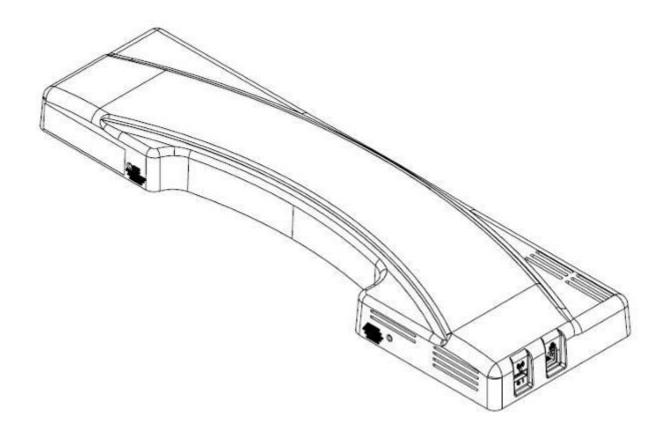
# WiSP - Wireless Service Platform



# User's Manual

Version 1.2

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## **Copyright Notice**

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# **CE0984** ①

Is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (2004/108/EC), Low-voltage Directive (2006/95/EC), the procedures given in European Council Directive 99/5/EC and 2004/104/EC.

The equipment was passed. The test was performed according to the following European standards:

- EN300 328 V1.7.1 (2006)
- EN301 489-1 V1.8.1: 2008, EN301 489-17 V2.1.1: 2009
- EN62311: 2008
- EN 60950-1: 2006 (2nd Edition); A11:2009+A1:2010+A12:2011

# Regulatory statement (R&TTE)

- European standards dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400-2.4835GHz;
- In France, the equipment must be restricted to the 2.4465-2.4835GHz frequency range and must be restricted to indoor use.

Operation of this device is subjected to the following National regulations and may be prohibited to use if certain restriction should be applied.

## Introduction

The Wireless Service Platform (WiSP) is a computing device capable of processing, storing, retrieving and sending data electronically. It is presumed that the WiSP assembly including power supply, storage media, user interface, WiSP UPS battery and PCBs will be contained within one enclosure that will be mounted to the side of the operational machine (workstation).

The WiSP shall be in the power on state when power is applied from the workstation. The WiSP shall have an internal power source capable of sustaining operation for a minimum of 100 seconds if A/C power is lost, to allow the operating system to shutdown. Its intent is to wirelessly enable archiving and documentation capabilities to the workstation and support USB user downloads.

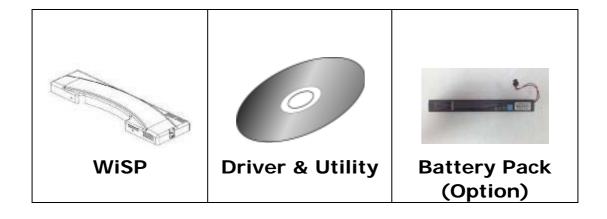
The WiSP conforms to the following wireless networking communication standards: IEEE 802.11B, IEEE 802.11G and IEEE 802.11N. The WiSP can make image of the workstation transfer easily into the data center and recording simpler than ever.

## **Chapter 1**

### **General Information**

## 1.1 Packing Contents

Following illustration displays the package contents of **WiSP**. If any of the following items is damaged or missed out please contact us right away.



# **Classification**

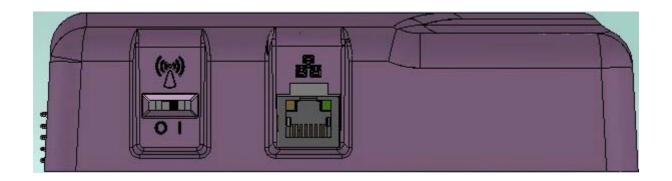
- 1. Level of production against electric shock: not classified
- 2. Level of protection against the ingress of water: IPX0
- 3. Type of protection against: Power by Class I
- 4. Mode of operation: Continuous Operation

# 1.2 System Specifications

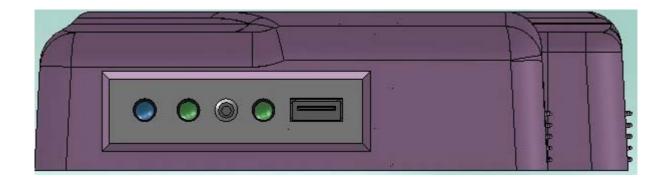
System		
CPU	Intel® Atom™ CPU Z510 1.10GHz FSB:533MHz L2:512K	
Chipset	Intel® System Controller Hub US15W	
Graphics Controller	Intel Graphics Media Accelerator 500	
Memory	Transcend DDR2 533 1GB SODIMM	
Storage	Transcend 16GB CF	
Operation System	Windows Embeddad 2009	
Peripherals & Devices		
USB Port	USB 2.0 x1	
Connectivity	RTL 8111C GbE LANs	
	WLAN 802.11 b/g/n support	
	MCS7830 USB Enternet support	
Power Source	Internal SNP-Z057 (60W, Medical Level)	
Power Input	100-240 Vac, 47-63 Hz, Max. 60 W	
Button	Wireless on/off button	
Mechanical & Environmental		
Operating Temp	0 ~ 45°C (32 ~ 113°F)	
Vibration	5 grms/5 ~ 500Hz/random operation	
Shock	10G/peak (11ms)	
Regulatory	CE, FCC Class-B, Type B Applied Part	
	EN60601-1, EN60601-1-2,UL60601-1	
Dimensions	530x41x155	
Net Weight	10.5Kg	

# 1.3 System Overview

## 1.3.1 Front Side



# 1.3.2 Rear Side



# 1.3.3 Left Side



# 1.4 Dimensions



## 1.5 Cleaning and Disinfecting



Do not use sharp tools.

Never immerse electrical connectors in water or other liquids. Such actions may damage the device.

If you accidentally spill liquid on a device, disconnect the unit from the power source.

Contact your service personnel regarding the continued safety of the unit before placing it back in operation.

Do not spray cleaning agent on the chassis.

Do not use disinfectants that contain phenol.

Do not autoclave or clean the device or its peripherals with strong aromatic, chlorinated, ketene, ether, or Esther solvents, sharp tools or abrasives.

During normal use of the WiSP may become soiled and should, therefore, be cleaned regularly.

Cleaning instructions follow:

- 1. Wipe the WiSP with a clean cloth that has been moistened in the cleaning solution.
- 2. Prepare agent per manufacturer's instructions or hospital protocol. Wipe thoroughly with a clean cloth.

## 1.6 Additional Information and Assistance

Contact your distributor, sales representative, or Portwell's customer service center for technical support if you need additional assistance.

Please have the following information ready before you call:

- 1. Product name and serial number
- 2. Description of your peripheral attachments
- 3. Description of your software (operating system, version, application software, etc.)
- 4. A complete description of the problem
- 5. The exact wording of any error messages
- 6. This equipment is a source of electromagnetic waves.

  Before use please, make sure that there are not EMI sensitive devices in its surrounding which may malfunction therefore.

#### Manufacturer

Portwell, Inc.

Add: No. 242, Bo-Ai Street, Shu-Lin Dist., New Taipei City 238,

Taiwan.

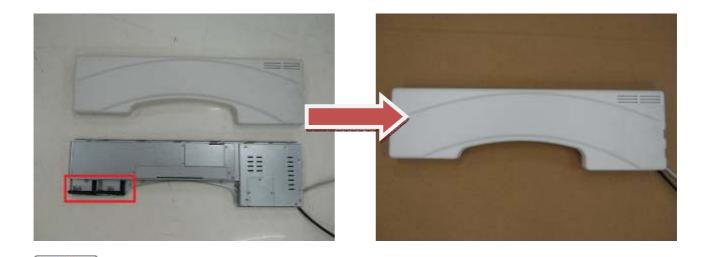
Tel: +886-2-7731-8888 Fax: +886-2-7731-9888

## 1.7 System Setting

WiSP is terminal control system of the network none has VGA display. Must be connected via Ethernet cable to the internal system.

Must be to trained service personnel of the install and setting.

# 1.8 Wireless Antenna Location



Portwell is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

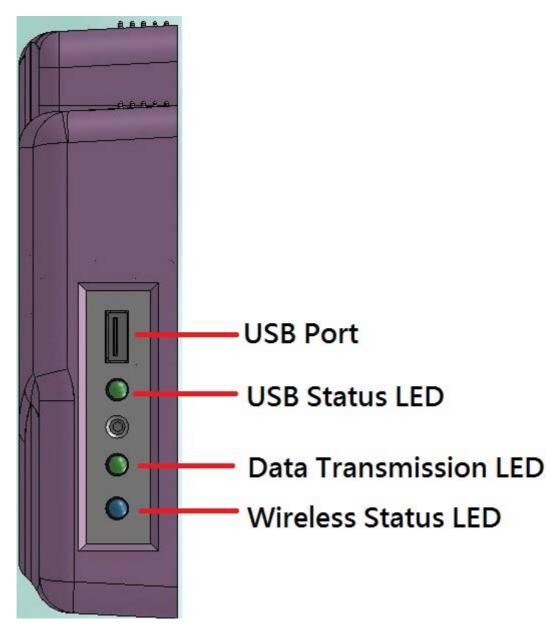
# **Chapter 2**

# **Locating Controls and Driver installations**

# 2.1 Location Controls

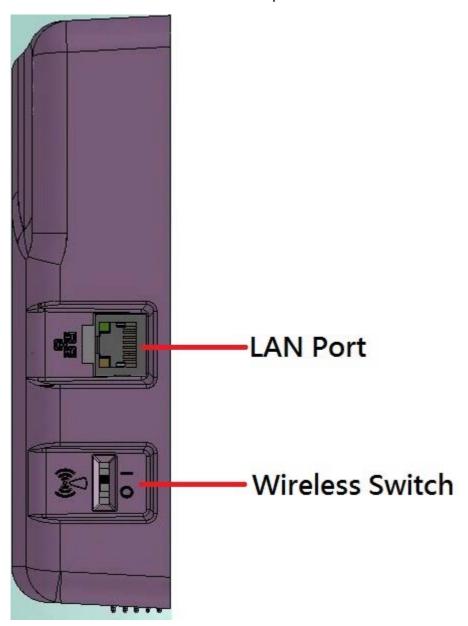
#### 2.1.1 Front Panel

The front panel contains one USB Port, USB Status LED, Wireless Status LED and Data Transmission LED



# 2.1.2 Rear I/O

The Rear I/O side contains one LAN port and Wireless Switch.

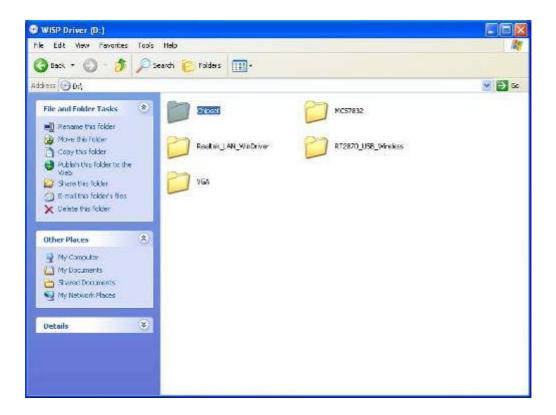


## 2.2 Driver Installation

Before you install the drivers, you must make sure the Operating System, in this case, Windows XP) is installed first.

### 2.2.1 Chipset Component Driver Installation

1. Put the CD ROM into the CD-ROM drive, Click **Chipset** directory to install the device driver.



2. Make sure you have closed all programs running and then click **Next** to continue



3. Please read the license agreement first, and click Yes to continue.



4. Please read the Readme file for system requirements and installation information, and click **Next** to continue.



5. The chipset device driver installation is completed. Click **Next** to continue.

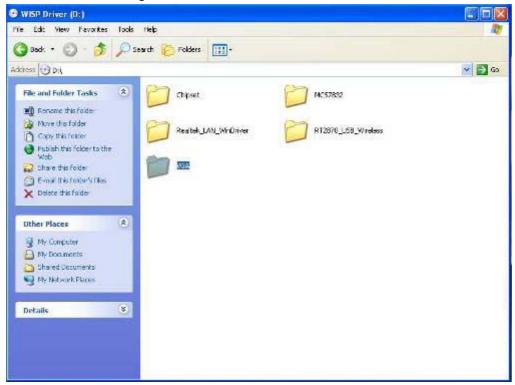


6. To have the installation take effect, select the **Yes** radio button and click **Finish** to restart your computer.



### 2.2.2 Intel Graphics GMCH Chip Driver Installation

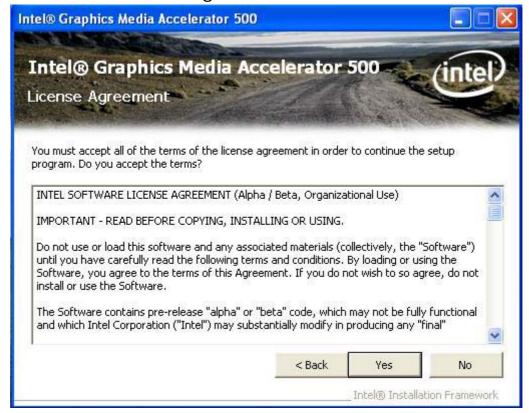
1. Click **VGA** directory to install the device driver.



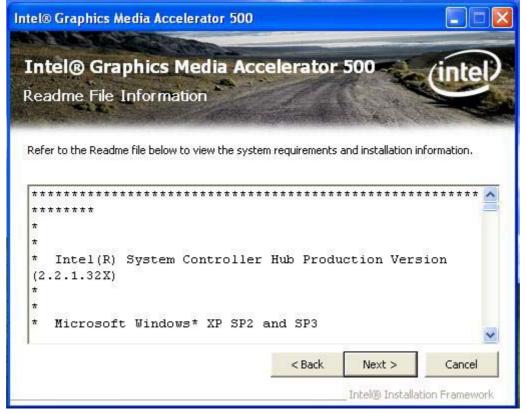
2. Make sure you have closed all programs running and then click **Next** to continue.



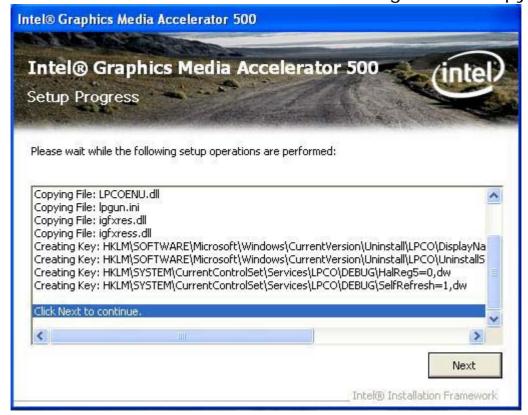
3. Please read the license agreement first, and click Yes to continue.



4. Please read the Readme file for system requirements and installation information, and click **Next** to continue.



5. Please wait for a while for the data extracting and file copying.

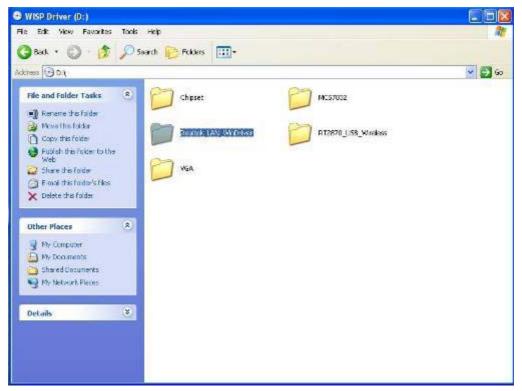


6. After installing the graphics device driver, click **Finish** with **Yes** radio button selected to restart your computer.

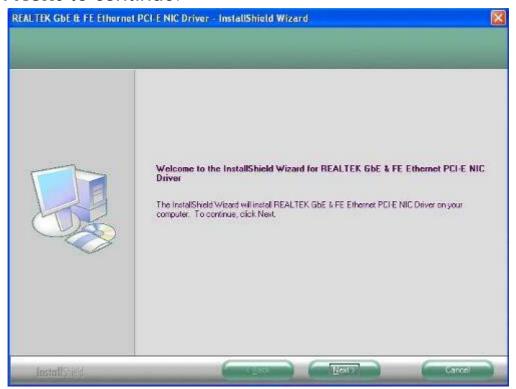


## 2.2.3 Realtek Gigabit Ethernet Controller Driver Installation

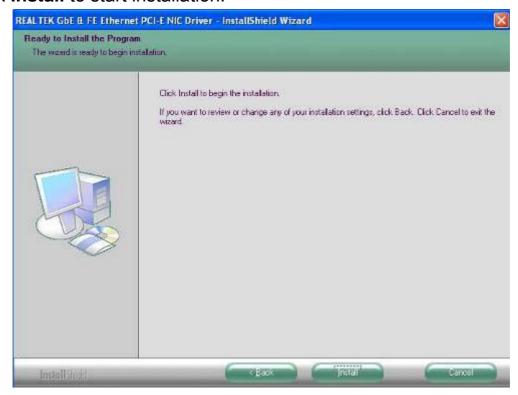
 Click Realtek\_LAN\_WinDriver directory to install the device driver.



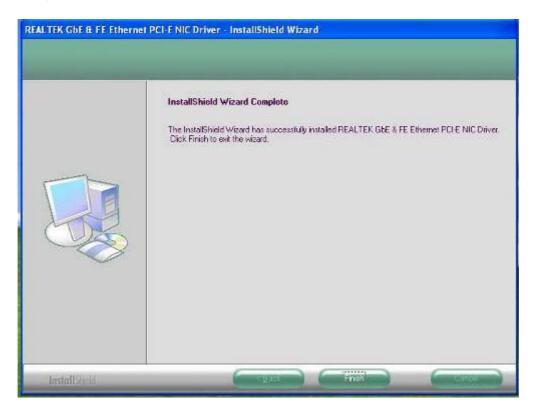
2. Click **Next** to continue.



3. Click Install to start installation.

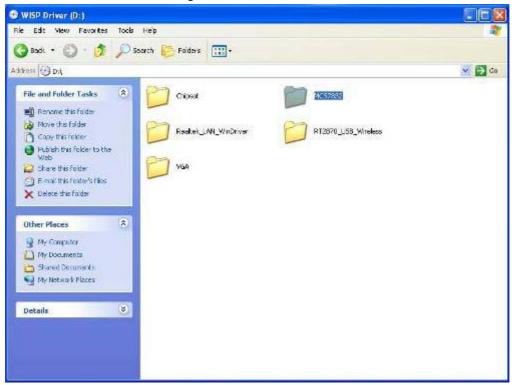


4. Click Finish to close the wizard window.

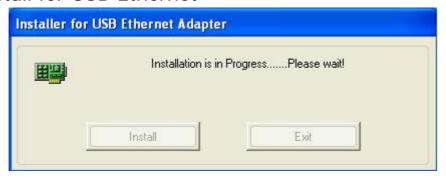


#### 2.2.4 MCS7832 USB Ethernet Controller Driver Installation

1. Click MCS7832 directory to install the device driver.

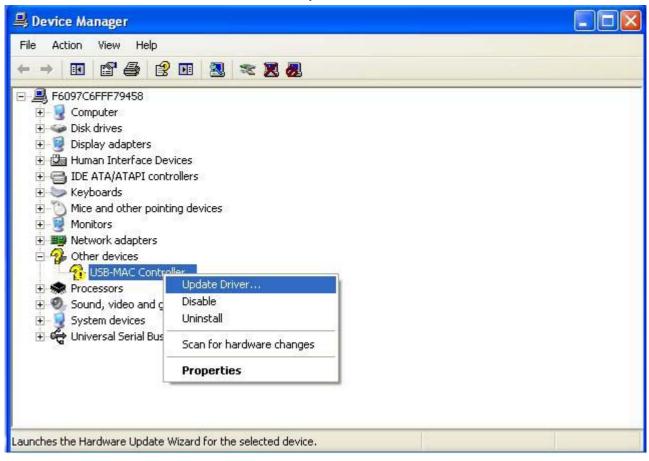


#### 2. Auto install for USB Ethernet



3. After the driver is installed, the USB Ethernet device information in Device Manager may appear with an exclamation mark. To solve this problem, please go through the following few steps to manually update the driver for this device on the Device Manager". You just need to do it once.

Double left-click the mouse on the "USB Device" icon under the "USB –MAC Controller" icon to update driver.



4. You will see the "Hardware Update Wizard" appearing on your desktop. Please select "Yes, now and every time I connector a device" and then click "Next".

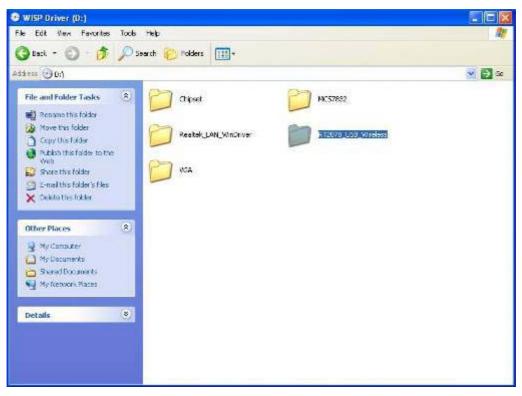


5. The driver is now completed updated. Click "Finish".

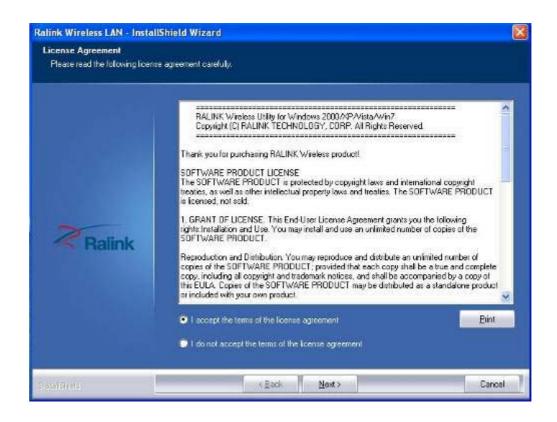


#### 2.2.5 Wireless Driver Installation

1. Click **RTL2870\_USB\_Wireless** directory to install the device driver.



2. Please read the license agreement first, and click **Next** to continue.



3. Select the setup type, click Next to continue. The default setting is "Install driver and Ralink WLAN Utility".



4. Select the configuration Tools type, click Next to continue. The default setting is "Ralink Configuration Tool".

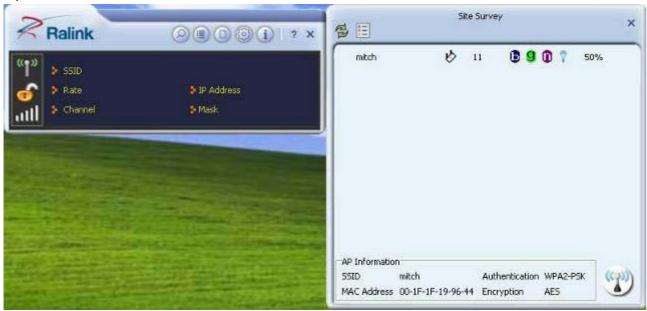


5. The WLAN driver is being installed. When the progress bar reaches the end, the installation is done.



6. Once the installation is completed, a Wireless LAN window as the figure shown below will pop up (for installing it the first time). This

windows displays the status of wireless signals and provides setting options.



# Chapter 3 BIOS Setup Information

WISP is equipped with the AMI BIOS stored in Flash ROM. These BIOS has a built-in Setup program that allows users to modify the basic system configuration easily. This type of information is stored in CMOS RAM so that it is retained during power-off periods. When system is turned on, NANO-8045L communicates with peripheral devices and checks its hardware resources against the configuration information stored in the CMOS memory. If any error is detected, or the CMOS parameters need to be initially defined, the diagnostic program will prompt the user

to enter the SETUP program. Some errors are significant enough to abort the start-up.

## 3.1 Entering Setup

Turn on or reboot the computer. When the message, "Hit < DEL> if you want to run

SETUP" appears, press <Del> key to enter BIOS setup program.

If the message disappears before you respond, but you still wish to enter Setup, please restart the system to try "COLD START" again by turning it OFF and then

ON, or touch the "RESET" button. You may also restart from "WARM START" by pressing <Ctrl>, <Alt>, and <Delete> keys simultaneously. If you do not press the

keys at the right time and the system will not boot, an error message will be displayed

and you will again be asked to,

#### Press <F1> to Run SETUP or Resume

The BIOS setup program provides a General Help screen. You can call up this screen

from any menu by simply pressing <F1>. The Help screen lists the appropriate keys

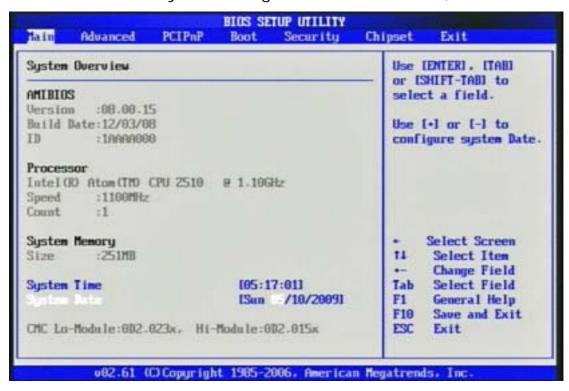
to use and the possible selections for the highlighted item. Press <Esc> to exit the

Help screen.



### 3.2 Main Menu

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



#### AMI BIOS, Processor, System Memory

These items show the firmware and hardware specifications of your system. Read only.

### **System Time**

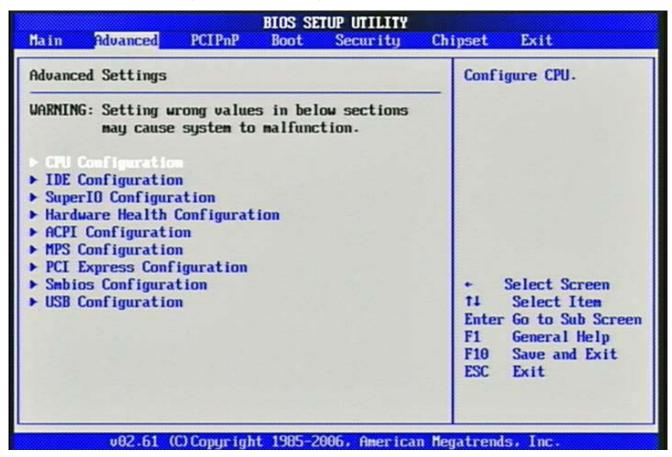
The time format is <Hour> <Minute> <Second>. Use [+] or [-] to configure system
Time.

#### **System Date**

The date format is <Day>, <Month> <Date> <Year>. Use [+] or [-] to configure system Date.

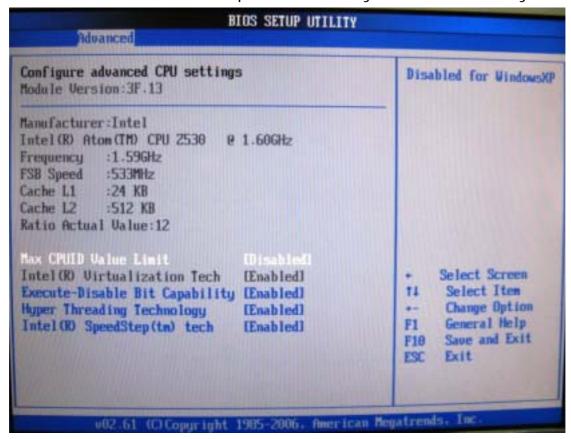
#### 3.3 Advanced

Use this menu to set up the items of special enhanced features.



### **CPU Configuration**

These items show the advanced specifications of your CPU. Read only.



#### **Max CPUID Value Limit**

Disable for Windows XP.

#### **Execute-Disable Bit Capability**

When disable, force the XD feature flag to always return 0.

#### **Hyper Threading Technology**

Enable for Windows XP and Linux4 (OS optimized for Hyper Threading Technology)

and disabled for other OS (OS not optimized for Hyper-Threading Technology)

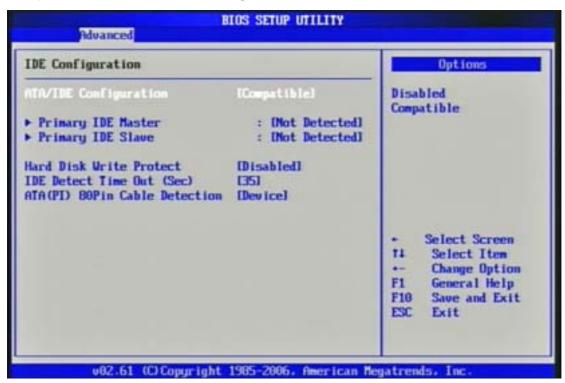
#### Intel(R) SpeedSetup(™) tech

Disable: Disable GV3 Enable: Enable GV3

#### **IDE Configuration**

The IDE Configuration the IDE devices, such as hard disk drive or CD-ROM drive. It

uses a separate sub menu to configure each hard disk drive (Master and Slave).

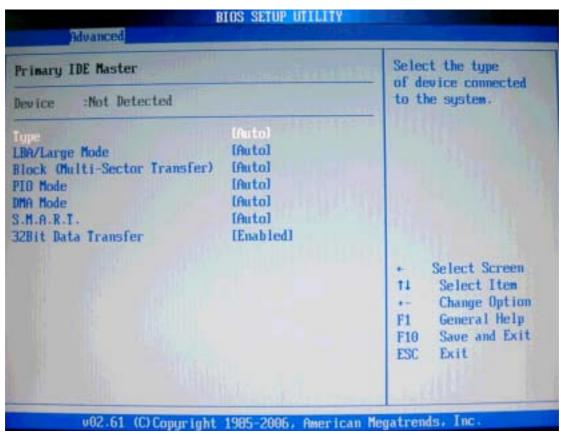


#### **ATA/IDE Configuration**

The choice: Disabled, Compatible.

#### **Primary IDE Master/Slave**

While entering setup, BIOS auto detects the presence of IDE devices. This display shows the status of auto detection of IDE devices.



[Type] Press PgUp/<+> or PgDn/<-> to select [Manual], [None] or [Auto] type.

You can use [Manual] to define your own drive type manually.

[LBA/Large Mode] Enabling LBA causes Logical Block Addressing to be used in place of Cylinders, Heads and Sectors.

[Block (Multi-Sector Transfer)] Any selection except Disabled determines the number

of sectors transferred per block.

[PIO Mode] Indicates the type of PIO (Programmed Input/Output).

[DMA Mode] Indicates the type of Ultra DMA.

[S.M.A.R.T.] This allows you to activate the S.M.A.R.T. (Self-Monitoring Analysis &

Reporting Technology) capability for the hard disks. S.M.A.R.T is a utility that monitors your disk status to predict hard disk failure. This gives you an opportunity

to move data from a hard disk that is going to fail to a safe place before the hard disk

becomes offline.

[32 Bit Data Transfer] Enable/Disable 32-bit Data Transfer.

#### **Hard Disk Write Protect**

Disabled/Enabled device write protection, this will be effective only if device is accessed through BIOS.

The choice: Disabled, Enabled.

#### IDE Detect Time Out (Sec)

Select the time out value for detecting ATA/ATAPI device (s).

The choice: 0, 5, 10, 15, 20, 25, 30, 35.

#### **ATA (PI) 80Pin Cable Detection**

Select the mechanism for detecting 80Pin ATA (PI) cable.

The choice: Host & Device, Host, Device.

#### **Super IO Configuration**

#### **Serial Port 1 Address**

Allows BIOS Select Serial Port1 Base Addresses.

The choice: Disabled, 3F8/IRQ4.

#### **Watch Dog Timer Set**

This BIOS testing option is able to reset the system according to the selected table.

The choice: Disabled, 10, 20, 30, 40 Sec, 1Min, 2Min, 4Min.

## **Hardware Health Configuration**

Configuration / monitor the Hardware Health.



#### **SYSFAN Mode Setting**

Fan configuration mode setting.

The choice: Manual Mode, Thermal Cruise Mode.

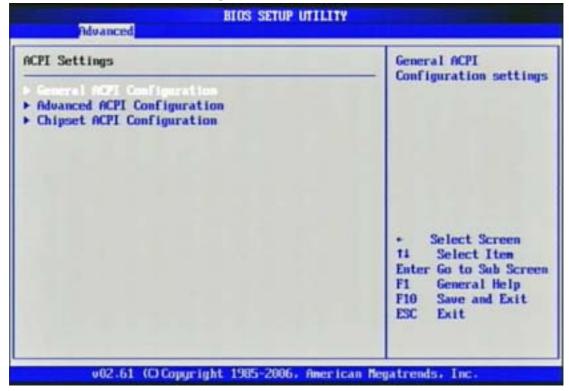
#### **SYSFAN PWM Control**

The PWM duty cycle control.

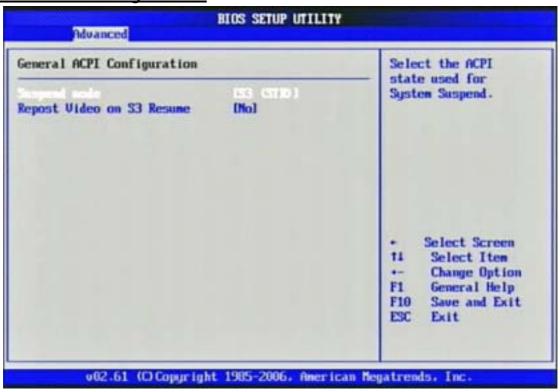
The choice: 0 to 255.

## **ACPI Configuration**

Select for Advanced ACPI Configuration.



## **General ACPI Configuration**



#### Suspend mode

This item specifies the power saving modes for ACPI function. If your operating system supports ACPI, you can choose to enter the Standby mode in S3 (STR) function through the setting of this field. Option is:

[S3 (STR)] The S3 sleep mode is a lower power state where the information of

#### system

configuration and open applications/ files is saved to main memory that remains powered while most other hardware components turn off to save energy. The information stored in memory will be used to restore the system when a "wake up"

event occurs.

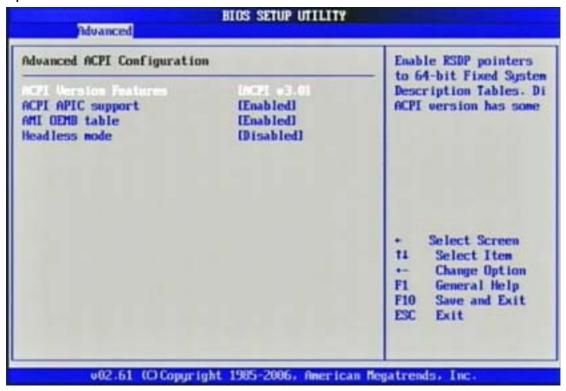
#### Repost Video on S3 Resume

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

The choice: No, Yes

#### **Advanced ACPI Configuration**

Advanced ACPI Configuration settings, Use this section to configure additional ACPI options.



#### **ACPI Version Features**

Enable RSDP pointers to 64-bit Fixed System Description Tables.

The choice: ACPI v1.0 / ACPI v2.0 / ACPI v3.0.

## **ACPI APIC support**

Include ACPI APIC table pointer to RSDT pointer list.

The choice: Disabled, Enabled.

## **AMI OEMB table**

Include OEMB table pointer to R(X) SDT pointer list.

The choice: Disabled, Enabled.

## **Headless mode**

Enable / Disable Headless operation mode through ACPI.

The choice: Disabled, Enabled.

#### **Chipset ACPI Configuration**

Chipset ACPI related Configuration settings, Use this section to configure additional

ACPI options.



## **APIC ACPI SCI IRQ**

Enable / Disable APIC ACPI SCI IRQ.

The choice: Disabled, Enabled.

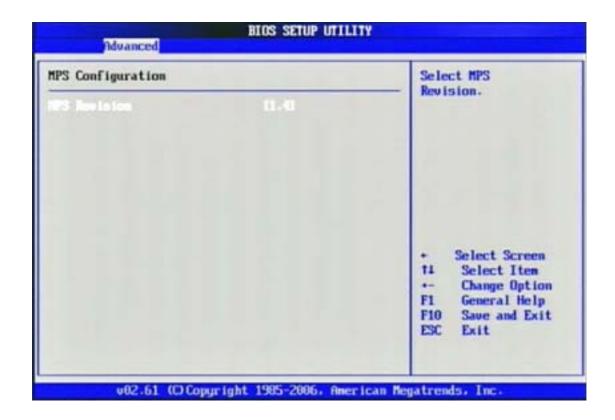
#### **USB Device Wakeup From \$3/\$4**

Enable / Disable USB device Wake from S3/S4 mode.

The choice: Disabled, Enabled.

## **MPS Configuration**

Configure the Multi-Processor Table.



#### **MPS Revision**

This field allows you to select which MPS (Multi-Processor Specification) version to

be used for the operating system. You need to select the MPS version supported by

your operating system. To find out which version to use, consult the vendor of your

operating system.

The choice: 1.1, 1.4.

## **PCI Express Configuration**

Configure PCI Express Support.



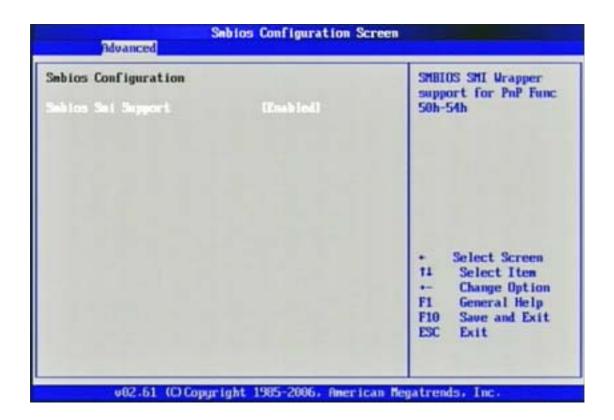
## **Active State Power-Management**

PCI Express LOs and L1 link power states.

The choice: Disabled, Enabled.

## **Smbios Configuration**

SMBIOS Configuration Menu.

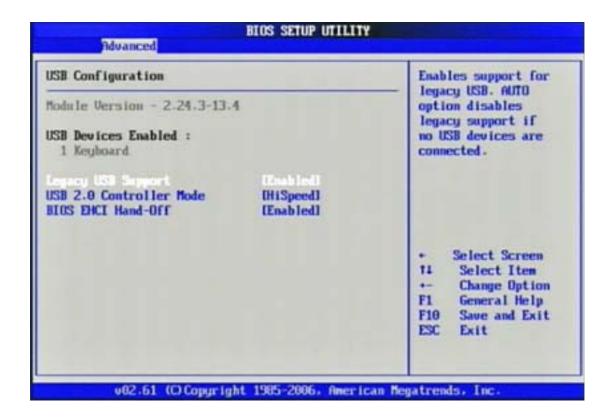


## **Smbios Smi Support**

SMBIOS SMI Wrapper supports for PnP Func 50h-54h.

The choice: Disabled, Enabled.

## **USB Configuration**



## **Legacy USB Support**

Set to [Enabled] if you need to use any USB 1.1/2.0 device in the operating system

that does not support or have any USB 1.1/2.0 driver installed, such as DOS and SCO

Unix.

The choice: Disabled, Enabled, Auto.

#### **USB 2.0 Controller Mode**

This setting specifies the operation mode of the onboard USB 2.0 controller.

The choice: FullSpeed, HiSpeed.

#### **BIOS EHCI Hand-Off**

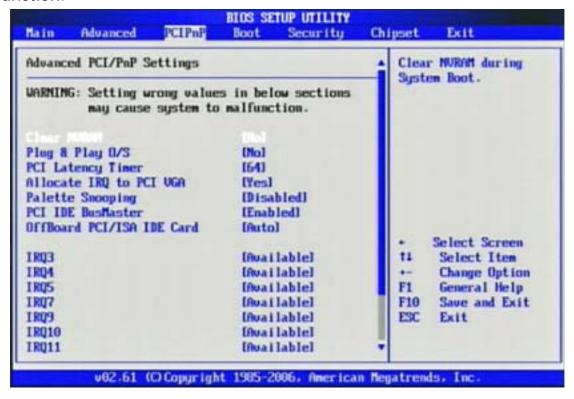
This is a workaround for OSes without EHCI hand-off support. The EHCI ownership

change should claim by EHCI driver.

The choice: Disabled, Enabled.

## 3.4 PCIPnP

Advanced PCI/PnP setting wrong values in below sections may cause system to malfunction.



#### **Clear NVRAM**

Clear NVRAM during System Boot.

The choice: No, Yes.

#### Plug & Play O/S

No: lets the BIOS configure all the devices in the system.

Yes: lets the operating system configure Plug and Play (PnP) devices not required

for

boot if your system has a Plug and Play operating system.

The choice: No, Yes.

#### **PCI Latency Timer**

Select value in units of PCI clocks for PCI device latency timer register.

The choice: 32, 64, 96, 128, 160, 192, 224, 248.

#### Allocate IRQ to PCI VGA

Yes: Assigns IRQ to PCI VGA card if card requests an IRQ.

No: Does not assign IRQ to PCI VGA card even if card requests an IRQ.

The choice: No, Yes.

#### **Palette Snooping**

Enabled: informs the PCI devices that an ISA graphics device is installed in the system so the card will function correctly.

The choice: Disabled, Enabled.

#### **PCI IDE BusMaster**

Enabled: Uses PCI bus mastering for reading / writing to IDE drives.

The choice: Disabled, Enabled.

#### OffBoard PCI/ISA IDE Card

Some PCI IDE cards may require this to be set to the PCI slot number that is holding

the card. AUTO: Works for most PCI IDE cards.

The choice: Auto, PCI Slot1, PCI Slot2, PCI Slot3, PCI Slot4, PCI Slot5, PCI Slot6.

# <u>IRQ 3 / IRQ 4 / IRQ5 / IRQ7 / IRQ 9 / IRQ 10 / IRQ 11 / IRQ 14 / IRQ 15</u>

Available: Specified IRQ is available to be used by PCI/PnP devices. Reserved: Specified IRQ is reserved for used by Legacy ISA devices.

The choice: Available, Reserved.

#### Reserved Memory Size

Select Size of memory block to reserve for legacy ISA devices.

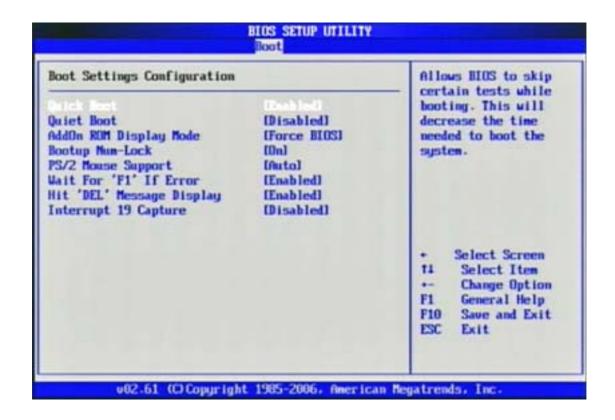
The choice: Disabled, 16K, 32K, 64K

## **3.5 Boot**

Use this menu to specify the priority of boot devices.



## **Boot Settings Configuration**



#### **Quick Boot**

Enabling this setting will cause the BIOS power-on self test routine to skip some of its

tests during boot up for faster system boot.

The choice: Disabled, Enabled.

#### **Quiet Boot**

This BIOS feature determines if the BIOS should hide the normal POST messages with the motherboard or system manufacturer's full-screen logo. When it is enabled,

the BIOS will display the full-screen logo during the boot-up sequence, hiding normal POST messages.

When it is disabled, the BIOS will display the normal POST messages, instead of the

full-screen logo.

Please note that enabling this BIOS feature often adds 2-3 seconds of delay to the booting sequence. This delay ensures that the logo is displayed for a sufficient amount of time. Therefore, it is recommended that you disable this BIOS feature for a

faster boot-up time.

The choice: Disabled, Enabled.

#### AddOn ROM Display Mode

This item is used to determine the display mode when an optional ROM is initialized

during POST. When set to [Force BIOS], the display mode used by AMI BIOS is used.

Select [Keep Current] if you want to use the display mode of optional ROM.

The choice: Force BIOS, Keep Current.

#### **Bootup Num-Lock**

This setting is to set the Num Lock status when the system is powered on. Setting to [On] will turn on the Num Lock key when the system is powered on. Setting to [Off] will allow users to use the arrow keys on the numeric keypad.

The choice: Off, On.

#### PS/2 Mouse support

Select [Enabled] if you need to use a PS/2-interfaced mouse in the operating system.

The choice: Disabled, Enabled, Auto.

#### Wait For 'F1' If Error

When this setting is set to [Enabled] and the boot sequence encounters an error, it

asks you to press F1. If disabled, the system continues to boot without waiting for you

to press any keys.

The choice: Disabled, Enabled.

#### Hit 'DEL' Message Display

Set this option to [Disabled] to prevent the message as follows:

Hit Del if you want to run setup

It will prevent the message from appearing on the first BIOS screen when the

computer boots. Set it to [Enabled] when you want to run the BIOS Setup Utility.

The choice: Disabled, Enabled.

#### **Interrupt 19 Capture**

Interrupt 19 is the software interrupt that handles the boot disk function. When enabled, this BIOS feature allows the ROM BIOS of these host adaptors to "capture"

Interrupt 19 during the boot process so that drives attached to these adaptors can

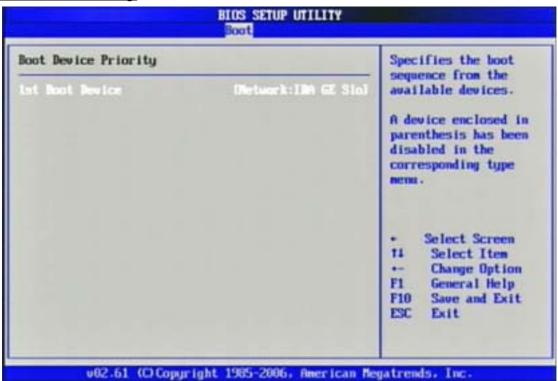
function as bootable disks. In addition, it allows you to gain access to the host adaptor's ROM setup utility, if one is available.

When disabled, the ROM BIOS of these host adaptors will not be able to "capture" Interrupt 19. Therefore, you will not be able to boot operating systems from any bootable disks attached to these host adaptors. Nor will you be able to gain access to

their ROM setup utilities.

The choice: Disabled, Enabled.

## **Boot Device Priority**



## **1st Boot Device**

The items allow you to set the sequence of boot devices where BIOS attempts to load

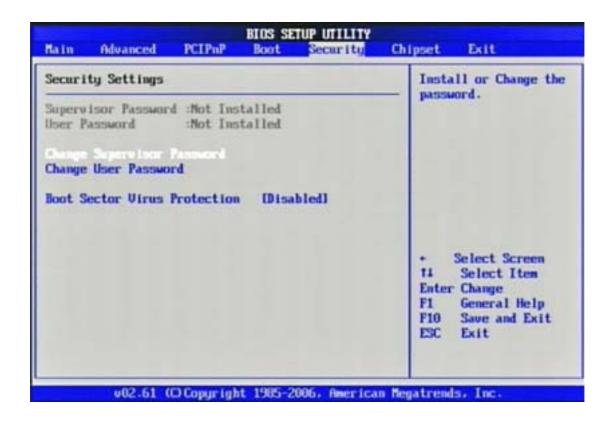
the disk operating system. First press < Enter> to enter the sub-menu. Then you may

use the arrow keys ( $\uparrow\downarrow$ ) to select the desired device, then press < + >, < - > or <PageUp>, <PageDown> key to move it up/down in the priority list.

The choice: (Network: IBA GE Slot 0200 v1324), Disabled.

## 3.6 Security

Use this menu to set supervisor and user passwords.



## Supervisor Password / Change Supervisor Password

Supervisor Password controls access to the BIOS Setup utility. These settings allow

you to set or change the supervisor password.

#### <u>User Password / Change User Password</u>

User Password controls access to the system at boot. These settings allow you to set or

change the user password.

#### **Boot Sector Virus Protection**

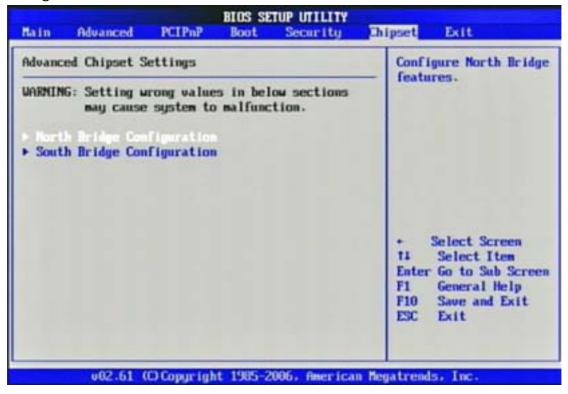
Boot Sector Virus Protection.

The choice: Disabled, Enabled.

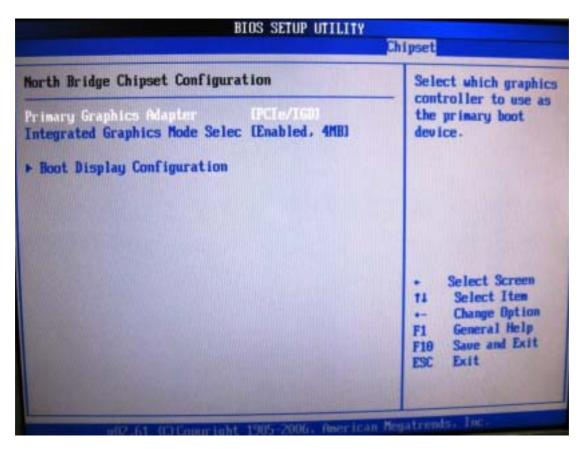
## 3.7 Chipset

This menu controls the advanced features of the onboard Northbridge and

#### Southbridge.



## **North Bridge Chipset Configuration**



## **Primary Graphics Adapter**

Select which graphics controller to use as the primary boot device.

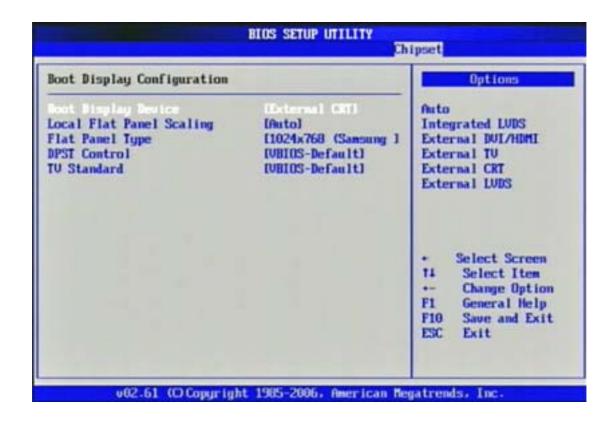
The choice: IGD, PCIe/IGD.

## **Integrated Graphics Mode Selec**

Select the amount of system memory used by the internal graphics device.

The choice: Disabled, Enabled, 1MB, Enabled, 4MB, Enabled, 8MB.

## **Boot Display Configuration**



## **Boot Display Device**

The choice: Auto, Integrated LVDS, External DVI/HDMI, External TV, External CRT

External LVDS.

#### **Local Flat Panel Scaling**

The choice: Auto, Forced Scaling, Disabled.

#### Flat Panel Type

The choice: 640x480 (generic), 800x600 (generic), 1024x768 (generic), 640x480 (NEC

8.4"), 800x600 (NEC 9"), 1024x600 (TMD 5.61"), 1024x600 (Samsung 4.8"), 1024x768 (Samsung 15"), 1280x768 (Sharp 7.2"), 1280x800 (Samsung 15.4"), 1366x768 (TMD 11.1").

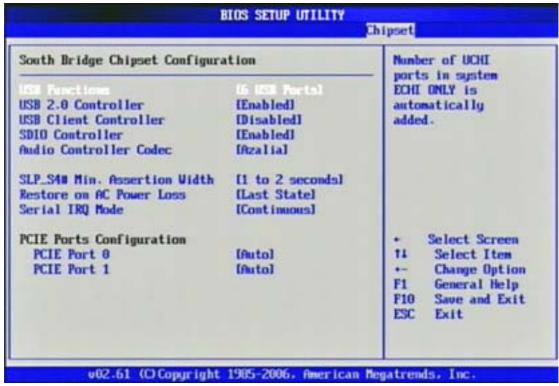
#### **DPST Control**

The choice: VBIOS-Default, DPST Disabled, DPST Enabled at Level 1~Level 5.

## **TV Standard**

The choice: VBIOS-Default, NTSC, PAL, SECAM, SMPTE240M, ITU-R television, SMPTE295M, SMPTE296M, CEA 7702, CEA 7703.

## **South Bridge Chipset Configuration**



#### **USB Functions**

This setting specifies the function of the onboard USB controller.

The choice: Disabled, 2 USB Ports, 4 USB Ports, 6 USB Ports.

#### **USB 2.0 Controller**

Set to [Enabled] if you need to use any USB 2.0 device in the operating system that

does not support or have any USB 2.0 driver installed, such as DOS.

The choice: Enabled, Disabled.

## **USB Client Controller**

The choice: Enabled, Disabled.

#### **SDIO** controller

The choice: Enabled, Disabled.

#### **Audio Controller Codec**

The choice: Auto, Azalia, Disabled.

## SLP\_S4# Min. Assertion Width

The choice: 4 to 5 seconds, 3 to 4 seconds, 2 to 3 seconds, 1 to 2 seconds.

#### **Restore on AC Power Loss**

This item allows user to configure the power status of using ATX power supply after

a serious power loss occurs.

The choice: Power Off, Power On, Last State.

#### **Serial IRQ Mode**

The choice: Continuous, Quiet.

#### **PCIE Port 0**

The choice: Auto, Enabled, Disabled.

#### PCIE Port 1

The choice: Auto, Enabled, Disabled.

## **3.8 Exit**

This menu allows you to load the BIOS default values or factory default settings into

the BIOS and exit the BIOS setup utility with or without changes.



## **Save Changes and Exit**

Exit System Setup and save your changes to CMOS. Pressing <Enter> on this item

asks for confirmation: Save changes to CMOS and exit the Setup Utility.

#### **Discard Changes and Exit**

Abandon all changes and exit the Setup Utility.

## **Discard Changes**

Abandon all changes and continue with the Setup Utility.

#### **Load Optimal Defaults**

Use this menu to load the default values set by the SBC manufacturer specifically for

optimal performance of the SBC.

#### **Load Failsafe Defaults**

Use this menu to load the default values set by the BIOS vendor for stable system performance.

#### 15.105 Federal Communications Commission (FCC) Requirements, Part 15

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ---Reorient or relocate the receiving antenna.
- ---Increase the separation between the equipment and receiver.
- ---Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ---Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. and (2) This device must accept any interference received, including interference that may cause undesired operation.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### Industry Canada - Class B

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matérial brouilleur: "Appareils Numériques," NMB-003 édictée par l'Industrie.

## To comply with FCC, Industry Canada and other national regulatory guidelines for RF exposure statement:

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment

should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

## Pour se conformer à la FCC, à l'industrie Canada et à d'autres directives de normalisation nationales pour le rapport d'exposition de rf :

- 1. Cet émetteur ne doit pas n'être coïmplanté ou opération en même temps qu'aucune autre antenne ou émetteur.
- 2. Cet équipement est conforme aux limites d'exposition de rayonnement de la FCC rf déterminées pour un environnement non contrôlé. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

## **Chapter 4 Appendix**

## 4.1 Protective Packing

Carefully packing your "WiSP" System (save the box and packing materials for future use).

See the picture below for packing the "WiSP" System:

