

*WTP-8866-15/19DPLUS*

*User's Manual*

*PN: 205G00WTP88661 V1.0*

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## **Greeting & Setup**

*Thank you for purchasing the WTP-8866-15/19DPLUS Panel PC. We wish that this unit will be durable and reliable in providing your needs. Please follow the instructions below to ensure the unit continues to have high performance*

## **Unpacking**

*After opening the carton, there will be a unit with an accessory box. Examine the contents to see if there are damages to the unit and if all accessories are present.*

## **Setting up**

*Please read this manual carefully and remember to keep this manual for future reference.*

## **Safety Instructions & Cleaning**

*The unit has undergone various tests in order to comply with safety standards. Inappropriate use may be dangerous. Please remember to follow the instructions below to insure your safety during the installation and operating process.*

## **Transporting & Placement of unit**

- 1. When moving the unit on a cart; be very cautious. Quick stops, excessive forces and uneven surfaces may cause the cart to overturn thus risking the unit to fall to the ground.*
- 2. If the Monitor display unit does fall to the ground, immediately turn the power off and disconnect cords. Then contact a service technician for repairs. Continual use of the unit may result*

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*cause a fire or electric shock. Also, do not repair the unit on your own.*

- 3. Before suspending the unit, make sure the material used for suspension is sturdy and stable. If not properly suspended, the display unit may fall and cause serious injury to people standing nearby as well as to the unit itself.*
- 4. If you wish to mount the display unit, remember to use only the mounting hardware recommended by the manufacturer.*

### ***Electrical and Power Source Related***

- 1. This Monitor display unit must operate on a power source as shown on the specification label. If you are not sure what type of power supply used in the area, consult your dealer or local power supplier.*
- 2. The power cords must not be damaged. Applied pressure, added heat, and tugging may damage the power cord.*
- 3. The power cord must be routed properly when setup takes place. We advise that this aspect measure is to prevent people from stepping on the cords or while the unit is suspended to prevent flying objects from getting tangled with the unit.*
- 4. Do not overload the AC outlets or extension cords. Electrical shocks or fires may occur from overloading.*
- 5. Do not touch the power source during a thunderstorm.*
- 6. If your hands are wet, do not touch the plug.*
- 7. Use your thumb and index finger, grip firmly on the power cord to disconnect from the electrical socket. By pulling the power cord, may result in damaging it.*
- 8. If the unit is not going to be in use for an extended period of*

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*time, remember to disconnect the unit.*

- 9. Connect the unit to a power source with the same numerical value as spec. label shown. Please use only the power cord provided by the dealer to ensure safety and EMC compliance.*

### **Various Factors of Environment**

- 1. Having liquids seep in or inserting objects into the unit may result in electric shocks from taking and/or short circuiting the internal parts.*
- 2. Do not place unit near heat generating sources.*
- 3. Do not place the unit in a location where it will come in contact with fumes or steam.*
- 4. If water has flow in or seep in, immediately disconnect power. Then contact a service technician for repairs.*

### **Servicing, Repairing, Maintenance & Safety Checks**

- 1. If the unit is not functioning properly, observe the performance level of the display closely to determine what type of servicing is needed.*
- 2. Do not attempt to repair the unit on your own. Disassembling the cover exposes users' to high voltages and other dangerous conditions. Notify and request a qualified service technician for servicing the unit.*
- 3. If any of the following situations occur turn the power source off and unplug the unit. Then contact a qualified service technician*
  - (a) The unit is soaked with liquids.*
  - (b) The unit is dropped or damaged.*
  - (c) If smoke or strange odor is flowing out of the unit.*

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*(d) If the power cord or plug is damaged.*

*(e) When the functions of the unit are dysfunctional.*

*4. When part replacement is needed. Make sure service technician uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. If unauthorized parts are used it may result in starting a fire, electrical shock and/or other dangers.*

### **Battery Installation**

*Follow below instructions and notice the caution for replacing and disposing of the RTC Lithium battery CR2032 for safety consideration.*

#### **CAUTION:**

*There is danger of explosion, if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instruction.*

***The specification is subject to change without notice.***

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*Version Change History*

<b>Date</b>	<b>Version</b>	<b>Description</b>	<b>Remark</b>
2013/10/21	V1.0	First release	

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# System Overview(WTP-8866-15D PLUS)

## System

CPU	AMD Fusion processor T40N
Chipset	AMD A55E
Graphic	AMD Radeon HD6320
Audio	Realtek ALC662, HD CODEC
LAN	Realtek 8111E x 2
Memory	DDR3 1066 MHz (max 4G)
SATA	1 x SATA II (Max. Data Transfer Rate 300 MB/s)

## BIOS

Brand: AMI

Flash ROM size: 16M

## Display

<b>Brand</b>	<b>Tianma</b>
<b>Model</b>	<b>TM150TDS50</b>
<b>Resolution (pixel)</b>	1024x768 XGA
<b>Active Area (mm)</b>	304.128 (W) x 228.096 (V)
<b>Outline Dimensions (mm)</b>	326.5 (H) x253.5 (V) x11.8
<b>Pixel Pitch (mm)</b>	0.297
<b>Mode</b>	TN
<b>Number of Colors</b>	16.7M
<b>View Angle (H/V)</b>	160/160
<b>Brightness (cd/m2)</b>	400
<b>Contrast Ratio</b>	600:1
<b>Response Time (ms) (at 25°C)</b>	8
<b>Backlight</b>	LED
<b>Weight (g)</b>	1000
<b>life time&lt;Hrs&gt;</b>	50000

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## **Touch Screen**

### **AMT 28115 resistive touch screen**

<i>Characteristics</i>	<i>Resistive ( 5 wire)</i>
<i>Model name</i>	<i>AMT 28115</i>
<i>Touch Resolution</i>	<i>4096x4096</i>
<i>Stylus use possible beyond finger</i>	<i>No Limitation, can use any stylus</i>
<i>Glove use possible</i>	<i>Any type glove</i>
<i>Light transmittance</i>	<i>80+ -3%</i>
<i>Hardness</i>	<i>3H</i>
<i>Response time</i>	<i>20 ms</i>
<i>Front Panel Protection -IP65</i>	<i>V</i>
<i>Touch screen Life</i>	<i>36 million activations</i>
<i>Warranty</i>	<i>5 wire: 3 years</i>
<i>Characteristics</i>	<i>Resistive ( 5 wire)</i>
<i>Characteristics</i>	<i>Resistive ( 5 wire)</i>

## **Touch Controller**

*RES PENMOUNT 6300, USB TOUCH*

## **Storage**

*HDD 2.5" SATA HDD drive bay x 1*

*CF 1 x bootable Compact Flash slot for CF type I/II storages*

## **Expansion slots**

*Mini-PCIE 52 pin card-edge type x 1 support half/full size (for  
WLAN module)*

## **External water/dust resistant I/O (rear side)**

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USB            *USB 2.0 x 3 (one is accessible behind front bezel, 2 at rear sides)*  
LAN            *RJ-45 x 1 (Gigabit Ethernet) and PoE power input*  
Audio          *Line-out x 1, with 3.5mm phone jack connector*

### **Power**

Power            *DC-In connector x 1*  
Power Input    *DC12V~28V*  
Power Adapter *AC 90 ~ 264V / 47 ~ 63 Hz / DC output 12V,*  
*Power ON/Off and reset buttons at rear side*

### **Mechanical & Environmental**

Material construction        *SUS304 stainless steel enclosure*  
CPU cooling by Heat sink cooling  
Gasket between enclosure and touch screen to minimize residual material  
Water and dust protection        *IP66 / NEMA4X*  
Operation Temperature        *0~40 °C (IEC60068-2-2, no air flow condition, fanless cooling)*  
Storage Temperature        *-20~60 °C*  
Operation Relative Humidity        *10%~90%, non-condensing*  
Storage Relative Humidity        *10%~90%, non-condensing*  
Dimensions                *395 x 345 x 65 (width, height, thickness)*  
Mounting                *VESA (100x100 mmxmm)*  
WTP-8866-15D PLUS Net weight    *8.8 KG*  
WTP-8866-15D PLUS +Wall Mount net weight: *12 KG*  
WTP-8866-15D PLUS +Wall Mount gross weight: *13.5 KG*

### **Packing list**

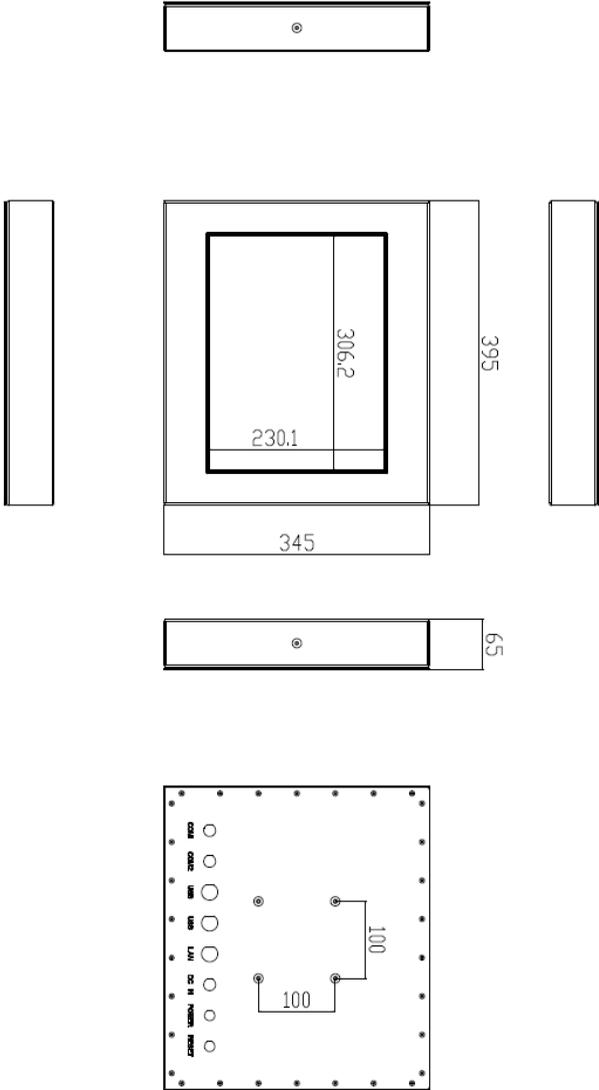
- 
1. *WTP-8866-15D PLUS*
  2. *CD-Title for driver and manual*
  3. *Power adapter*
  4. *Power cord*
  5. *Options*

**Regulatory**

*FCC-A, CE (EMC)*

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# System View



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SATA	1 x SATA II (Max. Data Transfer Rate 300 MB/s)

## BIOS

Brand: AMI

Flash ROM size: 16M

## Display

### Panel AUO G190EG01 V0

Size	19"
Model	G190EG01 V0
Resolution (pixel)	SXGA (1280 x 1024)
Aspect Ratio	5:4
Active Area (mm)	376.32 (H) x 301.06(V)
Pixel Pitch (mm)	0.294
Mode	Normally White
Number of Colors	16.7M
Color Saturation (NTSC %)	72
View Angle (H/V)	170 / 160
Brightness (cd/m <sup>2</sup> )	450 (Typ. Center point)
Contrast Ratio	1000 : 1 (Typ)
Response Time (ms) (at 25°C)	5 (Typ)

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<i>Power Consumption (W)(typ)</i>	<i>26.71 W</i>
<i>Interface</i>	<i>2ch LVDS</i>
<i>Supply Voltage (V)</i>	<i>5</i>
<i>Backlight</i>	<i>CCFL</i>
<i>Outline Dimensions (mm)</i>	<i>396.0 x 324.0 x 18.5</i>
<i>Weight (g)</i>	<i>2400 (Typ)</i>

### **Touch Screen**

	<i>AMT</i>
<i>Model name</i>	<i>AD-2511</i>
<i>Type</i>	<i>5 wire RES</i>
<i>Glove</i>	<i>Any type glove</i>
<i>Stylus</i>	<i>No Limitation, can use any stylus</i>
<i>Interface</i>	<i>USB</i>
<i>Light Transmission</i>	<i>80±3%</i>
<i>Hardness</i>	<i>3H</i>
<i>Glass thickness</i>	<i>1.8mm</i>
<i>Linearity</i>	<i><math>X \leq 1.5\%</math>, <math>Y \leq 1.5\%</math></i>
<i>Active area</i>	<i>212x159.20</i>
<i>Resolution</i>	<i>4096x4096</i>
<i>Lifetime</i>	<i>36 million activations</i>

### **Touch Controller**

*RES PENMOUNT 6300, USB TOUCH*

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*Audio Line-out x 1, with 3.5mm phone jack connector*

**Power**

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*Power Input DC12V~28V*  
*Power Adapter AC 90 ~ 264V / 47 ~ 63 Hz / DC output 12V,*  
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**Mechanical & Environmental**

*Material construction SUS304 stainless steel enclosure*  
*CPU cooling by Heat sink cooling*  
*Gasket between enclosure and touch screen to minimize residual material*  
*Water and dust protection IP66 / NEMA4X*  
*Operation Temperature 0~40 °C (IEC60068-2-2, no air flow condition, fanless cooling)*  
*Storage Temperature -20~60 °C*  
*Operation Relative Humidity 10%~90%, non-condensing*  
*Storage Relative Humidity 10%~90%, non-condensing*  
*Dimensions 395 x 345 x 65 (width, height, thickness)*  
*Mounting VESA (100x100 mmxmm)*  
*WTP-8866-19DPLUS Net weight 8.8 KG*

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*WTP-8866-19DPLUS+Wall Mount net weight: 12 KG*

*WTP-8866-19DPLUS+Wall Mount gross weight: 13.5 KG*

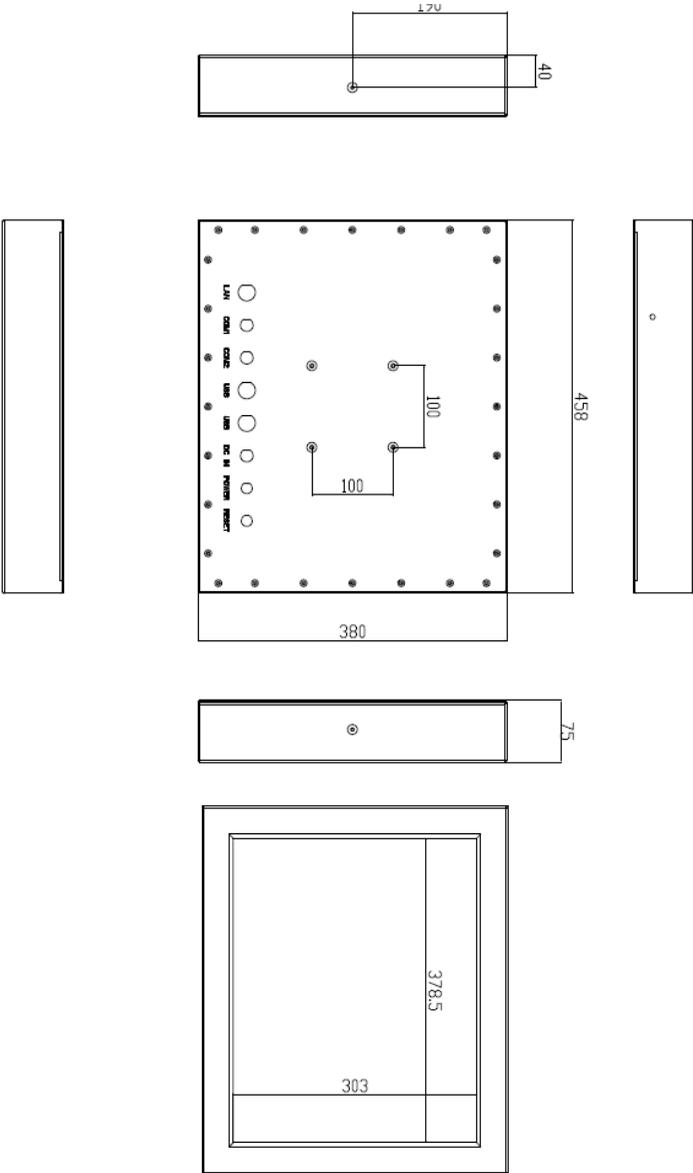
***Packing list***

- 6. WTP-8866-19DPLUS*
- 7. CD-Title for driver and manual*
- 8. Power adapter*
- 9. Power cord*
- 10. Options*

***Regulatory***

*FCC-A, CE (EMC)*

# System View



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## **Setting up the System**

*The following is a summary of the steps in setting up the system for use.*

***CAUTION: Make sure that power to the system and each of the devices to be connected is switched OFF before plugging in the connectors.***

- 1. Make any required external connections such as the keyboard, and mouse.*
- 2. Plug the appropriate end of the power cord into the power connector of the system. Then plug the other end of the power cord to an electrical outlet.*
- 3. Press the power switch of the system to turn on the system's power.*
- 4. If necessary, run the BIOS SETUP program to configure the system (see Chapter 3).*
- 5. Install the software drivers if necessary.*

---

## **Installing System Software**

*Recent releases of operating systems from major vendors include setup programs, which load automatically and guide you through hard disk preparation and operating system installation. The guidelines below will help you determine the steps necessary to install your operating system on the Panel PC hard drive.*

**NOTE:** *Some distributors and system integrators may have already pre-installed system software prior to shipment of your Panel PC.*

*Installing software requires an installed HDD. Software can be loaded in the WTP-8866-15/19DPLUS Panel PC using any of below methods:*

### **Method 1: Use the Ethernet**

*You can use the Ethernet port to download software from the net to the HDD that has been pre-installed in WTP-8866-15/19DPLUS Panel PC*

### **Method 2: Use the COM Port**

*By connecting another PC to the WTP-8866-15/19DPLUS Panel PC with an appropriate cable, you can use transmission software to transmit Operation System Software to the HDD that has been pre-installed in the WTP-8866-15/19DPLUS Panel PC.*

### **Method 3: Use a External CD-ROM**

*In order to boot up system from USB-CD/DVD drive, please connect USB-CD/DVD drive, turn on computer power, keep on pressing "F11" key, go into BIOS quick boot menu, select "USB-CD ROM", WAIT FOR 20 SECONDS, then press enter, system OS will boot up from USB-CD/DVD drive directly*

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*Then you can use the external CD-ROM to transmit the software to the HDD that has been pre-installed in the WTP-8866-15/19DPLUS Panel PC*

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## ***Installing the Drivers***

*After installing your system software, you will be able to set up the LAN, VGA, Audio and USB functions. All drivers are stored in a CD disc, which can be found in your accessory pack.*

*The various drivers and utilities in the disc have their own text files that help users install the drivers and understand their functions.*

---

## **BIOS Setup Information**

This chapter introduces BIOS setup information.

Power on or reboot the system board, when screen appears message as “Press DEL to enter SETUP.” Press <DEL> to run BIOS SETUP Utility.

Note: The BIOS configuration for reference only, it may subject to change without prior notice.

---

## 2.1 Main Menu

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Main Advanced Chipset Boot Security Save & Exit

BIOS Information		Choose the system default language
BIOS Vendor	American Megatrends	
Core Version	4.6.4.1	
Compliance	UEFI 2.1	
Project Version	0ABVQ 0.14 x64	
Model Name	WMIX-T56N	
Revision	R001	
Build Date	20130204	
Memory Information		↔ : Select Screen
Total Memory	4080 MB (DDR3)	↑↓ : Select Item
System Language	[English]	Enter : Select
System Date	[Tue 02/05/2013]	+/- : Change Opt .
System Time	[10:10:10]	F1: General Help
Access Level	Administrator	F2: Previous Values
		F3: Optimized Defaults
		F4: Save & Exit
		ESC: Exit

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### Date

Set system date.

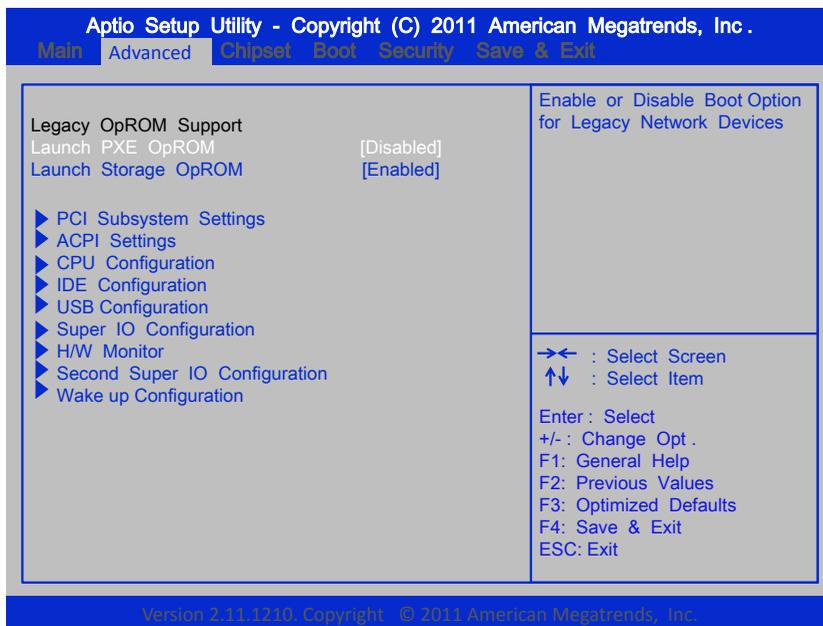
### Time

Set system time.

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## 2.2 Advanced Menu

This section allows you to configure CPU and other system devices for basic operation through the following sub-menus.

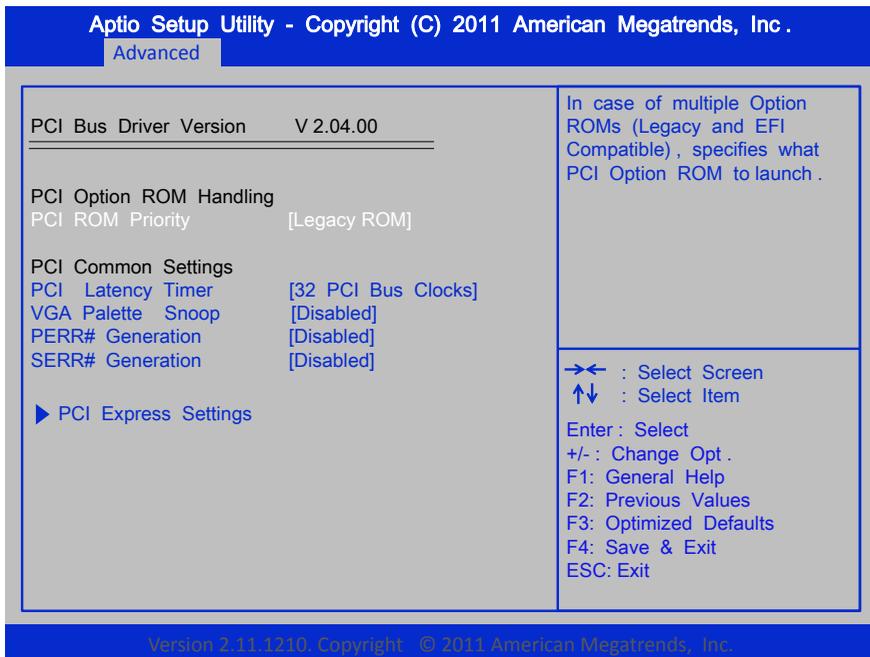


- PCI Subsystem Settings**
- ACPI Settings**
- CPU Configuration**
- IDE Configuration**
- USB Configuration**
- Super IO Configuration**
- H/W Monitor**
- Second Super IO Configuration**
- Wake up Configuration**

---

---

## 2.3 PCI Subsystem Setting



### PCI ROM Priority

In case of multiple optional ROMs (Legacy and EFI Compatible), specifies what PCI option ROM to launch.

### PCI Latency Timer

Choices: 32 PCI, 64 PCI, 96 PCI, 128 PCI, 160 PCI, 192 PCI, 224 PCI, 248 PCI Bus Clocks.

### VGA Palette Snoop

Enable or Disable VGA palette registers snooping.

### PERR# Generation

Choices: Disabled, Enabled.

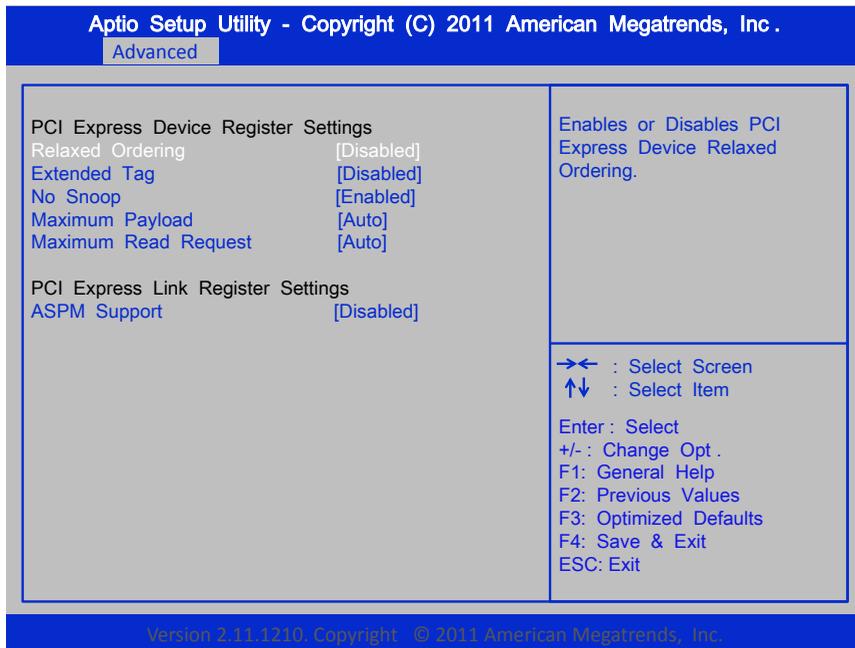
### SERR# Generation

---

Choices: Disabled, Enabled.

---

## 2.4 Advanced BIOS Feature Setup



**Relaxed Ordering**

Choices: Disabled, Enabled.

**Extended Tag**

Choices: Disabled, Enabled.

**No Snoop**

Choices: Disabled, Enabled.

**Maximum Payload**

This item can be supported by the motherboard chipset PCI express controller.

**Maximum Read Request**

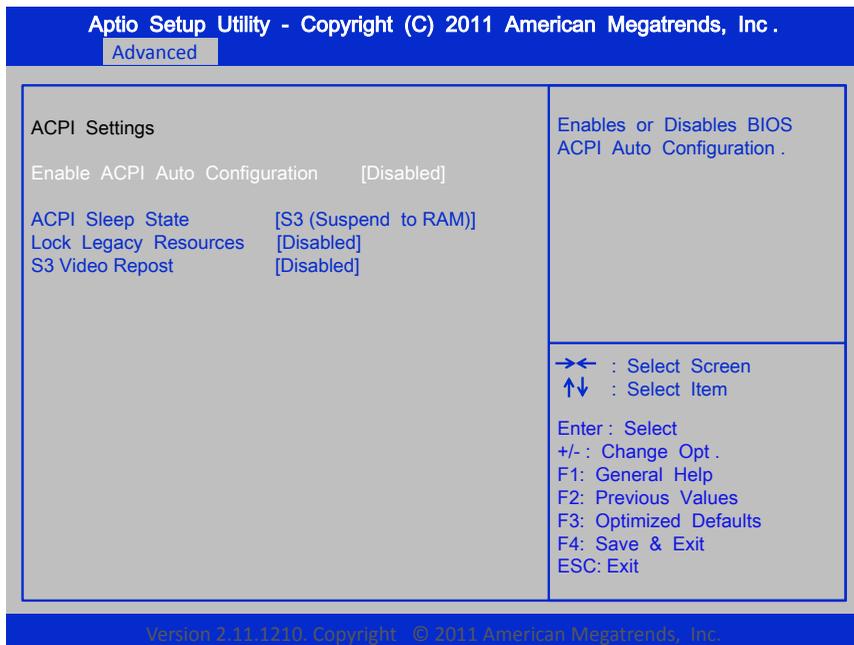
It is size for the device as a requester.

---

**ASPM Support**

Choices: Disabled, Enabled.

## 2.5 ACPI Settings



**ACPI Sleep Auto Configuration**

Choices: Disabled, Enabled.

**Lock Legacy Resources**

Choices: Disabled, Enabled.

**S3 Video Repost**

Choices: Disabled, Enabled.

## 2.6 CPU Configuration

<p>CPU Configuration</p> <p>Limit CPUID Maximum [Disabled]</p> <p>PSS Support [Enabled]</p> <p>PSTATE Adjustment [PState 0]</p> <p>PPC Adjustment [PState 0]</p> <p>NX Mode [Enabled]</p> <p>SVM Mode [Enabled]</p> <p>C6 Mode [Auto]</p> <p>▶ Node 0 Information</p>	<p>Disabled for Windows XP</p> <hr/> <p>→← : Select Screen                  ↑↓ : Select Item</p> <p>Enter : Select                  +/- : Change Opt .                  F1: General Help                  F2: Previous Values                  F3: Optimized Defaults                  F4: Save &amp; Exit                  ESC: Exit</p>
---	---

**Limit CPUID Maximum**

Choices: Disabled, Enabled.

**PSS Support**

Choices: Disabled, Enabled.

**PSTATE Adjustment**

This item is used to adjust startup P-state level, the choice is PState 0-7.

**PPC Adjustment**

This item is provided to adjust startup P-state level.

**NX Mode**

Choices: Disabled, Enabled.

**SVM Mode**

Choices: Disabled, Enabled.

**C6 Mode**

---

It is the option to enable “C6 mode” is added to the BIOS setup.

## 2.7 AMD G-T56N Processor

**Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.**

Advanced

<p>Node0 : AMD G-T56N Processor</p> <p>Dual Core Running @ 1670 MHz 1350mV Max Speed : 1650 MHZ Intended Speed : 1650MHZ Min Speed : 825 MHZ Microcode Patch Level : 5000101</p> <p>----- Cache per Core ----- L1 Instruction Cache : 32 KB/8-way L1 Data Cache : 32 KB/2-way L2 Cache : 512 KB/16-way No L3 Cache Present</p>	<p>→← : Select Screen ↑↓ : Select Item</p> <p>Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</p>
--	---

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## 2.8 IDE Configuration

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Advanced

IDE Configuration

SATA Port0	Not Present
SATA Port1	Not Present
SATA Port2	Not Present
SATA Port3	Not Present
SATA Port4	Not Present
SATA Port5	Not Present

→← : Select Screen  
↑↓ : Select Item

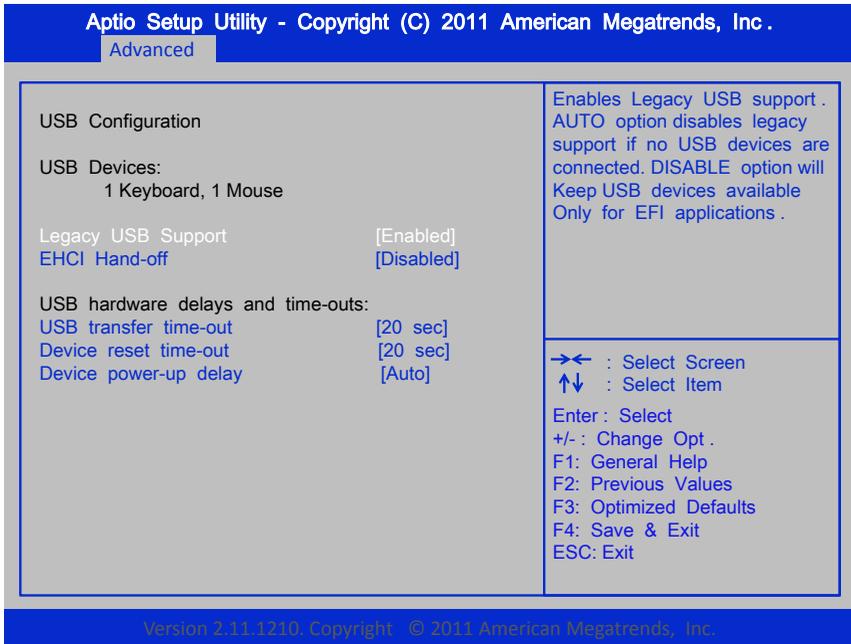
Enter : Select  
+/- : Change Opt .  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC: Exit

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- SATA Port0**
- SATA Port1**
- SATA Port2**
- SATA Port3**
- SATA Port4**
- SATA Port5**

---

## 2.9 USB Configuration



### Legacy USB Support

Set [Enabled] if you need to use any USB 1.1/2.0 devices in the operating system that does not support or have any USB 1.1/2.0 drivers installed. Such as DOS and SCO Unix.

### EHCI Hand-off

This is a workaround for OSs without EHCI hand-off support. The EHCI ownership change should be claimed by EHCI driver.

### USB transfer time-out

Choices: 1, 5, 10, 20 sec.

### Device Reset time-out

USB mass storage device starts unit command timeout.

Choices: 10, 20, 30, 40 sec.

---

**Device power-up delay**

This setting determines the maximum time for USB device will take before reporting to the controller.

## 2.10 Super IO Configuration

**Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.**  
Advanced

Super IO Configuration	Set Parameters of Serial Port 0 (COMA)
Super IO Chip Winbond W83627EHG	
▶ Serial Port 0 Configuration	
▶ Serial Port 1 Configuration	
▶ Parallel Port Configuration	
Watch Dog Timer [Time out Disable]	
CPU smart fan control [Disabled]	
System smart fan control [Disabled]	
	←→ : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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**Watch Dog Timer**

This option will determine watch dog timer.

**CPU smart fan control**

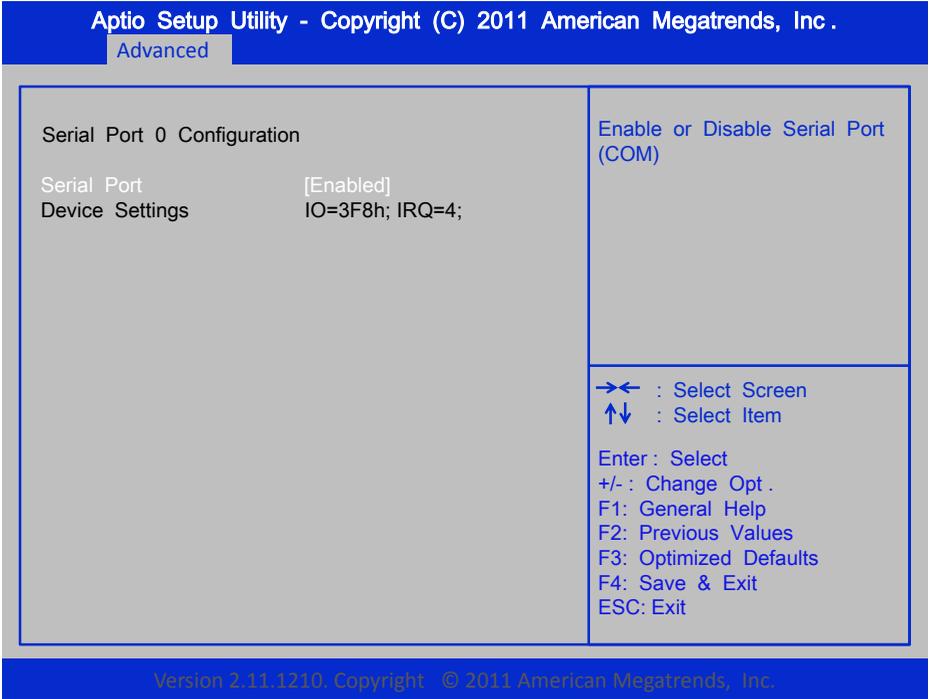
This option allows user to enable/disable the control of CPU fan speed by changing the fan voltage.

**System smart fan control**

This option allows user to enable/disable the control of smart fan speed by changing the fan voltage.

---

## 2.11 Serial Port 0 Configuration



### Serial Port

Use this option to enable or disable the serial port.

### Device Settings

Use this option to show the serial port IO port address and interrupt address.

---

## 2.12 Serial Port1 Configuration

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Advanced

Serial Port 1 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=2F8h; IRQ=3;	
Device Mode	[Serial Port Functi...]	
		→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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**Serial Port**

Use this option to enable or disable the serial port.

**Device Settings**

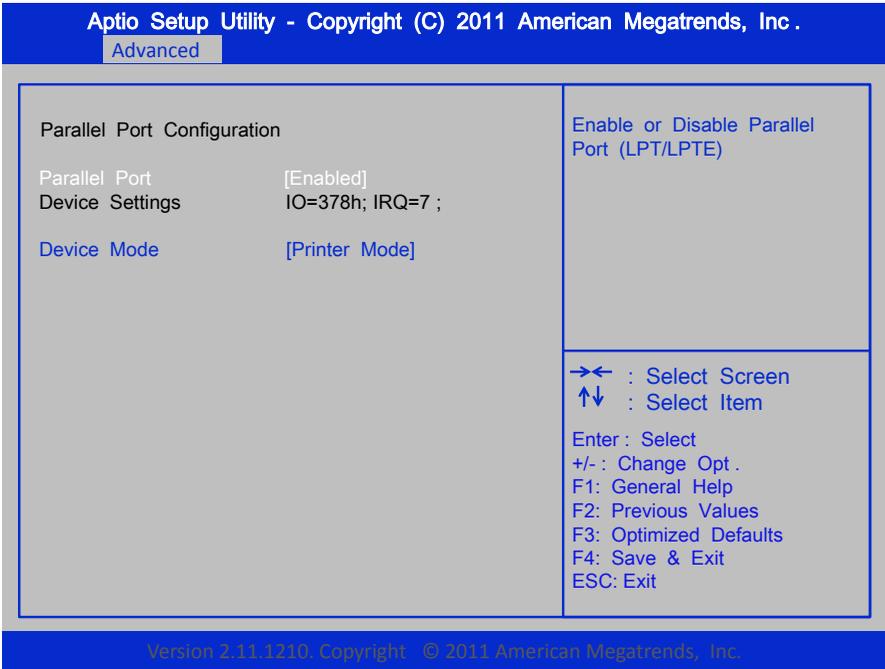
Use this option to change the device address and interrupt address.

**Device Mode**

Serial mode function.

---

## 2.13 Parallel Port Configuration



**Parallel Port**

Use this option to enable or disable the parallel port.

**Device Settings**

Use this option to change the device address and interrupt address.

**Device Mode**

It is printer mode.

## 2.14 Pc Health Status

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Advanced

### Pc Health Status

CPU Temperature	: +50 C
SYSTEM Temperature	: +39 C
CPU FAN Speed	: 8035 RPM
System FAN Speed	: N/A
VCORE	: +1.36 V
+12 V	: +11.51 V
+1.1 V	: +1.10 V
+1.5 V	: +1.52 V
+5 V	: +5.07 V
+3.3 V	: +3.32 V
VBAT (V)	: +3.02 V
3.3VSB (V)	: +3.32 V

→← : Select Screen  
↑↓ : Select Item

Enter : Select  
+/- : Change Opt .  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC: Exit

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---

## 2.15 Serial Super IO Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Advanced

Serial Super IO Configuration

Super IO Chip                      Fintek F81216

- ▶ Serial Port 1 Configuration
- ▶ Serial Port 2 Configuration
- ▶ Serial Port 3 Configuration
- ▶ Serial Port 4 Configuration

Set Parameters of Serial Port 1  
(COMC)

→← : Select Screen  
↑↓ : Select Item

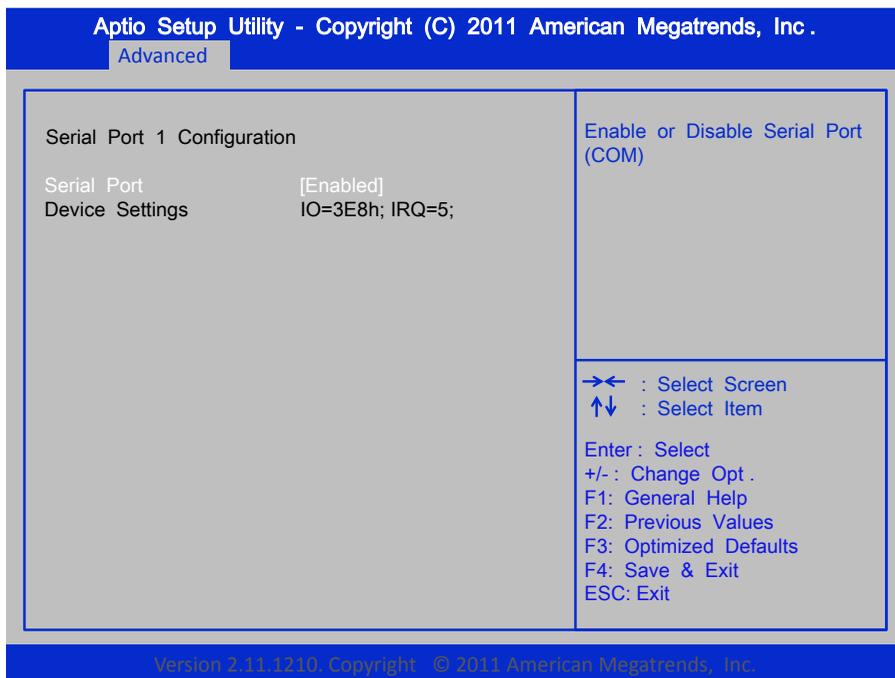
Enter : Select  
+/- : Change Opt .  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC: Exit

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- Serial Port 1 Configuration**
- Serial Port 2 Configuration**
- Serial Port 3 Configuration**
- Serial Port 4 Configuration**

---

## Serial Port1 Configuration



### Serial Port

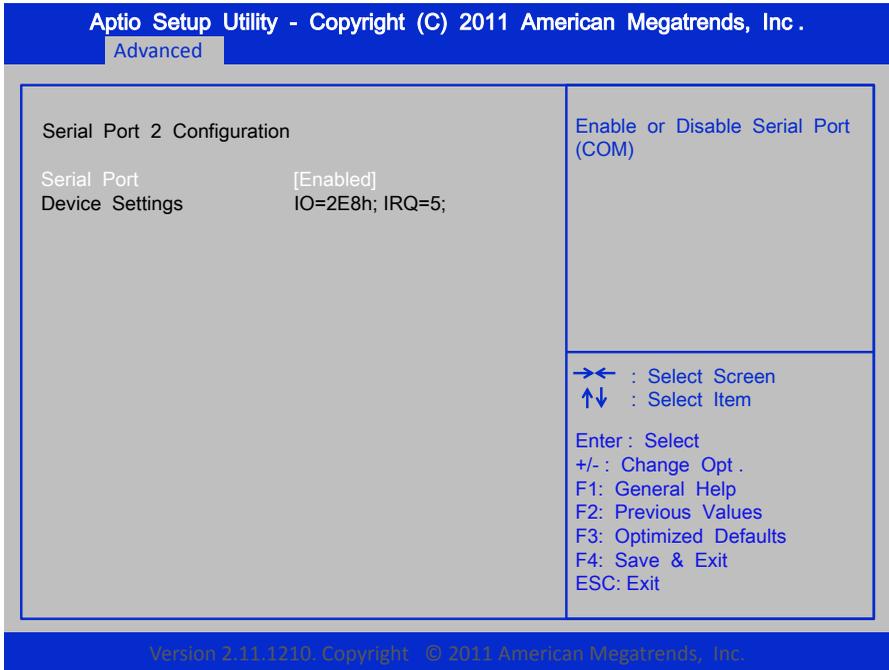
Use this option to enable or disable the serial port.

### Device Settings

Use this option to change the serial port IO port address and interrupt address.

---

## Serial Port2 Configuration



### Serial Port

Use this option to enable or disable the serial port.

### Device Settings

Use this option to change the serial port IO port address and interrupt address.

---

## Serial Port3 Configuration

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Advanced

Serial Port 3 Configuration	Enable or Disable Serial Port (COM)
Serial Port [Enabled]	
Device Settings IO=2A0h; IRQ=5;	
	→← : Select Screen ↑↓ : Select Item  Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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### Serial Port

Use this option to enable or disable the serial port.

### Device Settings

Use this option to change the serial port IO port address and interrupt address.

---

## Serial Port4 Configuration

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Advanced

Serial Port 4 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=2E0h; IRQ=5;	
		→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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### Serial Port

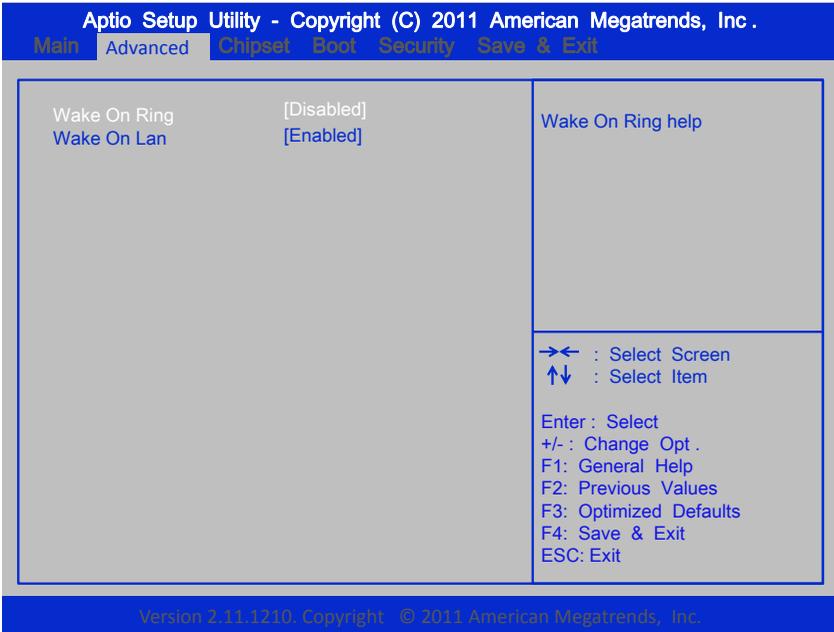
Use this option to enable or disable the serial port.

### Device Settings

Use this option to change the serial port IO port address and interrupt address.

---

## 2.16 Chipset



**Wake On Ring**

Choices: Disabled, Enabled.

**Wake On Lan**

Choices: Disabled, Enabled.

## 2.17 North Bridge Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc .

Main Advanced **Chipset** Boot Security Save & Exit

<ul style="list-style-type: none"><li>▶ North Bridge</li><li>▶ North Bridge LVDS Config Select</li><li>▶ South Bridge</li></ul>	North Bridge Parameters
<p>→← : Select Screen ↑↓ : Select Item</p> <p>Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</p>	

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- North Bridge
- North Bridge LVDS Config Select
- South Bridge

## 2.18 North Bridge Configuration

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Chipset

North Bridge Configuration		Select Primary Video Device That BIOS will use for output.
Primary Video Device	[IGD Video]	
NB GPP Core Config	[GPP_CORE_x4x4]	<p>→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</p>
Port 4 Control	[Disabled]	
Port 5 Control	[Disabled]	
Port 6 Control	[Disabled]	
Port 7 Control	[Disabled]	
IOMMU Mode	[Disabled]	
Memory Clock	[Auto]	
Memory Clear	[Disabled]	
Memory Information		
Memory Clock : 533 MHZ Total Memory : 4080 MB (DDR3)		
▶ GFX Configuration		
▶ Memory Configuration		
▶ Node 0 Information		

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### Primary Video Device

The device is IGD video.

### NB GPP Core Config

The item is for NB GPP Core configuration.

### Port4 Control

Choices: Disabled, Enabled.

### Port5 Control

Choices: Disabled, Enabled.

### Port6 Control

Choices: Disabled, Enabled.

### Port7 Control

---

Choices: Disabled, Enabled.

**IOMMU Mode**

Choices: Disabled, Enabled.

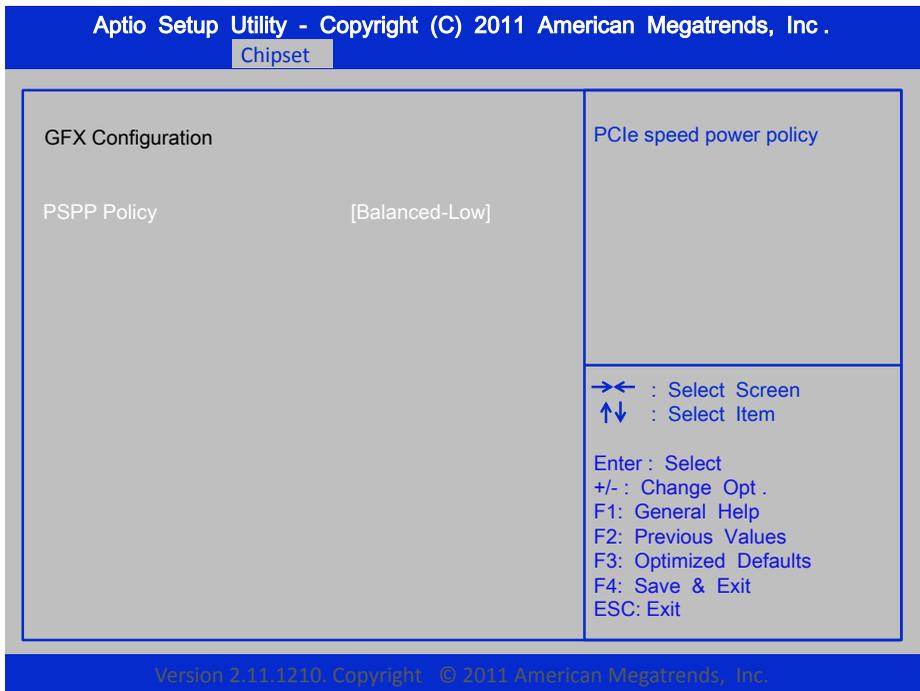
**Memory Clock**

It shows how fast this information gets distributed to the GPU

**Memory Clear**

Choices: Disabled, Enabled.

## 2.19 GFX Configuration

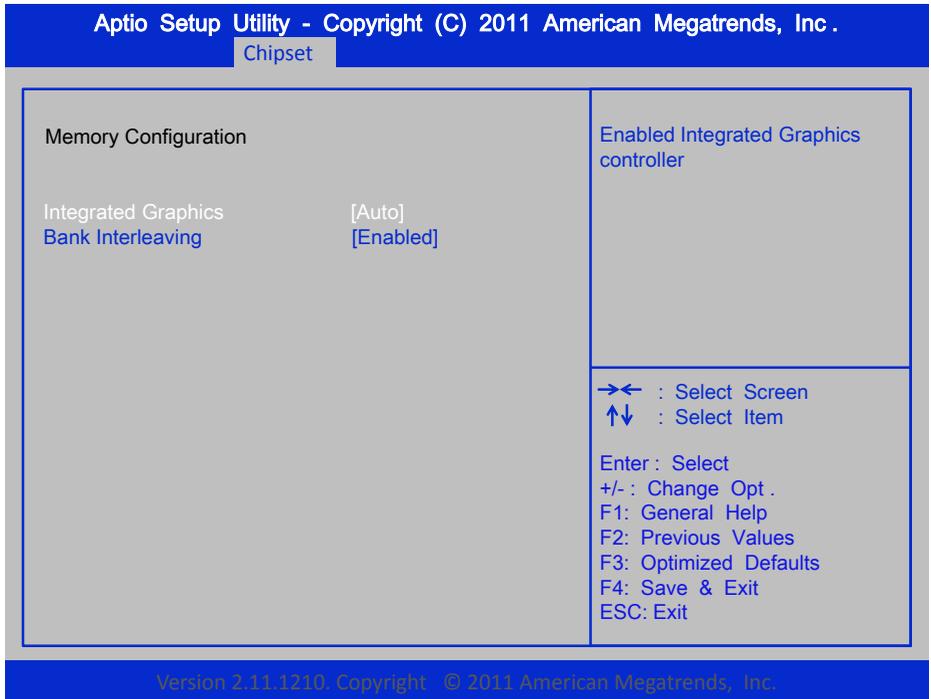


**PSPP Policy**

It is set to performance mode instead of power saving mode.

---

## 2.20 Memory Configuration



### Integrated Graphics

It shares memory with the CPU, and provides economical alternative to the stand-alone card.

### Bank Interleaving

Choices: Disabled, Enabled.

## 2.21 Node 0 Information

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Chipset

### Node 0 Information

Starting Address : 0 KB  
Ending Address : 4177979 KB

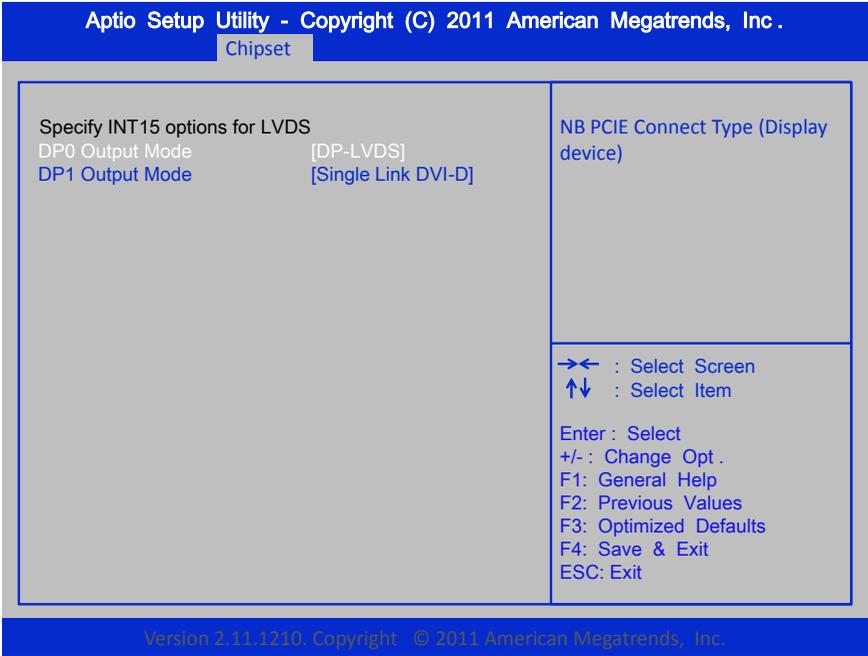
Dimm0 : Not Present  
Dimm1 : size=4096 MB, speed=1333MHz

→← : Select Screen  
↑↓ : Select Item

Enter : Select  
+/- : Change Opt .  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC: Exit

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## 2.22 SB Specify INT15 options for LVDS



### **DP0 Output Mode**

Use this item to enable LVDS.

### **DP1 Output Mode**

Use this item to choose DP1 output.

## 2.23 SB Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.  
Chipset

SB CIM Version : 1.1.1.1

- ▶ SB SATA Configuration
- ▶ SB USB Configuration
- ▶ SB GPP Port Configuration
- ▶ SB HD Azalia Configuration

Options for SATA Configuration

→← : Select Screen  
↑↓ : Select Item

Enter : Select  
+/- : Change Opt.  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC: Exit

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## 2.24 SATA Configuration

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Chipset

<p>OnChip SATA Channel [Enabled]          OnChip SATA Type [Native IDE]          OnChip IDE mode [Legacy mode]          SATA IDE Combined Mode [Enabled]          Combined Mode Option [SATA as primary]</p> <p>SATA ESP on PORT0 [Disabled]          SATA ESP on PORT1 [Disabled]          SATA ESP on PORT2 [Disabled]          SATA ESP on PORT3 [Disabled]          SATA ESP on PORT4 [Disabled]          SATA ESP on PORT5 [Disabled]          SATA Power on PORT0 [Enabled]          SATA Power on PORT1 [Enabled]          SATA Power on PORT2 [Enabled]          SATA Power on PORT3 [Enabled]          SATA Power on PORT4 [Enabled]          SATA Power on PORT5 [Enabled]</p>	<p style="text-align: center;">Enable or Disable Serial ATA</p> <hr/> <p>→← : Select Screen          ↑↓ : Select Item</p> <p>Enter : Select          +/- : Change Opt .          F1: General Help          F2: Previous Values          F3: Optimized Defaults          F4: Save &amp; Exit          ESC: Exit</p>
--	--

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**OnChip SATA Channel**

Choices: Disabled, Enabled.

**OnChip SATA Type**

The default is Native IDE.

**OnChip IDE Mode**

The option is Legacy mode or Native mode.

**SATA IDE Combined Mode**

Choices: Disabled, Enabled

**Combined Mode Option**

The option is set to be “SATA as primary.”

**SATA ESP on PORT0**

---

Choices: Disabled, Enabled

**SATA ESP on PORT1**

Choices: Disabled, Enabled

**SATA ESP on PORT2**

Choices: Disabled, Enabled

**SATA ESP on PORT3**

Choices: Disabled, Enabled

**SATA ESP on PORT4**

Choices: Disabled, Enabled

**SATA ESP on PORT5**

Choices: Disabled, Enabled

**SATA Power on PORT0**

Choices: Disabled, Enabled

**SATA Power on PORT1**

Choices: Disabled, Enabled

**SATA Power on PORT2**

Choices: Disabled, Enabled

**SATA Power on PORT3**

Choices: Disabled, Enabled

**SATA Power on PORT4**

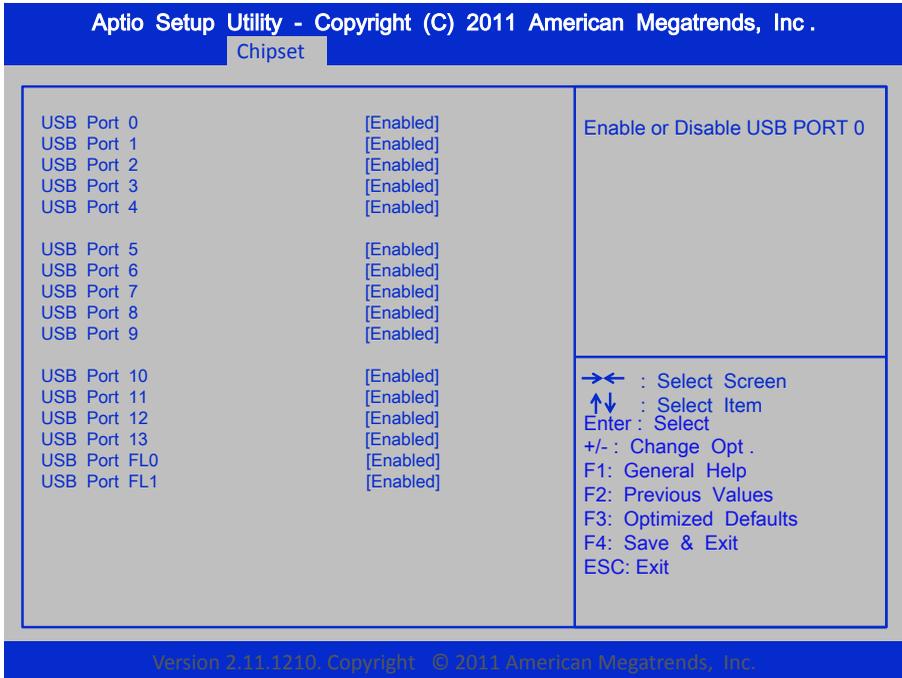
Choices: Disabled, Enabled

**SATA Power on PORT5**

Choices: Disabled, Enabled

---

## 2.25 USB Port



**OHCI HC (Bus 0 Dev 18 Fn 0)**

Choices: Disabled, Enabled

**OHCI HC (Bus 0 Dev 19 Fn 0)**

Choices: Disabled, Enabled

**OHCI HC (Bus 0 Dev 22 Fn 5)**

Choices: Disabled, Enabled

**USB Port 0**

Choices: Disabled, Enabled

**USB Port 1**

Choices: Disabled, Enabled

**USB Port 2**

---

Choices: Disabled, Enabled

**USB Port 3**

Choices: Disabled, Enabled

**USB Port 4**

Choices: Disabled, Enabled

**USB Port 5**

Choices: Disabled, Enabled

**USB Port 6**

Choices: Disabled, Enabled

**USB Port 7**

Choices: Disabled, Enabled

**USB Port 8**

Choices: Disabled, Enabled

**USB Port 9**

Choices: Disabled, Enabled

**USB Port 10**

Choices: Disabled, Enabled

**USB Port 11**

Choices: Disabled, Enabled

**USB Port 12**

Choices: Disabled, Enabled

**USB Port 13**

Choices: Disabled, Enabled

**USB Port FL0**

Choices: Disabled, Enabled

**USB Port FL1**

Choices: Disabled, Enabled

---

## 2.26 SB GPP Function Configuration

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Chipset

SB GPP Function GPP Port Link Configuration	[Enabled] [1:1:1:1 mode]	Enable or Disable SB GPP Function
		→← : Select Screen ↑↓ : Select Item  Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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**SB GPP Function**

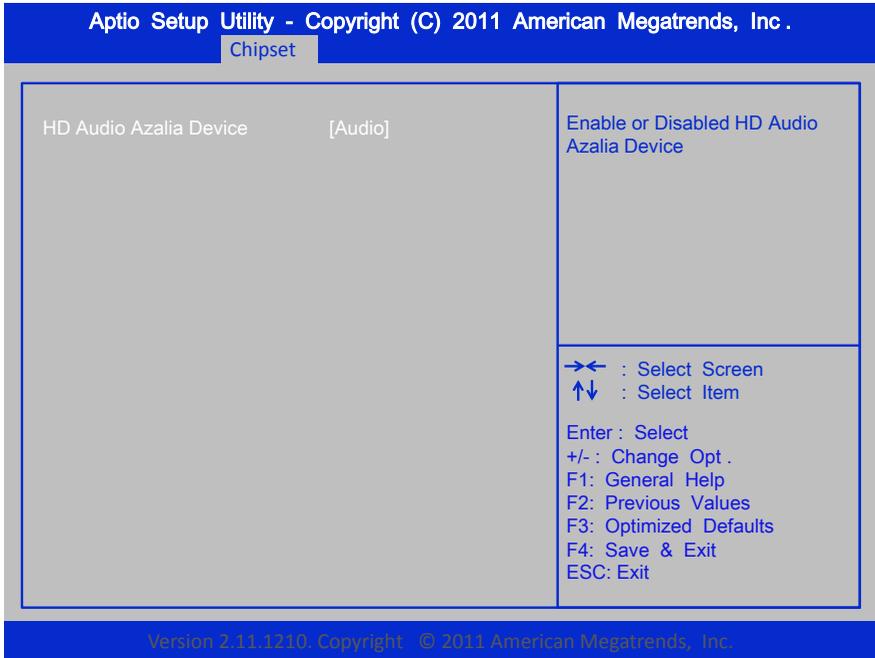
Choices: Disabled, Enabled

**GPP Port Link Configuration**

Choices: Disabled, Enabled

---

## 2.27 Azalia Device Configuration



**HD Audio Azalia Device**

## 2.28 Boot Configuration

The screenshot shows the Aptio Setup Utility interface with the 'Boot' tab selected. The 'Boot Configuration' section is expanded, showing various settings. The 'Setup Prompt Timeout' is set to '1'. The 'Bootup NumLock State' is set to '[On]'. Other settings include 'Quiet Boot' and 'Fast Boot' (both disabled), 'CSM16 Module Verison' (07.64), 'GateA20 Active' (Upon Request), 'Option ROM Messages' (Force BIOS), and 'Interrupt 19 Capture' (Disabled). The 'Boot Option Priorities' section shows 'Boot Option #1' as '[SATA: TOSHIBA MK25...]' and 'Boot Option #2' as '[UEFI: Built-in EFI...]'. The 'Hard Drive BBS Priorities' section is also visible. A legend on the right side of the screen lists navigation keys: left and right arrows for 'Select Screen', up and down arrows for 'Select Item', Enter for 'Select', +/- for 'Change Opt.', F1 for 'General Help', F2 for 'Previous Values', F3 for 'Optimized Defaults', F4 for 'Save & Exit', and ESC for 'Exit'. The version number 'Version 2.13.1210' and copyright information are at the bottom.

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.	
Main Advanced Chipset <b>Boot</b> Security Save & Exit	
Boot Configuration	
Setup Prompt Timeout	1
Bootup NumLock State	[On]
Quiet Boot	[Disabled]
Fast Boot	[Disabled]
CSM16 Module Verison	07.64
GateA20 Active	[Upon Request]
Option ROM Messages	[Force BIOS]
Interrupt 19 Capture	[Disabled]
Boot Option Priorities	
Boot Option #1	[SATA: TOSHIBA MK25...]
Boot Option #2	[UEFI: Built-in EFI...]
Hard Drive BBS Priorities	

Number of seconds to wait for setup activation key.  
65535(0xFFFF) means indefinite waiting.

←→ : Select Screen  
↑↓ : Select Item  
Enter : Select  
+/- : Change Opt .  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC:Exit

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### Setup Prompt Timeout

This setting is to remind when the system is waiting for setup activation key.

### Bootup NumLock State

This setting is to set 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.

Choices: On, Off.

### Quiet Boot

This item can help to select the screen display when the system boots.

### GateA20 Active

Upon request GA20 can be disabled using BIOS services.

---

**Option ROM Messages**

Set display mode for option ROM.

**Interrupt 19 Capture**

Enable: Allow option ROMs to trap into 19.

Choices: Disabled, Enabled.

---

## 2.29 Password Description

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.	
Main Advanced Chipset Boot Security Save & Exit	
<p>Password Description</p> <p>If ONLY the Administrator's password is set , then this only limits access to Setup and is only asked for when entering Setup If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights. The password must be 3 to 20 characters long.</p> <p>Administrator Password User Password</p>	<p>Set Administrator Password</p> <p>→← : Select Screen ↑↓ : Select Item</p> <p>Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save ESC: Exit</p>
Version 2.11.1210 Copyright © 2011 American Megatrends, Inc.	

## 2.30 Save Changes and Exit

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Main Advanced Chipset Boot Security **Save & Exit**

Save Changes and Exit  
Discard Changes and Exit  
Save Changes and Reset  
Discard Changes and Reset

Save Options  
Save Changes  
Discard Changes

Restore Defaults  
Save as User Defaults  
Restore User Defaults

Boot Override

Launch EFI Shell from file system device

Restore/Load Default values  
For all the setup options.

→← : Select Screen  
↑↓ : Select Item

Enter : Select  
+/- : Change Opt .  
F1: General Help  
F2: Previous Values  
F3: Optimized Defaults  
F4: Save & Exit  
ESC: Exit

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---

## **B. Wake UP on LAN Function**

***Please make sure the AC power is ON before use the function.***

- 1. Boot into OS (windows XP).*
- 2. In start menu control panel System device manager Network adapters double click Marvell Yukon 88E8071 Advance Wake from Shutdown Item select Wake on Magic packet from power off state.*

---