User Manual

GK7CN6S

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The illustrations in this user’s manual are for reference only. Actual product specifications may vary with territories.

The information in this user’s manual is subject to change without notice.

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Chapter 1

Preface

1.1 Regulations Information

¤ CE compliance

This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU-guidelines:

- EMC Directive 2014/30/EU,

- Low Voltage Directive 2014/35/EU(equals A2 : 2013) ,

- R&TTE Directive 1999/5/EC

The unit can be operated at an ambient temperature of max. 35°C (95°F). Do not subject it to temperatures below 5°C (41°F) or above 40°C (104 °F).

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

PREVENTION OF HEARING LOSS

CAUTION: Listening to music at high volume levels and for extended durations can damage one's hearing. In order to reduce the risk of damage to hearing, one should lower the volume to a safe, comfortable level, and reduce the amount of time listening at high levels. Headsets should comply with EN 50332-2 requirements.

FCC (SAR) Information

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/eot/ea/fccid after searching on FCC ID: 2AKHF9560NG

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.

CAUTION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

1.2 Safety Instructions

1. Do not apply heavy pressure to the computer or subject it to any form of strong impact as this can damage the computer's components or otherwise cause it to malfunction.

2. Never cover or block the air vents including those located at the base of the computer. Never cover your computer or AC adapter with any object.

3. To keep your computer in prime operating condition, protect your work area from direct sunlight.

4. Do NOT expose to or use near liquid, rain, or moisture.
   Do NOT use the modem during electrical storms.

5. Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.

1.3 Conventions for this Manual

CAUTION : This message contains important information that must be followed for safe operation.

NOTE : This message contains information for special situations.

1.4 Release History

Version	Date	Revision
1.0	07/2018	Initial release

Chapter 2

Getting to know the basics

2.1 Product Specification

This User's Manual provides technical information of instructions and illustrations on how to operate this notebook for the customer. Please read this manual carefully before using this notebook.

· Physical Characteristic

■ Dimension

395.7*260.8* 27.45mm

2.5kg +/- 5%

· CPU

■ Support Processor

CFL-H (Intel the 8th generation Coffee Lake H series)

· GPU

■ Support Processor

NVIDIA GTX 1060, 192bits

· Memory

■ RAM

DDR4 2666 MHz

· I/O Port

DC-in	x 1
USB	USB 3.1 X 2 (Gen1)
	USB type C 3.1 X 1 (Gen1)
	USB 2.0 X 1
RJ45	x 1
Card Reader	x 1 (2 in 1 Card reader-support MMC/SD/SDHC/SDXC card)
HDMI	x 1
Audio out & Mic in	x 2
Mini DP	x 2

· Audio

■ Audio Codec

Azalia standard support, D3 mode support

■ Speaker/MIC

1.Build-in 2 speakers (Optional :Woofer)

*Speaker : 2W/each

*Woofer : 2W/each

2.Digitial Microphone support

· Input

■ Keyboard

Mechanical KB with RGB backlight support,

■ Pointing Device

Touch pad 130.0*72.5mm +/- 0.15mm

· Display

■ LCD

17.3" Narrow border, FHD, 16:9, 144Hz or 60Hz

· Communication Port

■ LAN

*Supports 10/100/1000 Mb/Sec
*DSM (Deep sleep mode) support

■ Wireless LAN

*IEEE802.11b/g/n support; AC mode support

· Webcam

■ IR Camera or HD webcam (Optional)

IR Camera w/ D-MIC*2

HD Camera w/ D-MIC*1

· Storage

■ HDD

7mm height ; 2.5"; SATA

■ SSD:

*2 Slots

*M.2 2280,PCIE/SATA

SATA+PCIE3.0 X4 or X2(support NVMe)

PCIE 3.0 X4 or X2(support NVMe)

*RAID 0/1 Support

· Power

■ AC Adapter

Automatics Voltage adjustment between 100 and 240V AC 50/60Hz,
180 Watts (19.5V/9.23A), 3 Pins

■ Battery

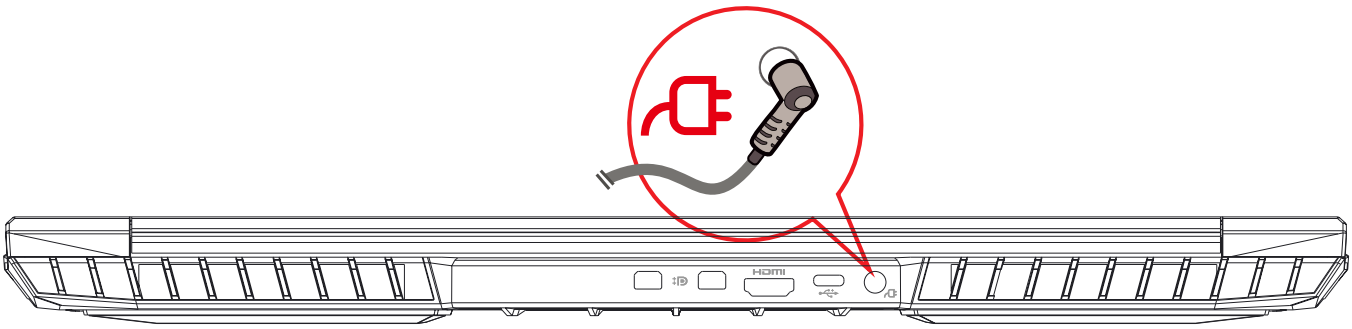
Li- polymer Battery, SW Gas Gauge IC, soft pack,

3 cells (3S1P 4100mAh) 46.74 Wh
4 cells (4S1P 4100mAh) 62.32 Wh (Optional)

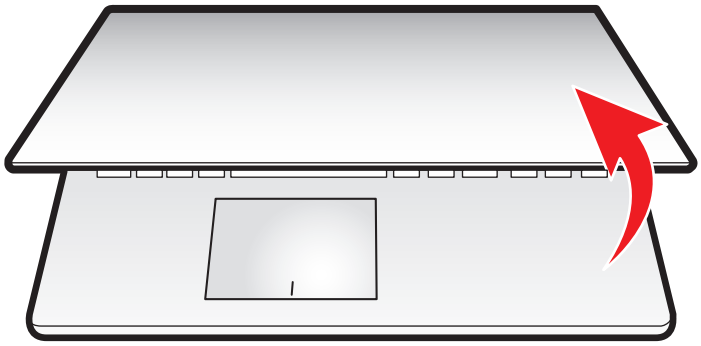
CAUTION: MODEL IS DESIGNED TO USE WITH THE DC INPUT:
19.5V/9.23A

2.2 Preparing your Computer

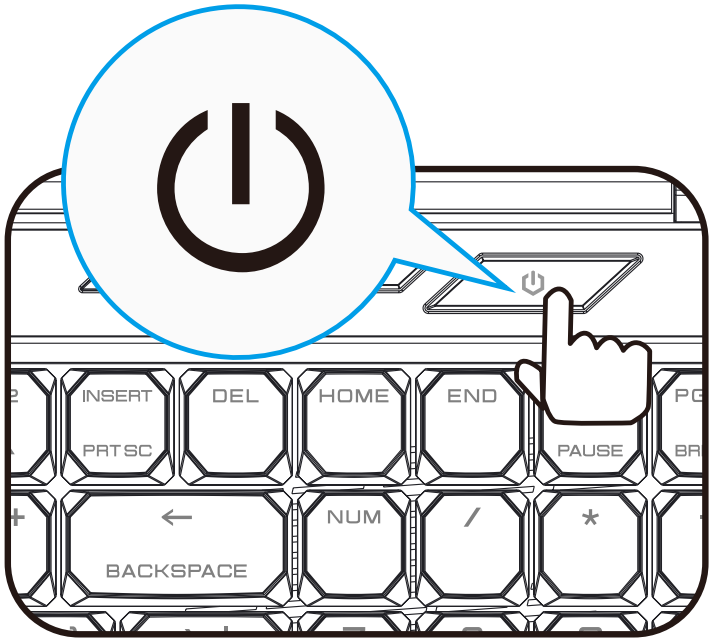
A Connect the AC adapter's DC output plug to the DC IN jack.



B The display panel can be opened to a wide range of angles for optimal viewing.



C Press the power button to turn on your notebook computer.

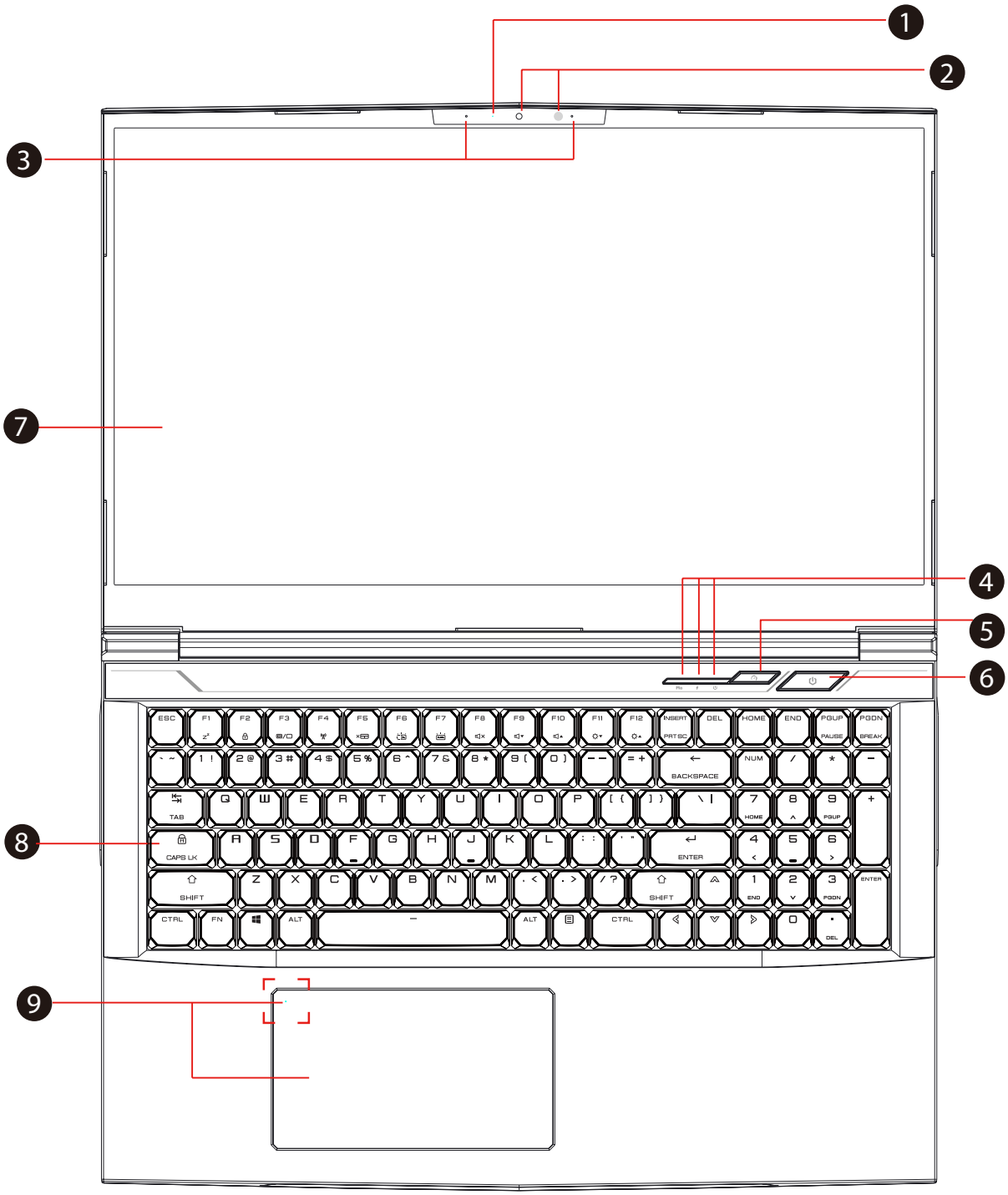


2.3 Product Overview

Please become familiar with each component before you operate the computer.

Top-Open View

NOTE: The product's color/ LED color, I/O port, indicator location, and specification will depend upon the actually shipping product.



1 **Camera Status LED**

The Camera Status LED shows the Camera status.

2 **Optional**

Camera ◯

A device that allows you to record video or take photographs with your computer.

Infrared capability for facial reconition camera

can be used to identify and authenticate user to unlock notebook, conduct payment and other security functions.

3 **Microphone**

Built-in microphone.

4 **Caps Lock Status LED**

Default: ON (Red)

Charging & Battery indicator

Charging(Power ON): Red

Charging(Power Off): Red

Battery Low (<6%): Red (3 Sec/Cycle)

Charging finish: Off

Power off: OFF

Power indicator

Power ON: Red

Suspend: Red, Slow / Smooth, Blinking (3Sec/Cycle)

Power Off: OFF

CAUTION:When you are not using the computer, keep the LCD-screen closed to protect it from dust.

5 **Office/Game Mode Switch**

On screen display

6 **Power Button**

Press this button to turn the computer's power on or off.

7 **LCD screen**

Displays of your notebook computer.

8 **Keyboard**

Mechanical keyboard

(The keyboard legend will depend on the spec / region)

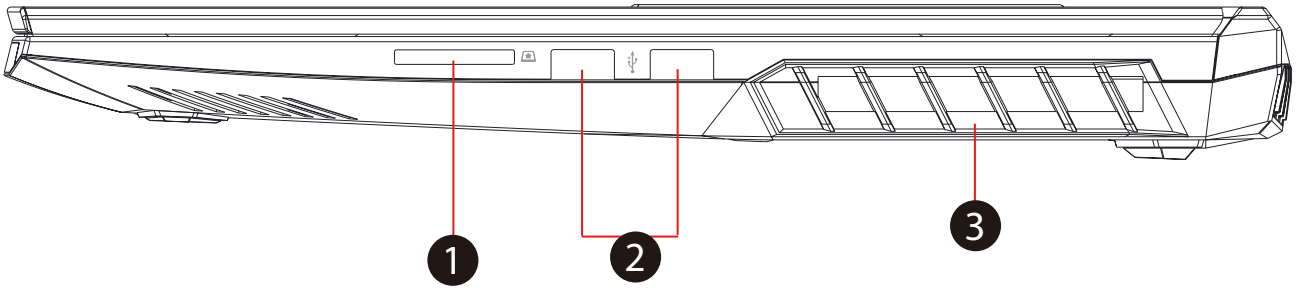
9 **Touchpad/Click pad**

Touch-sensitive pointing device which functions like the mouse.

Touchpad LED indicator/ Touchpad switch

(Please refer to P31)

Right Side View



1 **2 in 1 Card Reader**

Insert Memory Card.

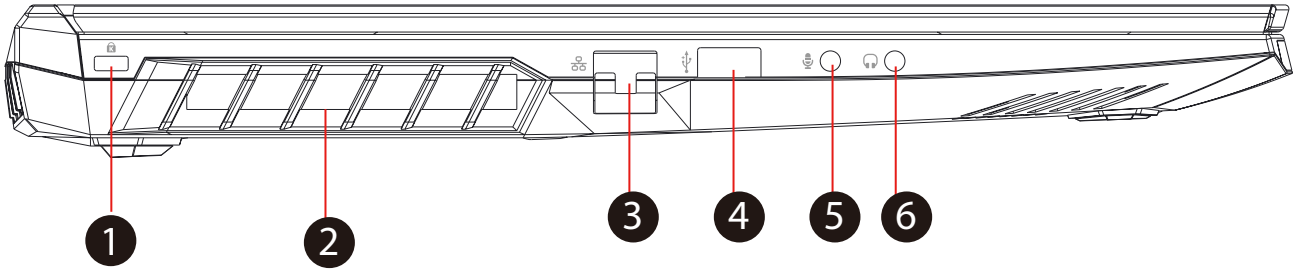
2 **USB Ports**

Connects an USB device.
(such as USB Zip drive, keyboard or mouse) into this jack.

3 **Vents**

The thermal vents are designed to cool the internal components and avoid overheating.

Left Side View



1 **Kensington® Lock Port**

To be secured using Kensington® Lock Port security products.

2 **Vents**

The thermal vents are designed to cool the internal components and avoid overheating.

3 **Network Jack**

This jack lets you connect to a LAN.

4 **USB Ports**

Connects an USB device.
(such as USB Zip drive, keyboard or mouse) into this jack.

5 **Mic In Jack**

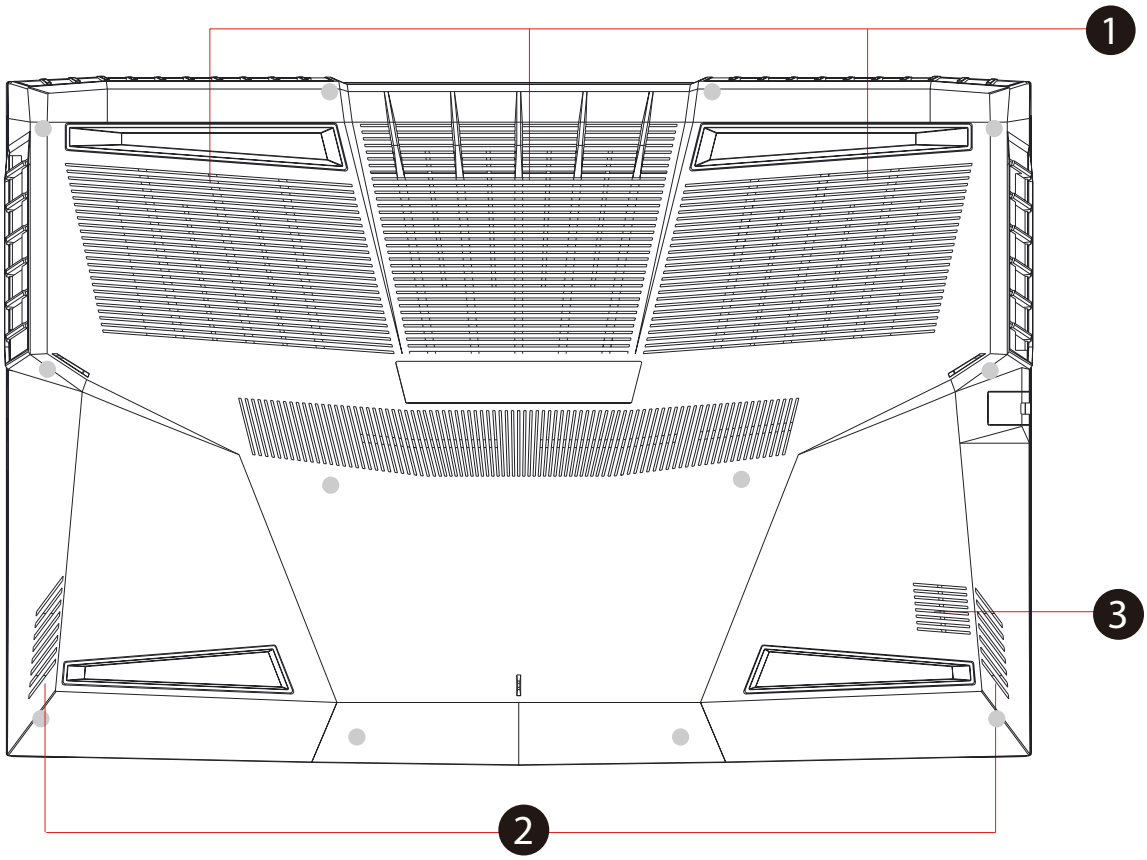
Connects amplified speakers, headphones or microphone into this jack.

6 **Audio Out Jack**

Connects amplified speakers, headphones or microphone into this jack.

Bottom Side View

NOTE : The product's thermal vent will depend upon the actually shipping product.



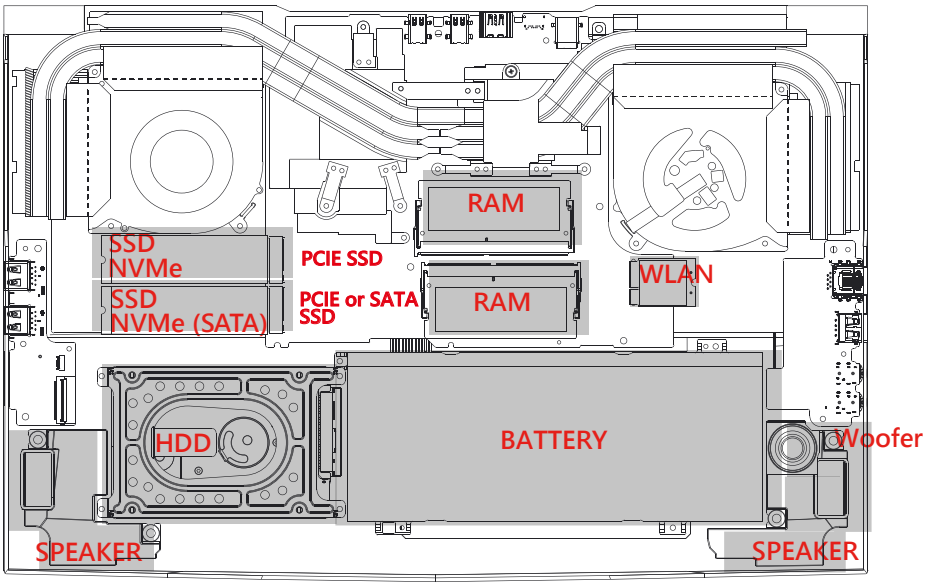
1 Vents

The thermal vents are designed to cool the internal components and avoid overheating.

2 Speaker

3 Woofer

HDD / RAM / SSD / WLAN Compartment View



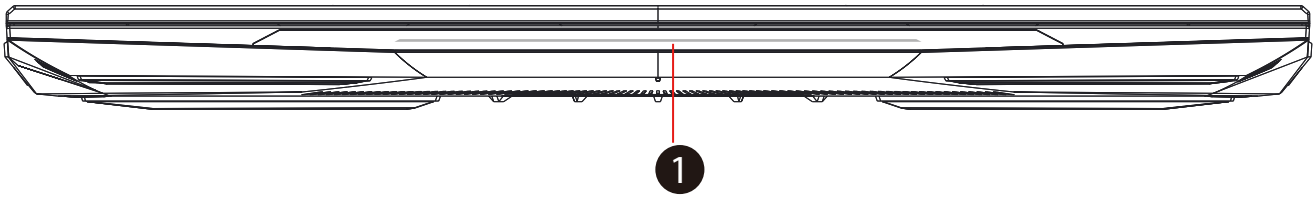
3S1P

If need to upgrade SATA SSD to PCIE SSD,

Please contact technical support and after-sales service .

CAUTION: Do not put the computer on your LAP or other Parts of the body to avoid injury from the heat.

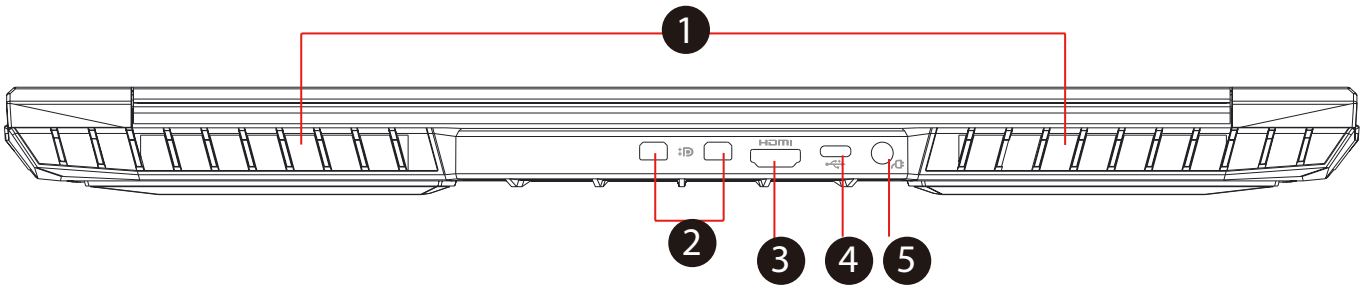
Front Side View



1 Light bar

Light bar Choose from APP

Back Side View



1 **Vents**

The thermal vents are designed to cool the internal components and avoid overheating.

2 **Mini Display Port**

Supports high-definition digital video connections.

3 **HDMI port**

Connected to the screen, or home theater system.

4 **USB Port (USB Type C)**

Connects an USB device (such as USB Zip drive, keyboard or mouse) into this jack. With charging function.

5 **Power Connector**

Connects the AC adapter into this connector.

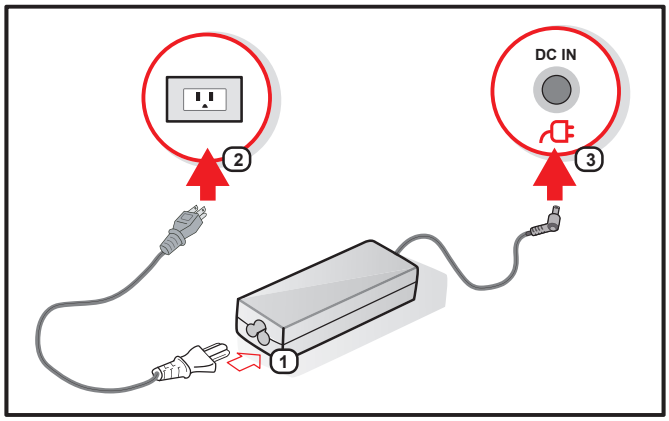
Chapter 3

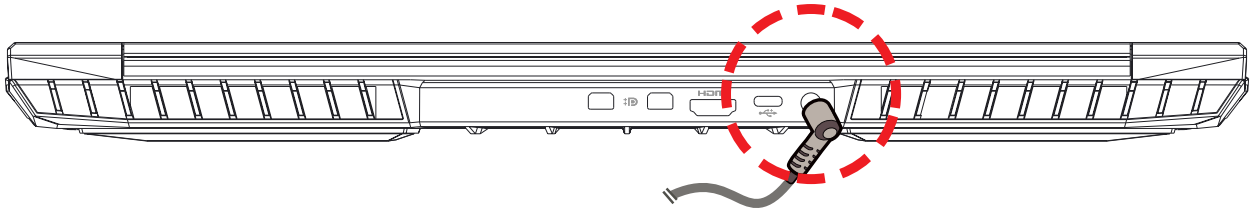
Getting started

3.1 AC Adapter

Please be noted that it is strongly recommended to connect the AC adapter and use the AC power while using this notebook for the first time. When the AC adapter is connected, the battery is being charged immediately. Attach the AC adapter when you need to charge the battery or you want to operate from AC power. It is also the fastest way to get started, because the battery pack will need to be charged before you can operate from battery power.

Note that the AC adapter included in the package is approved for your notebook; using other adapter model may damage either the notebook or other devices attached to it.





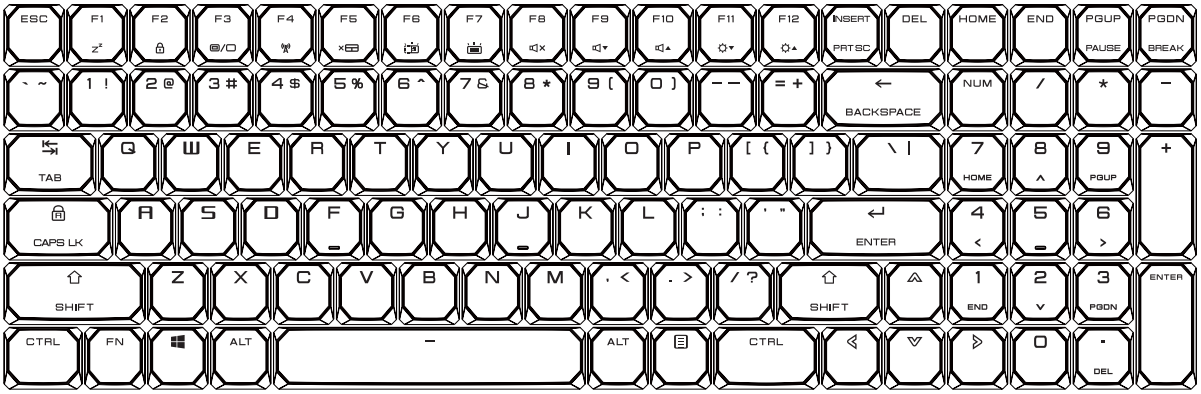
CAUTION: The use of inferior extension cords may result in damage to your notebook. Your notebook comes with its own authorized AC adapter. Use of a different AC adapter or cable extension which is not authorized for use will void warranty protection if damage to hardware is found in association to said adapter or extension cable.

NOTE: The power adapter can become hot when in use. Please be sure the AC adapter is not covered with any materials keep it away from exposed parts of your body. The AC adapter appearance may vary depending on your region.

3.2 Knowing the Keyboard

The following defines the colored hot keys on the Keyboard.

The colored commands can only be accessed by first pressing and holding the function key while pressing a key with a colored command.



NOTE: The number of keys available on your keyboard will depend on the country/region in which the keyboard was designed and built.

3.2.1 For keyboard users

To activate these functions, press the hot key associated with the desired function as below :

Function Keys

Keypad	Function Description
Fn + F1 Suspend:	Press this key combination (Fn+F1) to enter sleep mode.
Fn + F2 Windows Lock/On:	Press this key combination (Fn+F2) to turn Windows Lock/On .
Fn + F3 Display mode:	Press this key combination (Fn+F3) to enable Display Mode.
Fn + F4 RADIO On/Off:	Press this key combination (Fn+F4) to turn all radios on or off.
Fn + F5 Touch pad On/Off:	Press this key combination (Fn+F5) to On/Off Touch pad mode.

Function Keys

Keypad	Function Description
Fn + F6 Keyboard Brightness down:	Press this key combination (Fn+F6) to decrease brightness of Keyboard.
Fn + F7 Keyboard Brightness up:	Press this key combination (Fn+F7) to increase brightness of Keyboard.
Fn + F8 MUTE:	Press this key combination (Fn+F8) to enter MUTE mode.
Fn + F9 Volume down:	Press this key combination (Fn+F9) to enter Volume down mode.
Fn + F10 Volume up:	Press this key combination (Fn+F10) to enter Volume up mode.
Fn + F11 Brightness down:	Press this key combination (Fn+F11) to decrease brightness of LCD display.
Fn + F12 Brightness up:	Press this key combination (Fn+F12) to increase brightness of LCD display.

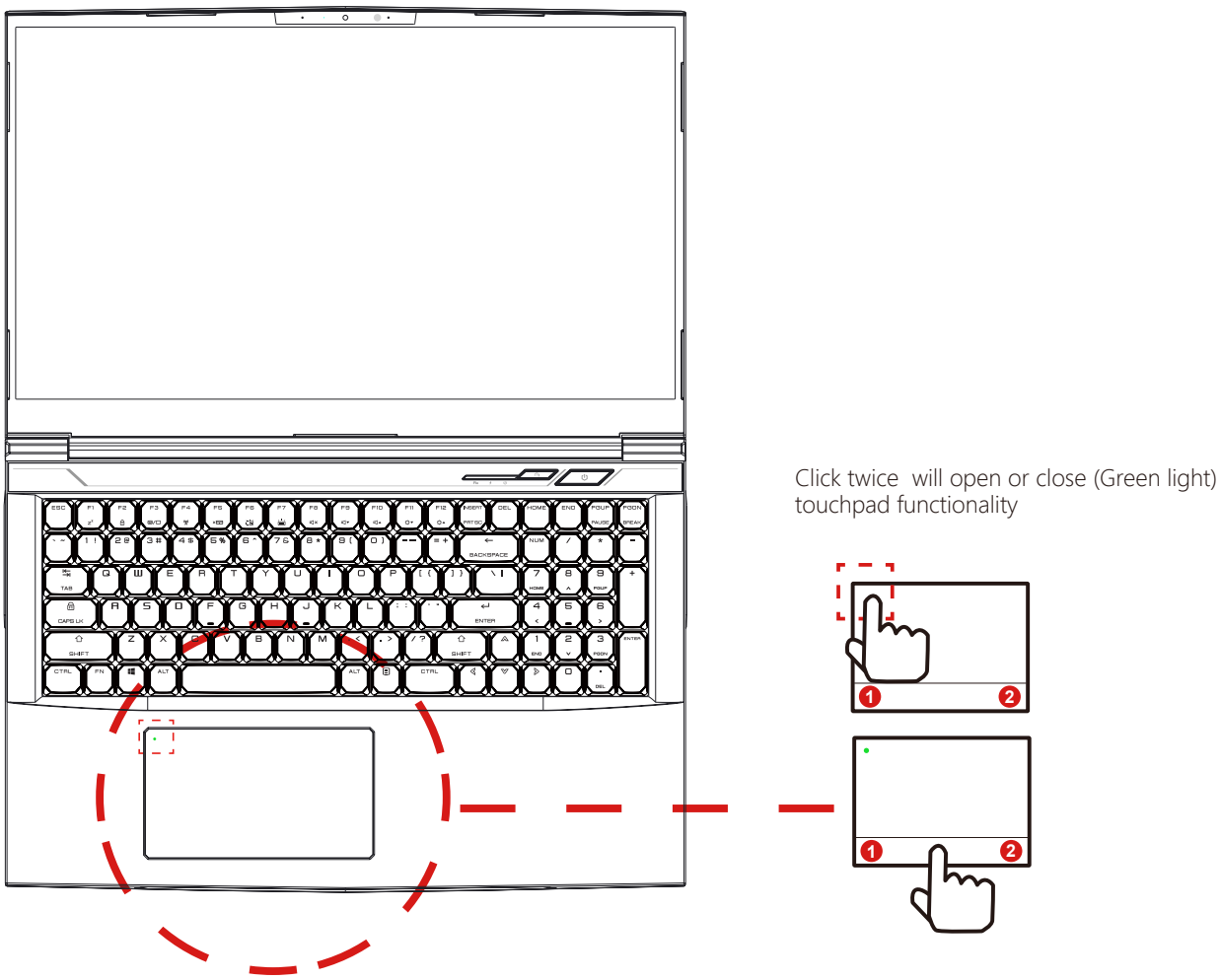
Function Keys

Keypad	Function Description
+ Q Search Charm : (Optional)	Press this key combination (Windows logo key+Q) to open the search charm and search apps.
+ I Settings Charm : (Optional)	Press this key combination (Windows logo key+I) to open the settings charm.
+ H Share Charm : (Optional)	Press this key combination (Windows logo key+H) to open the share charm.
+ K Devices Charm : (Optional)	Press this key combination (Windows logo key+K) to open the devices charm.

3.3 Using the touchpad / clickpad

The touchpad / clickpad is a rectangular electronic panel located just below your keyboard. Click twice left corner will open or close (Green light) touchpad functionality.You can use the static-sensitive panel of the touchpad / clickpad and slide it to move the cursor. You can use the buttons below the touchpad as left and right mouse buttons.

Press the left ❶ and right ❷ buttons located on the edge of the touchpad / clickpad to make selections and run functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad / clickpad produces similar results.



Chapter 4

BIOS setup

4.1 About BIOS Setup

4.1.1 When to Use BIOS Setup ?

You may need to run the BIOS Setup when:

- An error message appears on the screen during the system booting up and is requested to run SETUP.
- You want to change the default settings for customized features.
- You want to reload the default BIOS settings.

4.1.2 How to Run BIOS Setup ?

To run the BIOS Setup Utility, turn on the notebook and press the [Del] key during the POST procedure.

If the message disappears before you respond and you still wish to enter Setup, either restart the system by turning it OFF and ON, or simultaneously pressing [Ctrl]+[Alt]+[Del] keys to restart.

Be noted that the screen snaps and setting options in this chapter are for your references only.The actual setting screens and options on your Notebook may be different because of BIOS update.

The setup function only can be invoked by pressing [Del] or [F2] key during POST that provide a approach to change some setting and configuration the user prefer, and the changed values will save in the NVRAM and will take effect after the system rebooted. The setup uses a menu interface to allow the user to configure their system and the features are briefly listed as follow.

Press [F7] key for Boot Menu.

NOTE : The drivers, BIOS and utilities bundled in the support DVD may vary by models and are subject to change without notice.

4.2 BIOS Setup Menu

Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. Select the tags to enter the other menus.

Main Menu

Show system overview about memory size, main HDD or ODD and setting of system time and date.

Advanced Menu

To select the XD feature enable or disable XD feature only work with Intel platform + Windows.

Security Menu

Install or clear the password settings for supervisor and user.

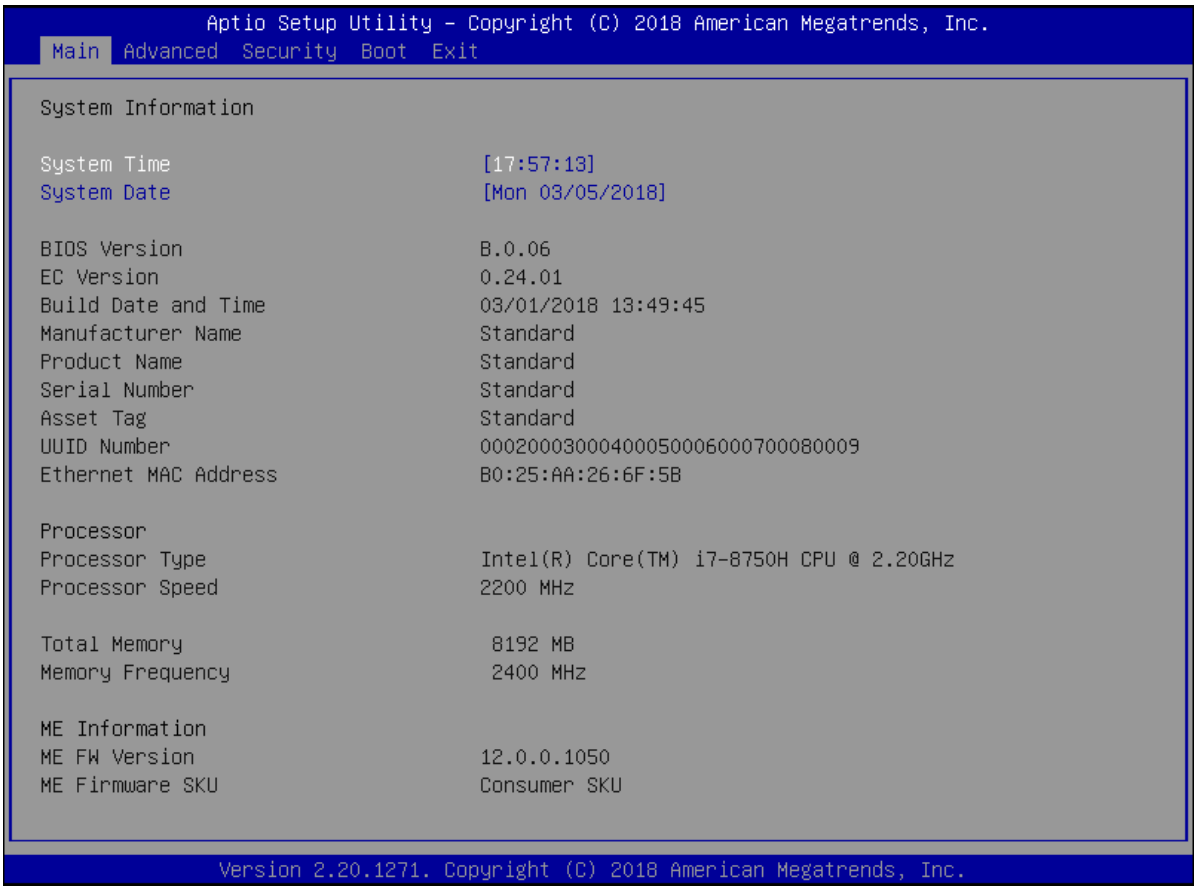
Boot Menu

Configure Settings during System Boot.

EXIT Menu

Save or discard the changes before leaving the BIOS Setup Menu.

4.2.1 Main Menu



· System Time

This item allows you to set the system time. There is a small internal (CMOS) battery which is designed to maintain your system clock. It is designed to maintain time even when the PC is powered down or in sleep mode. The time format is [hour:minute:second].

Use [+] or [-] to configure system Time.

· System Date

This item allows you to set the system date. The date format is [day:month:date:year].

Use [ENTER], [TAB] or [SHIFT-TAB] to select a field.

Day	Day of the week, from Sun to Sat, which is determined by BIOS (read-only).
Month (Month)	The month from 01 (January) to 12 (December).
Date (Date)	The date from 01 to 31.
Year (Year)	The year can be adjusted by users.

· Total Memory

This allows you to see the total amount of memory.

4.2.2 Advanced Menu

```
Aptio Setup Utility - Copyright (C) 2016 American Megatrends, Inc.
Main  Advanced  Security  Boot  Exit

Advanced Setting                                  If select UEFI OS,it will
                                                  support UEFI Mode compatible
OS Support                        [UEFI OS]       OS, otherwise, when select
Wake on LAN                       [Enabled]       Legacy OS, it can support
Cold Boot Keep Devices Status     [Enabled]       Legacy mode OS

SATA Device
SATA Mode Selection               [AHCI]
Serial ATA Port 0                 Empty
Serial ATA Port 1                 Empty
Serial ATA Port 2                 Empty
Serial ATA Port 3                 Empty

NVMe Device                                       →←: Select Screen
NVMe Controller 1                 Empty           ↑↓: Select Item
NVMe Controller 2                 Empty           Enter: Select
                                                  +/-: Change Opt.
Intel Virtualization Technology   [Enabled]       F1: General Help
                                                  F2: Previous Values
                                                  F3: Optimized Defaults
                                                  F4: Save & Exit
                                                  ESC: Exit

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```

- Wake on LAN

Enable/Disable

integrated LAN to wake the system.

- Serial ATA HDD

It will show AHCI SATA HDD info.

· NVMe Device

It will show NVMe Device info.

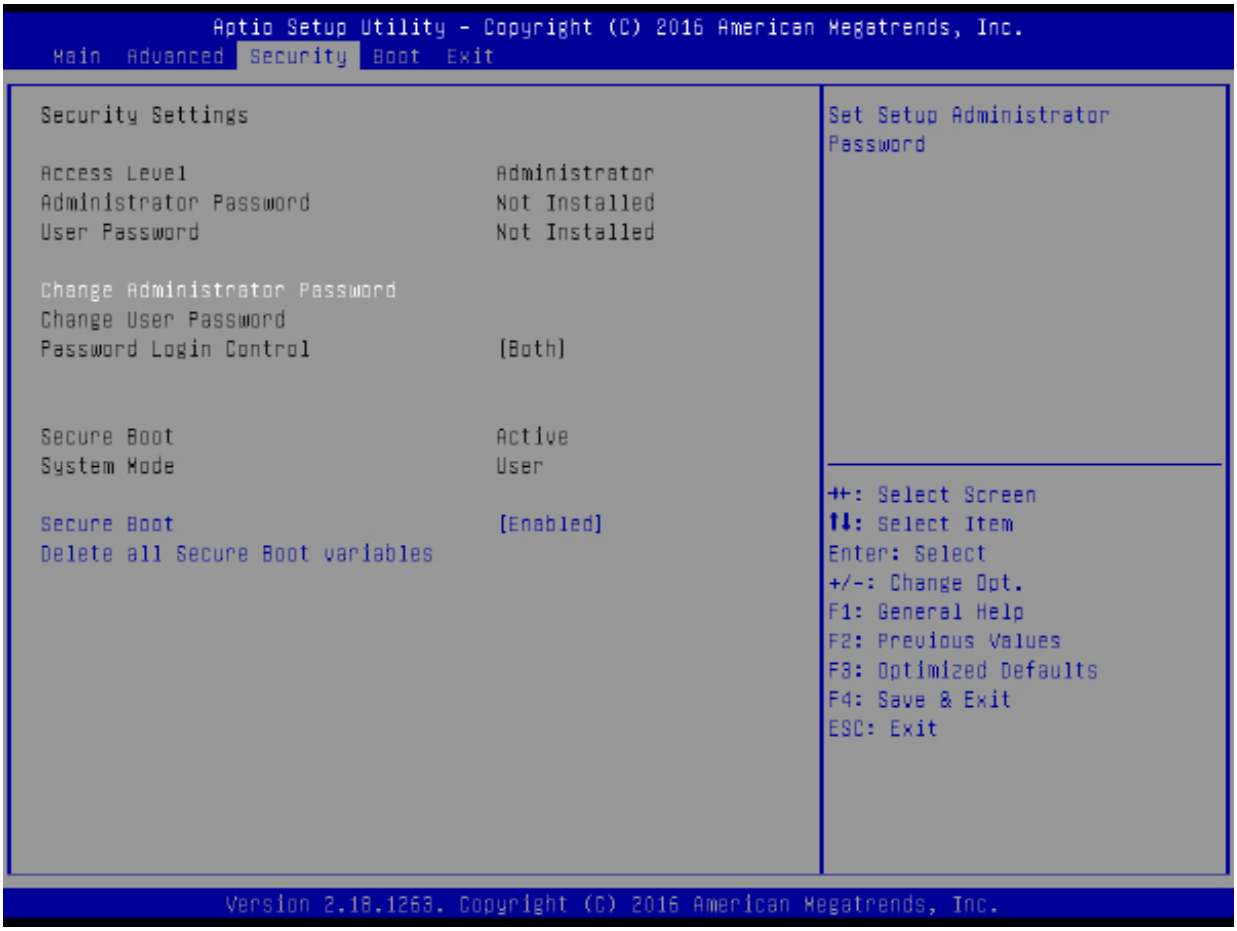
· Intel Virtualization Technology

When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

· RAID mode reminder

Please update strip size in BIOS to 128K in order for RAID to optimize performance.

4.2.3 Security Menu



· Change Administrator Password

When this item is selected, a message box shall appear on the screen as below:

Enter New Password

Type a maximum of 20-digit password and press [Enter].

The password typed now will replace any previously set password from CMOS memory. You may also press [ESC] to abandon new password setting. It is extremely important to keep record for any BIOS password which is set as it can not be reset even with the removal of a CMOS battery for the security of your PC.

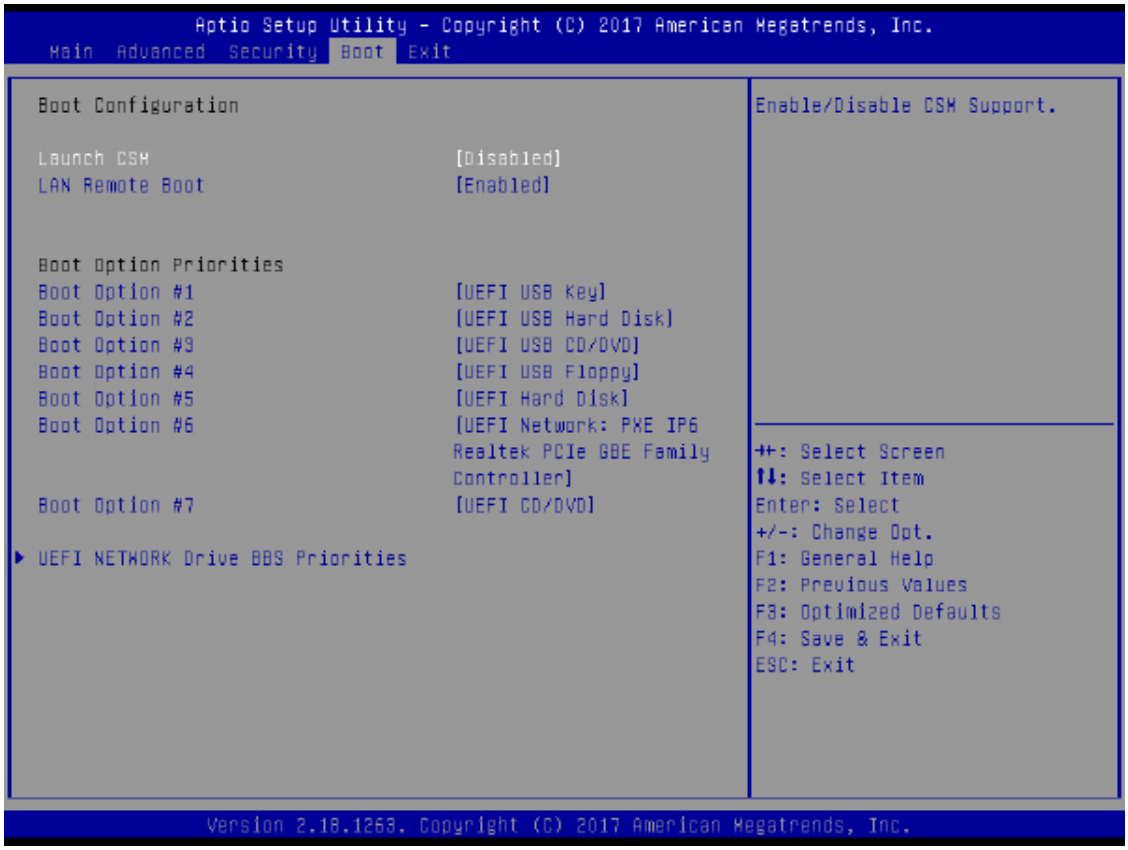
Select Change User Password to give or to abandon password setting same as Change Administrator Password item above.

Note that Administrator Password field allows users to enter and change the settings of the BIOS SETUP UTILITY, while User Password field only allows users to enter the BIOS SETUP UTILITY without having the authorization to make any change.

The Password Check item is used to specify the type of BIOS password protection that is implemented.

To clear a set Administrator Password/ User Password, just press [Enter] under Change Administrator Password/ Change User Password field when you are prompted to enter the password. A message box will pop up confirming password will be disabled. Once the password is disabled, the system will boot and user can enter setup without entering password.

4.2.4 Boot Menu



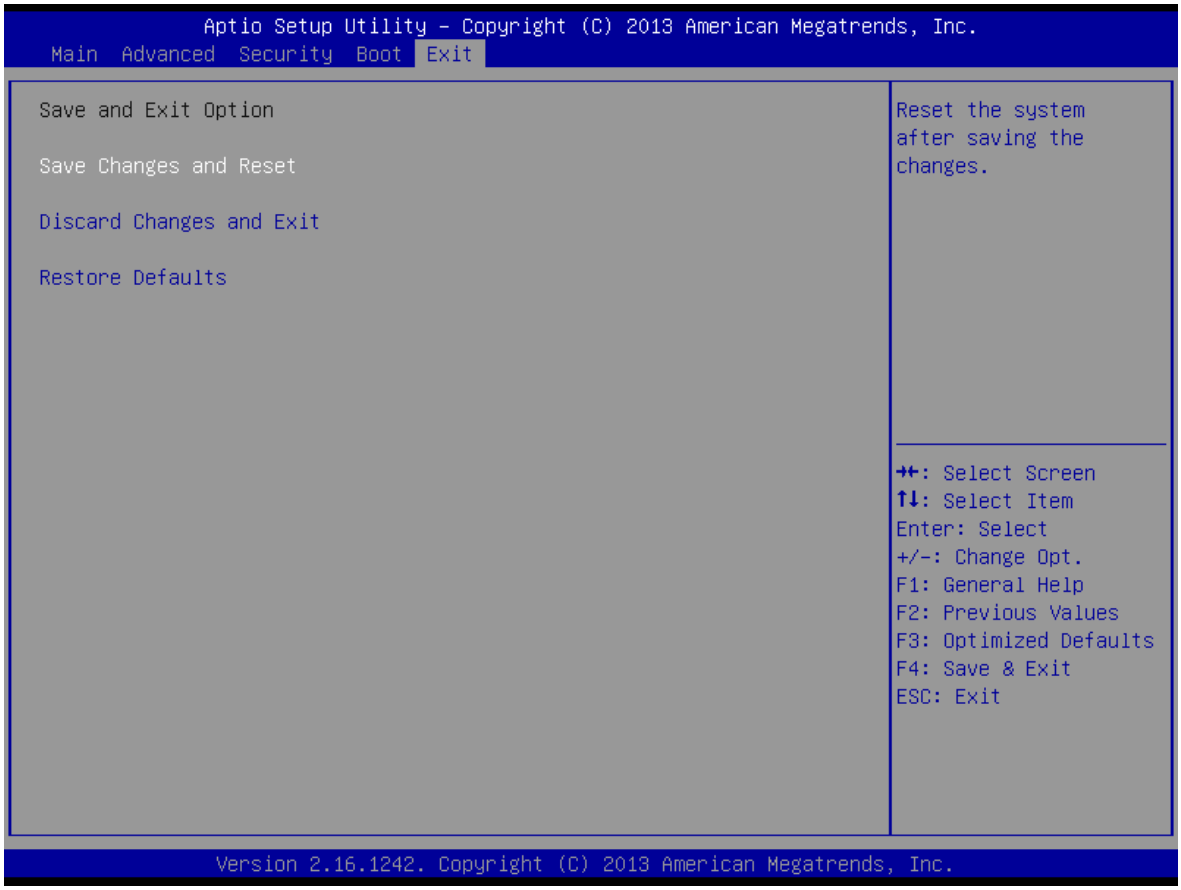
· Boot Configuration
  Configure Settings during System Boot.

· LAN Remote Boot [Disable]: Boot from LAN or not.

· Set Boot Priority (1st/2nd/3rd/..... Boot)
  Specifies the boot sequence from the available devices.
  A device enclosed in parenthesis has been disabled in the corresponding type menu.

· Hard Disk Drive / USB HardDisk Drive
  Specifies the Boot Device Priority sequence.

4.2.5 Exit Menu



· Save Changes and Reset

Exit system setup after saving the changes.F4 key can be used for this operation.

· Discard Changes and Exit

Exit system setup without saving any changes.
ESC key can be used for this operation.

· Restore Defaults

Restore/Load Defaults values for all the setup options.
F3 key can be used for this operation.