# **NANO-002**

**Installation Manual** 

E13507

First Edition V1

September 2017

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# **Notices**

#### **Federal Communications Commission Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A 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 manufacturer's 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 to 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.



WARNING! The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.





DO NOT throw the motherboard in municipal waste. This product has been designed to enable proper reuse of parts and recycling. This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.



DO NOT throw the mercury-containing button cell battery in municipal waste. This symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.



电子电气产品有害物质限制使用标识要求:图中之数字为产品之环保使用期限。仅指电子电气产品中含有的有害物质不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。

#### 有害物质的名称及含量说明标示:

	有害物质					
部件名称	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯 醚(PBDE)
印刷电路板及其电 子组件	×	0	0	0	0	0
外部信号连接口及   线材	×	0	0	0	0	0

本表格依据 SJ/T 11364 的规定编制。

〇:表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

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备注:此产品所标示的环保使用期限,系指在一般正常使用状况下。

# **Chapter 1**

This chapter gives a general description of the NANO-002. The chapter lists the system features including introduction on the front and rear panel, and internal components.

# 1.1 Welcome!

Your NANO-002 comes in a stylish casing and with a motherboard that supports the 6th Generation Intel® Core™ i7-6600U / i5-6300U / i3-6100U Processor (FCBGA1168).

The system supports up to 32GB Non-ECC, Un-buffered DDR4 2133/1867 MHz SO-DIMM. It features USB 3.0 ports for plug-and-play connectivity solutions for your USB 2.0/3.0 devices.

# System package contents

Check your NANO-002 system package for the following items.



If any of the items is damaged or missing, contact your retailer immediately.

Item description		
1.	NANO-002 system with	
	NITX-SKL1 motherboard	
	VESA mount Kit	
	Chassis	
2.	Support DVD	

# 1.2 Specifications

	System		
CPU	Intel® 6th generation 14nm Skylake ULT i7-6600U/ i5-6300U/ i3-6100U, BGA CPU, 15W TDP		
Chipset	Integrated into SoC		
Memory	2 x SO-DIMM, max. 32GB, DDR4 2133/1867 MHz, non-ECC, un-buffered memory		
I/O Chipset	NCT5538D		
Ethernet	2 x Realtek 8111G Giga LAN 10/100/1000Mb LAN controllers, 2 x RJ-45 ports		
Audio	Realtek® ALC887		
Function Class	1 x M.2 2280 M-Key slot (PCIe x 4+SATA)		
Expansion Slots	1 x M.2 2230 E-Key slot (PCIe+USB)		
BIOS	128Mbit Flash ROM, AMI BIOS		
	Temperature Monitor on CPU/System		
H/W Monitor	Voltage Monitor on Vcore/5V/3.3V/12V		
	Fan Monitor on Chassis		
WatchDog Timer	1~255 steps by software program		
Smart Fan Control	Chassis Fan		
Wake On LAN / PXE	Yes (WOL / PXE)		
Power State	S3, S4, S5		
	Graphics		
Graphics Chipset	Integrated Graphics		
Display Port Resolution	HDMI: 1.4 up to 4096 x 2160@60Hz		
Graphics Multi Display	HDMI+HDMI		
	Environment & Power & ME		
Battery	Lithium battery		
Power Requirement	1 x DC Power (DC: 12V~19V, wide rage:12V-5%~ 19V+10%)		
Operating Temperature	NANO-002N (FANLESS): 0°C~40°C NANO-002F (FAN): 0°C~50°C		
Storage Humidity	20% ~ 90%RH, non-condensing		
Certificate	CE & FCC class A		
M/B Form Factor	Nano ITX: 120mm x 120mm (4.72" x 4.72")		
VESA Mounting	75mm x 75mm		
Dimension (W x H x D)	150 x 125 x 55 mm (5.91" x 4.92" x 1.97")		

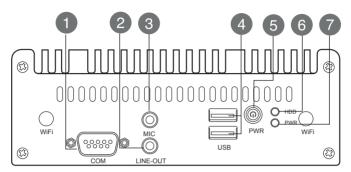
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	Front I/O			
USB	2 x USB 3.0 ports			
Audio	2 x Audio Jacks: Line-out (green), Mic-in (pink)			
Serial port	COM port RS-232			
Power button	1 x On/Off Button			
Others	1 x Power LED + 1 x HDD LED			
	Back I/O			
USB	2 x USB 3.0 ports			
Display	2 x HDMI ports			
LAN	2 x RJ-45 connectors			
	1 x Reset switch			
Others	1 x screw type DC Power jack			
	2 x Antenna outputs (from internal M.2 2230 slot)			
	Power Supply			
Power supply	1 x DC Power (DC: 12V~19V, wide rage:12V-5%~ 19V+10%)			
Power supply	1 x DC Power (DC: 12V~19V, wide rage:12V-5%~ 19V+10%) Internal I/O			
Power supply Storage	,			
	Internal I/O			
Storage	Internal I/O 1 x M.2 slot for SATA			
Storage	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)			
Storage FAN	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)  1 x Reset Switch 2-pin header			
Storage FAN	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)  1 x Reset Switch 2-pin header  1 x power button 2-pin header			
Storage FAN	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)  1 x Reset Switch 2-pin header  1 x power button 2-pin header  1 x M.2 2230 E-Key slot			
Storage FAN	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)  1 x Reset Switch 2-pin header  1 x power button 2-pin header  1 x M.2 2230 E-Key slot  Others			
Storage FAN	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)  1 x Reset Switch 2-pin header  1 x power button 2-pin header  1 x M.2 2230 E-Key slot  Others  Windows® 7 32 bit			
Storage FAN Others	Internal I/O  1 x M.2 slot for SATA  1 x Chassis Fan connector (3-pin, p=2.00mm)  1 x Reset Switch 2-pin header  1 x power button 2-pin header  1 x M.2 2230 E-Key slot  Others  Windows® 7 32 bit  Windows® 7 64 bit			

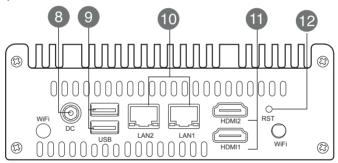
# 1.3 Getting to know your NANO-002

The front panel includes the power button and I/O ports.

#### Front panel



#### Back panel



- 1. Serial port. This port is for a serial (COM) port.
- 2. Line Out port (lime). This port connects a headphone or a speaker.
- 3. Mic In port (pink). This port connects a microphone.
- USB 3.0 ports. These two 9-pin Universal Serial Bus (USB) ports connect to USB 3.0/2.0 devices.



- Due to USB 3.0 controller limitations, USB 3.0 devices can only be used under a Windows® OS environment and after USB 3.0 driver installation.
- The plugged USB 3.0 device may run on xHCl or EHCl mode, depending on the operating system's setting.
- USB 3.0 devices can only be used for data storage.
- We strongly recommend that you connect USB 3.0 devices to USB 3.0 ports for faster and better performance from your USB 3.0 devices.

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- 5. **Power button.** This button is for switching on/off the power supply unit.
- 6. HDD LED. This LED indicator flashes while reading/writing data.
- 7. **Power LED.** This power LED lights up when you turn on the Slot-In PC.
- **8. DC-In port**. Plug the power adapter into this port.
- USB 3.0 ports. These two 9-pin Universal Serial Bus (USB) ports connect to USB 3.0/2.0 devices.



- Due to USB 3.0 controller limitations, USB 3.0 devices can only be used under a Windows® OS environment and after USB 3.0 driver installation.
- The plugged USB 3.0 device may run on xHCl or EHCl mode, depending on the operating system's setting.
- USB 3.0 devices can only be used for data storage.
- We strongly recommend that you connect USB 3.0 devices to USB 3.0 ports for faster and better performance from your USB 3.0 devices.
- LAN (RJ-45) ports. These ports allow gigabit connection to a Local Area Network (LAN) through a network hub. Refer to the table below for the LAN port LED indications.

# LAN port LED indications

Activity/Link		Speed LED	
Status	Description	Status	Description
OFF	No link	OFF	10 Mbps connection
ORANGE	Linked	ORANGE	100 Mbps connection
Green	Linked	GREEN	1000 Mbps connection



- 11. HDMI ports. These ports are for a High-Definition Multimedia Interface (HDMI) connector, and are HDCP compliant allowing playback of HD DVD, Blu-Ray, and other protected content.
- Reset button. This button resets or restores the system to its factory default settings.

# **Chapter 2**

This chapter provides step-bystep instructions on how to install components in the system.

# 2.1 Preparation

Before you proceed, make sure that you have all the components you plan to install in the system.

# **Basic components**

- DDR4 2133/1867 MHz Non-ECC, Un-buffered SO-DIMM Memory Module (DIMM)
- 2. Hard disk drive

#### Tool

Phillips screw driver

# 2.2 Before you proceed

Take note of the following precautions before you install components into the system.

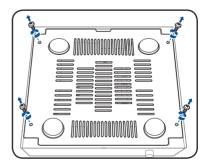


- Use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, before handling components to avoid damaging them due to static electricity.
- Hold components by the edges to avoid touching the ICs on them.
- Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with the component.

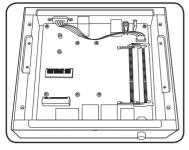
# 2.3 Installing your NANO-002

# **Installing your NANO-002**

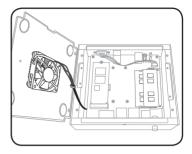
 Loosen the screws on the bottom cover of NANO-002 with a screwdriver.



2. Take bottom cover away from NANO-002.

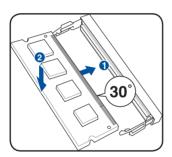


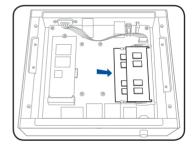




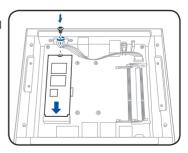
NANO-002F with fan

3. Insert the DDR4 memory to the SO-DIMM socket(s).



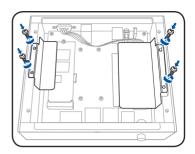


Install the Wi-Fi module with M.2 2230
 E-key connector interface and the external M.2 2280 M-Key SSD module.

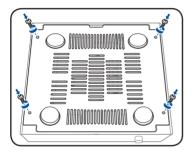


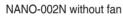
NANO-002 2-3

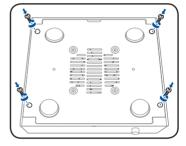
5. Install the two metal plates.



6. Secure the bottom cover to NANO-002 with the screws you removed earlier.







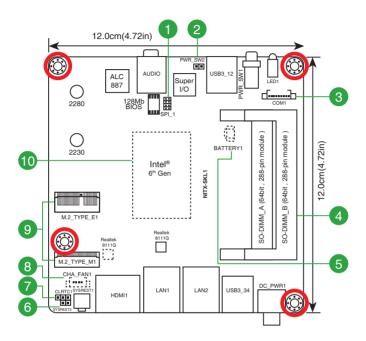
NANO-002F with fan

# **Chapter 3**

This chapter gives information about the motherboard that comes with the system. This chapter includes the motherboard layout, jumper settings, and connector locations.

# 3.1 Motherboard layout

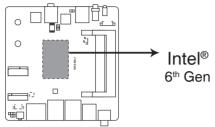
The NANO-002 system comes with a motherboard. This chapter provides technical information about the motherboard for future upgrades or system reconfiguration.



Connectors/Jumpers/Slots		
1.	BIOS programmable connector (8-pin SPI)	3-7
2.	Power header (2-pin PWR_SW2)	3-7
3.	Serial port connectors (10-1 pin COM1)	3-8
4.	SO-DIMM memory slots	3-4
5.	Battery connector (2-pin BATTERY1)	3-6
6.	Reset header (2-pin SYSREST2)	3-6
7.	Clear RTC RAM (CLRTC)	3-5
8.	Chassis fan connector (4-pin CHA_FAN1)	3-6
9.	M.2 Sockets	3-7
10.	CPU	3-3

# 3.2 Central Processing Unit (CPU)

This motherboard supports the 6th Generation Intel® Core™ i7-6600U / i5-6300U / i3-6100U Processor (FCBGA1168).

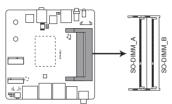


NITX-SKL1 CPU socket 6th Gen

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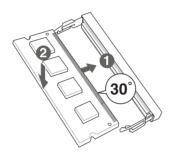
# 3.3 Installing a DIMM

This motherboard comes with two Double Data Rate 4 (DDR4) Small Outline Dual Inline Memory Module (SO-DIMM) sockets. The figure below illustrates the location of the DDR4 DIMM socket:

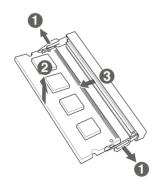


NITX-SKL1 288-pin DDR4 DIMM sockets

#### To install a DIMM



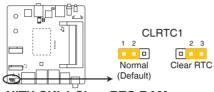
#### To remove a DIMM



# 3.4 Jumpers

## 1. Clear RTC RAM (3-pin CLRTC)

This jumper allows you to clear the Real Time Clock (RTC) RAM in CMOS. You can clear the CMOS memory of date, time, and system setup parameters by erasing the CMOS RTC RAM data. The button cell battery powers the RAM data in CMOS, which include system setup information such as system passwords.



**NITX-SKL1 Clear RTC RAM** 

#### To erase the RTC RAM:

- 1. Turn OFF the computer and unplug the power cord.
- 2. Move the jumper cap from pins 1-2 (default) to pins 2-3. Keep the cap on pins 2-3 for about 5-10 seconds, then move the cap back to pins 1-2.
- 3. Plug the power cord and turn ON the computer.
- Hold down the <Del> key during the boot process and enter BIOS setup to re-enter data.



Except when clearing the RTC RAM, never remove the cap on CLRTC jumper default position. Removing the cap will cause system boot failure!



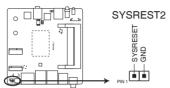
- If the steps above do not help, remove the onboard battery and move the jumper again to clear the CMOS RTC RAM data. After the CMOS clearance, reinstall the battery.
- You do not need to clear the RTC when the system hangs due to overclocking. For system failure due to overclocking, use the CPU Parameter Recall (C.P.R.) feature. Shut down and reboot the system, then the BIOS automatically resets parameter settings to default values.
- Due to the chipset limitation, AC power off is required before you use the C.P.R. function. You must turn off and on the power supply or unplug and plug the power cord before rebooting the system.

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# 3.5 Connectors

## 1. Reset connector (2-pin SYSREST2)

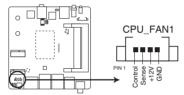
This 2-pin connector is for the chassis-mounted reset button for system reboot without turning off the system power.



NITX-SKL1 System reset connector

#### 2. Chassis fan connectors (4-pin CHA FAN1)

Connect the fan cables to the fan connectors on the motherboard, ensuring that the black wire of each cable matches the ground pin of the connector.



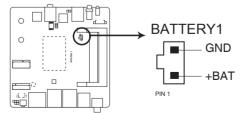
NITX-SKL1 Fan connector



**CAUTION:** Do not forget to connect the fan cables to the fan connectors. Insufficient air flow inside the system may damage the motherboard components. These are not jumpers! Do not place jumper caps on the fan connectors!

# 3. Battery connector (2-pin BATTERY1)

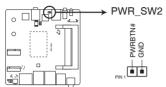
Connect the button cell battery to power the RAM data in CMOS, which include system setup information such as system passwords.



**NITX-SKL1 BATTERY connector** 

# 4. Power header (2-pin PWR\_SW2)

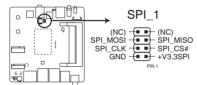
This connector is for the system power button.



NITX-SKL1 Power switch connector

# 5. BIOS programmable connector (8-pin SPI)

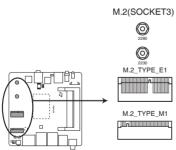
Use this connector to flash the BIOS ROM.



**NITX-SKL1 BIOS Programmable connector** 

#### 6. M.2 socket

This socket allows you to install an M.2 (NGFF) SSD module.

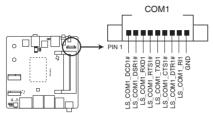


NITX-SKL1 M.2(SOCKET3)s

NANO-002 3-7

# 7. Serial port connector (10-1 pin COM1)

This connector is for serial (COM) ports. Connect the serial port module cable to this connector, then install the module to a slot opening at the back of the system chassis.



NITX-SKL1 Com port connector



NOTE: The COM module is purchased separately.

# **Chapter 4**

This chapter tells how to change system settings through the BIOS Setup menus and describes the BIOS parameters.

# **BIOS** setup

# 4.1 BIOS setup program

Use the BIOS Setup program to update the BIOS or configure its parameters. The BIOS screens include navigation keys and brief online help to guide you in using the BIOS Setup program.

# **Entering BIOS Setup at startup**

To enter BIOS Setup at startup:

Press < Delete > during the Power-On Self Test (POST). If you do not press < Delete >, POST continues with its routines.

# **Entering BIOS Setup after POST**

To enter BIOS Setup after POST:

- Press <Ctrl>+<Alt>+<Del> simultaneously.
- · Press the reset button on the system chassis.
- Press the power button to turn the system off then back on. Do this option only
  if you failed to enter BIOS Setup using the first two options.



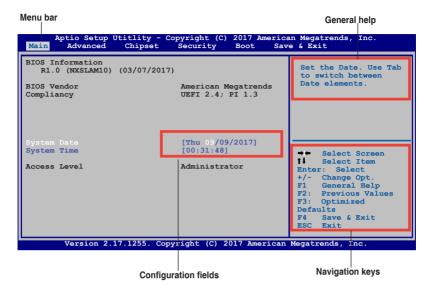
Using the **power button**, **reset button**, or the **<Ctrl>+<Alt>+<Del>** keys to force reset from a running operating system can cause damage to your data or system. We recommend to always shut down the system properly from the operating system.



#### IMPORTANT:

- The default BIOS settings for this motherboard apply to most working
  conditions and ensures optimal performance. If the system becomes
  unstable after changing any BIOS settings, load the default settings to
  regain system stability. Select the option Restore Defaults under the Save
  & Exit Menu. See section 4.7 Save & Exit Menu.
- The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.

# 4.1.1 BIOS menu screen



# 4.1.2 Menu bar

Main

Save & Exit

The menu bar on top of the screen has the following main items:

mann	Tot offariging the basis system configuration.
Advanced	For changing the advanced system settings.
Chipset	For viewing and changing chipset settings.
Boot	For changing the system boot configuration.
Security	For setting up BIOS security settings.

For changing the basic system configuration

To select an item on the menu bar, press the right or left arrow key on the keyboard until the desired item is highlighted.

For selecting the exit options and loading default settings.

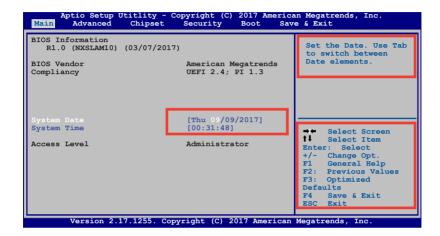
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# 4.2 Main menu

When you enter the BIOS Setup program, the **Main** menu screen appears, giving you an overview of the basic system information.



Refer to section **4.1.1 BIOS menu screen** for information on the menu screen items and how to navigate through them.



# 4.2.1 System Date [Day xx/xx/xxxx]

Allows you to set the system date.

# 4.2.2 System Time [xx:xx:xx]

Allows you to set the system time.

# 4.3 Advanced menu

The **Advanced** menu items allow you to change the settings for the CPU and other system devices.



Take caution when changing the settings of the Advanced menu items. Incorrect field values can cause the system to malfunction.



# 4.3.1 CPU Configuration

The items in this menu show the CPU-related information that the BIOS automatically detects.

## Hyper-threading [Enabled]

The Intel Hyper-Threading Technology allows a hyper-threading processor to appear as two logical processors to the operating system, allowing the operating system to schedule two threads or processes simultaneously.

[Enabled] Two threads per activated core are enabled.
[Disabled] Only one thread per activated core is enabled.

# Intel® Virtualization Technology [Disabled]

[Enabled] Allows a hardware platform to run multiple operating systems separately

and simultaneously, enabling one system to virtually function as several

systems.

[Disabled] Disables this function.

#### Turbo Mode [Enabled]

This item appears only when you set EIST to [Enabled] and allows you to automatically set the CPU cores to run faster than the base operating frequency when it is below the operating power, current and temperature specification limit. Configuration options: [Enabled] [Disabled]

# 4.3.2 SATA Configuration

While entering Setup, the BIOS automatically detects the presence of SATA devices. The SATA Port items show **Not Present** if no SATA device is installed to the corresponding SATA port.

# SATA Controller(s) [Enabled]

Enables or disables SATA devices. Configuration options: [Enabled] [Disabled]

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## **SATA Mode Selection [AHCI]**

Allows you to set the working mode of the SATA controller. Configuration options: [AHCI]

# 4.3.3 PCH-FW Configuration

#### **Firmware Update Configuration**

# Me FW Image Re-Flash [Disabled]

This item allows you to enable or disable Me FW Image Re-Flash function. Configuration options: [Disabled] [Enabled]

# 4.3.4 USB Configuration



The USB Devices item lists auto-detected values. If no USB device is detected, the item shows None.

# Legacy USB Support [Enabled]

[Enabled] Enables the support for USB devices on legacy operating

systems (OS).

[Disabled] USB devices are only available when running BIOS Setup.

[Auto] Allows the system to detect the presence of USB devices

at startup. If detected, the USB controller legacy mode is enabled. If no USB device is detected, the legacy USB support

is disabled.

#### 4.3.5 Hardware Monitor

#### **CPU Smart Fan Control [Disabled]**

Allows you to enable or disable CPU Smart Fan Function. Configuration options: [Enabled] [Disabled]

# 4.3.6 SIO Configuration

# [\*Active\*] Serial Port 2

#### Use this device [Enabled]

Allows you to enable or disable this logical device. Configuration options: [Enabled] [Disabled]



The following item appears only when you set **Use this device** to [Enabled].

#### Possible [Use Automatic Settings]

This item appears only when you set **Use this device** to [Enabled] and allows you to select an optimal setting for Super I/O devices. Configuration options: [Use Automatic Settings] [IO=2F8h; IRQ=3] [IO=3F8h; IRQ=4;]

# 4.3.7 Power Management

#### Power Mode [ATX Type]

Select power supply mode. Configuration options: [ATX Type] [AT Type]



The following items appear when you set Power Mode to [ATX Type].

#### Restore AC Power Loss [Always Off]

[Last State] The system goes into either off or on state, whatever the system

state was.

[Always On] The system goes into on state after an AC power loss.

[Always Off] The system goes into off state after an AC power loss.

# PCIe/RI Wake Event [Disabled]

Allows you to enable or disable PCIe/RI Wake Event.Configuration options: [Enabled] [Disabled]

# RTC Wake system from S5 [Disabled]

[Disabled] Disables system wake up from S5.

[Fixed Time] The system will wake up at the specified hr::min::sec.

Configuration options: [Disabled] [Enabled] .

[Dynamic Time] The system will wake up at the current time plus a specified

number of minutes.



The following items appear when Fixed Time is enabled.

#### Wake up day/hour/minute/second [0]

Specify the values for day/hour/minute/second.



The following item appears when Wake System with Dynamic Time is enabled.

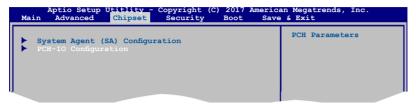
#### Wake up minute increase [1]

Specify the number of minutes added to the current time before waking up system. Input value range: [1~5]

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# 4.4 Chipset Menu

The **Chipset** menu allows you to change the advanced chipset settings. Select an item then press **<Enter>** to display the submenu.



# 4.4.1 System Agent (SA) Configuration

## Max TOLUD [Dynamic]

Configures the maximum value of TOLUD. Dynamic assignment will adjust TOLUD automatically based on the largest MMIP length of installed graphics controller. Configuration options: [Dynamic] [1GB] [1.25GB] ~ [3.25GB]

#### **Graphics Configuration**

#### Primary IGFX Boot Display [VBIOS Default]

Select the video device which will be activated during POST. This setting has no effect if an external graphics device is present. The secondary boot display selection appears based on your selection and the VGA mode is supported only on primary display. Configuration options: [VBIOS Default] [HDMI1] [HDMI2]

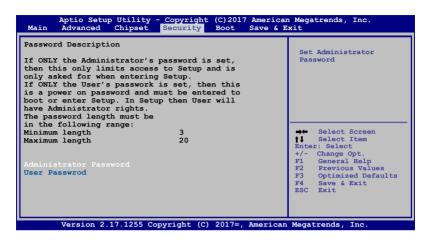
# 4.4.2 PCH-IO Configuration

# HD Audio [Auto]

This item controls the detection of HD Audio devices. Configuration options: [Auto] [Disabled] [Enabled]

# 4.5 Security menu

The Security menu items allow you to change the system security settings.



#### **Administrator Password**

If you have set an administrator password, we recommend that you enter the administrator password for accessing the system. Otherwise, you might be able to see or change only selected fields in the BIOS setup program.

#### To set an administrator password:



- If you have forgotten your BIOS password, erase the CMOS Real Time Clock (RTC) RAM to clear the BIOS password.
- The Administrator or User Password items on top of the screen show the default Not Installed. After you set a password, these items show Installed.
- 1. Select the **Administrator Password** item and press <Enter>.
- From the Create New Password box, key in a password, then press <Enter>.
- Confirm the password when prompted.

#### To change an administrator password:

- Select the Administrator Password item and press < Enter>.
- From the Enter Current Password box, key in the current password, then press <Enter>.
- From the Create New Password box, key in a new password, then press <Enter>.

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4. Confirm the password when prompted.

To clear the administrator password, follow the same steps as in changing an administrator password, but press <Enter> when prompted to create/confirm the password. After you clear the password, the **Administrator Password** item on top of the screen shows **Not Installed**.

#### **User Password**

If you have set a user password, you must enter the user password for accessing the system. The **User Password** item on top of the screen shows the default **Not Installed**. After you set a password, this item shows **Installed**.

#### To set a user password:

- 1. Select the **User Password** item and press <Enter>.
- From the Create New Password box, key in a password, then press <Enter>.
- 3. Confirm the password when prompted.

#### To change a user password:

- 1. Select the **User Password** item and press <Enter>.
- From the Enter Current Password box, key in the current password, then press <Enter>.
- From the Create New Password box, key in a new password, then press <Enter>.
- 4. Confirm the password when prompted.

To clear the user password, follow the same steps as in changing a user password, but press <Enter> when prompted to create/confirm the password. After you clear the password, the **User Password** item on top of the screen shows **Not Installed** 

# 4.6 Boot Menu

The Boot menu items allow you to change the system boot options.



# **Boot Configuration**

#### Quiet Boot [Enabled]

This item enables/disables Quiet Boot. Configuration options: [Disabled] [Enabled]

#### **Boot Option Priorities**

These items specify the boot device priority sequence from the available devices. The number of device items that appears on the screen depends on the number of devices installed in the system.



- To select the boot device during system startup, press <F7> during POST.
- To access Windows OS in Safe Mode, do any of the following:
  - Press <F5> during POST.
  - Press <F8> after POST.

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# 4.7 Save & Exit menu

The Save & Exit menu items allow you to load the optimal default values for the BIOS items, and save or discard your changes to the BIOS items.



#### Save Changes and Reset

Once you are finished making your selections, choose this option from the Save & Exit menu to ensure the values you selected are saved. When you select this option or if you press <F4>, a confirmation window appears. Select Yes to save changes and reset.

#### Discard Changes and Exit

This option allows you to reset the system without saving your changes. When you select this option or if you press <Esc>, a confirmation window appears. Select Yes to discard changes and reset.

#### **Restore Defaults**

This option allows you to restore the default values for each of the parameters on the Setup menus. When you select this option or if you press <F3>, a confirmation window appears. Select Yes to load the default values.