Pentium

MP 082
PCI/ISA Mainboard

USER'S MANUA

A1-0
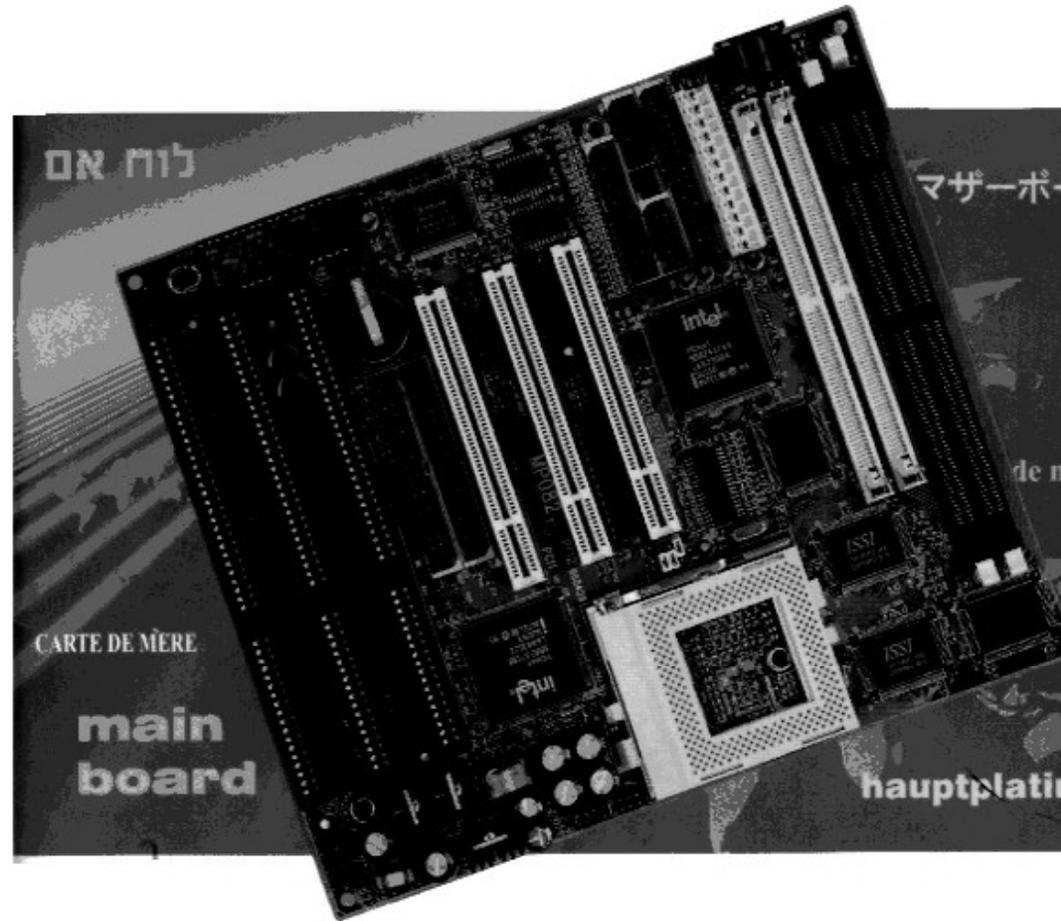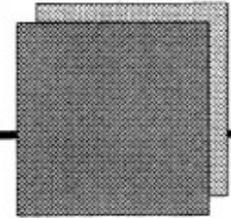
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Introduction 1

Foreword

This manual is designed to provide the basic necessary information for the end user to understand and properly use the MP082 mainboard. The mainboard ensures superlative performance and complete compatibilty with industry standards, which incorporating many techincal enhancements.

Trademarks

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Checklist

Your MP082 package contains the following:

➦MP082 mainboard

➦User's manual

➦HDD/FDD Cable

➦Com1 & Com2 Cable

➦Printer Cable

Precautions

Make sure you ground yourself before handling the mainboard or other system components. Electrostatic discharge will damage the 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 computer chassis.
- Frequently ground yourself while working, or use a grounding strap.
- Handle the mainboard by the edges and avoid touching its components.

Mainboard Features

- Intel 430VX PCI chipset: 82437(TVX) / 82438(TDX) / 82371 (PIIX3)
- Supports Intel Pentium, Cyrix / IBM 6X86, AMD K5 / K6 microprocessor
- Three high performance 32 bits PCI local bus master
- Three 16 bits ISA system bus I/O slots
- 256K / 512K synchronous cache onboard
- Main memory (DRAM) from 4MB to 128MB, either Page mode / EDO mode
- Supports SDRAM (Synchronous DRAM) , Two DIMM sockets
- Supports two USB (Universal Serial Bus) ports
- Enchanced IDE onboard
- Supports PnP (Plug and Play) function
- Enhanced fast I/O (Serial port, Parallel port (ECP/EPP/SPP), FDC) onboard
- IR port Option

Mainboard Layout

Mainboard layout Placement chart is for your referenc of jumpers location for the following functions. CPU jumper setting, CPU voltage selector , Flash ROM voltage selector , CMOS charge / discharge selsector jumper setting.
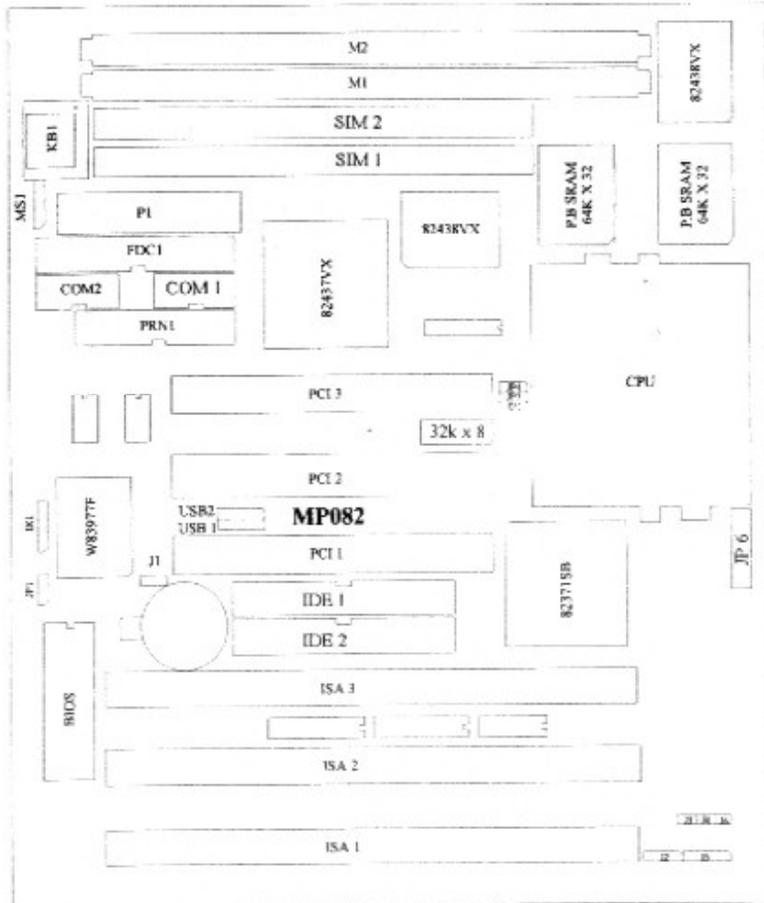
Jumpers and Connectors Reference

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

CPU Clock Selector	JP2,JP3,JP4
CPU Internal Clock Selector	JP6(1~6)
CPU Single & Dual Voltage Selector	JP6(7~16)
Flash ROM Voltage Selector	JP1
CMOS Charge / Discharge	J1

Mainboard Connectors:

Hard disk Connector	IDE1&IDE2
Printer Connector	PRN1
Floppy Connector	FDC1
Serial Connector	COM1 & COM2
Universal Serial Bus Connector	USB
IR port Connector	IR1
SMI Connector	J6
Hard disk LED Connector	J4
Keylock and Power LED Connector	J5
Speaker Connector	J2
Reset Connector	J3
Keyboard Connector	KB1
PS/2 Mouse Connector	MS1
Power Supply Connector	P1

Jumper Caps reference :

Red cap for CPU single & dual voltage selector

Yellow cap for Clock Selector

White cap for CPU Internal Clock Selector

Black cap for Others

CPU JUMPER SETTING

Before installing the CPU, make sure that the following jumpers are set properly.

CPU Clock Selector (Yellow Cap)   JP2 , JP3 , JP4
50 Mhz,55 Mhz,60 Mhz,66 Mhz,75 Mhz

CPU Internal Clock Selector (White Cap) JP6(1-6)
1.5x (3.5x) , 2x , 2.5x , 3x

CPU Voltage Selector (Red Cap)   JP6(7-16)
2.8V , 2.9V , 3.2V , 3.3V , 3.5V

JP6

2	4	6		8	10	12	14	16	
1	3	5		7	9	11	13	15	
OP	OP	OP	x1.5 (x3.5)	CL	OP	OP	OP	OP	3.5V
CL	OP	OP	x2	OP	CL	OP	OP	OP	3.3V
CL	CL	OP	x2.5	OP	OP	CL	OP	OP	3.2V
OP	CL	OP	x3	OP	OP	OP	CL	OP	2.9V
				OP	OP	OP	OP	CL	2.8V

Please refer to the type of CPU for correct jumper setting. If your CPU type is not list in the CPU type jumper setting , contact your dealer for further instruction.

NOTE: CPU has two different types of voltage (A) Single Voltage (B) Dual Voltage. Wrong jumper setting will damage the CPU.

JP4
JP3
JP2
3 2 1

JP 6
1   15
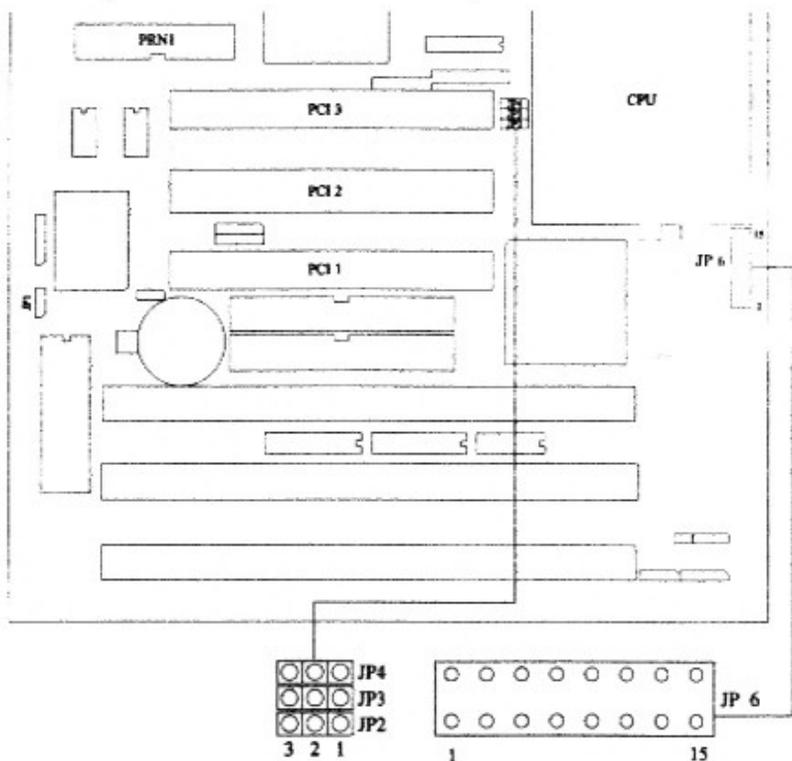
INTEL CPU
SINGLE VOLTAGE

PP-75/3.38V
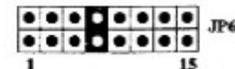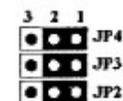
PP-90/3.38V
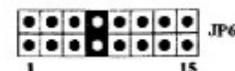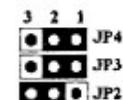
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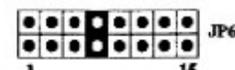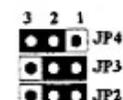
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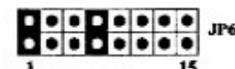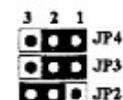
PP-133/3.38V
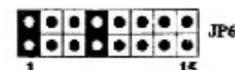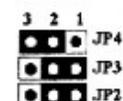
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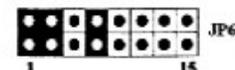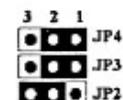
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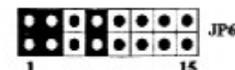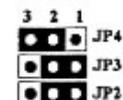
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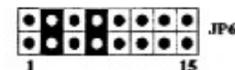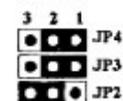
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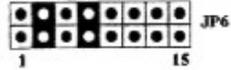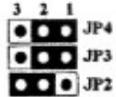
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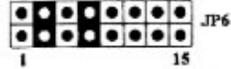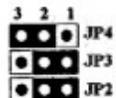
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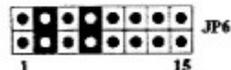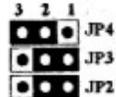
INTEL CPU
DUAL VOLTAGE

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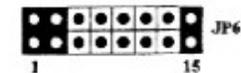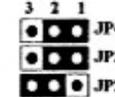
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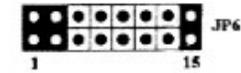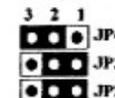
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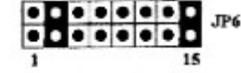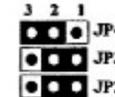
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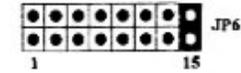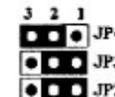
IBM / CYRIX CPU
SINGLE VOLTAGE

6x86-PR120/3.52V

6x86-PR133/3.52V

6x86-PR150/3.52V

6x86-PR166/3.52V

6x86-PR200/3.52V
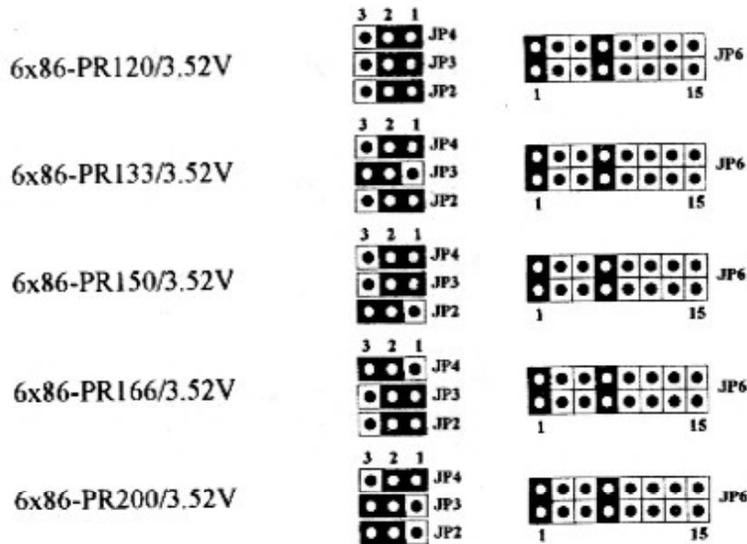
IBM / CYRIX CPU
DUAL VOLTAGE

6x86-PR120/2.8V

6x86-PR133/2.8V

6x86-PR150/2.8V

6x86-PR166/2.8V

6x86-PR200/2.8V
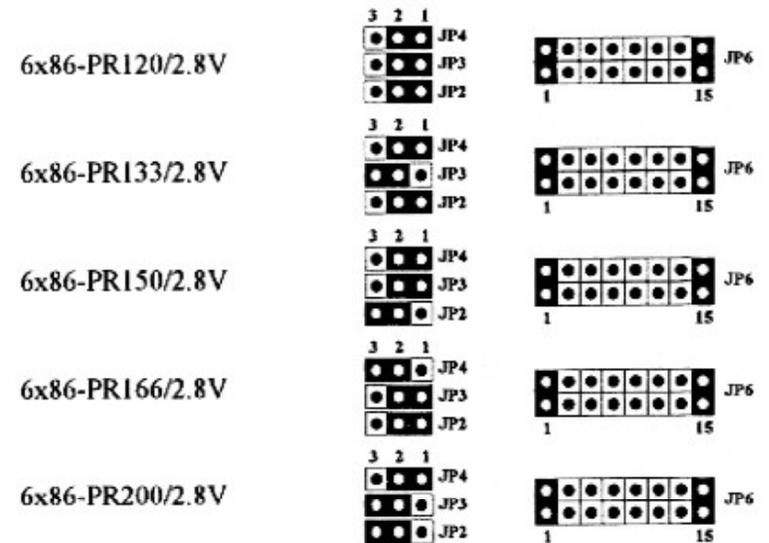
IBM/CYRIX M2 CPU

DUAL VOLTAGE

6x86MX-PR 166 GP/2.9V

6x86MX-PR 200 GP/2.9V

6x86MX-PR 233 GP/2.9V

6x86MX-PR 233 GP/2.9V

6x86MX-PR 266 GP/2.9V

6x86MX-PR 266 GP/2.9V

AMD K5 CPU
SINGLE VOLTAGE

AMD-K5-PR75/3.52V

AMD-K5-PR90/3.52V

AMD-K5-PR100/3.52V

AMD-K5-PR120/3.52V

AMD-K5-PR133/3.52V

AMD-K5-PR150/3.52V

AMD-K5-PR166/3.52V

AMD-K5-PR200/3.52V

AMD K6 CPU

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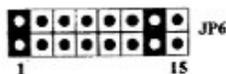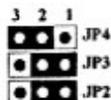
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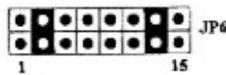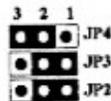
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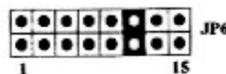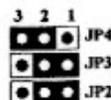
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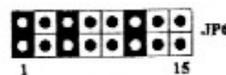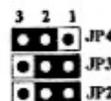
FLASH ROM VOLTAGE SELECTOR   RED Jumper Cap

JP1

| 1-2 | 12 VOLTS | FLASH ROM | (Intel / MX brand) |
| 2-3 | 5 VOLTS | FLASH ROM | (SST / Winbond brand) |

CMOS RESET CONNECTOR

J1

| 1-2 | CMOS CHARGE | (DEFAULT) |
| 2-3 | CMOS DISCHARGE OR RESET | |

IR PORT SELECTOR

IR port is selected, make sure the BIOS "INTEGRATED PERIPHERALS"setup IR port setting is set properly or will

MEMORY CONFIGURATION

MP082 is designed to support Memory from 4MB up to 128MB by using Standard , EDO and SDRAM mode. It only supports 4 banks of memory by using 4MB , 8MB , 16MB , 32MB or 64MB Single or Double-side Memory module in SIMM socket or DIMM socket.

"SB" means single bank RAM module (single side).
"DB" means double bank RAM module (double side).
"NA" means not accessible.
"NONE" means not installed but free.
Single and Double-side Memory Module at any size combination used on SIMM and DIMM socket.

SIMM1,2(BANK3,2)	DIMM1(BANK0,1)	DIMM2(BANK2,3)
SB	NONE	NONE
SB	NONE	SB
DB	NONE	NA
NONE	NONE	SB
NA	NONE	DB
SB	SB	NONE
SB	SB	SB
DB	SB	NA
NONE	SB	SB
NA	SB	DB
SB	DB	NONE
SB	DB	SB
DB	DB	NA
NONE	DB	SB
NA	DB	DB

NOTE:

* Do not mix the size of Single-side and Double-side memory module in SIM 1 & 2.

* Do not mix the DRAM types in SIM1 - 2 or M1 & M2. Different types of DRAM have different speeds that will make unreliable operation to the system.

* If SIMM socket SIM 1- 2 is used Double-side then DIMM socket M2 can not be used and vice versa to avoid memory Bank Conflict.

* Do not use 72-pin SIMM module with more than 24 chips. Module with more than 24 chips exceeds the design specification of the memory subsystem and will cause unreliable operation.

CONNECTORS

IDE 1 & 2	HARD DISK CONNECTOR
FDC1	FLOPPY CONNECTOR
PRN1	PRINTER PORT CONNECTOR
COM1 & 2	SERIAL PORT CONNECTOR
USB	UNIVERSAL SERIAL BUS CONNECTOR
IR1	IR PORT CONNECTOR
MS1	PS/2 MOUSE CONNECTOR
J6	SMI SWITCH CONNECTOR
J4	HARD DISK LED CONNECTOR
J5	KEYLOCK & POWER LED
J2	SPEAKER CONNECTOR
J3	RESET CONNECTOR

AWARD BIOS SETUP

AWARD BIOS SETUP

Award BIOS supports plug-and-play function and 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. The main menu allows you to select from several setup functions and two exit choices.

```
                ROM PCI/ISA BIOS (2A59GW0G)
                    CMOS SETUP UTILITY
                   AWARD SOFTWARE, INC.
```

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	PASSWORD SETTING
CHIPSET FEATURES SETUP	IDE HDD AUTO DETECTION
POWER MANAGEMENT SETUP	HDD LOW LEVEL FORMAT
PNP/PCI CONFIGURATION	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" ignore the changes and exit the setup program.

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 PCI/ISA BIOS (2A59GW0G)
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.	CYLS.	HEADS	PERCOMP	LANDZ	SECTORS	MODE
Primary Master	User	124.	1024	14	65535	1023	17	NORMAL
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	-------

Drive A:1.2Mb 5.25in.
Drive B:1.44M 3.5in.
Video :EGA/VGA
Halt On :All Errors

Base Memory:	640K
Extended Memory:	31744K
Other Memory:	384K
Total Memory:	32768K

ESC:QUIT   ↑ ↓ → ← :Select Item   PU/PD/+/-:Modify
F1:Help   (Shift) F2:Change Color

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.
Time (hh/mm/ss)	Type the current time.
Hard Disk	Choose from the predefined hard disk types 1 to 45. Typ

User definable. If you select type user, enter the information directly from th keyboard and press <Enter>. If you select AUTO type, BIOS will automaticall detect HDD type when power on. This information should be provided in th documentation from your hard disk vendor.

Drive A & B	Choose 360KB , 5.25 in.
	1.2MB , 5.25 in.
	720KB , 5.25 in.
	1.44MB , 3.5 in.
	2.88MB , 5.25 in.
	Not Installed
Video	Choose Monochrome
	Color 40 x 25
	EGA / VGA
	Color 80 x 25
Halt on	This category determines whether the computer will stop if an error is detected during power up.

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

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 (2A59GW0G)
BIOS FEATURES 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	:C,A	D4000-D7FFF Shadow	:Disabled
Swap Floppy Drive	:Disabled	D8000-DBFFF Shadow	:Disabled
Boot Up Floppy Seek	:Disabled	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	ESC:QUIT	↑↓→← :Select Item
Security Option	:Setup	F1:Help	
PCI/VGA Palette Snoop	:Disabled	F5: Old Values	Pu/PD/+/-:Modify
OS Select For DRAM >64MB	:Non-OS2	F6: Load BIOS Defaults	(Shift)F2:Color
		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:
   - <F1> Help, gives options available for each item.
   - Shift <F2> Changes Color.
   - <F5> Gets the old values.for the user to start the current session.
   - <F6> Loads all option with the BIOS default values.

<F7>	Loads all option with the Setup default values.
Virus Warning	This option enables/disables virus warning message if any attempt to wire to the boot sector of hard disk partition.
CPU Internal Cache	This option enables/disables the CPU internal cache memory.
External Cache	This option enables/disables the external cache memory.
Quick Power On Self Test	This option enables/disables the BIOS past POST at boot up.
Boot Sequence	This option A /C, D~F, SCSI, CD ROM, LS120 the computer searches the first drive for the operating system.
Swap Floppy Drive	This option enables/disables the boot up sequence from B to A drive.
Boot up Numlock status	This option is on/off the numlock mode at boot up.
Boot Up System Speed	This option is 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.
Typematic Rate Setting	This option enables/disables the typematic rate function.
Typematic Rate (Char/Sec)	This option sets the rate of character repeat per second.
Typematic Delay (Msec)	This option sets the delay time between the first and second character displayed.
Security Option	This option is 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.
PCI/VGA Palette Snoop	It Determines whether the MPEG ISA/VESA VGA card can work with PCI/VGA or not Enable : When PCI/VGA working with MPEG/VESA VGA card. Disable: When PCI/VGA not working with MPEG ISA/VESA VGA card
OS Select For DRAM >64MB	This item allows you to access the memory that over 64MB in OS/2
Video BIOS Shadow	Will copy BIOS code from slower ROM to faster RAM.
C8000-DFFFF Shadow	these categories determine whether option ROMs will be copied to RAM.

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

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 (2A59GW0G)
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.
```

Auto Configuration	:Enabled	Delayed Transatction	:Disabled
DRAM Timing	:70ns		
DRAM RAS# Precharge Time	:4		
DRAM R/W Leadoff Timing	:6		
Fast RAS To CAS Delay	:3		
DRAM Read Burst (EDO/FP)	:x333/x444		
DRAM Write Burst Timing	:x333		
Fast MA to RAS# Delay CLK	:1		
Fast EDO Path Select	:Disabled		
Refresh RAS# Assertion	:5 Clks		
ISA Bus Clock	:PCICLK/4		
System BIOS Cacheable	:Disabled		
Video BIOS Cacheable	:Disabled		
8 Bit I/O Recovery Time	:1		
16 Bit I/O Recovery Time	:1	ESC:QUIT	↑↓→← :Select Item
Memory Hole At 15M-16M	:Disabled	F1:Help	Pu/PD/+/-:Modify
Peer Concurrency	:Enabled	F5: Old Values	(Shift)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:

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

Auto Configuration — This option enables/disables the Auto configuration function.

DRAM Timing — This option sets the DRAM timing.

DRAM RAS# Precharge Time — This option determines the number of CPU clock allocated. the RAS# to accumulate its charge before the DRAM is refreshed

DRAM R/W reads Leadoff Time — This option sets the number of CPU clock allowed befer and writes for DRAM are performed.

Fast RAS# To CAS# Delay — This option determines the timing of the transition from RAS# to CAS#.

DRAM Read Burst<EDO/FPM> — This option sets the timing for DRAM Read Burst.

DRAM Write Burst Timing — This option sets the timing for DRAM Write Burst.

Fast MA to RAS# Delay CLK — This option controls number of clock MA setup to RAS# assertion.

Fast EDO Path Select — This option enables/disables the Fast EDO Path Select.

Refresh RAS# Assertion — This option controls the number of clocks RAS# is asserted for refresh cycle.

ISA Bus Colock — This option selests the ISA Bus Clock.

System BIOS Cacheable. — This option enables/disables the System BIOS area Cacheable

Video BIOS Cacheable. — This option enables/disables the Video BIOS area Cacheable

8 Bit I/O Recovery Time — This option is used to add additional recovery delay between CPU or PCI, master 8 bits I/O cycle and the ISA bus.

16 Bit I/O Recovery Time — This option is used to add additional recovery delay between CPU or PCI, master 16 bits I/O cycle and the ISA bus.

Memory Hole At 15M-16M — This option enables/disables Memory Hole at 15M-16M.

Peer Concurrency — This option enables/disables Peer Concurrency.

Delay Transaction — This option enables/disables delay transaction.

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

POWER MANAGEMENT SETUP

This setup includes the items of Power Management setup.

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

```
ROM PCI/ISA BIOS (2A59GW0G)
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC.
```

Power Management	:Disabled				
PM Control by APM	:Yes	** Power Down & Resume Events **			
Video off Method	:V/H SYNC+Blank	IRQ 3	(COM 2)		:ON
MODEN Use IRQ	:3	IRQ 4	(COM 1)		:ON
		IRQ 5	(LPT 2)		:OFF
Doze Mode	:Disabled	IRQ 6	(Floppy Disk)		:OFF
Standby Mode	:Disabled	IRQ 7	(LPT 1)		:OFF
Suspend Mode	:Disabled	IRQ 8	(RTC Alarm)		:OFF
HDD Power Down	:Disabled	IRQ 9	(IRQ2 Redir)		:OFF
		IRQ 10	(Reserved)		:OFF
Wake Up Event In Doze & Standby		IRQ 11	(Reserved)		:OFF
IRQ3 (Wake-Up Event) :ON		IRQ 12	(PS/2 Mouse)		:OFF
IRQ4 (Wake-Up Event) :ON		IRQ 13	(Coprocessor)		:OFF
IRQ8 (Wake-Up Event) :ON		IRQ 14	(Hard Disk)		:ON
IRQ12 (Wake-Up Event) :ON		IRQ 15	(Reserved)		OFF

```
ESC:QUIT                    ↑↓→← :Select Item
F1:Help
F5: Old Values              Pu/PD/+/-:Modify
F6: Load BIOS Defaults      (Shift)F2:Color
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:

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

Power Management	Options 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 1 hour.
	Max Saving — Pre-defined timer values of 1 minute.

PM Control by APM

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

Video Off Method

The "Video Off Method" default is "V/H SYNC +Blank". The other options are "DPMS" and Blank Only". When power management blanks the monitor screen, the default setting blanks the screen and turns off vertical and horizontal scanning. The DPMS (Display Power Management System) setting allows the BIOS to control the video card if it has the DPMS features. If you don't have a "Green monitor,use the Blank Only Option.

MODEM Use IRQ

This option sets the IRQ used by modem.

Doze Mode

This option sets the time or disables the doze mode.

Standby Mode

This option sets the time or disables Standby mode.

Suspend Mode   This option sets the time or disables HDD Power Down.

COM-Drive Port   Those option turns ON/OFF the BIOS monitors' Accessed
IRQ3-IRQ15   and activites. If act ivity occurs from the enableditem, the
                    system will not enter into the green functionmode (power
                    saving).

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

PnP/PCI CONFIGURATION SETUP

This setup includes the items of PnP /PCI configuration setup.

1. Choose "Pn/PCI CONFIGURATION SETUP" from the main menu and Pn/PCI
   configuration setup appears on the screen with the default values.

```
              ROM PCI/ISA BIOS (2A59GW0G)
                  PnP/PCI CONFIGURATION
                   AWARD SOFTWARE, INC.
```

Resource Controlled By	:Manual	PCI IRQ Actived By	:Level
Reset Configuration Data	:Disabled	PCI IDE IRQ Map To	:PCI -AUTO
IRQ-3 Assigned to	:Legace ISA	Primary IDE INT #	:A
IRQ-4 Assigned to	:Legace ISA	Secondary IDE INT #	:B
IRQ-5 Assigned to	:PCI/ISA PnP		
IRQ-7 Assigned to	:PCI/ISA PnP		
IRQ-9 Assigned to	:PCI/ISA PnP		
IRQ-10 Assigned to	:PCI/ISA PnP		
IRQ-11 Assigned to	:PCI/ISA PnP		
IRQ-12 Assigned to	:PCI/ISA PnP		
IRQ-14 Assigned to	:PCI/ISA PnP		
IRQ-15 Assigned to	:PCI/ISA PnP		
DMA-0 Assigned to	:PCI/ISA PnP		
DMA-1 Assigned to	:PCI/ISA PnP	ESC:QUIT	↑↓→← :Select Item
DMA-3 Assigned to	:PCI/ISA PnP	F1:Help	Pu/PD/+/-:Modify
DMA-5 Assigned to	:PCI/ISA PnP	F5: Old Values	(Shift)F2:Color
DMA-6 Assigned to	:PCI/ISA PnP	F6: Load BIOS Defaults	
DMA-7 Assigned to	:PCI/ISA PnP	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:

	<F1>	Help, gives options available for each item.
Shift	<F2>	Changes Color.

<F5>   Gets the old values; for the user to start the current session.
<F6>   Loads all option with the BIOS default values.
<F7>   Loads all option with the Setup default values.

Resource Controlled by   This option sets Resource Controlled by Auto or Manual configure.

Reset Configuration Data   This option enables/disables Reset Configuration Data.

IRQ3/4/5/7/9/10/11/12/14/15   This option Legacy ISA/PCI/ISA PnP determines
DMA0/1/3/5/6/7   the IRQ/DMA assigned to the Assigned to ISA bus and is not available to any PCI slot.

PCI IRQ Activated by   This option sets the IRQ assigned to LEVEL or EDGE trigger.

PCI IDE IRQ Map To   This option selects PCI-AUTO, ISA or assigns a PCI Slot number (depending on which slot the PCI IDE is inserted).

Primary IDE INT#   This option sets the Primary IDE INT# to A,B,C or D. The default setting is A .

Secondary IDE INT#   This option sets the Secondary IDE INT# to A,B,C or D. The default setting is B .

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

LOAD BIOS DEFAULT

The BIOS default which provide the minimum requirement for your system

Press ENTER key to load the BIOS default value.

LOAD SETUP DEFAULT

The Chipset default are setting which provide for maximize performance.

Press ENTER key to load the setup default

INTEGRATED PERIPHERALS

This option includes the items of INTEGRATED PERIPHERALS setup features.

1. Choose " INTEGRATED PERIPHERALS" from the main menu and Integrated Peripherals menu will appear on the screen with the default values.

```
ROM PCI/ISA BIOS (2A59GW0G)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

IDE HDD Block Mode    : Enabled         Onboard Parallel port 1  : 37B/IRQ7
IDE Primary Master PIO : Auto           Parallel Port Mode       : SPP
IDE Primary Slave PIO  : Auto
IDE Secondary Master PIO: Auto
IDE Secondary Slave PIO: Auto
On-Chip Primary IDE    : Enabled
On-Chip Secondary IDE  : Enabled
PCI Slot IDE 2nd channel: Enabled
USB Controller         : Enabled
KBC Input clock        : 8 MHz
Onboard FDC Controller : Enabled
Onboard Serial port 1   : 3FB/IRQ4      ESC:QUIT          ↑↓→← :Select Item
Onboard Serial port 2   : 2FB/IRQ3      F1:Help
                                        F5: Old Values    Pu/PD/+/-:Modify
Onboard IR Controller  : Disabled       F6: Load BIOS Defaults  (Shift)F2-Color
                                        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:
- <F1> Help, gives options available for each item.
- Shift <F2> Changes Color.
- <F5> Gets the old values.for the user to start the current session.
- <F6> Loads all option with the BIOS default values.
- <F7> Loads all option with the Setup default values

IDE HDD Block Mode	This option enables/disables the IDE HDD Block mode function.Not all HDD supports this function.
IDE Primary Master/Slave	This option selects different PIO mode from mode 0 to mode 4
Secondary Master/Slave	for onboard PCI IDE mode processor input/output mode.
On-Chip Primary PCI IDE	This option enables/disables the primary onboard PCI IDE.
On-Chip Secondary PCI IDE	This option enables/disables the secondary onboard PCI IDE.
PCI Slot IDE 2nd Channel	This option enables/disables PCI Slot IDE 2nd Channel.
USB Controller	This option enable/disable USB Function controller.
KBC Input clock	This option selects different KBC Input clock.
Onboard FDC controller	This option enable/disable onboard FDC controller.
Onboard serial port 1	This ption enables/disables onboard Serial Port 1 and select port address/IRQn.
Onboard serial port 2	This ption enables/disables onboard Serial Port 2 and select port address/IRQn.
Onboard IR Controller	This option function follow by IrDA/ ASKIR and select port address/IRQn.

Onboard Paralled Port   This option enables/disables on port parallel port and
                             select parallel port address/IRQn.

Onboard Parallel Mode   This option selects different parallel port mode.

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

PASSWORD SETTING

1.Enter password up to eight characters in length and press <Enter>

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

2. 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: If you reset the CMOS, all setup will lose and you must run BIOS setup program again.

IDE HDD AUTO DETECTION

If your system has an IDE hard drive, you can use this utility to detect its parameters and enter them into the Standard CMOS Setup automatically.

This utility will detect as many as four IDE drivers if your system configuration supports that many . In sequence, a set of parameters for each drive will appear in the box. To accept the entries displayed, press the Y key, to skip to the next drive, press the N key. If you accept the value , the parameters will appear listed beside the drive letter on the screen and the next letter, without parameter will appear and the program will attempt to detect parameter for the next drive. If you press N key to skip rather than accept a set of parameters, zeros are entered after that drive letter.

Remember, if you use another IDE controller that does not have Enhanced IDE support for four devices, you can only install two IDE hard disk drives. Your IDE controller must support Enhanced IDE features in order to use Drive E and Drive F. The onboard IDE controller supports Enhanced IDE and has two connectors that support a total of four IDE devices.

When you finished, any entries you accepted are automatically entered on the line for that drive in the Standard CMOS Setup. Any entries you skipped are ignored and nothing is entered for that drive in Standard CMOS Setup.

IDE HDD AUTO DETECTION SCREEN

ROM PCI/ISA BIOS (2A59GW0G)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

HARD DSIKS	TYPE	SIZE	CYLS	HEADS	PRECOMP	LANDZ	SECTOR	MODE
Primary Master :								

Select Primary Master Option (N=Skip) ? N

OPTION	SIZE	CYLS	HEADS	PRECOMP	LANDZ	SECTOR	MODE
1(Y)	307	790	15	65535	790	57	NORMAL

Note: If you are setting up a hard disk that supports LBA mode, three lines will appear in the parameter box. Choose the line that lists LBA or an LBA drive.Do not choose Large or Normal.

Important: This utility will only detect one set of parameters for an IDE hard drive. Some IDE drivers can use more than one set.This is not a problem if the drive is new and there is nothing on it. If the hard disk drive is already fully formatted when you install it, and different parameters than those detected here were used, you will have to enter them manually.

If the parameters listed don't match the ones used when the drive was formatted, the drive won't be readable. If the auto detect parameters displayed do not match the ones that should be used your drive, do not accept them. Press <N> key to reject the values and enter the correct ones manually from the Standard CMOS Setup screen.

3 Award BIOS Setup

SAVE & EXIT SETUP

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

EXIT WITHOUT SAVING

This function abandons all CMOS changes and exit setup.

RMA CHECK LIST

1 · CUSTOMER NAME :   DATE:____

2 · CONTACT PERSON : _____ TEL : _____ EXT. : __

3 · RMA NO. :

4 · TOTAL QTY. :

MODEL NO.	Serial NO.	SYMHTOMS	Repair STATUS

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