

CONTENTS

1.	Specification	2
2.	Parts Of The Mother Board	4
3.	MotherBoard Layout Quick View	5
4.	Installation	6
4-1	Jumper Overview	6
4-2	CPU Setting	8
4-3	Install System Memory Modules	9
4-4	External Connction	10
4-5	ATX Power Supply Connector	11
4-6	KeyBoard , Mouse, USB, COM / LPT / Sound	12
4-7	Front Panel Connection	14
4-8	FAN, IR, WOL, CD IN Connector	15
4-9	Power On Procedure	17
Appendix:	BIOS Setup Tips.....	18

Item Checklist

Please check that your package is complete. If you discover damaged or missing items, please contact your retailer.

- Motherboard x 1
- 40-pin IDE Connector Flat Cable x 1
- 34-pin Floppy Disk Drive Flat Cable x 1
- User Manual x 1; CD x 1

Option : Components will be include upon customer ordering instructions per Proforma Invoice & additional external procurement cost will be included.

1. *Specification*

Microprocessor

- fç* Support for a single Intel PPGA Mendocino processor
- fç* Supports 66MHz host bus speed (100MHZ Clock will be supported in the feature when CPU is available), selectable by BIOS
- fç* PPGA socket 370

Cache and System Memory

- fç* 128KB cache, built-in Mendocino processor
- fç* 2 x 168-pin dual inline memory module (DIMM) sockets
- fç* Supports up to 256 MB of synchronous DRAM (SDRAM)

Chipset (Intel 82440ZX AGPset and PCI/IDE Interface)

- fç* Intel 82443ZX PCI/AGP controller (PAC)
Integrated PCI bus mastering controller
Integrated Accelerated Graphics Port (AGP) interface
- fç* Intel 82371EB PCI/ISA/IDE Xcelerator (PIIX4E)
Multifunction PCI-to-ISA bridge
Universal Serial Bus (USB) and DMA controllers
Two fast IDE interfaces that support up to four IDE drives or devices
Power management logic
Real-time clock

Audio Subsystemes

- fç* ESS solo1 PCI 3D single chip audio controller
- fç* Line-out, Mic-in , Line-in, MIDI/Game Port

I/O Features

- fç* Winbond 83977 super I/O controller
- fç* 1xFDD Port support up to 2.88MB
- fç* 1xParallel Port (LPT) support ECP/EPP
- fç* 2xHigh Speed Serial (16C550 UART) Ports

- fç* 2 x IDE Ports support ultra DMA/33
- fç* 2xUniversal Serial Bus (USB) Ports
- fç* 1xPS/2 Keyboard Port
- fç* 1xPS/2 Mouse Port
- fç* 2xIrDA Front and Rear Port

Expansion Slots

- fç* 1 x 16-bit ISA Slot
- fç* 3 x 32-bit PCI Slots
- fç* 1 x 32-bit AGP Slot

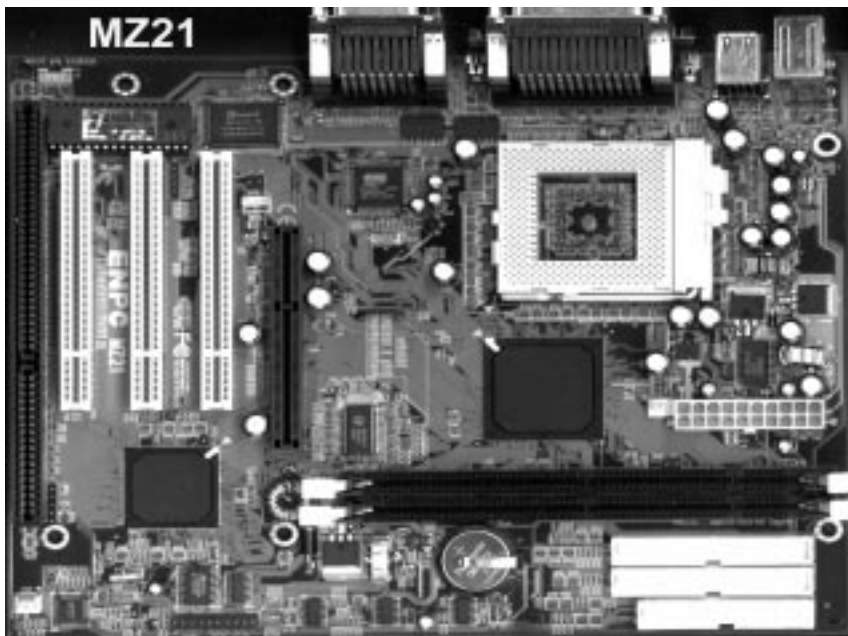
Other Features

- fç* Award BIOS (2 Mb flash memory)
- fç* Plug and Play compatible
- fç* Jumperless configuration
- fç* Advanced Power Management (APM) 1.2 support
- fç* Advanced Configuration and Power Interface (ACPI) 1.0 support
- fç* Hardware monitoring and alert (Optional)
- fç* Modem ring wake up and power up. Wake on LAN
- fç* Keyboard power on and PS/2 mouse power on

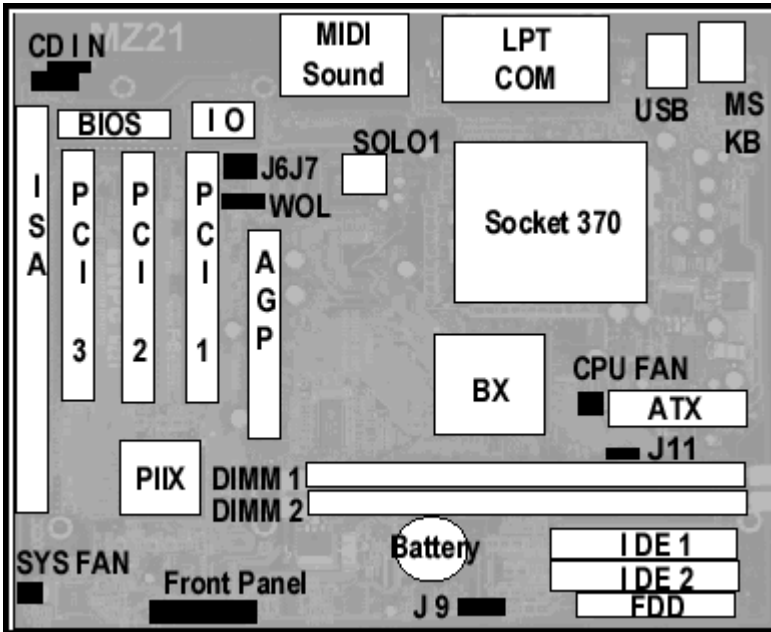
Form Factor

Micro ATX, 244mmX200mm

2. *Parts Of The Mother Board*



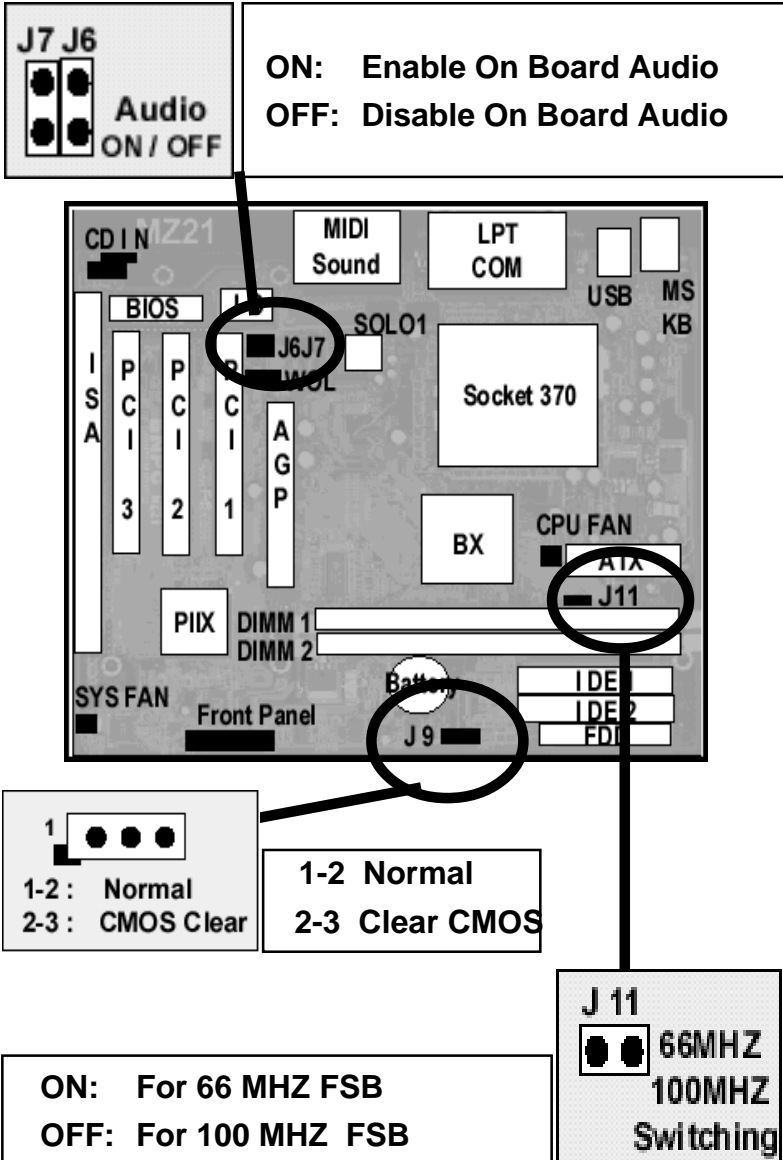
3. *MotherBoard Layout Quick View*



Jumper:

- 1. J11: FSB 66 MHZ / 100 MHZ Switching
- 2. J 9: CMOS Clear (Set the BIOS Data to Factory default)
- 3. J 7/J 6: On Board Sound Chip Enable / Disable

4-1 Jumper Overview



CMOS Clearing

CMOS Clear, which is a safety hook if you forget the password. Sometime , if user change the CPU and making the BIOS difficult to recognize the CPU type, Clear CMOS will help BIOS to re-config the system successfully.

Follow the steps:

After you have turned off your computer, clear the CMOS memory by momentarily shorting pins 2-3, for a few seconds. Then restore it to the initial 1-2 jumper setting in order to recover and retain the default settings. Reset your computer now.

J11 (66MHZ / 100 MHZ Switching)

If overclock the CPU from 66MHZ to 100 MHZ on the jumperless design mother board the following symptom will happen:

The AGP card will run 100 MHZ with the AGP Clock, inside the AGP Chip will run up to 200MHZ (For 2x AGP Card) instead of the $66\text{MHZ} \times 2 = 133\text{MHZ}$

That's because the CPU original is 66MHZ FSB design by Intel, When you overclock the CPU to 100MHZ, the Chipset didn't know you force the Clock to 100MHZ by BIOS, it will let the 100MHZ as AGP Clock. If you use the 66MHZ for that CPU, the AGP Card clock will be 66MHZ; If you use the original 100 MHZ FSB CPU , the Chipset recognized the CPU is 100MHZ FSB design, it will reduce the $100\text{MHZ} / 1.5 = 66\text{MHZ}$, then the AGP will run 66MHZ(Inside AGP will be $66\text{MHZ} \times 2 = 133 \text{ MHz}$).

**If use the 100MHZ FSB,
Regardless use the 66MHZ or 100MHZ type CPU
Set the J11 to OFF.**

4-2 CPU Setting

Selecting the CPU Frequency

The CPU frequency selection is set with the followings:

BIOS Setup → CPU Speed Setting → CPU Frequency

(The possible setting is 66, 75, 83 , 100, 103, 112, 124, 133 MHZ)

BIOS Setup → CPU Speed Setting → CPU Ratio

(The possible setting is 3x, 3.5x, 4x, 4.5x, 5x, 5.5x, 6x)



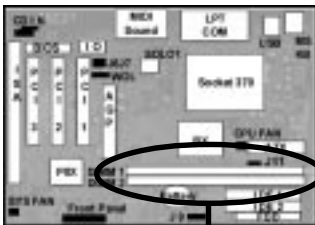
Notes:

1. Most current Intel Pentium II, Pentium III or Celeron CPU will fix the CPU Clock Ratio, User just need to decide the CPU Front Side Bus for the CPU. The Mother Board provide the Clock from 66MHZ to 112 MHZ for user to setup.
2. User can define the CPU Clock Ratio in the BIOS setup utility for the CPU which did not fix the Clock Ratio. If the CPU fix the Ratio, the CPU Clock ratio will be no changed.
3. If user fail to power up the system (No Display), please Clear the CMOS then boot up again or Press [Insert] key to power up the system. If still fail, please check the Memory is contact well or not and also well adjust the CPU Front Side Bus for the related CPU.

4-3 Install System Memory Modules

This motherboard support 2 slots for 168-pin 3.3V Non-buffered DIMM modules, providing support for up to 256 MB of main memory using DIMM modules from 8MB to 128MB. For 66MHz host bus CPUs, please use 10ns or faster DIMM modules. For 100MHz host bus CPUs, please use 8ns or faster DIMM modules. The following is the example to install the system SDRAM memory module combination: if you have two DIMM Modules, you has better install them into DIMM Slot 1 & Slot 2 with the Max possible memory size up to 256MB (128 + 128) if the 128MB DIMM module is available.

Numbers of the Memory Module	DIMM1	DIMM2	Memory Size	Max. Size
1	1st		8~128MB	128 MB
2	1st	2nd	8~128MB	256 MB



- 1
- 2

The DIMM types supported SDRAM (Synchronous DRAM). The following is the summary:

Single side:

1Mx64 (8MB), 2Mx64 (16MB), 4Mx64 (32MB), 8Mx64 (64MB), 16Mx64 (128MB)

Double side:

1Mx64x2 (16MB), 2Mx64x2 (32MB), 4Mx64x2 (64MB), 8Mx64x2 (128MB).

Total Memory Size:

There is no jumper setting required for the memory size or type. It is automatically detected by the system BIOS, and the total memory size is to add them together.

4-4 External Connction

1. Unplug your power supply when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both your motherboard and expansion cards.

2. Ribbon cables should always be connected with the red stripe on the Pin 1 side of the connector. The Four Corners of the connectors are labeled on the motherboard. Pin 1 is the side closest to the power connector on hard drives and floppy drives. IDE ribbon cable must be less than 18in. (46cm), with the second drive connector no more than 6in. (15cm) from the first connector.

3. The motherboard requires a power supply and a power good signal. Make the ATX power supply can take at least 10mAmp load on the 5V Standby lead (5VSB) to meet the standard ATX specification.

4. To prevent electrical spikes, make sure that the power supply is not connected to an outlet when making or removing connections. Power supplies contain power remains, which can damage electrical components.

5. Expansion Card Installation Procedure

! Read the documentation for your expansion card and make any necessary hardware or software settings for your expansion card, such as jumpers.

! Remove your computer system's cover and the bracket plate on the slot you intend to use. Keep the bracket for possible future use.

! Carefully align the card's connectors and press firmly.

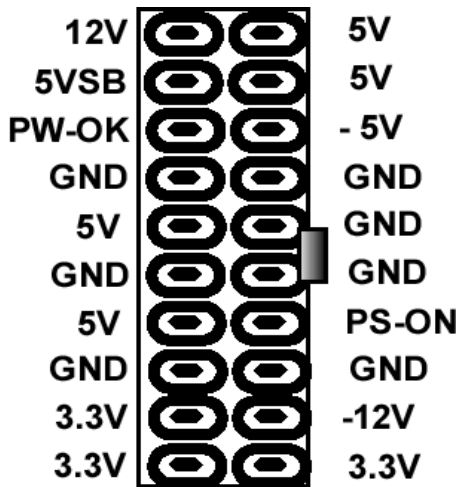
! Secure the card on the slot with the screw you removed above.

! Replace the computer system's cover.

! Set up the BIOS if necessary (such as IRQ xx Used By ISA: Yes in PNP AND PCI SETUP)

4-5 ATX Power Supply Connector

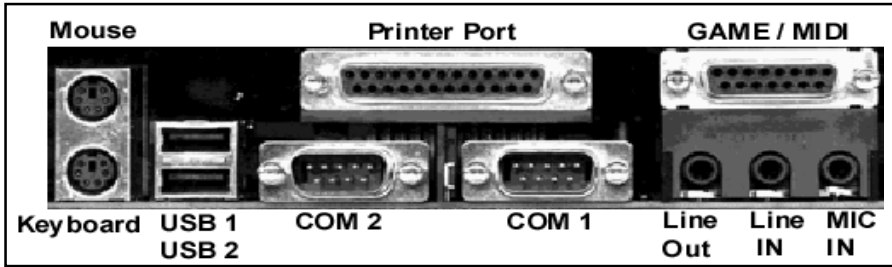
Plug the connector from the power directly into the 20-pin male ATX PW connector on the motherboard as shown in the following figure. The plug from the power supply will only insert in one orientation because of the different hole sizes. Find the proper orientation and push down firmly making sure that the pins are aligned and the power supply is off before connecting or disconnecting the power cable.



ATX Power Connector

Make sure that your ATX power supply can supply at least 10 mAmp on the 5-volt standby lead (5VSTB). You may experience difficulty in powering on your system if your power supply cannot support the load. For Wake on LAN support, your ATX power supply must supply at least 1 Amp. You should plug in/out the Power Cable to/from the Mother Board more carefully, all the Pins should be connect at the same time.

4-6 KB, Mouse, USB, COM and LPT



PS/2 Keyboard Connector

The onboard PS/2 keyboard connector. The view angle of drawing shown here is from back panel of the housing.

	Pin	Description	Pin	Description
	1	Keyboard Clock	2	GND
	3	Keyboard Data	4	N.C.
	5	+5VDC	6	N.C.

PS/2 Mouse Connector

The onboard PS/2 mouse connector. The view angle of drawing shown here is from back panel of the housing.

	Pin	Description	Pin	Description
	1	Mouse Clock	2	GND
	3	Mouse Data	4	N.C.
	5	+5VDC	6	N.C.

USB (Universal Serial Bus Connector)

You can attach USB devices to the USB connector. The Mother board contains two USB connectors, which are marked as USB. USB is a new serial bus design that is capable of cascading low-/medium-speed peripherals (less than 12Mbps) such as keyboard, mouse, joystick, scanner, printer and modem/ISDN. With USB, complex cable connections at the back panel of your PC can be eliminated.

Pin	Description	Pin	Description
1	+5 VDC	5	+5VDC
2	DATA -	6	DATA-
3	DATA +	7	DATA+
4	Ground	8	Ground

Serial Devices (COM1/COM2)

The onboard serial connectors are 9-pin D-type connector on the back Panel of mainboard. The serial port 1 connector is marked as COM1 and the serial port 2 connector is marked as COM2.

Printer Port (LPT)

The onboard printer connector is a 25-pin D-type connector marked PRINTER. The view angle of drawing shown here is from back panel of the housing.

Line In

For the External Audio signal Input

Mic In

Connect to Microphone

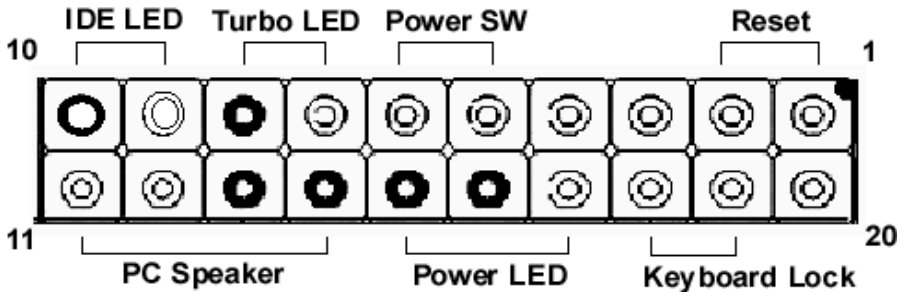
Line Out (Speaker Out)

Connect to Speaker

MIDI / GAME Port

Connect to MIDI device or Game Pad or joystic

4-7 Front Panel Connection



1). IDE Activity LED (Pin 9,10)

This connector connects to the IDE (hard disk) activity indicator light

2). System Power LED (Pin 15,16,17)

This 3-pin connector lights the system power LED when the motherboard has power.

3). Turbo LED (Pin 7,8)

If the cabinet provide the turbo LED cable, connect the cable to this two pin connector to turn on the LED on the front panel.

4). ATX Power Switch (Pin 5,6)

The system power is controlled by a push-switch, connected to this lead. Pushing the button once will turn on the power and pushing again will turn off the power.

5). Reset Switch (Pin 1,2)

This 2-pin connector connects to the case-mounted reset switch for rebooting your computer without having to turn off your power switch. This is a preferred method of rebooting in order to prolong the life of the system power supply.

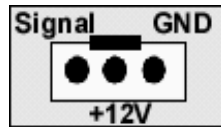
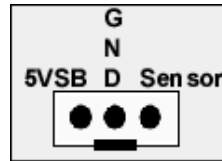
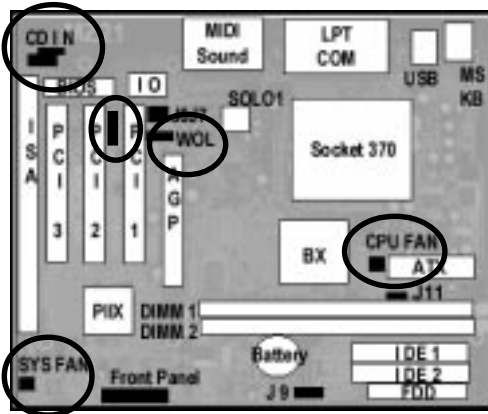
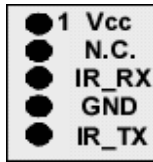
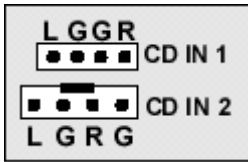
6). Keyboard Lock Switch Lead (Pin 18,19)

This 3-pin connector connects to the case-mounted keyboard lock switch for locking the keyboard.

7). Speaker Connector (Pin 11,12,13,14)

This 4-pin connector connects to the case-mounted speaker.

4-8 FAN, IR, WOL, CD IN Connector



A. CPU & System Cooling FAN Connector:

This connectors support a CPU cooling fan of 500 mA (6WATT, +12V) or less. Orient the fan so that the heat sink fins allow airflow to go across the onboard heat sink(s). Depending on the fan manufacturer, the wiring and plug may be different. The red wire should be positive (+12V), while the black should be ground. Connect the fan plug to the board taking into consideration the polarity of the connector.

B. IrDA Compliant Infrared Module Connector

This connector support the optional wireless transmitting and receiving infrared module. This module mounts to a small opening on system cases that support this feature. You must also configure UART 2. Use Infrared in Chipset Features Setup to select whether UART 2 is directed for use with COM2 or IrDA. When IrDA is selected in BIOS, COM2 will be disabled. Use the five pins as shown and connect a ribbon cable from the module to the motherboard to the pin definitions.

Pin 1	Vcc
Pin 2	NC
Pin 3	IR_RX
Pin 4	GND
Pin 5	IR_TX

C. Wake-On-LAN (WOL)

Attach the 3-pin connector from the LAN card which supports the Wake-On-LAN (WOL) function to the WOL connector on the motherboard.

This WOL function lets users wake up the connected computer through the LAN card. Please install according to the following pin assignment by the Page 15.

D. CD IN Connector

Provided 2 CD Audio Input Connectors that depending on the Cable user have, which connect from CDROM to this Connector

4-9 Power On Procedure

1. After all connections are made, close the system case cover.
2. Be sure that all switches are off (in some systems, marked with 0)
3. Make sure your power supply voltage is correctly set to 110V or 230V.
4. Connect the power supply cord into the power supply on the back
5. Connect the power cord into a power outlet
6. You may then turn on your devices in the following order:

Your monitor

External SCSI devices (starting with the last device on the chain)

Your system power. (press the ATX power switch on the front of the case.)

7. The power LED on the front panel of the system case will light. For ATX power supplies, the system LED will light when the ATX power switch is pressed. The monitor LED may light up after the system power up, if it complies with green standards or if it has a power standby feature. The system will then run power-on tests. While the tests are running, additional messages will appear on the screen. If you do not see anything within 30 seconds from the time you turn on the power, the system may have failed a power-on test. Recheck your jumper settings and connections or call your retailer for assistance.

8. During power-on, hold down <Delete> to enter BIOS setup menu if you want to run the BIOS Setup Utility.

Powering Off your computer: You must first exit or shut down your operating system before switching off the power switch. For ATX power supplies, you can press the ATX power switch after exiting or shutting down your operating system. If you use Windows 95/98, click the Start button, click Shut Down, and then click Shut down the computer. The system will give three quick beeps after about 30 seconds and then power off after Windows shuts down. The message You can now safely turn off your computer will not appear when shutting down with ATX power supplies.

Appendix: BIOS SETUP TIPS

The document comes from the Award BIOS Manual, for reference only.

ROM PCI/ISA BIOS (2A69KECG)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

virus warning	: Enabled	Video BIOS Shadow	: Disabled
CPU Internal Cache	: Disabled	C8000-CBFFF Shadow	: Disabled
External Cache	: Disabled	CC000-CFFFF Shadow	: Disabled
CPU L2 Cache ECC Checking	: Enabled	D0000-D3FFF Shadow	: Disabled
Processor Number Feature	: Enabled	D4000-D7FFF Shadow	: Disabled
Quick Power On Self Test	: Disabled	D8000-DBFFF Shadow	: Disabled
Boot Sequence	: A,C,SCSI	DC000-DFFFF Shadow	: Disabled
Swap Floppy Drive	: Disabled		
Boot Up Floppy Seek	: Disabled		
Boot Up NumLock Status	: Off		
Gate A20 Option	: Normal		
Typeomatic Rate Setting	: Disabled		
Typeomatic Rate (Chars/Sec)	: 6		
Typeomatic Delay (Msec)	: 250		
Security option	: Setup		
PCI/VGA Palette Snoop	: Disabled	ESC : Quit	↑ + : Select Item
Assign IRQ For VGA	: Disabled	F1 : Help	PU/PD/+/- : Modify
OS Select For DRAM > 64MB	: Non-OS2	F5 : Old values	(Shift)F2 : Color
Report No FDD For WIN 95	: No	F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Virus Warning

When this item is enabled, the Award BIOS will monitor the boot sector and partition table of the hard disk drive for any attempt at modification. Afterwards, if necessary, you will be able to run an anti-virus program to locate and remove the problem before any damage is done.

Enabled Activates 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 will appear when anything attempts to access the boot sector or hard disk partition table.

CPU Internal Cache/External Cache

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

Enabled Enable cache

Disabled Disable cache

Quick Power On Self Test

This category speeds up Power On Self Test (POST) after you power up 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 to search first for the disk operating system (i.e., DOS). Default value is A,C.

C,A First search for hard disk drive then floppy disk drive.
A,C First search for floppy disk drive then hard disk drive.
CDROM, C, A System will first search for CDROM drive, then hard disk drive and the next is floppy disk drive.
C, CDROM, A System will first search for hard disk drive , then CDROM drive, and the next is floppy disk drive.

Swap Floppy Drive

This item allows you to determine whether enable the swap floppy drive or not. The choice: Enabled/Disabled.

Boot Up Floppy Seek

During POST, BIOS will determine if the floppy disk drive installed is 40 or 80 tracks. 360K type is 40 tracks while 760K, 1.2M and 1.44M 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.

Boot Up NumLock Status

This allows you to determine the default state of the numeric keypad. By default, the system boots up with NumLock on.

On Keypad is number keys
Off Keypad is arrow keys

Boot Up System Speed

Selects the default system speed — the normal operating speed at power up.

High: Set the speed to high

Low: Set the speed to low

Gate A20 Option

This entry allows you to select how the gate A20 is handled. The gate A20 is a device used to address memory above 1 Mbytes. Initially, the gate A20 was handled via a pin on the keyboard. Today, while keyboards still provide this support, it is more common, and much faster, for the system chipset to provide support for gate A20.

Normal keyboard

Fast chipset

Typematic Rate Setting

This determines if the typematic rate is to be used. When disabled, continually holding down a key on your keyboard will generate only one instance. In other words, the BIOS will only report that the key is down. When the typematic rate is enabled, the BIOS will report as before, but it will then wait a moment, and, if the key is still down, it will begin the report that the key has been depressed repeatedly. For example, you would use such a feature to accelerate cursor movements with the arrow keys.

Enabled Enable typematic rate

Disabled Disable typematic rate

Typematic Rate (Chars/Sec)

When the typematic rate is enabled, this selection allows you select the rate at which the keys are accelerated.

Typematic Delay (Msec)

When the typematic rate is enabled, this selection allows you to select the delay between when the key was first depressed and when the acceleration begins.

Security Option

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

OS Select for DRAM > 64

This item allows you to access the memory that over 64MB in OS/2.

The choice: Non-OS2, OS2.

PCI / VGA Palette Snoop

It determines whether the MPEG ISA/VESA VGA Cards can work with PCI/VGA or not.

Enabled When PCI/VGA working with MPEG ISA/VESA VGA Card.

Disabled When PCI/VGA not working with MPEG ISA/VESA VGA Card

Video BIOS Shadow

Determines whether video BIOS will be copied to RAM. However, it is optional depending on 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 option ROMs will be copied to RAM. An example of such option ROM would be support of on-board SCSI.

Enabled Optional shadow is enabled

Disabled Optional shadow is disabled

ROM PCI/ISA BIOS (2A69KECG)
 CHIPSET FEATURES SETUP
 AWARD SOFTWARE, INC.

Auto Configuration	: Enabled	Auto Detect DIMM/PCI Clk	: Enabled
EDO DRAM Speed Selection	: 60ns	Spread Spectrum	: Disabled
EDO CAS# MA wait State	: 2		
EDO RAS# wait State	: 1		
SDRAM RAS-to-CAS Delay	: 3		
SDRAM RAS Precharge Time	: 3		
SDRAM CAS latency Time	: 3		
SDRAM Precharge Control	: Disabled		
DRAM Data Integrity Mode	: Non-ECC		
System BIOS Cacheable	: Enabled		
Video BIOS Cacheable	: Enabled		
Video RAM Cacheable	: Disabled		
8 Bit I/O Recovery Time	: 1		
16 Bit I/O Recovery Time	: 1		
Memory Hole At 15M-16M	: Disabled		
Passive Release	: Enabled	ESC : Quit	↑↓ : Select Item
Delayed Transaction	: Disabled	F1 : Help	PU/PD/+/- : Modify
AGP Aperture Size (MB)	: 64	F5 : Old Values (Shift)	F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

The Chipset Features Setup” includes settings for the chipset dependent features. These features are related to system performance. It is highly recommended that the items are optimal setting for this Main-Board. You should not change them unless you are familiar with the chipset. Make sure you fully understand the items before you try to change anything. You may change the parameter settings to improve system performance. However, it may cause system unstable if the settings are not correct for your system configuration. Once you change the setting and not sure which one will be better parameter, please load the BIOS default by press F6 or load the SETUP default by press F7.

SDRAM RAS-to-CAS delay

They are important parameters that affect the SDRAM performance. If your SDRAM has unstable problem, change 2/2 to 3/3.

SDRAM CAS Latency Time

This setting defines the CAS timing parameter of the SDRAM in terms of clocks. Sometime, the BIOS will recommend you to set the correct value depending on the DIMM Module you use.

System BIOS Cacheable

Select Enabled allows caching of the system BIOS ROM at F000h-FFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Enabled	BIOS access cached
Disabled	BIOS access not cached

Video BIOS Cacheable

Select Enabled allows caching of the video BIOS ROM at C0000h-F7FFFh, resulting in better video performance. However, if any program writes to this memory area, a system error may result.

Enabled	Video BIOS access cached
Disabled	Video BIOS access not cached

Video RAM Cacheable

Select Enabled allows caching of the video RAM, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

8 Bit I/O Recovery Time

The recovery time is the length of time, measured in CPU clocks, which the system will delay after the completion of an input/output request. This delay takes place because the CPU is operating so much faster than the input/output bus that the CPU must be delayed to allow for the completion of the I/O. This item allows you to determine the recovery time allowed for 8 bit I/O. Choices are from NA, 1 to 8 CPU clocks.

16 Bit I/O Recovery Time

This item allows you to determine the recovery time allowed for 16 bit I/O. Choices are from NA, 1 to 4 CPU clocks.

Memory Hole At 15M-16M

In order to improve performance, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory space below 16 MB.

Enabled	Memory hole supported.
Disabled	Memory hole not supported.

Passive Release

When Enabled, CPU to PCI bus accesses are allowed during passive release. Otherwise, the arbiter only accepts another PCI master access to local DRAM. The Choice: Enabled, Disabled.

Delayed Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select Enabled to support compliance with PCI specification version 2.1. The Choice: Enabled, Disabled.

AGP Aperture Size (MB)

Select the size of the Accelerated Graphics Port (AGP) aperture. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation. See www.agpforum.org for AGP information. The choice: 4, 8, 16, 32, 64, 128, 256

ROM PCI/ISA BIOS (2A69KECG)
 POWER MANAGEMENT SETUP
 AWARD SOFTWARE, INC.

Power Management	: User Define	** Reload Global Timer Events **
PM Control by APM	: Yes	IRQ[3-7,9-15],NMI
Video off Method	: V/H SYNC+Blank	Primary IDE 0
Video off After	: Standby	Primary IDE 1
MODEM Use IRQ	: 3	Secondary IDE 0
Doze Mode	: Disable	Secondary IDE 1
Standby Mode	: Disable	Floppy Disk
Suspend Mode	: Disable	Serial Port
HDD Power Down	: Disable	Parallel Port
Throttle Duty Cycle	: 62.5%	
PCI/VGA Act-Monitor	: Disabled	
Soft-Off by PWR-BTTN	: Instant-Off	
CPUFAN Off In Suspend	: Enabled	
PowerOn by Ring	: Enabled	
Resume by Alarm	: Disabled	
IRQ 8 Break Suspend	: Disabled	
		ESC : Quit
		F1 : Help
		F5 : Old values
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults
		↑/↓ : Select Item
		PU/PD/+/- : Modify
		(Shift)F2 : Color

The Power Management Setup screen enables you to control the Main Board green features.

Power Management

This function allows you to set the default parameters of power-saving modes.

PM Control by APM

If Max Saving” is selected, you can turn on this item, transfer power management control to APM

Video Off Method

The option V/H SYNC+Blank” allows the BIOS to blank off screen display by turning off the V-Sync signals sent from add-on VGA card. DPMS Supported” allows the BIOS to blank off screen display by your add-on VGA card which supports DPMS; Blank Screen” allows the BIOS to blank screen display by turning off the red-green-blue signals.

Video Off After

What time frame that the video will be disabled under current power management settings.

MODEM use IRQ

When the system is in green function, modem will wakes up the system through IRQ you assigned here.

Doze Mode

When disabled, the system will not enter Doze mode. The specified time option defines the idle time the system takes before it enters Doze mode.

Standby Mode

When the standby mode timer times-out, it will enter the standby mode and retain CPU at a slow working speed. The screen will be blanked out.

Suspend Mode

This function works only when the Pentium II Processor is installed. The timer starts to count when system Standby mode timer is timed out and no PM Events are occurring. Valid range is from 1 minute up to 1 hour.

HDD Power Down

This option lets you specify the IDE HDD idle time before the device enters the power down state.

Throttle duty Cycle

Choose the duty cycle time : 12.5%, 25%, 37.5%, 50%, 62.5%(default), 75%, or 87.5%. The bigger of the percentage, the more saving power it gets.

PCI/VGA Active Monitor

Enabled : the system can not enter the power saving mode when monitor is on.

Disabled : the system can enter the power saving mode when monitor is on.

Soft-Off by PWRBTN

When enabled, turning the system off with the on/off button places the system in a very low-power-usage state, with only enough circuitry receiving power to detect power button activity or Resume by Ring activity.

Resume by Ring

Enabled : Wake up the system from ring signal (COM Port)

Disabled : (default) Ring signal can not wake up the system.

Resume by Alarm:

This option allows you to have the system turn on at a preset time each day or on a certain day.

RQ8 Break Suspend

Choose Enabled or Disabled (default). Alarm function will be activated when this function is enabled.

Note:

If the [Resume by Ring] set to Enable, that means the machine will wake up after a external Modem Ring in through the COM Port. That is the special function for the Modem Ring on. But if the machine is in the off mode and you just power ON/OFF the external Modem, sometimes, it will cause the machine power on, because the Modem Power On/OFF pulse will be taken as the Modem Ring in signal and then power up the machine.

ROM PCI/ISA BIOS (2A69KECG)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

PNP OS Installed : NO	Assign IRQ For USB : Enabled
Resources Controlled By : Auto	
Reset Configuration Data : Disabled	
ESC : Quit ↑↓+/- : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults	

The PNP/PCI Configuration Setup allows you to configure the ISA and PCI devices installed in your system.

PnP OS Installed

Normally, the PnP resources are allocated by BIOS during POST (Power-On Self Test). If you are using a PnP operating system (such as Windows 95,98), set this item to Yes to inform BIOS to configure only the resources needed for booting (VGA/IDE or SCSI). The rest of system resources will be allocated by PnP operating system.

Resources Controlled By

Setting this option to Manual allows you to individually assign the IRQs and DMAs to the ISA and PCI devices. Set this to Auto to enable the auto-configuration function.

Reset Configuration Data

If you had plugged some Legacy cards in the system and there were records into ESCD (Extended System Configuration Data). You can set this field to Enabled to clear ESCD one time, while the Legacy cards were removed.

Assign IRQ For USB

Assign IRQ For USB

ROM PCI/ISA BIOS (2A69KECG)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

IDE HDD Block Mode : Enabled	Onboard Serial Port 2 :
IDE Primary Master PIO : Auto	UART Mode Select :
IDE Primary Slave PIO : Auto	RxD , TxD Active : Hi,Lo
IDE Secondary Master PIO : Auto	IR Transmittiion delay : Enabled
IDE Secondary Slave PIO : Auto	Onboard Parallel Port :
IDE Primary Master UDMA : Auto	Parallel Port Mode :
IDE Primary Slave UDMA : Auto	ECP Mode Use DMA : 3
IDE Secondary Master UDMA: Auto	EPP Mode Select : EPP1.7
IDE Secondary Slave UDMA: Auto	
On-Chip Primary PCI IDE: Enabled	
On-Chip Secondary PCI IDE: Enabled	
USB Keyboard Support : Disabled	
Init Display First : PCI Slot	
POWER ON Function :	
KB Power ON Password : Enter	ESC : Quit ++ : Select Item
Hot Key Power ON : Ctrl-F1	F1 : Help PU/PD/+/- : Modify
KBC input clock : 8 MHz	F5 : Old Values (Shift)F2 : Color
Onboard FDC Controller : Enabled	F6 : Load BIOS Defaults
Onboard Serial Port 1 : 3F8/IRQ4	F7 : Load Setup Defaults

IDE HDD Block Mode

This allows your hard disk controller to use the fast block mode to transfer data to and from your hard disk drive (HDD).

- Enabled IDE controller uses block mode.
- Disabled IDE controller uses standard mode.

IDE Primary/Secondary Master/Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

IDE Primary/Secondary Master/Slave UDMA

Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/33, select Auto to enable BIOS support.

The Choice: Auto, Disabled

On-Chip Primary/Secondary PCI IDE

The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select Enabled to activate each channel separately.

USB Keyboard support

Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB keyboard.

The Choice: Enabled, Disabled.

Onboard FDD Controller

This should be enabled if your system has a floppy disk drive (FDD) installed on the system board and you wish to use it. Even when so equipped, if you add a higher performance controller, you will need to disable this feature.

The Choice: Enabled, Disabled.

Onboard Serial Port 1/Port 2

This item allows you to determine access onboard serial port 1/port 2 controller with which I/O address.

The Choice: 3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled, Auto.

UART 2 Mode

This item allows you to determine which Infra Red (IR) function of onboard I/O chip. The Choice: Standard, ASKIR, HPSIR.

Duplex Select

Select the value required by the IR device connected to the IR port. Full-duplex mode permits simultaneous two-direction transmission. Half-duplex mode permits transmission in one direction only at a time.

The Choice: Half, Full.

RxD, TxD Active

This item allows you to determine the active of RxD, TxD.

The Choice:Hi, Hi, Lo, Lo, Lo, Hi,Hi, Lo

Onboard Parallel Port

Select a logical LPT port name and matching address for the physical parallel (printer) port.

The choice: 378H/IRQ7, 278H/IRQ5, 3BCH/IRQ7, Disabled.

Parallel Port Mode

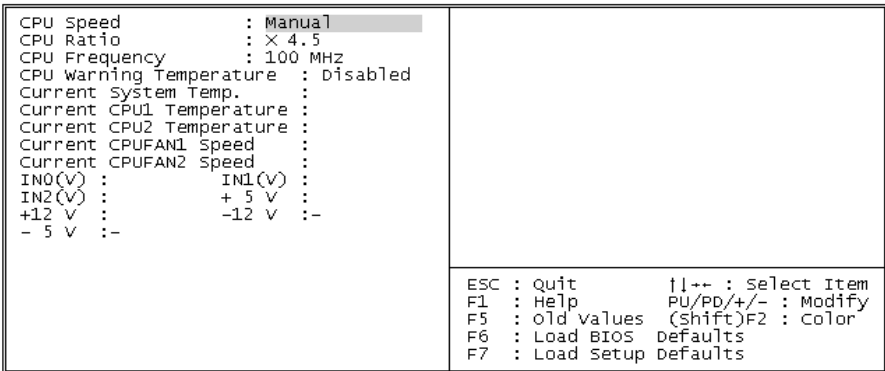
Select an operating mode for the onboard parallel port. Select Compatible or Extended unless you are certain both your hardware and software support EPP or ECP mode.

The choice: SPP, ECP+EPP1.7, EPP1.7+SPP, EPP1.9+SPP, ECP, ECP+EPP1.9, and Normal.

ECP Mode Use DMA

Select a DMA channel for the port. Choices are 3, 1.

ROM PCI/ISA BIOS (2A69KECG)
CPU FEATURES SETUP
AWARD SOFTWARE, INC.



CPU Speed

Set to Manual user can use the next two items to decide the CPU speed.

CPU Ratio

This item lets you select the ratio of Core/Bus frequency. Have the following selections: 3x, 3.5x, 4x , 4.5x, 5x, 5.5x, 6x

CPU Frequency

This item lets you set external clock (bus clock). The possible settings are 66, 75, 83, 100, 103, 112, 124, 133 MHZ.

CPU Warning Temperature

This is the temperature setting that the computer will respond to an overheating CPU and provide the alarm.

USER Password

This Main Menu item lets you configure the system so that a password is required every time the system boots or an attempt is made to enter the Setup program. The password cannot be longer than 8 characters.

IDE HDD Auto Detection

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

Normal mode

For drives small than 528MB

Large Mode

For drives larger than 528MB that do not use LBA. There can only be used with MS-Dos operating system.

LBA mode

For drives larger than 528MB and up to 8.4GB that use logic block addressing mode. Normally we recommend to select LBA Mode if our HDD drivers large than 528MB

SAVE & EXIT SETUP

-- END --