

Mainboard

MS 6760 Vers.1



FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

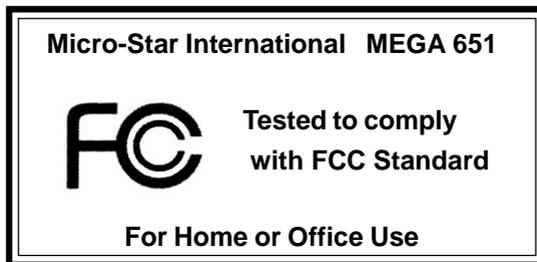
Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and AC. power cord, if any, must be used in order to comply with the emission limits.

VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.



Lithium Battery Statement

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

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Safety Instructions

1. Always read the safety instructions carefully.
2. Keep this User's Manual for future reference.
3. Keep this equipment away from humidity.
4. Lay this equipment on a reliable flat surface before setting it up.
5. The openings on the enclosure are for air convection hence protects the equipment from overheating. **DO NOT COVER THE OPENINGS.**
6. Make sure the voltage of the power source and adjust properly 115/230V before connecting the equipment to the power inlet.
7. Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
8. Always Unplug the Power Cord before inserting any add-on card or module.
9. All cautions and warnings on the equipment should be noted.
10. Never pour any liquid into the opening that could damage or cause electrical shock.
11. If any of the following situations arises, get the equipment checked by a service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment has not work well or you can not get it work according to User's Manual.
 - The equipment has dropped and damaged.
 - The equipment has obvious sign of breakage.
12. **DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 60^oC (140^oF), IT MAY DAMAGE THE EQUIPMENT.**



CAUTION: Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.

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Revision History

Revision	Revision History	Date
V1.0	First release	April 2003
V1.1	Add "Media Center" and "Appendix" Make update on p. 1-7 & 3-3 Replace v1.0	June 2003
v1.2	Special Edition for SI	July 2003
v1.3	Remove "Media Center" Replace v1.1	July 2003
v1.4	Update Chapter 3 Replace v1.3	Sep. 2003

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SYSTEM SPECIFICATION

● M/B

- MS-6760 (Proprietary F/F), 185 x 290 mm (4 layer)

● CPU:

- Support Socket 478 for Pentium® 4, 2.8 GHz

● Chipset:

- SiS 651 + SiS 962

● Memory:

- DDR 333 x 2, support memory up to 2.0GB

● On-Board Audio:

- AC'97 Codec integrated in ALC 650, support 5.1 channel , SPDIF In/Out.

● On-Board VGA:

- Integrated (AGP 4X)

** On-Board VGA memory: None

● On-Board Communication

- LAN: integrated in Realtek (10/100Mb)

- Modem: 56K MDC module

● On-Board USB

- Front x 2; Rear x 2; On-Board x 2 for Card Reader & RF K/B, M/S (MFG Option)

● On-Board IEEE 1394:

- RTL8801B PHY (2 ports), Front x 2 (4 pin, 6 pin)

● Expansion Slots:

- PCI 2.2 x 1, AGP (4X) x1

● Power Off Function:

- Playback Audio CD, MP3, AM/FM Radio Tuner (with Remote Controller)

● TV Tuner Function

- MS-8606 (Option PCI with remote controller)

● Power Supply:

- 200W (PFC 5V/12V SB) Full Range

● Chassis:

- 202(W) x 320(D) x 151(H) mm (9.76 Liters)

● **On-Board Headers & Connectors**

- Rear Panel: Parallel Port x 1, Serial Port x 1, VGA x 1, PS/2 x 2, Mic in/Line in/Line out x 1, USB x 2, LAN (RJ45) x 1, SPDIF/O x 1, Modem (RJ11) x 1
- Front Panel: Mic in/Headphone x 1, USB x 2, SPDIF/I x 1, 1394 x 1 (4-pin), 1394 x 1(6-pin)

● **BIOS**

- 2MB Flash

● **Others**

- Microsoft® PC 2001
- LAN Wake Up Function
- Suspend to RAM/DISK function
- Top Tech III (Thermal Overheat Protection Technology)
- PC Alert System Hardware Monitor
- On-Board BlueBird Module for Power-Off features
- On-Board Equalizer (LCM)

Introducing Mainboard

1.1 Mainboard Layout

1.2 CPU/Memory

1.3 Power Supply

1.4 Front Panel

1.5 Back Panel

1.6 Connectors

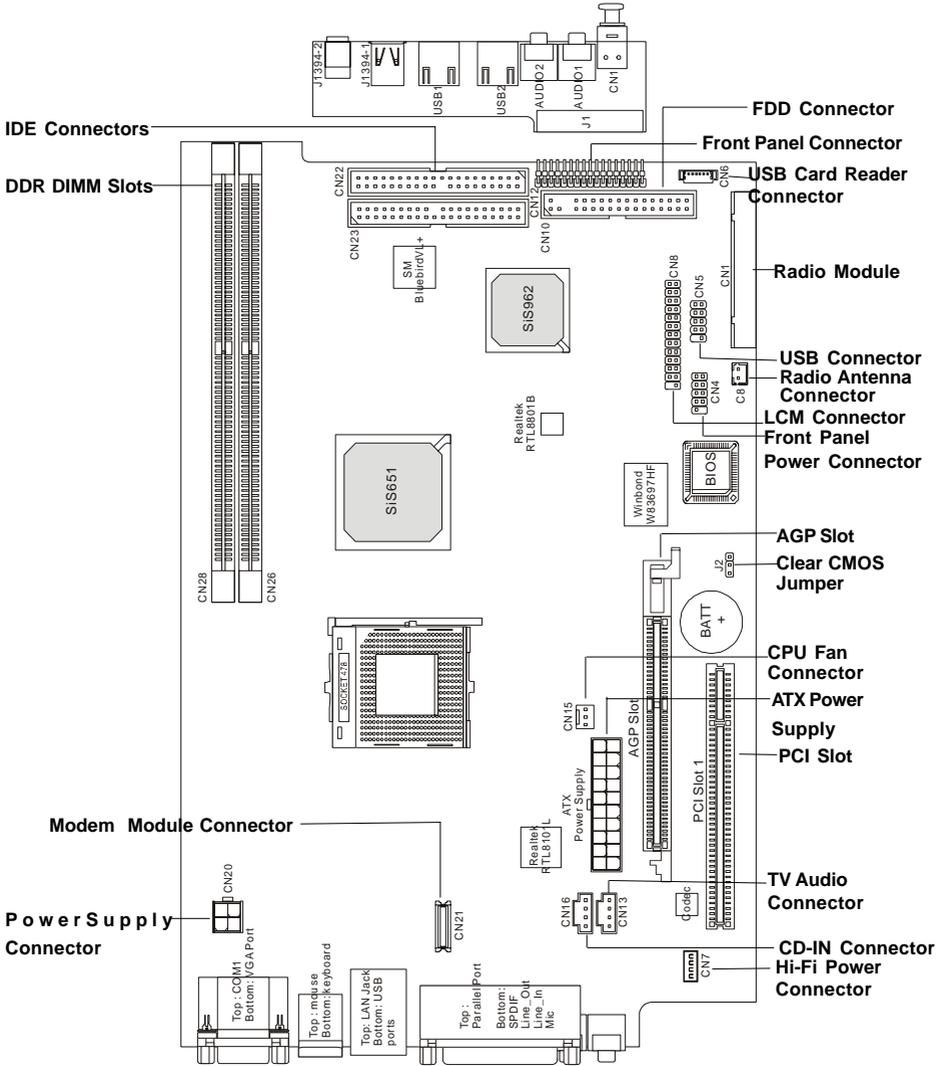
1.7 Jumper

1.8 Slots

Chapter 1

1.1 MAINBOARD LAYOUT

See the following for the mainboard layout:



MS6760 v1.X Mainboard

Chapter 1

1.3 POWER SUPPLY

The system is equipped with a 200W(PFC) ATX power supply. The power cord of power supply has been connected to the connectors on the mainboard when shipped out. You can find two connectors (20-Pin & CN 20) on the mainboard.

ATX Power Supply Pin Definition

PIN	SINGAL	PIN	SIGNAL
1	3.3V	11	3.3V
2	3.3V	12	-12V
3	GND	13	GND
4	5V	14	PS_ON
5	GND	15	GND
6	5V	16	GND
7	GND	17	GND
8	PW_OK	18	
9	5V_SB	19	5V
10	12V	20	5V



20-Pin Connector

CN20 Pin Definition

PIN	SINGAL
1	GND
2	GND
3	12V
4	12V



CN 20

Power Supply Specification

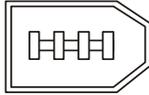
Dimension	70 (H)x1450(W)x105(D) mm
PFC	Yes (passive)
Wattage	200W Max
Electrical Design Specification	AC Output :100-127/200-240 VAC, Switch Selectable, Auto Protection DC Output :+3.3V 17A :+5V 12A :+12V 13.5A :-12V 0.5A :+5Vsb 3A :+12Vsb 2.5A 80 mm PWM Fan
Certificate	FCC/UL/CUL/BSMI/CB/NEMKO/TUV



Chapter 1

IEEE 1394 Port: J1394-1

The bigger 6-pin IEEE 1394 Port on the back panel is designed for you to connect to IEEE 1394 devices without external power. That means the mainboard can provide the power for the devices connected to this port.

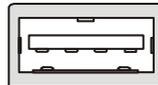
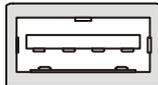


Software Support

IEEE 1394 Driver is provided by Windows® 98 SE, Windows® XP, Windows® ME and Windows® 2000. Just plug in the IEEE 1394 connector into the port. These Operating Systems will install the driver for IEEE 1394.

USB Ports

The mainboard provides an OHCI (Universal Host Controller Interface) Universal Serial Bus root for attaching USB devices such as keyboard, mouse or other USB-compatible devices. You can plug the USB device directly into the connector.



USB Port Description

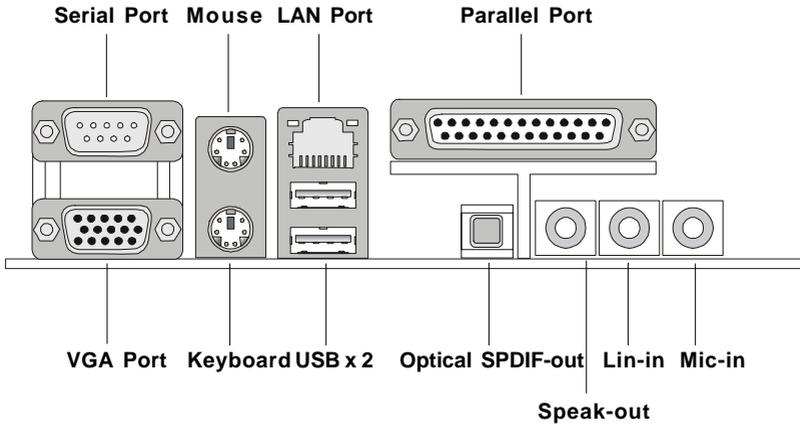
PIN	SIGNAL	DESCRIPTION
1	VCC	+5V
2	-Data 0	Negative Data Channel 0
3	+Data 0	Positive Data Channel 0
4	GND	Ground
5	VCC	+5V
6	-Data 1	Negative Data Channel 1
7	+Data 1	Positive Data Channel 1
8	GND	Ground



Chapter 1

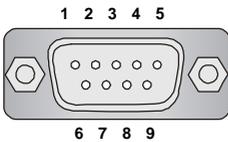
1.5 BACK PANEL

The Back Panel provides the following ports:



Serial Port

The mainboard offers a 9-pin male DIN serial port . The port is 16550A high speed communication ports that sends/receives 16 bytes FIFOs. You can attach a serial mouse or other serial devices directly to the connector.



9-Pin Male DIN Connector

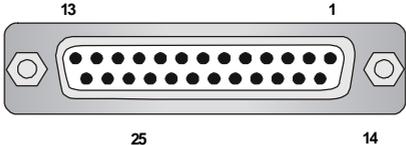
Pin Definition

PIN	SIGNAL	DESCRIPTION
1	DCD	Data Carry Detect
2	SIN	Serial In or Receive Data
3	SOUT	Serial Out or Transmit Data
4	DTR	Data Terminal Ready
5	GND	Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	Ring Indicate



Parallel Port

The mainboard provides a 25-pin female centronic connector as LPT. A parallel port is a standard printer port that supports Enhanced Parallel Port (EPP) and Extended Capabilities Parallel Port (ECP) mode.



Pin Definition

PIN	SIGNAL	DESCRIPTION
1	STROBE	Strobe
2	DATA0 Data0	
3	DATA1	Data1
4	DATA2	Data2
5	DATA3	Data3
6	DATA4	Data4
7	DATA5	Data5
8	DATA6	Data6
9	DATA7	Data7
10	ACK#	Acknowledge
11	BUSY	Busy
12	PE	Paper End
13	SELECT	Select
14	AUTO FEED#	Automatic Feed
15	ERR#	Error
16	INIT#	Initialize Printer
17	SLIN#	Select In
18	GND	Ground
19	GND	Ground
20	GND	Ground
21	GND	Ground
22	GND	Ground
23	GND	Ground
24	GND	Ground
25	GND	Ground

Chapter 1

1.8 SLOTS

PCI Slot

The PCI slot allows you to insert PCI card or TV Tuner card. The TV Tuner card is included in the MEGA651.

When adding or removing expansion cards, make sure that you unplug the power supply first. Meanwhile, read the documentation for the expansion card to make any necessary hardware or software settings

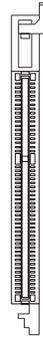
NOTE: You can insert the *OPTIONAL MS8606* card into the PCI slot to enjoy watching TV.

AGP (Accelerated Graphics Port) Slot

The AGP slot allows you to insert the AGP graphics card. AGP is an interface specification designed for the throughput demands of 3D graphics. It introduces a 66MHz, 32-bit channel for the graphics controller to directly access main memory and provides three levels of throughputs: 1x (266Mbps), 2x (533Mbps) and 4x (1.07Gbps).



PCI Slot 1



AGP Slot



Setting BIOS Function

2.1 Entering Setup

2.2 The Main Menu

2.3 Standard CMOS Features

2.4 Advanced BIOS Features

2.5 Advanced Chipset Features

2.6 Integrated Peripherals

2.7 Power Management Setup

2.8 PnP/PCI Configurations

2.9 PC Health Status

2.10 Frequency/Voltage Control

Chapter 2

2.1 ENTERING SETUP

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press key to enter Setup.

Press DEL to enter SETUP

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On or pressing the RESET button. You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Control Keys

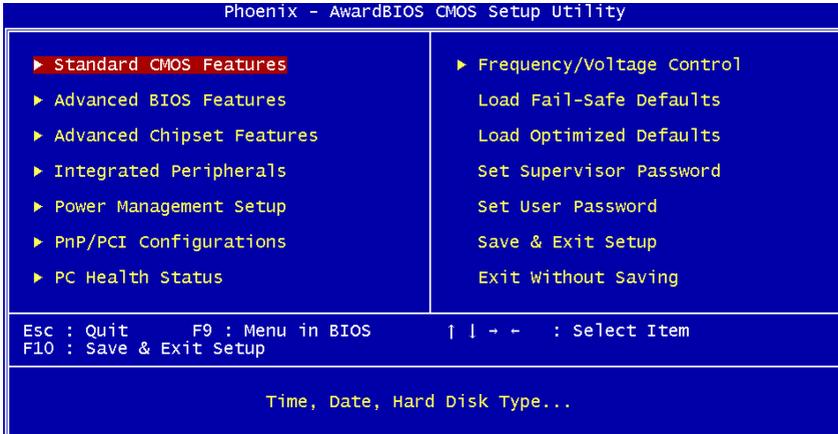
<↑>	Move to the previous item
<↓>	Move to the next item
<<->	Move to the item in the left hand
<->>	Move to the item in the right hand
<Enter>	Select the item
<Esc>	Jumps to the Exit menu or returns to the main menu from a submenu
<+ /PU>	Increase the numeric value or make changes
<- /PD>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from Fail-Safe default table, only for Option Page Setup Menu
<F7>	Load Optimized defaults
<F10>	Save all the CMOS changes and exit



Chapter 2

2.2 THE MAIN MENU

Once you enter Phoenix-Award® BIOS CMOS Setup Utility, the Main Menu (Figure 1) will appear on the screen. The Main Menu allows you to select from twelve setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.



Standard CMOS Features

Use this menu for basic system configurations, such as time, date etc.

Advanced BIOS Features

Use this menu to setup the items of AWARD® special enhanced features.

Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize your system's performance.

Integrated Peripherals

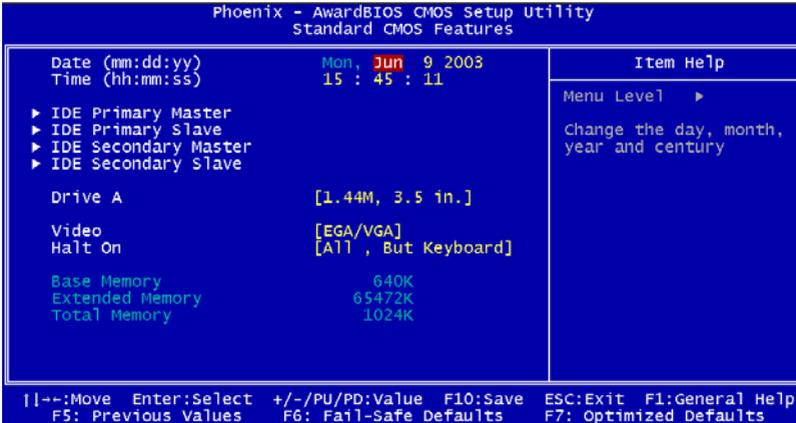
Use this menu to specify your settings for integrated peripherals.



Chapter 2

2.3 STANDARD CMOS FEATURES

The items in Standard CMOS Features Menu are divided into 12 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.



Date

This allows you to set the system to the date that you want (usually the current date). The format is <day><month> <date> <year>.

Time

This allows you to set the system time that you want (usually the current time). The time format is <hour> <minute> <second>.

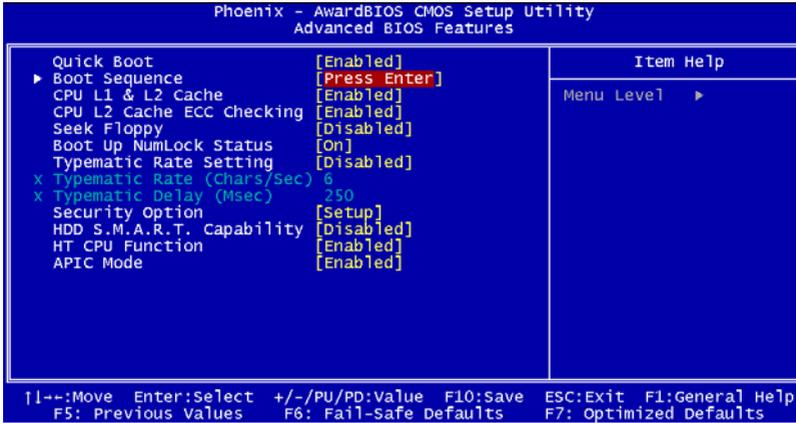
IDE Primary/Secondary Master/Slave

Press PgUp/<+> or PgDn/<-> to select *Manual*, *None* or *Auto* type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use *Manual* to define your own drive type manually.



Chapter 2

2.4 ADVANCED BIOS FEATURES



Quick Boot

Setting the item to *Enabled* allows the system to boot within 5 seconds since it will skip some check items. Available options: *Enabled*, *Disabled*.

Boot Sequence

The items allow you to set the sequence of boot devices where BIOS attempts to load the disk operating system.

NOTE: If you want to boot from USB device like USB FDD, please turn on either USB keyboard or mouse enable.

CPU L1 & L2 Cache

Cache memory is additional memory that is much faster than conventional DRAM (system memory). When the CPU requests data, the system transfers the requested data from the main DRAM into cache memory, for even faster access by the CPU. This setting enables/disables the internal cache (also known as L1 or level 1 cache) and external cache (also known as L2 or level 2 cache). Settings are: *Enabled* and *Disabled*.



