Minix 785G Series

Socket AM2+/AM3Processor Mainboard

User's Manual

Rev: 1.00, Nov 2009

Motherboard

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Table of Contents

Chapter 1 Introduction

1.1 Package Checklist

Thank you for choosing our product.
Please check the following packing and accessories, if there is any broken or part missing, please contact with your franchiser.

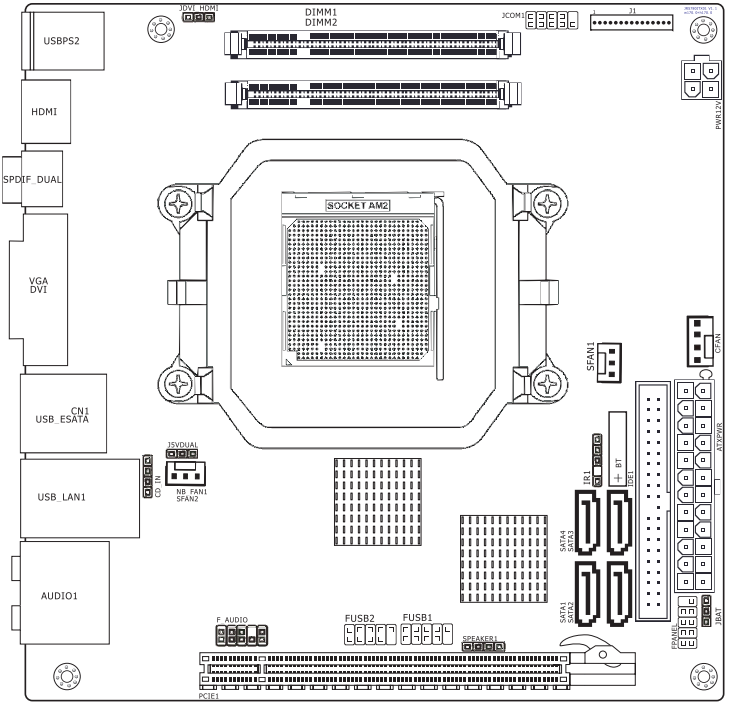
- HDD Cable X 1
- Rear I/O Panel X 1
- User's Manual X 1
- Driver/Utility CD X 1
- Serial ATA Signal Cable X 2
- Serial ATA Power Cable X 1

The items listed above are for reference only, and are subject to change without notice.

1.2 Specifications

CPU	- Supports AMD® Socket AM2+/AM3 processors: - AMD Phenom™ II/ Athlon™ II/ Athlon™64 x2 Dual Core/ Sempron™ processors; - Note: This board supports up to maximum 65W TDP processors. For details, please refer to the CPU support list on our website.
Main Chipset	- AMD 785G + SB710 - Built in Radeon™ HD 4200 Graphics, DirectX® 10.1 and UVD 2 ready;
Main Memory	- Supports 2 x 1.8V DDR2 SODIMM sockets supporting up to 8 GB memory - Supports Dual channel memory architecture - Onboard side-port 128M DDR2 memory - Supports for DDR2 1066MHz(o.c)/800MHz/667MHz/533MHz memory
BIOS	- AMI BIOS, supports Plug&Play - Supports Advanced Power Management ACPI,STR - CPU temperature, Fan speed, System Voltage monitoring
Integrated Ports	- 1 x PS/2 Keyboard port - 1 x DVI port - 1 x HDMI port - 1 x VGA port - 1 x RJ45 port - 1 x eSATA port - 1 x SPDIF_IN port - 1 x SPDIF_OUT port - 1 x COM header - 1 x CPU Fan header - 2 x System Fan headers - 1 x SPEAKER header - 1 x F_AUDIO header - 1 x IR header - 10 x USB 2.0 ports, USB 1.1 is compliant - 4 x SATA ports , Maximum Speed to 3GB/s,support for SATA RAID 0,1,10 - 1 x IDE connector, 2 x IDE devices could be connected.
Sound	- Onboard 6-channel/8-channel HD Audio Codec (Optional) - Front Panel Jumper, provides stereo MIC port on front panel
Onboard LAN	- Onboard 10/100/1000Mbps compatible LAN (Optional)
Expansion Slots	- 1 x PCI-Express x16 Gen. 2 slot (running at x4)
Form Factor	Mini ITX (170mm*170mm)

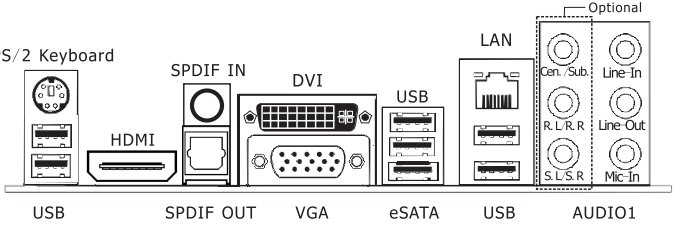
1.3 Mainboard Layout



(This picture is only for reference)

1.4 Connecting Rear Panel I/O Devices

The rear I/O part of these mainboard provides the following I/O ports:



(This picture is only for reference)

- PS/2 Keyboard: Connect to a PS/2 keyboard.
- HDMI:Connect to multimedia devices of HDMI protocol.
- SPDIF IN:This connector provides an S/PDIF-IN connection.
- SPDIF OUT:Connect to digital audio device.
- DVI: Connect to monitor input.
- VGA: Connect to a monitor's VGA input.
- eSATA: Connect to peripherial SATA devices.
- LAN: The LAN port allows the motherboard to connect to a local area network by means of a network hub.
- USB: The USB ports are used to connect USB 2.0/1.1 devices such as scanner, speakers, keyboard, mouse, hub, digital camera, joystick, etc.
- AUDIO(Rear Panel Audio):

  Center/Subwoofer (Orange): This jack is used to connect to the center and the subwoofer speakers of the multi-channel audio system.

  Rear Left/Right (Black): This jack is used to connect to the rear left and rear right speakers of the multi-channel audio system.

  Side Left/Right (Gray): This jack is used to connect to the side left and side right speakers of the multi-channel audio system.

  Line-in (Light Blue): This jack is used to connect to the line out from any external audio sources such as MP3 player, CD player, AM/FM radio tuner, etc.

  ine-out (Front Left/Right Jack, Lime): This jack is used to connect to the front left and right channel speakers of the audio system.

  Mic-in (Pink): This jack is used to connect an external microphone.

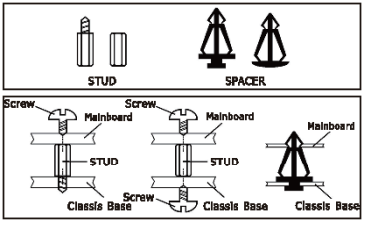
Chapter 2 Hardware Setup

2.1 Choosing a Computer Chassis

- Choose a chassis big enough to install this mainboard.
- As some features for this mainboard are implemented by cabling connectors on the mainboard to indicators and switches or buttons on the chassis, make sure your chassis supports all the features required.
- If there is possibility of adopting some more hard drives, make sure your chassis has sufficient power and space for them.
- Most chassis have alternatives for I/O shield located at the rear panel. Make sure the I/O shield of the chassis matches the I/O port configuration of this mainboard. You can find an I/O shield specifically designed for this mainboard in its package.

2.2 Installing Mainboard

Most computer chassis have a base with many mounting holes to allow the mainboard to be securely attached, and at the same time, prevent the system from short circuits. There are two ways to attach the mainboard to the chassis base: (1)with studs, or (2) with spacers. Basically, the best way to attach the board is with studs. Only if you are unable to do this should you attach the board with spacers. Line up the holes on the board with the mounting holes on the chassis. If the holes line up and there are screw holes, you can attach the board with studs. If the holes line up and there are only slots, you can only attach with spacers. Take the tip of the spacers and insert them into the slots. After doing this to all the slots, you can slide the board into position aligned with slots. After the board has been positioned, check to make sure everything is OK before putting the chassis back on.



To install this mainboard:

1. Locate all the screw holes on the mainboard and the chassis base.
2. Place all the studs or spacers needed on the chassis base and have them tightened.
3. Face the mainboard's I/O ports toward the chassis's rear panel.
4. Line up all the mainboard's screw holes with those studs or spacers on the chassis.
5. Install the mainboard with screws and have them tightened.

2.3 Installation of the CPU and CPU Cooler

Before installing the CPU, please comply with the following conditions:

1. Please make sure that the mainboard supports the CPU.
2. Please take note of the one indented corner of the CPU. If you install the CPU in the wrong direction, the CPU will not insert properly. If this occurs, please change the insert direction of the CPU.
3. Please add an even layer of heat sink paste between the CPU and CPU cooler.
4. Please make sure the CPU cooler is installed on the CPU prior to system use, otherwise overheating and permanent damage of the CPU may occur.
5. Please set the CPU host frequency in accordance with the processor specifications. It is not recommended that the system bus frequency be set beyond hardware specifications since it does not meet the required standards for the peripherals. If you wish to set the frequency beyond the proper specifications, please do so according to your hardware specifications including the CPU, graphics card, memory, hard drive, etc.

2.3.1 Installation of the CPU

1. Unlock the socket by pressing the lever sideways, then lift it up to a 90°.

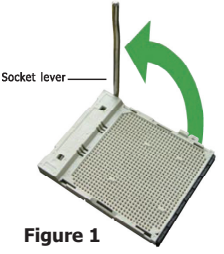
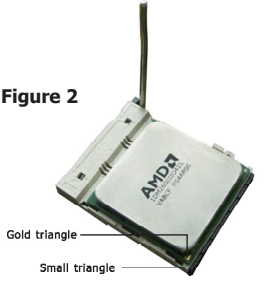


Figure 1

2. Position the CPU above the socket such that the CPU corner with the gold triangle matches the socket corner with a small triangle.
3. Carefully insert the CPU into the socket until it fits place.

Figure 2



4. When the CPU is in place, push down the socket lever to secure the CPU.
   The lever clicks on the side tab to indicate that it is locked.

Figure 3

2.3.2 Installation of the CPU Cooler

For proper installation, please kindly refer to the instruction manuals of your CPU Cooler.

We suggest there should be active cooling to the chipset area in order to let the motherboard function properly, completely enclosed system environment without adequate air flow will result in chipset overheat, which is not recommended.

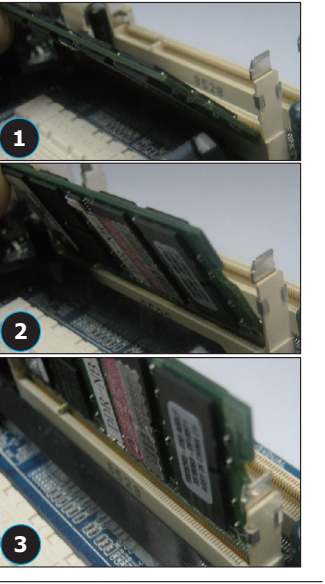
2.4 Installation of Memory Modules

This mainboard provides two 200-pin DDRII (Double Data Rate) SODIMM slots and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install two identical (the same brand, speed, size and chip-type) memory modules in the DDRII DIMM slots to activate Dual Channel Memory Technology. Otherwise, it will operate at single channel mode.

To install system memory:

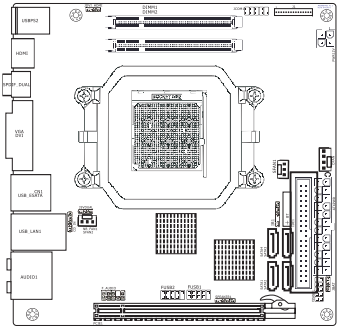
1. Power off the computer and unplug the AC power cord before installing or removing memory modules.
2. Locate the DIMM slot on the board.
3. Insert the SODIMM module at a 45 degree angle.
4. Push the SODIMM module back towards the board until the clips lock the module in place.
5. To remove the DIMM modules, push the two ejector tabs on the slot outward simultaneously, and then pull out the DIMM module.

Static electricity can damage the electronic components of the computer or optional boards. Before starting these procedures, ensure that you are discharged of static electricity by touching a grounded metal object briefly.



2.5 Connecting Peripheral Devices

2.5.1 IDE Disk Drive Connectors

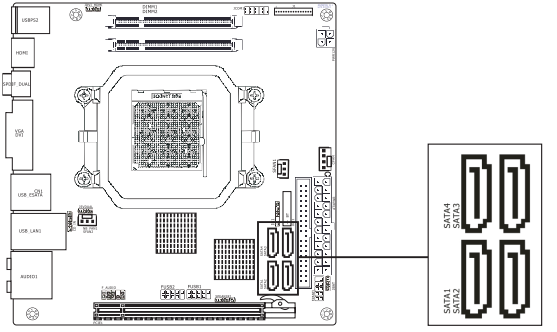


Each of the IDE port connects up to two IDE drives at Ultra ATA 133/100/66/33 mode by one 40-pin, 80-conductor,and 3-connector Ultra ATA/66 ribbon cables.
Connect the single end (blue connector) at the longer length of ribbon cable to the IDE port of this board, the other two ends (gray and black connector) at the shorter length of the ribbon cable to the connectors of your hard drives.

Make sure to configure the "Master" and "Slave" relation before connecting two drives by one single ribbon cable. The red line on the ribbon cable must be aligned with pin-1 on both the IDE port and the hard-drive connector.

2.5.2 Serial ATA Connectors

Each SATA connector serves as one single channel to connect one SATA device by SATA cable.

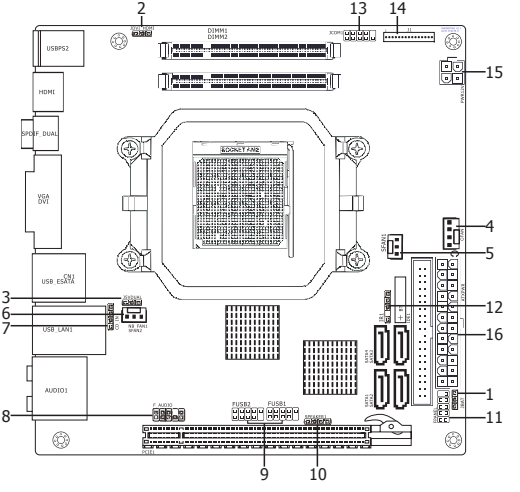


2.5.3 PCI Express slots

PCI-Express x16 Gen. 2 slot (running at x4).

Chapter 3 Jumpers & Headers Setup

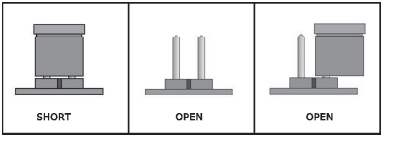
Quick Components Guide

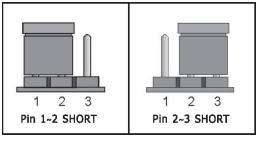


NO.	Layout	Page NO.	No.	Layout	Page NO.
1	JBAT	13	9	FUSB1/FUSB2	15
2	JDVI_HDMI	13	10	SPEAKER1	15
3	J5VDUAL	14	11	FPANEL	15
4	CFAN	14	12	IR1	15
5	SFAN1	14	13	JCOM1	16
6	SFAN2	14	14	J1(optional)	16
7	CD_IN(optioanal)	14	15	PWR12V	16
8	F_AUDIO	14	16	ATXPWR	16

Checking Jumper Settings

- For a 2-pin jumper, plug the jumper cap on both pins will make it CLOSE (SHORT). Remove the jumper cap, or plug it on either pin (reserved for future use) will leave it at OPEN position.
- For 3-pin jumper, pin 1~2 or pin 2~3 can be shorted by plugging the jumper cap in.





How to identify the PIN1 jumpers?

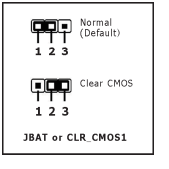
Please check the mainboard carefully, the PIN1 is marked by "1" or white thick line.

1-JBAT(CMOS Memory Clearing Header)

The time to clear the CMOS memory occurs when (a) the CMOS data becomes corrupted, (b) you forgot the supervisor or user password preset in the BIOS menu, (c) you are unable to boot-up the system because the CPU ratio/clock was incorrectly set in the BIOS menu, or (d) whenever there is modification on the CPU or memory modules.

This header uses a jumper cap to clear the CMOS memory and have it reconfigured to the default values stored in BIOS.

- Pins 1 and 2 shorted (Default): Normal operation.
- Pins 2 and 3 shorted: Clear CMOS memory.



2-JDVI_HDMI(DVI/HDMI Setting Header)

1-2（Default）	Auto	While JDVI_HDMI jumper be shorted #pin 1-2, it will auto detect HDMI or DVI device, but if some DVI or HDMI device cann't be detected, please be shorted #pin 2-3.
2-3	DVI/HDMI EN	

3-J5VDUAL(5VDUAL Setting Header)

1-2（Default）	Enable	2-3 pin can not support the keyboard post function,need to set 1~2 pin enable the function.
2-3	Disable	

4/5/6-CFAN/SFAN1/SFAN2(Fan Power Connectors)

CFAN:

Pin No.	Definition
1	GND
2	+12V
3	RPM
4	Control

SFAN1/SFAN2:

Pin No.	Definition
1	GND
2	+12V
3	RPM

These fan connectors are not jumpers. DO NOT place jumper caps on these connectors.

7-CD_IN(Internal Audio Connectors) (optional)

Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

8-F_AUDIO(Front Panel Audio Connection Header)

Pin No.	Header	HD Audio Definition	AC97 Audio Definition
1	PORT1L	Microphone_Left	Microphone
2	AGND	Ground	Ground
3	PORT1R	Microphone_Right	MIC Power
4	PRESENCE#	-ACZ_DET	N/A
5	PORT2R	Line2_Right	Line out (R)
6	SENSE1_RETURN	AuD_R_Return	N/A
7	SENSE_SEND	FAUDIO_JD	N/A
8	No Pin	N/A	N/A
9	PORT2L	Line2_Left	Line Out(L)
10	SENSE2_RETURN	AuD_L_Return	N/A

9-FUSB1/FUSB2(Additional USB Port Headers)

Pin No.	Definition	Pin No.	Definition
1	VCC	2	VCC
3	Data 0-	4	Data 1-
5	Data 0+	6	Data 1+
7	Ground	8	Ground
9	NO Pin	10	NC

10/11-SPEAKER1/FPANEL(Speaker Headers & Front Panel Switches)

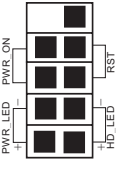
HD_LED (Red): Hard Driver LED connector
This connector connects to the case-mounted HD LED cable, and the LED will light when the hard drive(s) is/are being accessed.

RST (Blue): Reset Switch
This connector connects to the case-mounted reset switch which allows you to reboot without having to power-off the system and thus prolonging the life of the power supply or system.

PWR_ON (Black): Power Switch
Depending on the setting in the BIOS setup, this switch serves two functions which will allow you to power-on/off the system or to enter the suspend mode.

PWR_LED (Green): Power/Standby LED
When the system's power is on, this LED will light. When the system is in the S1 (POS - Power on Suspend) or S3 (STR - Suspend to RAM, optional) state, it will blink every second.

SPEAKER (Yellow or Black): Speaker Connector
This 4-pin connector connects to the case-mounted speaker.



SPEAKER1:

Pin No.	Definition
1	SPK +
2	NC
3	NC
4	SPK -

12-IR1(IR Connection Header)

Connect the IrDA cable (if available) to this IR connector.

Pin No.	Definition
1	VCC
2	NC
3	IRRX
4	GND
5	IRTX

13-JCOM1(Serial Port Header)

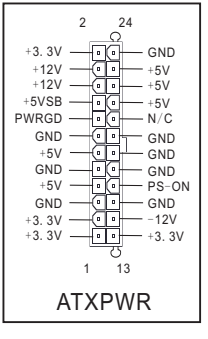
This JCOM1 header supports a serial port module.

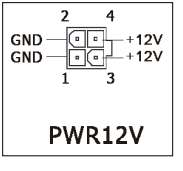
Pin No.	Definition	Pin No.	Definition
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

15/16-PWR12V/ATXPWR(4-pin 12V Power Connector/ATX 24-pin Power Connector)

ATXPWR (ATX Power) connector

We recommend to use our motherboard with a power supply that complies with the ATX12V Power Supply Design Guide Version 1.1. Every ATX12V power supply unit has a standard 24-pin ATX main power connector that must be plugged into this connector. If you would like to use an old power supply with only a 20-pin ATX main power connector, then please plug the 20-pin ATX main power connector along with pin 1 and pin 13.





PWR12V (+12V Power) connector

Your power supply unit may come with a 4-pin or 8-pin +12V power connector. The +12V power enables the delivery of more +12VDC current to the CPU's Voltage Regulator Module (VRM). please connect the 4-pin power to this connector.

Chapter 4 BIOS Setup Utility

BIOS stands for Basic Input and Output System. It was once called ROM BIOS when it was stored in a Read-Only Memory (ROM) chip. Now manufacturers would like to store BIOS in EEPROM which means Electrically Erasable Programmable Memory. BIOS used in this series of mainboard is stored in EEPROM, and is the first program to run when you turn on your computer.

BIOS performs the following functions:
1. Initializing and testing hardware in your computer (a process called "POST", for Power On Self Test).
2. Loading and running your operating system.
3. Helping your operating system and application programs manage your PC hardware by means of a set of routines called BIOS Run-Time Service.

4.1 About BIOS Setup

BIOS Setup is an interactive BIOS program that you need to run when:
1. Changing the hardware of your system. (For example: installing a new Hard Disk etc.)
2. Modifying the behavior of your computer. (For example: changing the system time or date, or turning special features on or off etc.)
3. Enhancing your computer's behavior. (For example: speeding up performance by turning on shadowing or cache)

4.2 To Run BIOS Setup

First access BIOS setup menu by pressing <F1> key after “POST” is complete (before OS is loaded). After the first BIOS be setupped(or loaded default values) and save, the <DEL> key will be pressed if you will enter BIOS setup menu.

4.3 About CMOS

CMOS is the memory maintained by a battery. CMOS is used to store the BIOS settings you have selected in BIOS Setup. CMOS also maintains the internal clock. Every time you turn on your computer, the BIOS Looks into CMOS for the settings you have selected and configures your computer accordingly. If the battery runs out of power, the CMOS data will be lost and POST will issue a “CMOS invalid” or “CMOS checksum invalid” message. If this happens, you have to replace the battery and check and configure the BIOS Setup for the new start.

4.4 The POST (Power On Self Test)

POST is an acronym for Power On Self Test. This program will test all things the BIOS does

before the operating system is started. Each of POST routines is assigned a POST code, a unique number which is sent to I/O port 080h before the routine is executed.

4.5 BIOS Setup — CMOS Setup Utility

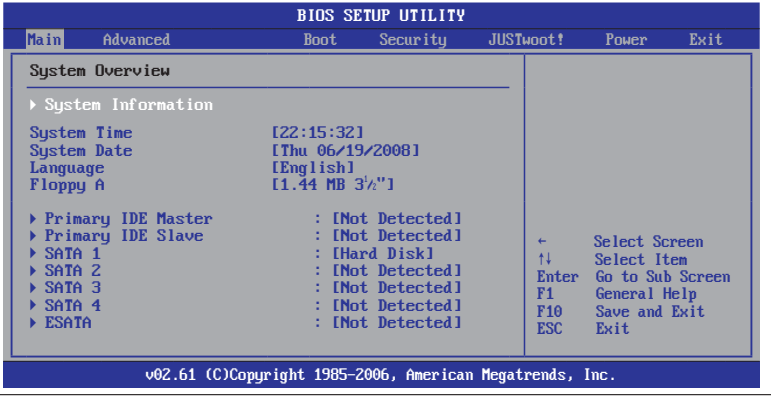
- *In order to increase system stability and performance, our engineering staff is constantly improving the BIOS menu. The BIOS setup screens and descriptions illustrated in this manual are for your reference only, and may not completely match with what you see on your screen.*
- *Do not change the BIOS parameters unless you fully understand its function.*

4.5.1 CMOS Setup Utility

After powering up the system, the BIOS message appears on the screen,when the first time or when CMOS setting wrong, there is following message appears on the screen , but if the first first BIOS be setuped(or loaded default values) and save, the <DEL> key will be pressed if you will enter BIOS setup menu.

```
Press F1 to Run SETUP
```

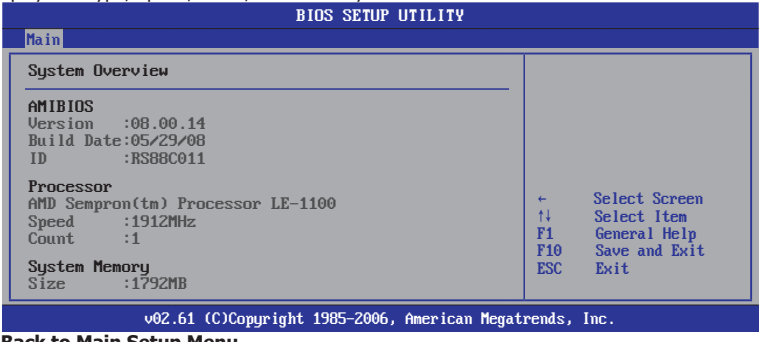
If this message disappears before you respond, restart the system by pressing <Ctrl> + <Alt>+ <Del> keys, or by pressing the reset button on computer chassis. Only when these two methods should be fail that you restart the system by powering it off and then back on.
After pressing <F1> or <Del> key, the main menu appears.



This is the System Overview, The System Time, System Date, Primary IDE information, SATA port information.

- **System Information**

  Please Enter this submenu, this will be display BIOS verison, build date, ID number, also will display CPU type, Speed, count, and Memory Size and so on.



  - **Back to Main Setup Menu**

- **System time**

  This item sets the time you specify(usually the current time)in the format of [Hour],[Minute]and [Second].

- **System date**

  This item sets the date you specify(usually the current date in the format of [Month],[Date],and [Year].

- **Floppy A**

  Allows you to selects the type of floppy disk drive installed in your system. If you do not install a floppy disk drive, set this item to None.

- **Language**

  Allows you to selects the current default language used by the BIOS.

- **Primary IDE Master/Slave**

  This item sets the status of auto detection of IDE devices while enterting setup, and BIOS will auto detects the presence of IDE devices.

- **SATA Port 1 /2/3/4/ESATA**

  This item sets the status of auto detection of SATA devices while enterting setup, and BIOS will auto detects the presence of SATA devices.

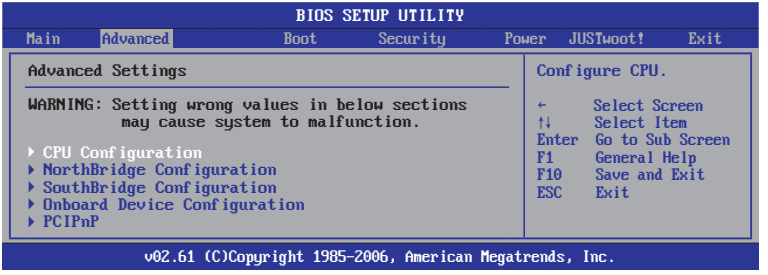
4.5.2 Control Keys

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item.

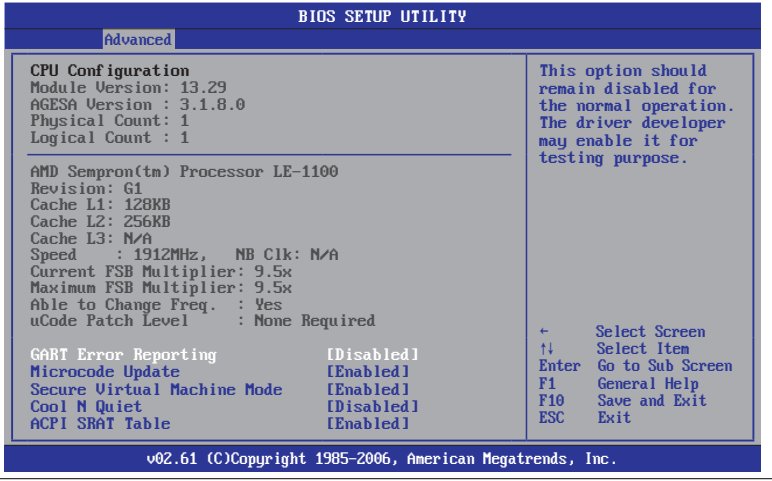
Please check the following table for the function description of each control key.

Control Key(s)	Function Description
← / →	Move cursor left or right to select Screens
↑ / ↓	Move cursor up or down to select items
+/-/PU/PD	To Change option for the selected items
<Enter>	To bring up the selected screen
<ESC>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
<F1>	General help
<F2/F3>	Change Colors
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F7>	Discard Changes
<F8>	Load Failsafe Defaults
<F9>	Load Optimal Defaults
<F10>	Save configuration changes and exit setup

4.5.3 Advanced Setting

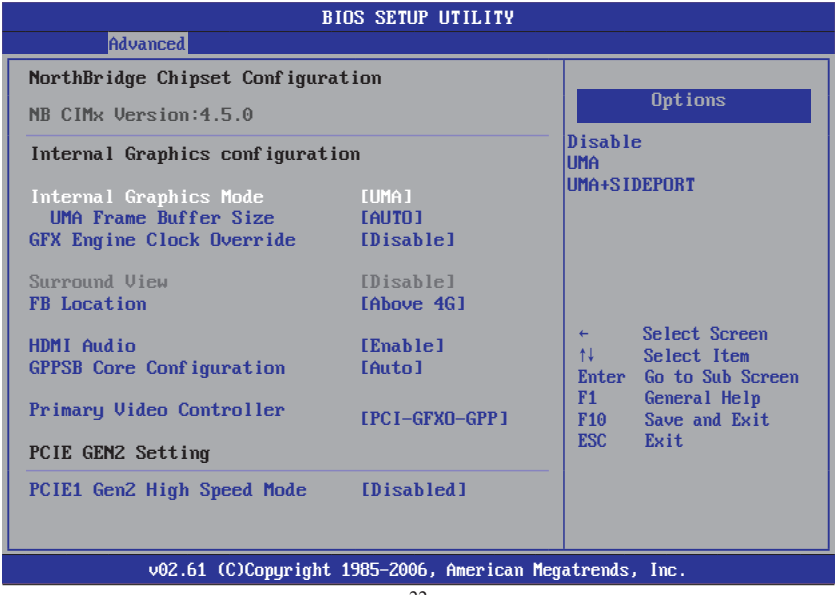


This submenu including these configurations, such as CPU, Northbridge, Southbridge, Onboard Device, only CPU Configuration submenu dispay diallog box as follwoing.

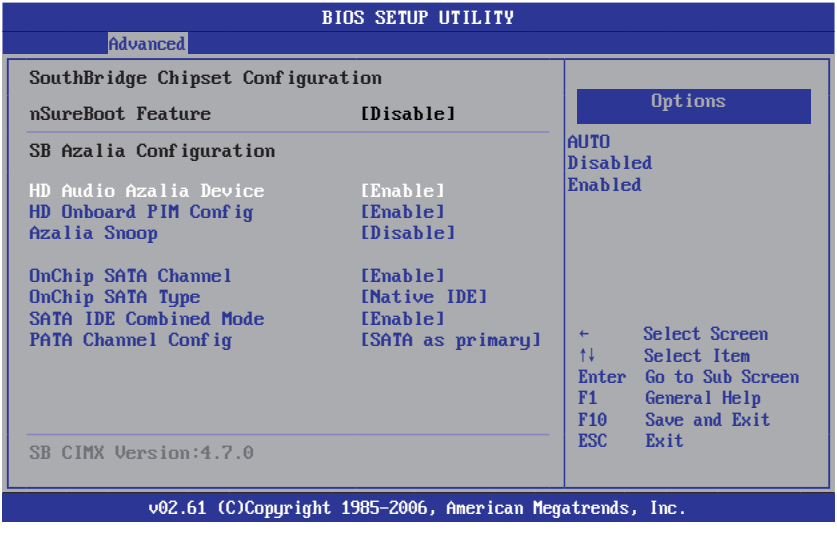


This is CPU related parameter and CPU setting.

- **CPU Configuration**
  Click <Enter> key to enter its submenu, it will be display configureted CPU information, including Module Version, Manufacturer , CPU type, Frequency, FSB Speed, Cache L1 , Cache L2 and so on.
- **Cool N Quiet**
  Enabled :Lets the AMD Cool N Quiet driver dynamically adjust the CPU clock and VIA to reduce heat output from your computer and its power consumption.
  Disabled: Disables this function(Default).
- **North Bridge Configuration**
  Click <Enter> key to enter its submenu, it will be display north bridge chipset configuration.



- **South Bridge Configuration**
  Click <Enter> key to enter its submenu, it will be dispay south bridge chipset configuration, this item sets USB functions, audio controller, PCIE ports selection.



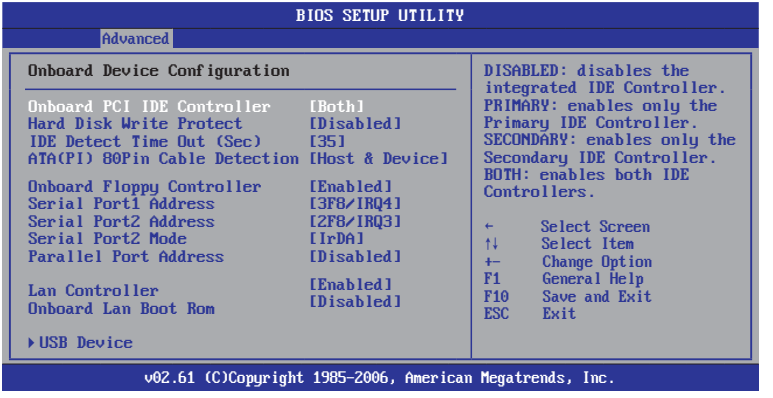
- **SB Azalia Audio Configuration**
  Click <Enter> key to enter its submenu.

- **HD Audio Azalia Device**
  Sets the HD Audio has Enabled or Disabled state.

- **HD Onboard PIN Config**
  Enabled : Display the option for Azalia Front Panel in BIOS.
  Disabled: Disabled the option for Azalia Front Panel in BIOS.

- **Azalia Front Panel**
  Sets the sound function for front panel Enabled or Disabled.

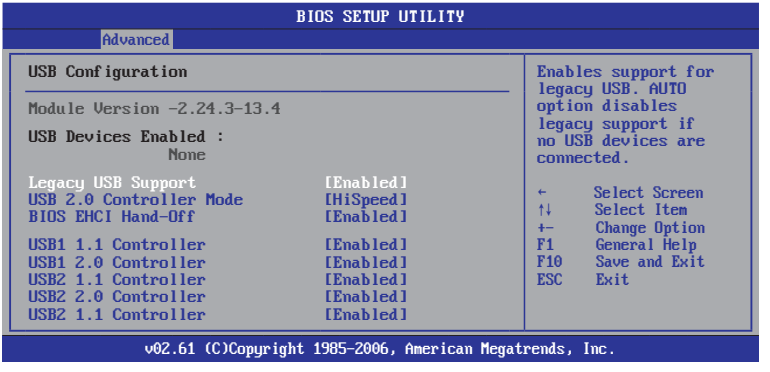
- **Onboard Device Configuration**
  Click <Enter> key to enter its submenu.



- **Onboard PCI IDE Controller**
  This option allows you to Select PCI IDE training mode
- **Hard disk write protect**
  Disable/enable device write protection.this will be effictive only if device is accessed through BIOS
- **IDE Detect Time Out**
  Select the time out value for detecting ATA/ATAPI device(s)
- **ATA(PI) 80Pin Cable Detection**
  Select the mechanism for detecting 88pin ATA(PI) Cable.
- **Onboard Floppy Controller**
  Allows BIOS to Enable or Disable FLOPPY Controller
- **Serial Port1 Address**
  Allows BIOS to Select Serial Port1 base Addresses.
- **Serial Port2 Address**
  Allows BIOS to Select Serial Port2 base Addresses.

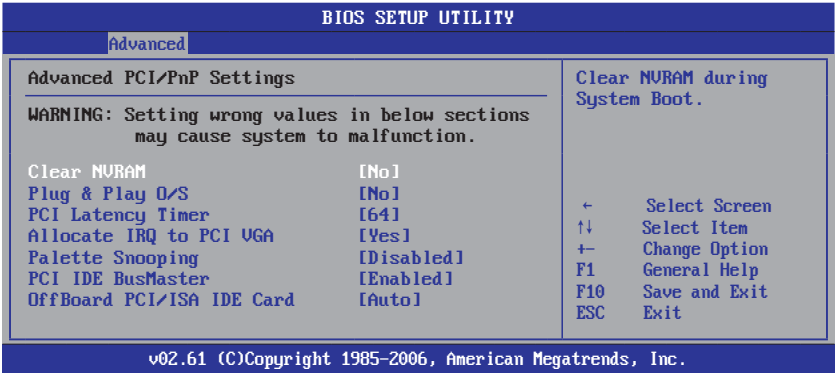
- **Parallel Port Address**
  Allows BIOS to Parallel Port base Addresses.
- **Lan Controlle**r
  Enable:turn on the lan Disabled:shut the lan
- **Onboard 8056 Lan Boot ROM**
  Available options:Disabled, Enabled

▸ **USB Configuration**
Click <Enter> key to enter its submenu.



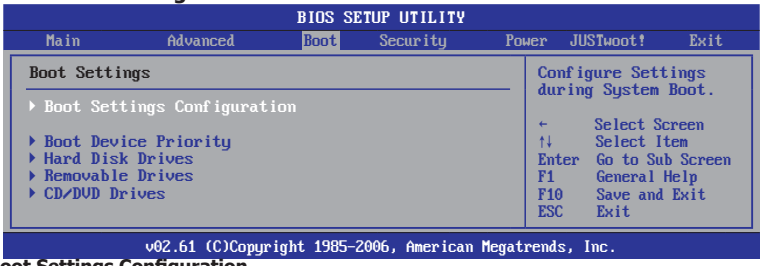
- **Legacy USB Support**
  Enabled or Disabled Legacy USB option, and Auto option disables legacy support if no USB devices are connected.
- **USB 2.0 Controller Mode**
  Allow you to selects the HiSpeed(480Mbps) or FullSpeed(12Mbps).
- **BIOS EHCI Hand-Off**
  This is a workaround for OSes without EHCI hand-off support. The EHCI ownership change should claim by EHCI driver.
  - **Back to Advanced Setup Menu**

‣ PCIPnP Setting

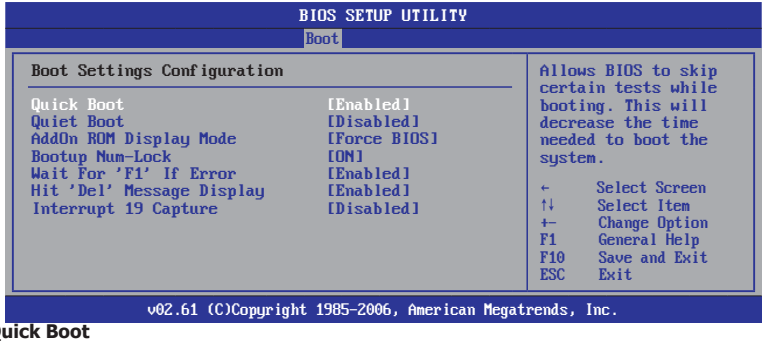


- **Clear NVRAM**
  This item for clearing NVRAM during system boot.
- **Plug & Play O/S**
  This item lets the BIOS configure all the devices in the system or lets the operating system configure plug and play (PnP) devices not required for boot if your system has a Plug and Play operating system.
- **PCI Latency Timer**
  This item sets value in units of PCI clocks for PCI device latency timer register.
- **Allocate IRQ to PCI VGA**
  This item assigns IRQ to PCI VGA card if card requests IRQ or doesn't assign IRQ to PCI VGA card even if card requests an IRQ.
- **Palette Snooping**
  This item informs the PCI devices that an ISA graphics device is installed in the system so the card will function correctly.
- **PCI IDE BusMaster**
  This item uses PCI busmastering for BIOS reading / writing to IDE derives.
- **OffBoard PCI/ISA IDE Card**
  This item works for most PCI IDE cards, some PCI IDE cards may require this to be set to the PCI slot number that is holding the card.

4.5.4 Boot Setting



- **Boot Settings Configuration**
  Click <Enter> key to enter its submenu.



- **Quick Boot**
  This item allows you to speed up Power On Self Test (POST) after you power on the computer. If this is set to [Enabled], BIOS will shorten or skip some check items during POST.
- **Quiet Boot**
  It's for sets post menu and detect device.
- **AddOn ROM Display Mode**
  Sets the display mode for option ROM.
- **Bootup Num-Lock**
  Allows you to select the power-on state for the NumLock.

- **Wait For 'F1' If Error**
  When set to Enabled,the system waits for the F1 key t be pressed when error occurs.
- **Hit 'Del' Message Display**
  When set to Enabled,the system displays the message "Press DEL to run Setup" durning POST.
- **Interrupt 19 Capture**
  When set to Enabled, this function allows the option ROMs to trap Interrupt 19.
- **Back to Boot Setup Menu**

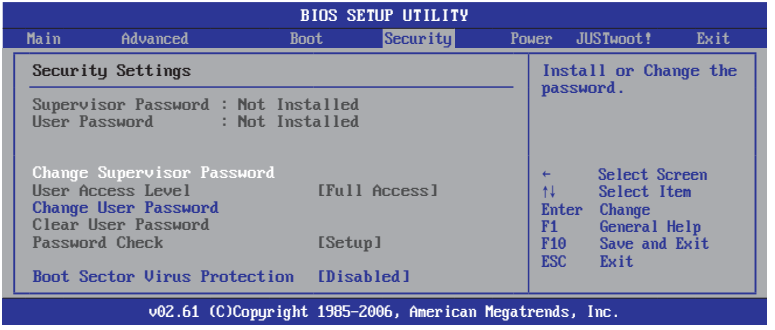
▸ **Boot Device Priority**
Click <Enter> key to enter submenu, it will be display specifies the boot sequence from the available devices.

▸ **Hard Disk Drives**
Click <Enter> key to enter submenu, it will be display specifies the boot device priority sequence from available hard disk drives.

▸ **Removable Drives**
Click <Enter> key to enter submenu, it will be display specifies the boot device priority sequence from available removable drives.

▸ **CD/DVD Drives**
Click <Enter> key to enter submenu, it will be display specifies the boot device priority sequence from available CD/DVD drives.

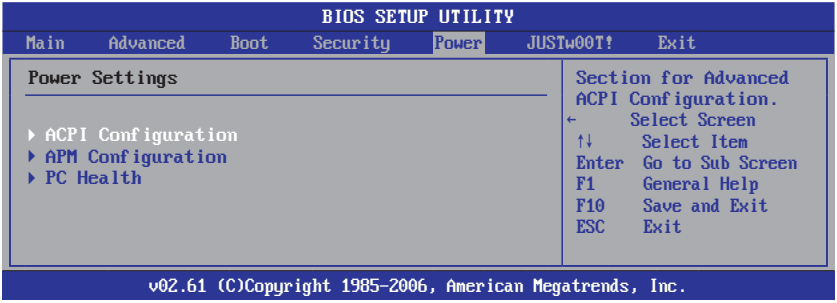
4.5.5 Security Setting



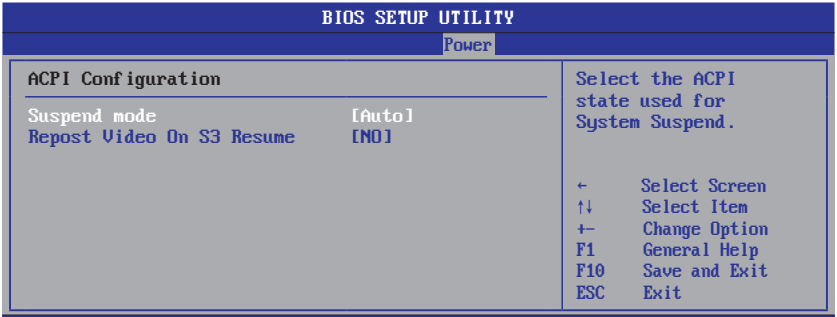
This item allows you to Chage Supervisor/User Password, Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked toconfirm the password. Type the password again and press <Enter>.

⚠ *Note: Don't forget your password. If you forget the password, you will have to open the computer case and clear all information in the CMOS before you can start up the system. But by doing this, you will have to reset all previously set options.*

4.5.6 Power Setting



- **ACPI Configuration**
  Click <Enter> key to enter its submenu.



- **Suspend Mode**
  Allows you to select the Advanced Configuration and Power Interface (ACPI) state to be used for system suspend.

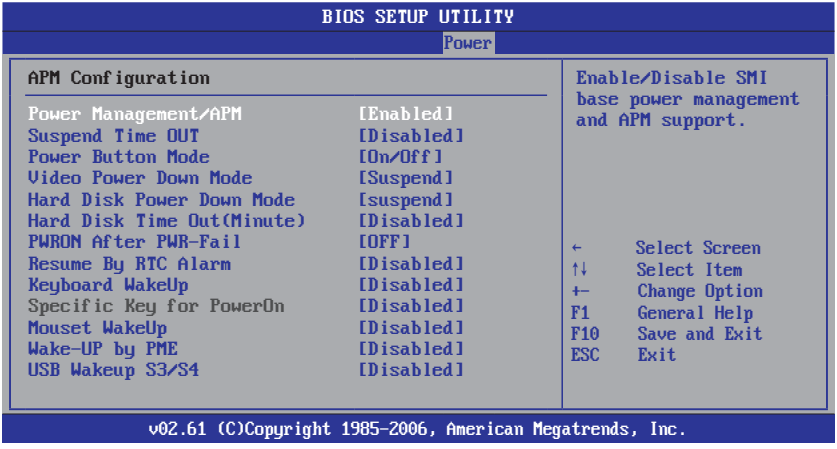
- **Repost Video on S3 Resume**

  Determines whether to invoke VGA BIOS post on S3/STR resume.

  - Press <**Esc**> key to return to "**Power**" menu.

- **APM Configuration**

  Click <Enter> key to enter its submenu, APM Configuration Template Manager allows you to manage Power Managerment default or custom configuration templates.



- **Power Management/APM**

  Enable or disable APM.

- **Power Button Mode**

  Select Power button functionality.

- **Suspend Time OUT**

  If no activity during this time period,the BIOS will place the system into suspend low power state.

- **Video Power Down Mode**

  Optional:Disabled,Standby,suspend.

- **Hard Disk Power Down Mode**

  Optional:Disabled,Standby,suspend.

- **Hard Disk Time Out(Minute)**

  Optional:Disabled,1,2,3,4,5,6,7,8.

- **PWRON After PWR-Fail**

  This item selects the system action after an AC power failure.

  [Off]: When power returns after an AC power failure, the system's power remains off. You must press the Power button to power-on the system.

  [On]: When power returns after an AC power failure, the system's power will be powered on automatically.

  [Former-Sts]: When power returns after an AC power failure, the system will return to the state where you left off before power failure occurred. If the system's power is off when AC power failure occurs, it will remain off when power returns. If the system's power is on when AC power failure occurs, the system will power-on when power returns.

- **Resume By RTC Alarm**

  Allows you to enable or disable RTC to generate a wake event. When this item is set to Enabled,the items RTC Alarm Date,RTC Alarm Hour,RTC Alarm Minute,and RTC Alarm Second appear with set values.

- **Keyboard WakeUp**

  PS/2 keyboard activity wakes the computer from an ACPI S1 or S3 state.

- **Specific Key for PowerOn**

  When the Power On function is set to Password, use this item to set the password.

▸ **PC Health**

Click <Enter> key to enter its submenu, it will be display hardware health configuration, including System temperature, CPU temperature, FAN speed and all kinds of voltages.

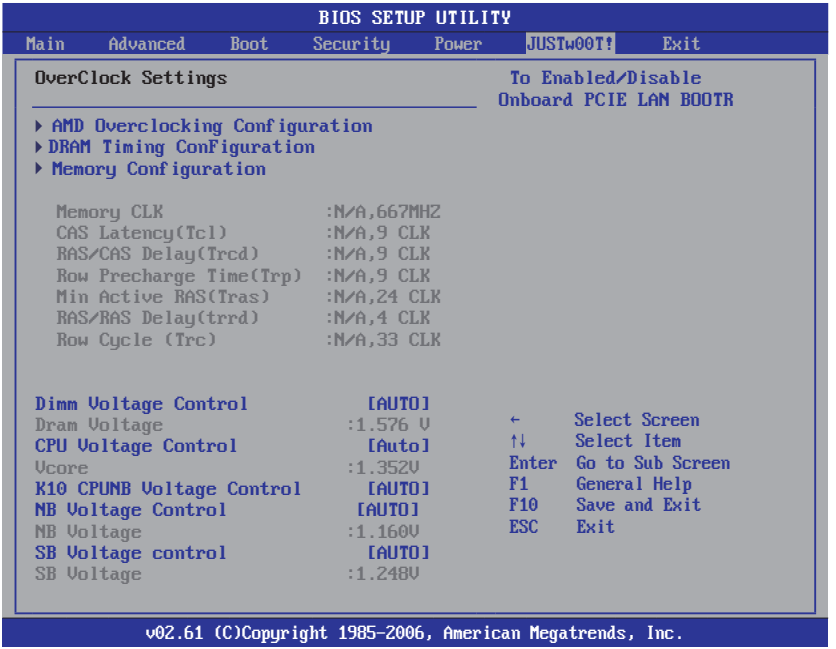
- **CPUFAN Mode Setting**

  Available options: Manual Mode，Thermal Cruise Mode，Speed Cruise Mode

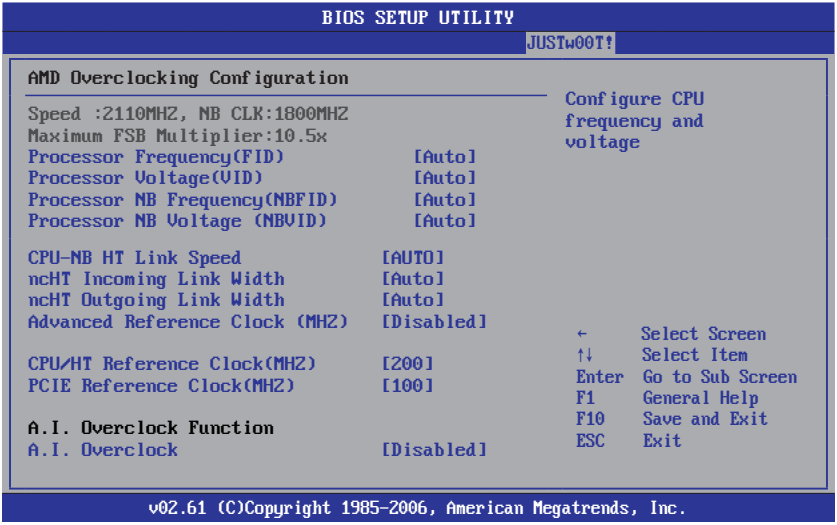
- **CPUFAN PWM Control**

  According to PWM out configuration adjustable CPU Fan speed.

4.5.7 JUSTwoot! Setting

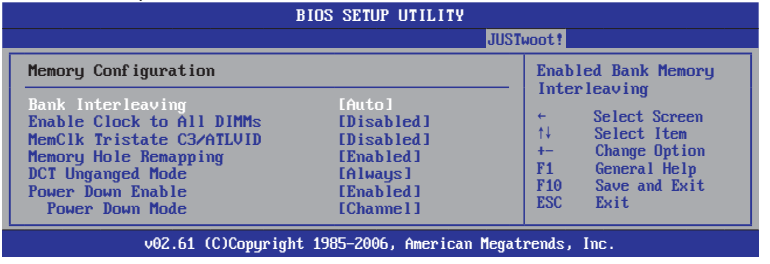


- **AMD Overclocking Configuration**
  This item allows you to set processor frequency, processor voltage, CPU-NB HT link speed, ncHT incoming link width, ncHT outgoing link width, memory configuration and CPU/HT reference clock.
  The option of CPU/HT Reference Clock allows you overclock CPU clock, the Min is 200MHz, the Max is 400, keyin "+"/"-" to select clock.



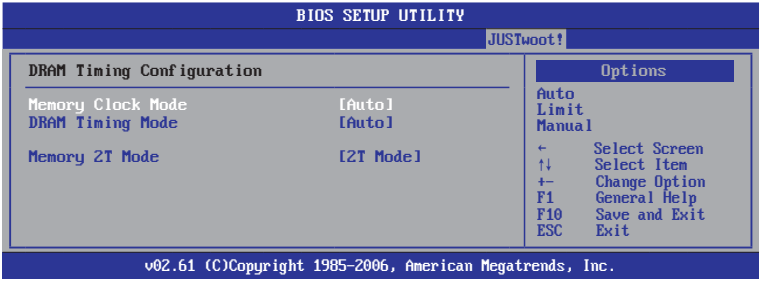
- **PCIE Reference Clock (MHz)**
  It's for adjust PCIE frequency.
- **A.I. Overclock**
  CPU frequency intelligent setting.

- **Memory Configuration**
  Click <Enter> key to enter its submenu.



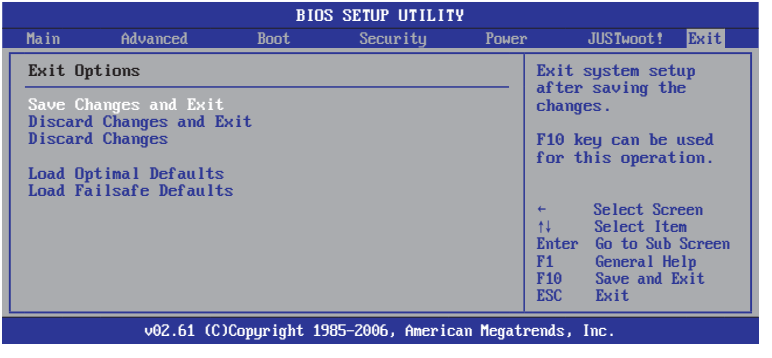
- **Bank Interleaving**
  Sets the bank interleaving feature.
- **Enable Clock to All DIMMs**
  This item is to enable or disable the unused clocks to DIMMs even the memory slots are not populated.
- **MemClk Tristate C3/ATLVID**
  Enables or disables the MemClk Tri-Stating during C3 and Alt VID.
- **Memory Hole Remapping**
  Enables or disables the memory remapping around the memory hole.
- **DCT Unganged Mode**
  This item allows the selection of the unganged DRAM mode (64-bit width).
- **Power Down Enable**
  This item is to enable or disable the DDR power down mode.
- **Power Down Mode**
  Available options: Channel, Chip Select

- **DRAM Timing Configuration**
  This submenu allows you to set Memory Clock Mode and DRAM Time Mode.

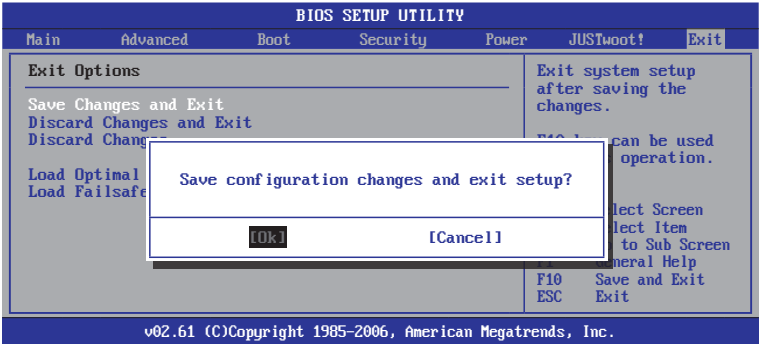


- **Memory Clock Mode**
  This item is to select the memory clock mode.
- **DRAM Timing Mode**
  This item is to select the DRAM Timing mode.
- **Back to JUSTw00T! Setup Menu**

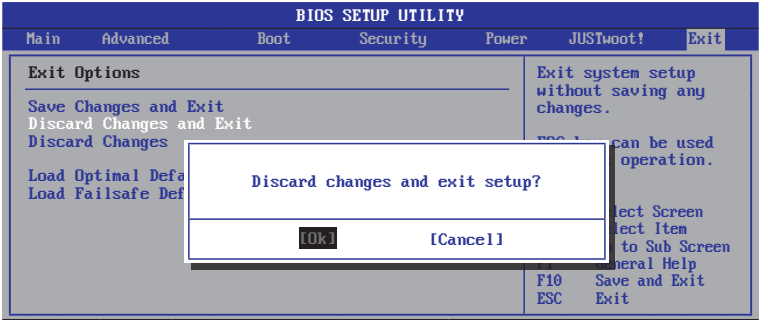
4.5.8 Exit Setting



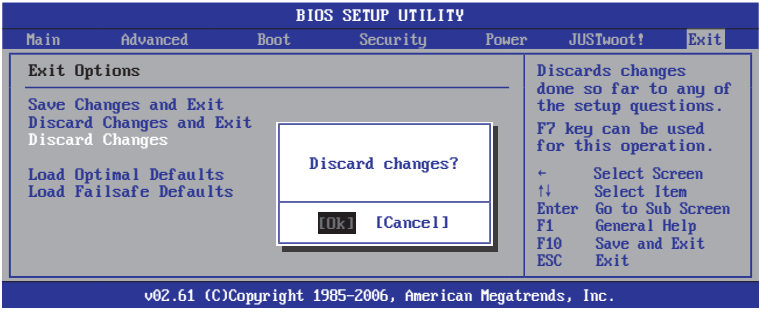
Highlight this item and select <Ok>,then press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility. Or press <Cancel> to return to the main menu.



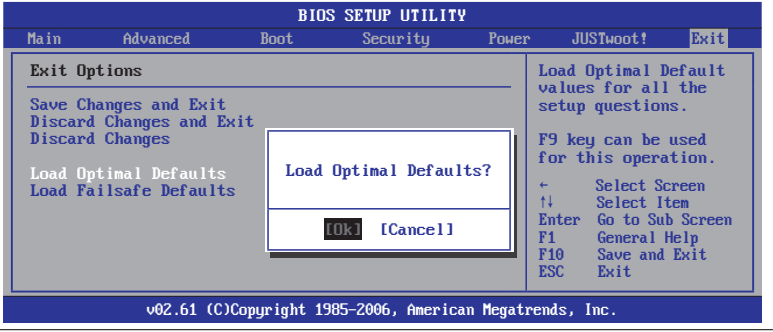
Highlight this item and select <Ok>,then press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility. Or press <Cancel> to return to the main menu.



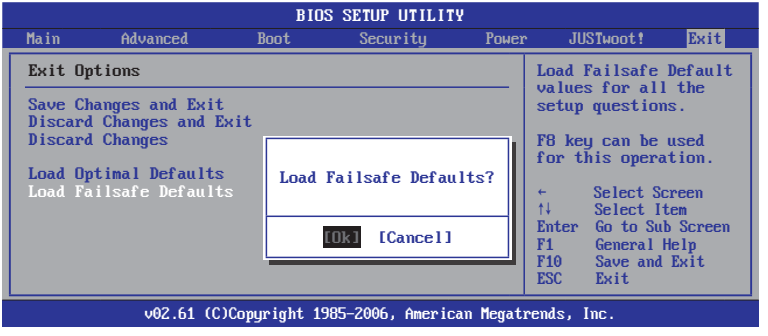
Sleect <Ok>and press <Enter> to discard changes and exit, or press <Cancel> to return to the main menu.



This option opens a dialog box that let you install optimized defaults for all appropriate items in the Setup Utility. Select <OK> and then <Enter> to install the defaults. select <Cancel> and then <Enter> to not install the defaults. The optimized defaults place demand on the system that may be greater than the performance level of the components, such as the CPU and the memory. You can cause fatal errors or instability if you install the optimized defaults when your hardware does not support them. If you only want to install setup defaults for a specific option, select and display that option, and then press <F9>.



This option opens a dialog box that lets you install fail-safe defaults for all appropriate items in the Setup Utility: Select <Ok> and the <Enter> to install the defaults. Select <Canel> and then <Enter> to not install the defaults. The fail-safe defaults place no great demand on the system and are generally stable. If your system is not functioning correctly, try installing the fail-safe defaults as a first step in getting your system working properly again.If you only want to install fail-safe defaults for a specific option, select and display that option, and then press <F8>.



Chapter 5 Driver Installation

Check your package and there is Driver CD included. This CD consists of all drivers you need. In addition, this CD also include an auto detect software which can tell you which hardware is installed, and which drivers needed so that your system can function properly.
Insert CD into your CD-ROM drive and the menu should appear as below. If the menu does not appear, double-click My Computer / double-click CD-ROM drive or click Start / click Run / type X:\ AUTORUN.EXE (assuming X is your CD-ROM drive).

(This picture is only for reference)

From the Main MENU you may make 4 selections:
1. +Mainboard Driver Installation Utility: Click to enter the driver installation menu.
2. +Useful Software Utility: Click to enter the utilities installation menu.
3. >Browse CD: Click to browse the contents of this "Driver & Utility CD".
4. Exit: Click to exit this installation menu.

When you choose **Mainboard Driver installation Utility**, the drivers menu should appear as below:

(This picture is only for reference)

From the Drivers MENU you may make 3 selections:

1. **AMD Chipset Installtion Utility**
2. **Onboard LAN Driver**
3. **Audio Driver**