



MORE THAN JUST A MAINBOARD

The **AZZA** 601 Mainboard Series



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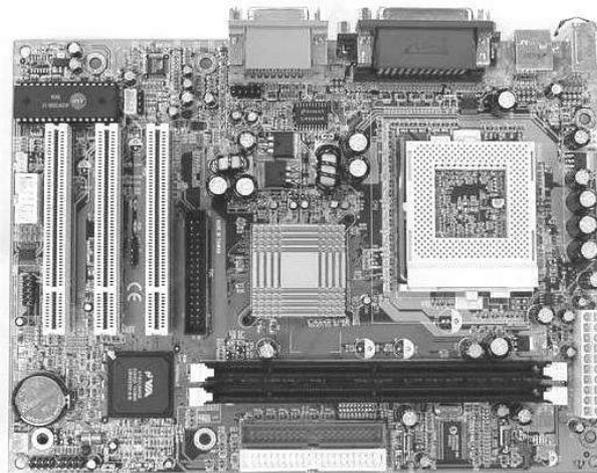
User's Manual

Socket 370 Micro ATX Mainboard

601AM
601BM
601AS
601BM4
601BS4

Pentium III / Celeron / VIA C3

Version 1.x



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Package Checklist

This package contains the following items:

- Mainboard
- Users manual
- One IDE cable
- One 34-pin floppy disk drive cable
- One Driver Utility CD

If any of these items are missing or damaged, please contact your dealer or sales representative for assistance.

Technical Support

If you require additional information, assistance during installation, please contact your dealer, your dealer will be able to provide the latest information.

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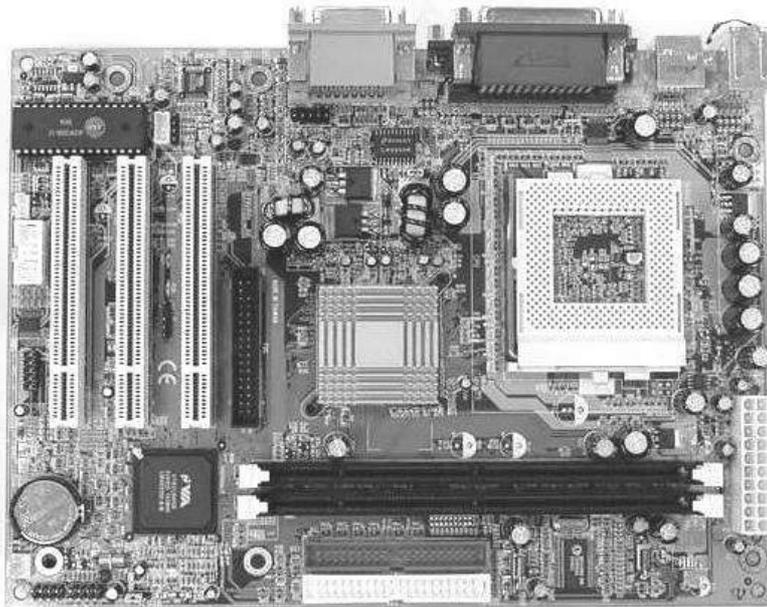
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Introduction

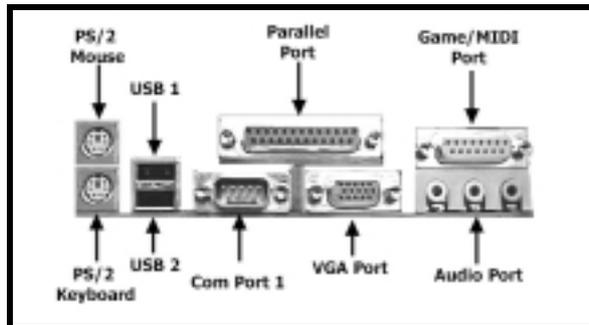
Chapter 1 - Introduction

1.1 MAINBOARD LAYOUT



Introduction

PC99 ATX Connector



Introduction

1.1.1 601 Series

There are five models in this series:

- i) 601AM iii) 601BM v) 601BS4
- ii) 601AS iv) 601BM4

The 601 series all support a VIA PLE133 (VT8601A) northbridge chipset. The 601A series support a VT82C686A southbridge chipset whereas the 601B series supports a VT82C686B southbridge chipset. The chipsets for the 601AM, 601AS and 601BM models all have 2x AGP support. The chipsets for the 601BM4 and 601BS4 have 4x AGP support.

Introduction

1.1.2 Mainboard Dimension

Width & Length: 244 mm x 180 mm.
Height: 35 mm
PCB Thickness: 4 layers.

1.1.3 Environment Limitation

Operating Temperature: 10°C to 40°C . (50°F to 104°F)
Required Airflow: 50 linear feet per minute across CPU.
Storage Temperature: - 40°C to 70°C. (- 40°F to 158°F)
Humidity: 0 to 90% non-condensing.
Altitude: 0 to 10,000 feet

1.2 Features and Specifications

Processor

Support Intel® Socket 370 Pentium™ !!! or Celeron™ up to 1 GHz high speed processors and VIA Cyrix III processor.

Chipset

Northbridge : VIA PLE133 (VT8601A)

Southbridge : 601AM / 601AS for VT82C686A

601BM (VT8601A CD)

601BM4/ 601BS4 for VT82C686B (VT8601A CE)

CPU Switching Voltage Regulator

Equipped with a switching voltage regulator that automatically detects +1.30V to 2.05V DC power supply.

System Memory

Two 168-pin DIMM Sockets that support up to 1GB PC SDRAM, 3.3V PC-100 or PC-133 SDRAM.

Introduction

Expansion Slots

The mainboard is equipped with 3 dedicated PCI slots.

Onboard 3D Sound

Supports Microsoft ® DirectSound / DirectSound 3D.

AC97 supported full duplex, independent sample rate converter for audio recording and playback.

Front Audio Port :- Optional for the 601AS and 601BS4

For use with Front Utility Panel (UP) to connect Ear Phone, Microphone and Audio-in. For more details, please consult your dealer.

Word Size

Data Path : 8-bit, 16-bit, 32-bit, 64-bit.

Address Path : 32-bit.

FRONT SIDE BUS FREQUENCY

Support 66MHz, 100MHz and 133MHz FSB.

BIOS

Award BIOS, Windows ® 95/98 Plug and Play compatible.

Supports SCSI sequential boot-up.

Flash EPROM for easy BIOS upgrades (2 Mbit).

Supports DMI 2.0 function.

Desktop Management Interface (DMI)

The mainboard comes with a DMI 2.0 built into the BIOS. The DMI utility in the BIOS will automatically record different information about your system configuration and store this information in the DMI pool, which is a part of the system board's Plug and Play BIOS. DMI, along with the appropriately networked software, is designed for easy inventory, maintenance and to simplify troubleshooting of computer systems.

WOL (Wake-On-Lan) Port:- Optional for the 601BS4

One WOL connector supports Wake-On-LAN functionality.

USB Ports

The mainboard is equipped with 2 USB ports and 2 USB connectors for expansion. USB allows data exchange between your computer and a wide range of simultaneously accessible external Plug and Play peripherals. (Cable for two connectors are optional and sold separately).

Introduction

Connectors

One connector for IrDA interface (It is optional for the 601BS4).
One floppy drive interface supports up to two 2.88MB floppy drives.
One 20-pin ATX power supply connector.
One CPU and One Chassis fan connectors.
Two CD audio-in connectors (601AS / 601BS4 only comes with one CD audio-in connector).
One Front Audio Connector supports a Front Utility Panel (The Front Utility Panel is optional for the 601AS and the 601BS4).

ATX Double Deck Ports (PC 99 color-coded connectors)

Two USB ports.
One NS16C550A-compatible DB-9 serial port.
One SPP/ECP/EPP DB-25 parallel port.
One mini-DIN-6 PS/2 mouse port.
One mini-DIN-6 PS/2 keyboard port.
One game/MIDI port.
Three audio jacks: speaker-out, line-in and mic-in.

Introduction

PCI Bus Master IDE Controller

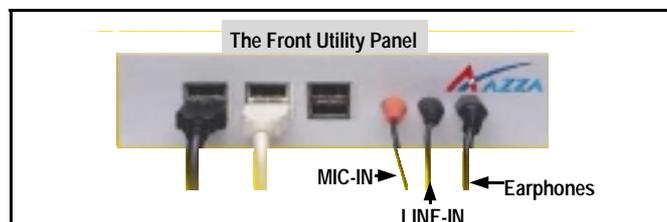
Two PCI IDE interfaces support up to four IDE devices.
Support ATA/33 and ATA66 hard disk drives for 601AM/601AS.
Support ATA/33, ATA/66 and ATA100 hard disk drives for 601BM/601BM4/601BS.
PIO Mode 3 and Mode 4 Enhanced IDE (data transfer rate up to 16.6MB/sec.).
Bus mastering reduces CPU utilization during disk transfer.
Supports ATAPI CD-ROM, LS-120 and ZIP.

IrDA Interface :- Optional for the 601BS4

The mainboard is equipped with an IrDA connector for wireless connectivity between your computer and peripheral devices. It supports peripheral devices that meet the HPSIR or ASKIR standard.

Utility Panel:- Optional for the 601AS and 601BS4

The Utility Panel (UP) brings the MIC-IN, LINE-IN and Earphones lines, together with some USB ports, to the front of the system. The UP can be connected to the internal Front Audio Connector. The UP is shown below.



Introduction

1.3 System Health Monitor Functions

The mainboard is capable of monitoring the following system health conditions:

1. Monitors processor temperature and overheat alarm.
2. Monitors V_{CORE}/3.3V/5V/12V/2.5V voltages and failure alarm.
3. Monitors processor/chassis fan speed and failure alarm.
4. Read back capability that displays temperature, voltage and fan speed.

1.3.1 Hardware Monitoring System Utility

The mainboard comes with the Hardware Monitoring System utility contained on the CD that comes with your mainboard. It is capable of monitoring the system's hardware conditions such as the temperature of the processor and system, voltage, and speed of the CPU and chassis fans. You are allowed to manually set a range to the items being monitored. If the values are over or under the set range, a warning message will pop-up. The utility can also be configured to allow a beeping alarm to sound whenever an error occurs. We recommend that you use the Default Setting, which is the ideal setting that would maintain the system in good working condition.

Introduction



Use this utility only with Windows ® 95 or Windows ® 98 operating system.

1.3.2 Installation of HMSU

To install the utility, please insert the CD Driver into the CD-ROM drive. The auto run screen (Driver Utility) will automatically appear. Click the Hardware Monitoring category, chose the model number and OS to install. Please refer to the Driver CD "Readme" file for further installation instructions.

1.4 Intelligence

Dual Function Power Button

Depending on the setting in the Soft-Off By Power-Button field of the Power Management Setup, this switch allows the system to enter the Soft -Off or Suspend mode.

Introduction

External Modem Ring-on:- Optional for the 601BS4

The Modem Ring-on feature allows the system that is in the Suspend mode or Soft Power Off mode to wake-up/power-on to respond to incoming calls. This feature supports external modem only.

RTC Timer to Power-on the System

The RT C installed on the system board allows your system to automatically power-on on the set date and time.

Wake-On-LAN Ready :- Optional for the 601BS4

The Wake-On-LAN function allows the network to remotely wake up a Soft Power Down (Soft -Off) PC. Your LAN card must support the remote wakeup function. The 5VSB power source of your power supply must be at least 720mA.

ACPI Ready

The mainboard is designed to meet the ACPI (Advanced Configuration and Power Interface) specification. ACPI has energy saving features supporting OS Direct Power Management (OSPM) for round the clock PC operation.

Hardware Installation

Chapter 2 - Hardware Installation

Before you start installation, a grounded anti-static mat is recommended. Attached an anti static wristband to your wrist and have it grounded to the same point as the anti-static mat.

The following steps must be completed before you can use your PC:

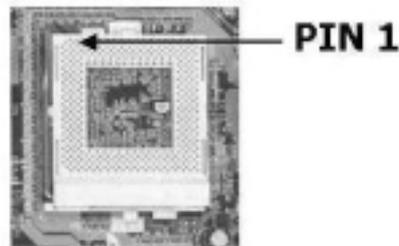
- Configure the Mainboard Settings.
- Install Central Processing Unit (CPU).
- Install Memory Modules.
- Install Expansion Cards.
- Connect Ribbon Cables, Panel Wires and Power Supply.

2.1 Installation of Processor (CPU)

Before you install the processor, make sure that you have an approved Heat Sink with Cooling Fan. Without proper heat sink with cooling fan will damage the processor and mainboard.

To install your processor, please do the following:

1. Locate a small dot marked on top of the CPU. The marking indicate Pin 1 of the CPU.
2. Locate the Socket Pin 1 marking on the mainboard.
3. Push the lever sideways and lift it upwards to 90-degree angle. Insert the CPU into the Socket. Please make sure that the CPU Pin 1 is insert to the socket Pin 1 location
4. Install an approved heat sink with cooling fan for proper heat dissipation. Falling to install a heat sink with cooling fan may cause over-heating and burnout your CPU.
5. Snap back the lever into place.



Hardware
Installation

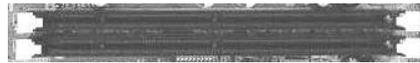


Caution! Be careful not to scrape the mainboard when mounting a clamp-style processor fan to prevent damage to the mainboard.

Hardware Installation

2.2 Installing of DIMM Memory

1. This mainboard uses only Dual Inline Memory Module. Sockets are available for 3.3-volt (power level) un-buffered Synchronous Dynamic Random Access (SDRAM) memory system of 64, 128 or 256MB.
2. It support single-side or double-side SDRAM DIMM module and the maximum memory size supported is 1GB.



This mainboard supports PC-100 and PC-133 DIMM modules. You may choose the memory access time by using the CMOS setup utility. (Refer to CMOS setup "DRAM Clock"). There are three different choices in the CMOS setup program for selection:

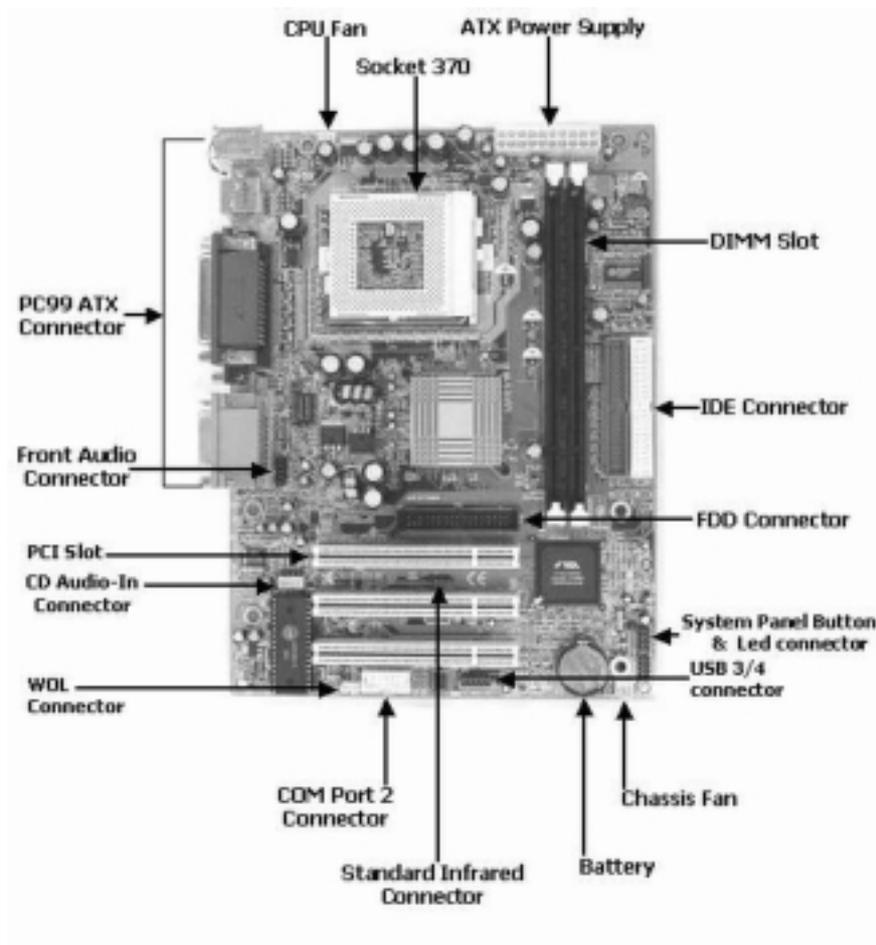
CPU: You should select this option if you installed the CPU and SDRAM DIMM with the same speed. For example, 133MHz CPU with PC133 SDRAM DIMM.

CPU +33M: You should select this option if you use 100MHz CPU with PC133 SDRAM DIMM or 66MHz CPU with PC100 SDRAM DIMM. In other word, you have installed a lower speed CPU with higher speed SDRAM DIMM.

CPU -33M: You should select this option if you use a higher speed CPU with lower speed SDRAM DIMM. For example, using 133MHz CPU with PC100 SDRAM DIMM.

Hardware Installation

2.3 Internal Connectors



Hardware
Installation

Internal Connectors Map

Hardware Installation

2.3.1 PCI Slots

Both PCI and PCI expansion cards may require IRQs, this mainboard complies with Plug and Play (PnP) specification that allows automatic system configuration whenever a PnP compliant card is added. For PnP card, IRQs are assigned automatically for those available.

2.3.2 Floppy Disk Drive Connector

This connector supports two Floppy drives. Uses the ribbon cable provided and make sure that the red strip is connected to PIN 1 of the connector.

2.3.3 Primary and Secondary IDE Connectors

Each IDE connector supports two IDE drives. If you install two hard drives, you need to configure the second drive to Slave mode. Please refer to the hard drive manual for appropriate jumper setting.

2.3.4 Standard Infrared (SIR) Connector

Optional for the 601BS4

This IR connector (SIR) supports optional wireless transmitting and receiving infrared module. You must configure the setting through URAT2 to select whether URAT2 is directed for use with COM 2 or IrDa.



- 1- 5VDC
- 2- No Connector
- 3- IR Receiver
- 4- Ground
- 5- IR Transmitter

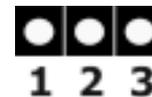
2.3.5 Serial Port 2 (Com 2) Connector

Optional for the 601BS4

This connector allows you to add on an additional serial port (Com 2). The serial port cable is optional and needs to be purchased separately.

2.3.6 Cooling and Chassis Fan Power Connector

Please install your cooling fan to the power connector CN13. If the hardware-monitoring feature is installed, you could monitor the rotating speed of the CPU cooling fan in your Windows operating system. The Chassis Fan must be connected to CN17



- 1- Ground
- 2- +12v DC
- 3- Fan Signal

Hardware Installation

2.3.7 ATX Power Connector

This connector connects to an ATX power supply. The plug from the power supply can only be inserted in one orientation because of the different hole sizes. Find the correct Orientation, make sure that the pins are aligned then push down firmly.

! Important! Ensure that your ATX power supply can supply at least 10mA on the +5 volt standby lead (+5VSB).

2.3.8 WOL (Wake On LAN) Connector

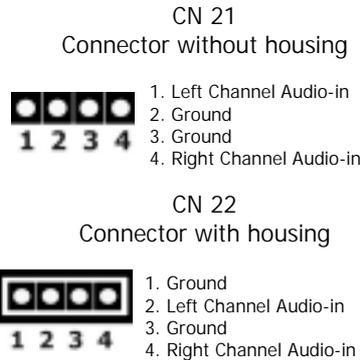
Optional for the 601BS4

This connector needs to be connected to a LAN card with Wake-On-LAN output. The connector powers up the system when a wakeup packet or signal is received through the LAN card. In order to use the WOL LAN card to trigger the power of the PC system, the switching power supply must be able to provide at least 720mA current driving ability on the "5V Standby" voltage.

2.3.9 CD Audio-in Connector

The CD audio-in connectors on the board are used to connect CD ROM audio out. There are two different types of connectors. Please insert the correct connector supplied to the appropriate connector.

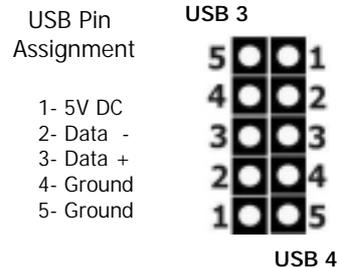
Connector with housing (CN22) is optional for the 601AS and 601BS4



Hardware Installation

2.3.10 USB (Universal Serial Bus) 3 and 4 Connector

Apart from two USB ports available onboard the ATX connector, these connectors allow you to add on an optional kit to expand the total USB to supports 4 USB devices. It's support the Front Utility Panel.

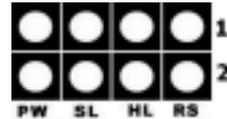


! Please ensure that the USB Cable you intend to connect to these USB port have the same pin assignment to avoid damage or burn out of the mainboard.

Hardware Installation

2.3.11 System Panel buttons and LED connectors

PW = Power on/off and Suspend Switch Connector
SL = Sleep LED Connector
HL = HDD LED Connector
RS = Reset Button Connector



Power On / Off and External Suspend Switch Connector

The Power On/Off connector has two functions. It can be the Power Switch or Suspend Switch of your PC system. You can either choose “**Delay 4 Sec** or **Instant OFF**” (Please refer to the BIOS setup in Chapter 3)

Option 1: If you choose “**Delay 4 Sec.**” In the BIOS CMOS Setup, the function of “PW” will be:

- A. When system power is “OFF”, press this switch, the system will power on.
- B. When system power is “ON”, you can select two different mode:

Hardware
Installation

Mode 1: Press the Power ON button and release (less than 4 seconds); the system will be turned into Suspend mode (turn into the GREEN mode) When the system is in Suspend mode:

Press the Power on button (less than 4 seconds), the system will return to Full-ON mode.

Press and hold the Power On Button for more than 4 seconds, the system will be powered off.

Mode 2: Press and hold the Power ON button for more than 4 seconds, the system will be completely powered off.

Option 2: If you choose “**Instant OFF.**” In the BIOS CMOS Setup, it will operate like normal ON / OFF Power button.

Hardware Installation

Sleep LED Connector

Pin #	Signal Name
1	Signal Pin
2	Ground

This LED when lighted indicate that the AC power is "ON" but your system is switch "OFF". When the led is unlighted indicated that either the AC power is "OFF/ UNCONNECTED" or the system is switch "ON".

IDE HDD LED Connector

Pin #	Signal Name
1	+ 5V DC Pull-up
2	HDD Active Signal

When connect to the chassis HDD connector, read and write activity by HDD will cause the LED to light

Reset Button Connector

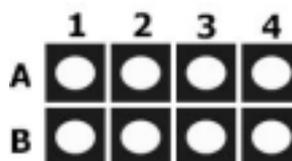
Pin #	Signal name
1	Reset Control
2	Ground

When connected to the chassis reset button, you can reset your PC when press this button.

2.3.12 Speaker and Power LED Connector

Speaker Connector

Connect your chassis speaker to the four pins connector "A". It allows you to hear systems beeps and warnings sound.



Front Panel Power LED Connector

Connect your chassis Power LED connector to the four pins connector "B".

Row	Pin	Function
A	1 - 4	Speaker
B	1 - 4	Power Led

2.3.13 Front Audio Connector

The Front Audio Connector is used together with the Front Utility Panel. When they are connected together you can easily plug your ear-phone, MIC and Audio to the front panel of your case. Please consult your dealer for more details about Front Utility Panel.



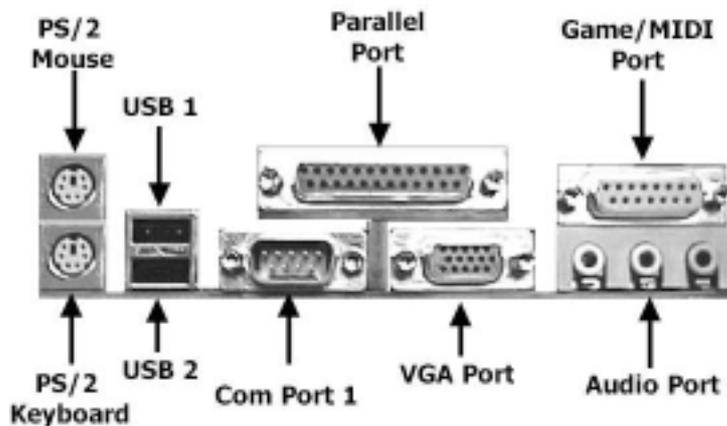
Optional for the 601AS and 601BS4

Hardware Installation

2.4 External Connectors

Ribbon cable should always be connected with the red strip to the PIN 1 on the connector of the devices such as CD ROM and Hard Drive. Check the connector for Pin 1 before installation.

Some pins are used for connectors or power sources. These are different from jumpers in the mainboard layout. Placing jumper caps on these jumpers will cause damage to the mainboard.



2.4.1 PS/2 Mouse and Keyboard Connector

This connector only supports PS/2 mouse and keyboard plugs. If you have a standard AT size (large DIN) keyboard plug, you need to use a mini DIN adapter.

2.4.2 Serial Port COM 1 Connector

This serial port is available for mouse and other serial devices. (I/O addresses used are 3F8H/2F8H/3E8H/2E8H and IRQ3/IRQ4, selected by CMOS setup)

2.4.3 Parallel Port Connector

This parallel port for use in printer supports SPP/EPP/ECP modes, IRQ7 or IRQ5 is selectable, ECP mode will use either DMA 3 or DMA 1 which can be selected by the BIOS setup program.

Hardware Installation

2.4.4 Universal Serial Bus (USB) Port 1 & 2

Two USB ports are available for connecting USB devices.

The mainboard is also equipped with an expansion connector that supports two additional USB external connectors. (The USB cable is not included in with the mainboard).

2.4.5 Audio/Game Port Connector

There is the 3D audio interface built on this mainboard.

2.4.6 VGA Connector

The 601AM, 601BM and 601AS mainboards are integrated with onboard 2x AGP VGA . The 601BM4 and 601BS4 mainboards are integrated with onboard 4x AGP VGA . Simply connect your VGA Monitor Adapter to this connector.

2.5 Jumper Settings

Jumper are built on the mainboard to allow the user the flexibility to configure mainboard setting to meet their specific requirements. When there is no jumper cap insert into the jumper, it is called "OPEN" and when it will insert with Jumper cap, it is known as "SHORT".

Below is the example and picture of a "SHORT" Setting.

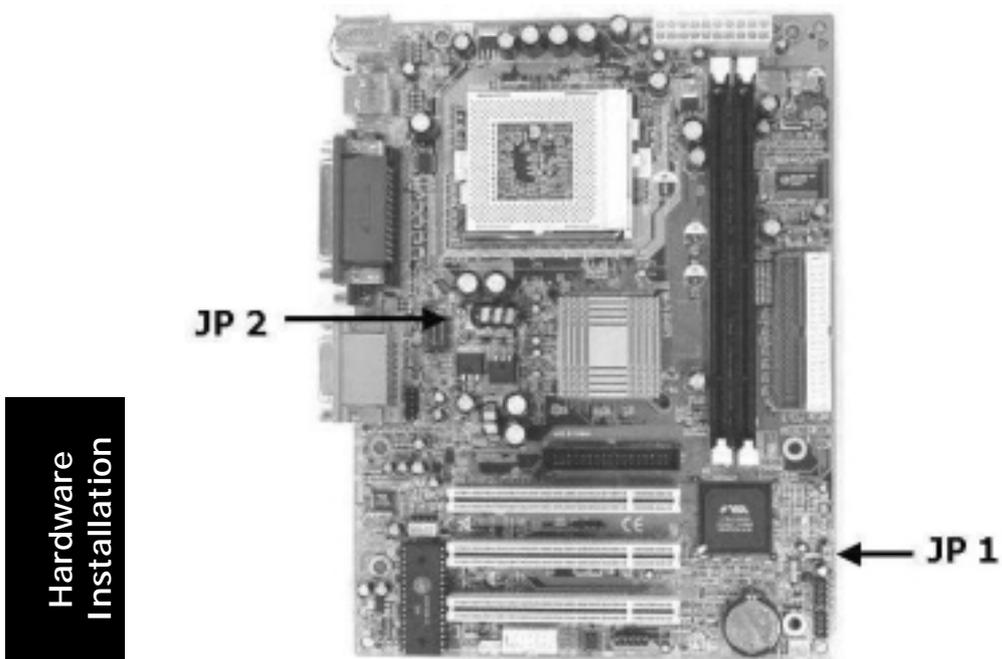


2.5.1 Jumper Description (JP2 is optional for the 601BS4)

Jumper #	Function
JP1	Clear CMOS Data
JP2	CPU Voltage Adjustment

Hardware Installation

2.5.2 Jumper Layout



Jumpers Map

JP 1 Clear CMOS Data

Basically, all BIOS CMOS data are stored in the CMOS memory. At time, you may need to clear the store data due to problems with some setup devices, loss of security password...etc.

Hardware Installation

Clear CMOS Data Procedure

1. Unplug your PC.
2. Remove jumper from Pin 1 and 2 of JP1.
3. Plug jumper into the PIN 2 and PIN 3.
4. Wait for 3 seconds and plug the jumper back to Pin 1 and 2
5. Turn on your PC.
6. Press the <Delete> button during boot up and enter the BIOS CMOS Setup Utility to re-enter new password again.

JP 2: CPU Voltage Adjustment Optional for the 601BS4

JP2	Vcore
OPEN	unchanged
SHORT	0.05V higher adjusted

This feature is included in order to allow you to adjust the CPU voltage manually. When you "SHORT" the jumper, the CPU Voltage is raised by 0.05V against the normal voltage.

Warning: Adjustment of the CPU Voltage may damage the mainboard and CPU.

BIOS SETUP

Chapter 3 - Managing the PC BIOS

3.1 Award BIOS CMOS Setup Utility

The EEPROM on the mainboard stores the AWARD BIOS CMOS Setup Utility to allow you to configure your system. Anytime, you wish to configure your system BIOS, you need to run BIOS CMOS Setup Utility (for example, you may wish to set the Security Password System or changing your Power Management Setting).

Entering Setup

Each time when you start your computer, the system provides you with the opportunity to run the BIOS CMOS Setup Utility. Immediately when you turn on your system, press the <Delete> button to call up the BIOS CMOS Setup Utility.

The BIOS CMOS Setup Utility will not activate if your computer finishes the POST (Power-On-Self-Test) stage. You need to restart the system again to call up the BIOS CMOS Setup Utility. To restart the system, either you can power off, press the reset button on your chassis or simultaneously press the <Ctrl> + <Alt> + <Delete> button. The system will restart and you need to press the <Delete> immediately to call up the BIOS CMOS Setup Utility.

Control Keys

At the bottom of the utility, you will notice a legend bar. The keys in the legend bar allow you to navigate through the various setup menus. The table below lists the control keys with their corresponding functions:

Up Arrow	Move to previous item.
Down Arrow	Move to next item.
Left Arrow	Move to item on the left.
Right Arrow	Move to item on the right.
Enter	Select the desired item.
F1	Display the help screen for the selected feature.
Esc	Exit to the previous screen.
PgUp(-)/PgDn(+)	Modify or change the content of the highlighted item.
F5	Restore the previous CMOS value (only the current page setup will be restored)
F7	Loads the optimized default values from BIOS default table, (only the current page setup will be loaded).
F10	Save changes to CMOS and exit setup.

BIOS SETUP

3.2 MAIN MENU

GETTING HELP

Main Menu

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

Status Page Setup Menu / Option Page Setup Menu

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

Once you have called up the BIOS CMOS Setup Utility, the following screen will appear:

 CMOS Setup Utility – Copyright (C) 1984 - 2000 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	

ESC : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color

Time, Date, Hard Disk Type ...

 Due to constantly updating of BIOS software, the BIOS screen and descriptions are only for reference purpose and may not reflect the exact BIOS screen.

BIOS
Setup

BIOS SETUP

3.3 STANDARD CMOS SETUP

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software.
Standard CMOS Setup

Date (mm : dd : yy) : Tue, Apr 2 2001		Item Help
Time (hh : mm : ss) : 12 : 00 : 00		Menu Level ▶
▶ IDE Primary Master	Maxtor 52049H4	Change the day, month, year and century
▶ IDE Primary Slave	None	
▶ IDE Secondary Master	None	
▶ IDE Secondary Slave	None	
Drive A	1.44, 3.5 in.	
Drive B	None	
Video	EGA/VGA	
Halt On	All,But Keyboard	
Base Memory	640K	
Extended Memory	15360K	
Total Memory	16384K	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Date (mm : dd : yy)

Sets your system to the date that you specific (usually the current date). The format is month, day, and year.

Time (hh : mm : ss)

Sets your system to the time you specific (usually the current time). The format is hour, minute, second. The time format is based on the 24-hour military-time clock. For example, 1 P.M. is 13:00:00.

IDE Primary/Secondary Master/Slave

The mainboard supports four IDE Hard Drives. These fields allow you to set your Hard Drive parameters.

BIOS
Setup

It is recommend to select Auto so that the BIOS will automatically detect the HDD. The following table will appeared, please make sure that the specification of your HDD match the drive table.

BIOS SETUP

IDE HDD Auto-Detection	[Press Enter]
IDE Primary Master	[Auto]
Access Mode	[Auto]
Capacity	xxxxx MB
Cylinder	xxxxx
Head	xx
Precomp (Write precomp)	x
Landzone (Landing Zone)	xxxxx
Sector	xx

Drive A /B:

Select the correct specifications for the diskette drive(s) installed in the computer.

None	No diskette drive installed
360K, 5.25 in	5-1/4 inch PC-type standard drive; 360 Kilobyte capacity
1.2M, 5.25 in	5-1/4 inch AT-type high-density drive; 1.2 MB capacity
720K, 3.5 in	3-1/2 inch single-sided drive; 720 Kilobyte capacity
1.44M, 3.5 in	3-1/2 inch double-sided drive; 1.44 MB capacity
2.88M, 3.5 in	3-1/2 inch double-sided drive; 2.88 MB capacity

Video:

Select the type of primary video subsystem in your computer. The BIOS CMOS Setup Utility will detect the correct video type automatically.

EGA/VGA	Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SEGA, SVGA or PGA monitor adapters
CGA 40	Color Graphics Adapter, power up in 40 column mode
CGA 80	Color Graphics Adapter, power up in 80 column mode
MONO	Monochrome adapter

Halt On

This field allows you to decide which type of errors you want to halt the system when detected during Power On Self Test.

Base Memory / Extended Memory / Total Memory

This field displays the amount of memory detected by the system during boot up. This is a display only field and you don't have to make changes to this field.

Base Memory : Indicates the memory installed below the conventional 1MB space.

Extended Memory : Indicates the memory installed above the 1MB space.

Total Memory : Indicates the total memory installed in the PC system.

BIOS SETUP

3.4 ADVANCED BIOS FEATURES

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software

Advanced BIOS Features

Virus Warning	: Disabled	Item Help
CPU Internal Cache	: Enabled	Menu Level ►
External Cache	: Enabled	
CPU L2 Cache ECC Checking	: Enabled	
Processor Number Feature	: Disabled	Allows you to
Quick Power On Self Test	: Enabled	choose the Virus
First Boot Device	: Floppy	warning feature for
Second Boot Device	: HDD-0	IDE Hard disk
Third Boot Device	: LS120	boot sector
Boot Other Device	: Enable	protection. If this
Swap Floppy Drive	: Disabled	function is enabled
Boot Up Floppy Seek	: Enabled	and some attempt
Boot Up NumLock Status	: On	to write data into
Gate A20 Option	: Normal	this area, BIOS
Typematic Rate Setting	: Disabled	will show a
Typematic Rate (Chars/Sec)	: 6	warning message
Typematic Delay (Msec)	: 250	on screen and
Security Option	: Setup	alarm beep.
OS Select For DRAM > 64MB	: Non-OS2	
HDD S.M.A.R.T Capability	: Disabled	
Video BIOS Shadow	: Enabled	
C8000-CBFFF Shadow	: Disabled	
CC000-CFFFF Shadow	: Disabled	
D0000-D3FFF Shadow	: Disabled	
D4000-D7FFF Shadow	: Disabled	
D8000-DBFFF Shadow	: Disabled	
DC000-CFFFF Shadow	: Disabled	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

BIOS SETUP

Virus Warning

When enabled, you receive a warning message if a program (specifically, a virus) attempts to write to the boot sector or the partition table of the hard disk drive. You should then run an anti-virus program. Keep in mind that this feature protects only the boot sector, not the entire hard drive.



Many disk diagnostic programs that access the boot sector table can trigger the virus-warning message. If you plan to run such a program, we recommend that you first disable the virus warning.

CPU Internal Cache / External Cache

CPU Cache memory is additional memory that is much faster than conventional DRAM (system memory) in which is built in in the processor. IF you enable this option, when the CPU requests data, the system transfers the requested data from the main DRAM into cache memory for faster access.

CPU L2 Cache ECC Checking

When you select Enabled, The ECC checking will ensured the accuracy of the data stored on the L2 cache.

Processor Number Feature

If have Pentium !!! processor installed on the mainboard, enabling this option allows the serial code inside the Pentium !!! processor to be published on certain application.

Quick Power On Self Test

Select Enabled to reduce the amount of time required to run the power-on self-test (POST). A quick POST skips certain steps. We recommend that you normally disable quick POST. Better to find a problem during POST than lose data during your work.

First/Second/Third/Boot Other Device

These fields allow you to decide the boot sequence of your bootable devices such as Hard Drive, CD ROM...etc.

BIOS SETUP

Swap Floppy Drive

This field is effective only in systems with two floppy drives. Selecting "Enabled" assigns physical drive B to logical drive A, and physical drive A to logical drive B.

Boot Up Floppy Seek

When enabled, the BIOS tests (seeks) floppy drives to determine whether they have 40 or 80 tracks. Only 360-KB floppy drives have 40 tracks; drives with 720 KB, 1.2 MB, and 1.44 MB capacity all have 80 tracks. Because very few modern PCs have 40-track floppy drives, we recommend that you set this field to Disabled to save time.

Boot Up NumLock Status

Toggle between On or Off to controls the state of the NumLock key when the system boots. When toggled On, the numeric keypad generates numbers instead of controlling cursor operations.

Security Option

This field allows you to select Setup or System Security option and it needs to work along with the "Set Supervisor Password" in the main menu.

When "Setup" option is selected, you will be prompt to input your "Passwords" before you can start the BIOS CMOS Setup Utility. When you select "System" option, you will be prompt to input your password in order to load the Operation System (Window OS or Linux OS).

Forgotten Your Password

If you happen to forget your password, you can clear the password by erasing the CMOS Real Time Clock (RTC) Ram. Please refer to page 18 under "JP6 Clear CMOS Data".

OS Select For DRAM > 64MB

Select OS2 only if you are running OS/2 operating system with greater than 64 MB of RAM on your system. Otherwise, use the default setting "Non-OS2" for all other operating systems.

BIOS SETUP

HDD S.M.A.R.T Capability

If your Hard Drive support the S.M.A.R.T. technology (Self Monitoring Analysis Reporting Technology) feature, you may “enable” this item to monitor and report your Hard Drive healthy status. Check with your Hard Drive Vendor for further information about SMART feature.

Note! Using this feature may decrease system performance.

Video BIOS/XXXX-XXXX Shadow

This field allows you to enable or disable the shadow feature for the Video BIOS and the appropriate memory segment.

BIOS SETUP

3.5 ADVANCED CHIPSET FEATURES

CMOS Setup Utility - Copyright (C) 1984 - 1999 Award Software
Advanced chipset Features

		Item Help
DRAM Clock	: CPU Clock	
DRAM Timing By SPD	: Disable	
SDRAM Cycle Length	: 3	Menu Level ►
Bank Interleave	: Disable	
Memory Hole	: Disable	
P2C/C2P Concurency	: Enable	
Fast R-W Turn Around	: Enable	
System BIOS Cacheable	: Disable	
Video RAM Cacheable	: Disable	
Frame Buffer Size	: 8M	
AGP Aperture Size	: 64MB	
On Chip USB	: Enable	
USB Keyboard Support	: Disable	
On Chip Sound	: Enable	
CPU to PCI Write Buffer	: Enable	
PCI Dynamic Bursting	: Enable	
PCI Master 0 WS Write	: Enable	
PCI Delay Transaction	: Enable	
PCI #2 Access #1 Retry	: Disable	
AGP Master 1 WS Write	: Disable	
AGP Master 1 WS Read	: Disable	

↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

DRAM Clock

BIOS
Setup

This field allows you to select the DRAM access speed to control the memory performance.

DRAM Timing By SPD

When you select enabled, the system BIOS will read the DRAM parameters from the SPD chip on the DIMM module and set the DRAM timing automatically.

BIOS SETUP

SDRAM Cycle Length

When synchronous SDRAM is installed, the number of clock cycles of CAS latency depends on the SDRAM timing. It is recommended that you use the default value specified.

Bank Interleave

This field allows you to select how many banks of DRAM are installed on the mainboard so that the system BIOS will be able to adjust the SDRAM interleave access mode to optimize the SDRAM performance.

Memory Hole

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

Enabled	Memory hole supported.
Disabled	Memory hole not supported.

P2C/C2P Concurrency

This field allows you to enable or disable the PCI to CPU, CPU to PCI concurrency features.

Fast R-W Turnaround

This item controls the DRAM timing. It allows you to enable/ disable the fast read/write turn around.

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 may occur.

Enabled	BIOS access cached
Disabled	BIOS access not cached

Video Ram Cacheable

Selecting Enabled allows caching of the video BIOS ROM at C0000h to C7FFFh, resulting in better video performance.

Enabled	Video BIOS/RAM access cached
Disabled	Video BIOS/RAM access not cached.

BIOS SETUP

Frame Buffer Size

This field allows you to select the frame buffer size for the on board VGA.

AGP Aperture Size

Select the size of 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 forward to the AGP without any translation.

OnChip USB

You should choose "Enabled" to use the on chip USB feature. If you add in another USB controller, then you need to disable this feature to avoid conflict.

USB Keyboard Support

If you are using the Legacy OS (such as MS-DOS) and you're installing a USB keyboard, please select "Enabled" in this field. For PnP O/S like Windows 98, Windows 2000, Windows ME ... etc, you should select the default setting.

OnChip Sound

There is the Audio interface built in the system chipset. You can use this field to configure the onboard Audio interface disable the Audio interface.

CPU to PCI Write Buffer

When selected "Enabled" writes from the CPU to the PCI bus are buffered so that the CPU will not have to wait until the write is completed before starting another write cycle.

PCI Dynamic Bursting

When enabled, every write transaction goes to the write buffer. Burstable transaction will be able to burst on the PCI bus.

PCI Master 0 WS Write

When enabled, writes to the PCI bus are executed with zero wait states.

BIOS SETUP

PCI Delay 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.

PCI#2 Access #1 Retry

When disabled, PCI#2 will not be disconnected until access finishes (default). When enabled, PCI#2 will be disconnected if maximum retries are attempted without success.

AGP Master 1 WS Write/Read

When enabled, writes to the AGP are executed with one wait states.

BIOS SETUP

3.6 Integrated Peripherals

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software
Integrated Peripherals

On-Chip IDE Channel0	: Enabled	Item Help
On-Chip IDE Channel1	: Enabled	
IDE Prefetch Mode	: Enabled	Menu Level ►
Primary Master PIO	: Auto	
Primary Slave PIO	: Auto	
Secondary Master PIO	: Auto	
Secondary Slave PIO	: Auto	
Primary Master UDMA	: Auto	
Primary Slave UDMA	: Auto	
Secondary Master UDMA	: Auto	
Secondary Slave UDMA	: Auto	
Init Display first	: PCI Slot	
IDE HDD Block Mode	: Enabled	
Onboard FDC Controller	: Enabled	
Onboard Serial Port 1	: Auto	
Onboard Serial Port 2	: Auto	
UART 2 Mode	: Standard	
IR Function Duplex	: Half	
TX, RX inverting enable	: No, Yes	
Onboard Parallel Port	: 378/IRQ7	
Onboard Parallel Mode	: Normal	
ECP Mode Use DMA	: 3	
Parallel Port EPP Type	: EPP 1.9	
Onboard Legacy Audio	: Enabled	
Sound Blaster	: Disabled	
Sound I/O Base Address	: 220H	
SB IRQ Select	: IRQ 5	
SB DMA Select	: DMA 1	
MPU-401	: Disable	
MPU-401 I/O Address	: 330-333H	
Game Port (200-207H)	: Enabled	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

BIOS
Setup

BIOS SETUP

On-Chip IDE Channel 0 / 1

These options allow you to enable or disabled the onboard Primary IDE interface.

IDE Prefetch Mode

The onboard IDE drive interfaces support IDE prefetching for faster drive accesses. If you install additional add on IDE interface card, you should disabled this filed if your interface does not support prefetching.

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.

Primary/Secondary, Master/Slave UDMA

Ultra DMA 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, select Auto to enable BIOS support.

Init Display First

When you have both onboard AGP and PCI VGA card installed in your system, you can use this field to decide the display loading priority during startup.

IDE HDD Block Mode

This selection allows your hard disk controller to select the block mode to transfer data to and from your hard disk (HDD).

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

BIOS SETUP

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. If you add a higher performance controller, you should disable this feature.

Onboard Serial Port 1/Port 2

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

UART 2 Mode

This field allows you to determine which mode for the Onboard Serial Port 2.

IR Function Duplex

This item allows you to select the IR half or full duplex function.

TX, RX inverting enable

This item allows you to enable the TX, RX inverting depending on your hardware requirement. It is recommended not to change the default setting to avoid error.

Onboard Parallel Port

This field allows you to select the address for the physical parallel (printer) port.

Onboard Parallel Port Mode

This field allows you to select an operating mode for the onboard parallel (printer) port. Check the printer manual for the recommended mode.

ECP Mode Use DMA

The Parallel port on the mainboard support ECP/EPP, ECP, and EPP modes. When you select ECP mode, you may specify the DMA# for the parallel port for proper function.

BIOS SETUP

EPP Mode Select

If you select EPP mode for your parallel port, use this field to select the EPP port type. The values are 1.7 or 1.9.

Onboard Legacy Audio

This field controls the onboard legacy audio.

- Sound Blaster
- SB I/O Base Address
- SB IRQ Select
- SB DMA Select
- MPU-401
- MPU-401 I/O Address
- Games Port (200-207H)

BIOS SETUP

3.7 Power Management Setup

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software
Power Management Setup

ACPI Function	: Disabled	Item Help
Power Management	: Press Enter	
PM Control By APM	: Yes	Menu Level ►
Video Off Option	: Suspend->Off	
Video Off Method	: Blank Screen	
Modem Use IRQ	: 3	
Soft-Off by PWR-BTTN	: Instant – off.	
Wake-Up Events	: Press Enter	
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

ACPI function

If you wish to use the ACPI function, you have to use operation system that supports ACPI like Windows 98. During Windows 98 installation, you will have to provide specific parameter (please refer to Windows 98 manual for the parameters).

When the ACPI function is installed in your PC system successfully, you will find the ACPI function in the power management icon. The PW switch defined by the ACPI is different to the BIOS setup and it always has the higher priority than what was defined in the system BIOS.

Power Management

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. HDD Power Down
2. Doze Mode
3. Suspend Mode

Please refer to the following table for the mode functional description:

BIOS SETUP

Min. Power Saving	Minimum power management. Doze Mode = 1 hr. Standby Mode = 1 hr., Suspend Mode = 1 hr., and HDD Power Down = 15 min.
Max. Power Saving	Maximum power management -- ONLY AVAILABLE FOR SL CPU . Doze Mode = 1 min., Standby Mode = 1 min., Suspend Mode = 1 min., and HDD Power Down = 1 min.
User Defined	Allows you to set each mode individually. When enabled, each range is from 1 min. to 1 hr. except for HDD Power Down which range from 1 min. to 15 min.

HDD Power Down

When enabled and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active.

Doze Mode

When enabled and after the set time of system inactivity, the CPU clock will run at slower speed while other devices still operate at full speed.

Suspend Mode

This field allows you to choose the time interval which PC system will turn into suspend mode.

PM Control By APM

When you select enabled, the Advanced Power Management device will be activated to enhance the Maximum Power Saving mode and stop the CPU internal clock. This feature must be use together with Advance Power Management (APM).

BIOS SETUP

Video Off Option

When enabled, this feature allows the VGA adapter to operate in a power saving mode depending on your selection.

Always On	The monitor will remain on during power saving mode.
Suspend— > Off	Monitor will be blanked once the system enter Suspend mode.
All Modes—> Off	Monitor will be blanked when the system any power saving mode.

Video Off Method

When you are using the Green Monitor with your PC system, there are three modes selectable in this field for power energy saving.

V/H SYNC+Blank	This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS Support	Initial display power management signaling.

Modem Use IRQ

This mainboard has the ACPI feature designed on the board and it will “wakeup” automatically when it detects incoming modem Ring-in signal (only available with external modem connected to your PC system. You need to input the desire IRQ value of the com port used.

!	COM 1 uses IRQ4, and COM 2 uses IRQ3.
----------	---------------------------------------

Soft-Off by PWR-BTTN

Pressing the power button for more than 4 seconds will forces the system to enter into Soft-Off state when system has “Hung”

BIOS SETUP

Wake Up Event

When you click "Enter" key, the following menu will pop up:

VGA	: OFF	Item Help
LPT & COM	: LPT/COM	Menu Level ▶
HDD & FDD	: ON	Default is Disabled. Select Enabled to Reset Extended System Configuration Data
PCI Master	: OFF	
Modem/Lan Resume	: DISABLED	
RTC Alarm Resume	: DISABLED	
Date (of Month)	: 0	
Resume Time (hh:mm:ss)	: 0 : 0 : 0	
IRQs Activity Monitoring	: Press Enter	

VGA

When enabled, any VGA signal will awake the system.

LPT & COM

When selected "On", any activity from these devices or IRQs will wakes up the system.

HDD & FDD

When selected "On", any activity from the HDD or FDD will wakes up the system.

PCI Master

When selected "ON", any activity from the PCI devices will wakes up the systems.

Modem/Lan Resume

Any input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) will wakes up the system.

RTC Alarm Resume

When RTC Alarm Resume is enabled, you may set the date and times for the RTC (real time clock) alarm to wake up the system.

BIOS SETUP

IRQs Activity Monitoring

If you wish you exempt any IRQ to enter into power management mode, select "Disable" and that IRQ will be excluded from the power management function.

3.8 PNP/PCI COFIGURATION

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software PnP/PCI Configuration				
PnP OS Installed : No	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Item Help</td> </tr> <tr> <td style="padding: 2px;">Menu Level ▶</td> </tr> <tr> <td style="padding: 2px;">Default is Disabled. Select Enabled to Reset Extended System Configuration Data</td> </tr> </table>	Item Help	Menu Level ▶	Default is Disabled. Select Enabled to Reset Extended System Configuration Data
Item Help				
Menu Level ▶				
Default is Disabled. Select Enabled to Reset Extended System Configuration Data				
Reset Configuration Data : Disable				
Resources Control by : Auto(ESCD)				
X IRQ Resources : Press Enter				
X DMA Resources : Press Enter				
PCI/VGA Palette Snoop : Disabled				
Assign IRQ For VGA : Enabled				
Assign IRQ For USB : Enabled				
↑↓→←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults				

PNP OS Installed

Select "Yes" if your installed OS support PnP (Plug and Play).

Reset Configuration Data

This field should be left as Disabled. If you have installed a new add-on card and the system reconfiguration has caused serious conflict that the operating system can not boot, then you should Select Enabled in order to reset Extended System Configuration Data (ESCD).

Resources Controlled by

The Award Plug and Play BIOS has the capacity to automatically configure the boot and Plug and Play compatible devices along with a Plug and Play operating system such as Windows 95. If you set this field to "manual", you may manually select specific resources in each of the sub menu.

BIOS SETUP

IRQ Resources

When resources are controlled manually, you need to assign interrupt type for the devices.

Legacy ISA devices compliant with the original PC AT bus specification require a specific interrupt (such as IRQ 4 for serial port 1). PCI/ISA devices compliant with the Plug and Play standards, whether designed for PCI or ISA bus architecture.

PCI/VGA Palette Snoop

Some display cards are non-standard VGA card (such as graphics accelerator or MPEG Card) which may not display color properly on your screen. If you encounter problem, select "Enable" may correct this problem. Leave it "Disabled" as the default setting if you are using the normal display card.

Assign IRQ For VGA / USB

If you have VGA card installed that require IRQ signal, or you have the USB device connected to the onboard USB port, then select "Enabled" in this field. Otherwise, you may select "Disabled" so that the related IRQ will be released for other devices.

3.9 PC Health Status

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software		
PC Health Status		
Current CPU Temperature	40°C / 104°F	Item Help
Current CPU FAN Speed	4687 RPM	
Current Chassis FAN Speed	0 RPM	Menu Level
Vcore	1.63 V	
2.5 V	2.58 V	
3.3 V	3.30 V	
5 V	5.10 V	
12 V	12.48 V	
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

The table above allows you to monitor your PC system healthy status. You can check on the related field and monitor the status like voltage, Temperature...etc.

BIOS SETUP

Current CPU Temperature

This field shows you the current system temperature.

Current CPU Fan Speed

This field shows you the current CPU FAN and / or System FAN operating speed.

Current Chassis Fan Speed

This field shows you the current Chassis FAN operating speed.

Vcore

This field shows you the current system voltage.

3.10 Frequency/Voltage Control

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software Frequency/Voltage Control		Item Help
Auto Detect DIMM/PCI Clk	: Enable	
Spread Spectrum	: Disabled	Menu Level
CPU Host/PCI Clock	: 133/33Mhz	

Auto Detect DIMM/PCI Clk

When "Enabled", it will auto detect the devices presences on DIMM and PCI slots. When there is no device presented on some of the PCI slots or DIMM connectors, the clock on the related DIMM connectors and PCI slots will be disabled to reduce the Electro-Magnetic Interference (EMI).

Spread Spectrum

When Spread Spectrum is enabled, the EMI radiation on this mainboard will be reduced.

CPU Host / PCI Clock

The BIOS will automatically detect the FSB and PCI clock. If you wish to select other clock frequency, you can use this field to select the desired frequency.

BIOS SETUP

3.11 Load Optimized Defaults

CMOS Setup Utility – Copyright (C) 1984 - 2000 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	
ESC : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color
Time, Date, Hard Disk Type ...	

In case that you don't know how to use the Award BIOS CMOS Setup Utility to select the settings, you may use this field to load the optimized default which is defined in the system BIOS. This Optimized Default is recommended by our engineer that gives a series of parameters for ensuring the best reliability.

If you are not familiar with the setup procedure or if you made some changes in the CMOS setting and found that the PC system becomes unstable, you should try to load the optimized default value first and then re-configure step by step again.

BIOS SETUP

3.12 SET SUPERVISOR PASSWORD

CMOS Setup Utility – Copyright (C) 1984 - 2000 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	
ESC : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color
Time, Date, Hard Disk Type ...	

The "SUPERVISOR PASSWORD" is for you to control unauthorized access to your BIOS CMOS Setup or Booting into the your PC system. The Supervisor Password option is used together with the Security Option in section.

When "Setup" is selected in Security Option

If you want to change the BIOS setting, you will have to key-in the Supervisor Password so that you can start the BIOS CMOS Setup Utility and change the system setting.

When "System" is selected in Security Option

When turn on the PC system, it will request you to enter the Password in order to boot up your system. Without the correct password, the PC system will stop and the operation system will not be loaded.

BIOS SETUP

3.13 SET USER PASSWORD

CMOS Setup Utility – Copyright (C) 1984 - 2000 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving
PC Health Status	
ESC : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color
Time, Date, Hard Disk Type ...	

The User Password can be used to check the user's authority. However, this password entry is different from the "SUPERVISOR PASSWORD" mentioned in previous section. The User Password will have different function according to the "Supervisor Password" and the "Security Option" setup:

A. When there is a password stored in the "SUPERVISOR PASSWORD"

• When "Setup" is selected in Security Option:

When you use the "User Password" to log into the BIOS setup program, you can only select "User Password", "SAVE & EXIT SETUP" and "EXIT WITHOUT SAVING" from the main menu. (Using Supervisor Password to log into the PC system, you will have the complete right to access all BIOS settings.)

• When "System" is selected in Security Option:

When turn on the PC system, it will request you to enter the Password. Without correct password, PC system will stop and the operation system won't be loaded.

B. When there is no password stored in the "SUPERVISOR PASSWORD"

• When "Setup" is selected in Security Option:

Users can use the "User Password" to log into the BIOS setup program, and they can make all the change in the BIOS setup program.

• When "System" is selected in Security Option:

When turn on the PC system, it will request you to enter the Password. Without the correct password, the PC system will stop and the operation system will not be loaded.



BIOS SETUP

3.14 SAVE & EXIT SETUP / EXIT WITHOUT SAVING

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Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
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ESC : Quit	↑↓→← : Select Item
F10 : Save & Exit Setup	(Shift)F2 : Change Color
Time, Date, Hard Disk Type ...	

Save & Exit Setup

This option will save all setup values to CMOS RAM & EXIT SETUP routine. Move the selection bar to "SAVE & EXIT SETUP" and press "Enter" key, then types "Y" and "Enter" key, the values will be saved and all the information will be stored in the CMOS memory.

Exit Without Saving

This item exits the setup routine without saving any changed values to CMOS RAM, When you do not want to save your change to the CMOS memory, you may choose to run this option and the setting what you made in the BIOS setup routine will be abundant.