then press <ESC> to exit the main menu.

Important : If you forget the password ,the only way to access the system is to reset the CMOS.

Note : resetting the CMOS, all setup will lost and you must run BIOS setup program again.

IDE HDD AUTO DETECTION

This main menu will automatically detect the hard disk type and configure the Standard CMOS setup accordingly.

Note : This function is only for valid IDE hard disk.

HDD LOW LEVEL FORMAT

This main menu will make a low level format the hard disk.

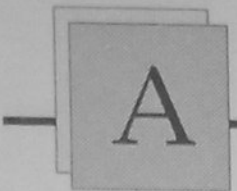
Note: Low level format will delete all the datas in the hard disk.

SAVE & EXIT SETUP

This function saves the changes of values to the CMOS and exit setup.

EXIT WITHOUT SAVING

This function abandons all CMOS changes and exit setup.



Appendix

CPU Jumper Setting

CPU TYPE	CPU CLOCK																CPU VOLTAGE		
	JP19	JP20	JP22	JP23	JP24	JP25	JP26	JP27	JP28	JP29	JP5	JP6	JP13	JP14	JP16				
INTEL																			
SX333	OP	OP	OP	1-2	OP	OP	1-2	OP	OP	1-2	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX333	2-3	OP	OP	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX2-66	2-3	OP	OP	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX4-75	2-3	OP	OP	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX4-100	2-3	OP	OP	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
P34T-66	2-3	CL	5-6	2-3	1-2	CL	3-4	1-2	3-4	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
P34T	1-2	OP	OP	2-3	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
AMD																			
DX-40	2-3	OP	OP	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX2-66	2-3	OP	OP	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
NVXT CPU																			
DX2-80	2-3	CL	3-4	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX4-100	2-3	OP	5-6	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX4-130	2-3	OP	5-6	1-2	1-2	CL	3-4	1-2	OP	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
SV8B CPU																			
DX4-100	2-3	OP	5-6	2-3	1-2	CL	3-4	1-2	3-4	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX4-120	2-3	OP	5-6	2-3	1-2	CL	3-4	1-2	3-4	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
5X86-131(75)	2-3	OP	3-4, 5-6	2-3	1-2	CL	3-4	1-2	3-4	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
CYRIX																			
DX-40	2-3	OP	1-2	1-2	3-4	CL	5-6	3-4	1-2	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX2-66	2-3	OP	1-2	1-2	3-4	CL	5-6	3-4	1-2	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX2-80	2-3	OP	1-2	1-2	3-4	CL	5-6	3-4	1-2	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
DX4-100	2-3	OP	1-2	1-2	3-4	CL	5-6	3-4	1-2	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
CX586-100	2-3	OP	5-6	1-2	1-2	CL	3-4	1-2	3-4	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	
CX586-120	2-3	OP	5-6	1-2	1-2	CL	3-4	1-2	3-4	2-3	CL	CL	OP	1-2	1-2	1-2	1-2	1-2	

NOTE: The default setting of this index is 3.45 volts. Please pay attention to your CPU voltage.
 IBM, TI & SGS-THOMSON CPU have the same jumper setting with CYRIX CPU.