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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) ,
- RF Directive 2014/53/EU

SAR/DAS refers to the rate at which the body absorbs RF energy. The SAR limit set by the ICNIRP Guidelines is 2.0 W/kg(10g).

Testing for SAR is conducted using standard operating positions accepted by the EN standard.
During testing, the radio is set to its highest transmission levels and placed in positions that simulate use against the body.

This product is compliant with ICNIRP Guidelines with respect to Electromagnetic Fields (EMF) which specifies a Specific Absorption Rate (SAR) limit of 2W/kg. DAS*/SAR: 0.96W/kg (corps/body)
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 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.

CAUTION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.
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: 2AKHFA2X201NG.

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

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>11/2021</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
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**
    - 308.8 x 213 x 13.6~15.6mm
    - WUXGA: 1090g +2%
    - WQXGA: 1133g +2%

- **CPU**
  - **Support Processor**
    - ADL-P (modern standby supported)

- **GPU**
  - **Support Processor**
    - Nvidia GN20-P0/P1 (Only for PH4AQE1 and PH4AQP1)

- **Memory**
  - **RAM**
    - DDR4 3200MHz

- **Display**
  - **LCD**
    - 14" Narrow, WQXGA, 16:10, 90Hz
    - 2880*1800
**· I/O Port**

DC-in x 1
USB
  USB Type Ax2
  Right: (Gen1)x1 (Power off mode support USB power, & w/bc1.2 protocol )
  Left:  (Gen1)x1
  USB Type CX2:
  Right: TBT4 (only w/ 5V@3A output ) +W Type-C Adaptor(40W~100W)
  Left: USB3.1 gen2 /W Type-C Adaptor /w DP 1.4
HDMI x 1
Audio Combo x 1
Card reader x 1 -USB3 interface, SD/SDHC/SDXC, UHS-I speed
  -Connector: Full SD size

**· Audio**

- Audio Codec Realtek ALC256 (Co-lay ALC256&256M, reserve design for EVO)
  Azalia standard support,
  D3 mode support
- Speaker/MIC
  Build-in 2 speakers
  Speaker : 2W/each
  Digital Microphone support
· Webcam

- Infrared capability for facial recognition camera
  
  IR Camera w/ D-MIC*2, 4mm
  
  FHD+IR hybrid webcam

· Communication Port

- Wireless LAN +BT
  
  *M.2 2230 w/ CNVI interface (Intel Wi-Fi 6 AX201)
  
  IEEE802.11 a/b/g/n/ac/ax support

· Input

- Keyboard
  
  Membrane KB: 277*106mm, Travel=1.2mm
  
  Backlight = Single zone /White Lighting

- Pointing Device
  
  Outline/PCB: 130*80mm +/- 0.1mm /Glass
  
  Enable/Disable area: 10mm*10mm
  
  Palm Rejection: Support
· **Power**

- **AC Adapter**

  Automatics Voltage adjustment between 100 and 240VAC 50/60Hz,
  90 Watts (19V/4.74A), 3 Pins

- **Battery**

  Li- polymer Battery, SW Gas Gauge IC, soft pack,
  1. 3cells (3s1p/4570mAh) 53Wh

---

**CAUTION: MODEL IS DESIGNED TO USE WITH THE**

**DC INPUT:** 90 Watts (19V/4.74A) or 65 Watts (19V/3.42A) by model.
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 Camera
A device that allows you to record video or take photographs with your computer.

Infrared capability for facial recognition camera
can be used to identify and authenticate user to unlock notebook, conduct payment and other security functions.

3 Microphone
Built-in microphones.
IR CCD MIC*2

4 LCD screen
Displays of your notebook computer.

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

Power ON: White
Suspend: White, Slow / Smooth, Blinking White (3Sec/Cycle)
Power Off: OFF

CAUTION: When you are not using the computer, keep the LCD-screen closed to protect it from dust.
6 **Keyboard**
   The keyboard provides keys with comfortable travel
   (The keyboard legend will depend on the spec / region)

7 **Caps Lock Status LED**
   Default: ON (White)

8 **Touchpad LED indicator/ Touchpad switch**

9 **Touchpad/Click pad**
   Touch-sensitive pointing device which functions like the mouse.
Right Side View

1. **Thunderbolt™4 (USB Type C 3.1)**
   Connects an USB device. (such as USB Zip drive, keyboard or mouse) into this jack.

2. **USB Port (Gen1)**
   Connects an USB device (such as USB Zip drive, keyboard or mouse) into this jack. With charging function.

3. **HDMI port**
   Connected to the screen, or home theater system.

4. **Power Connector**
   Connects the AC adapter into this connector.
1. Kensington® Lock Port
   To be secured using Kensington® Lock Port security products.

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

3. USB Port (Gen1)
   Connects an USB device (such as USB Zip drive, keyboard or mouse) into this jack. With charging function.

4. Card Reader
   -USB3 interface, SD/SDHC/SDXC, UHS-I speed
   -Connector: Full SD size

5. Audio Combo (Mic In Jack/Audio Out Jack)
   Connects amplified speakers, headphones or microphone into this jack.
Vents
The thermal vents are designed to cool the internal components and avoid overheating.

Speaker

CAUTION: To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to come into contact with the skin or a soft surface, such as pillows or rugs or clothing, during operation.
NOTE: Specification will depend upon the actually shipping product.

If you need to upgrade m.2 SSD,
Please contact technical support and after-sales service.
Front Side View

Back Side View
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 hot keys on the Keyboard.

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

<table>
<thead>
<tr>
<th>Keypad</th>
<th>Function Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Fn + F1" /></td>
<td>Suspend: Press this key combination (Fn+F1) to enter sleep mode.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Fn + F2" /></td>
<td>Windows Lock/On: Press this key combination (Fn+F2) to turn Windows Lock/On.</td>
</tr>
<tr>
<td><img src="image3.png" alt="Fn + F3" /></td>
<td>Display mode: Press this key combination (Fn+F3) to enable Display Mode.</td>
</tr>
<tr>
<td><img src="image4.png" alt="Fn + F4" /></td>
<td>RADIO On/Off: Press this key combination (Fn+F4) to turn all radios on or off.</td>
</tr>
<tr>
<td><img src="image5.png" alt="Fn + F5" /></td>
<td>Mode switch: Press this key combination (Fn+F5) to quick switch - Basic mode / Silent mode.</td>
</tr>
</tbody>
</table>
## Function Keys

<table>
<thead>
<tr>
<th>Keypad</th>
<th>Function Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Fn</code> + <code>F6</code></td>
<td>Keyboard Brightness down: Press this key combination (Fn+F6) to decrease brightness of Keyboard.</td>
</tr>
<tr>
<td><code>Fn</code> + <code>F7</code></td>
<td>MUTE: Press this key combination (Fn+F8) to enter MUTE mode.</td>
</tr>
<tr>
<td><code>Fn</code> + <code>F8</code></td>
<td>Volume down: Press this key combination (Fn+F9) to enter Volume down mode.</td>
</tr>
<tr>
<td><code>Fn</code> + <code>F9</code></td>
<td>Volume up: Press this key combination (Fn+F10) to enter Volume up mode.</td>
</tr>
<tr>
<td><code>Fn</code> + <code>F10</code></td>
<td>Brightness down: Press this key combination (Fn+F11) to decrease brightness of LCD display.</td>
</tr>
<tr>
<td><code>Fn</code> + <code>F11</code></td>
<td>Brightness up: Press this key combination (Fn+F12) to increase brightness of LCD display.</td>
</tr>
<tr>
<td><code>Fn</code> + <code>F12</code></td>
<td>Print Screen: Press this key combination (Fn+Prt Sc) will capture the entire screen.</td>
</tr>
</tbody>
</table>
Function Keys

Search Charm: (Optional)

For a full list of Windows keyboard shortcuts, please visit the Microsoft official website

https://support.microsoft.com/en-us/
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 1 and right 2 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.

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

- **Total Memory**

  This allows you to see the total amount of memory.
4.2.2 Advanced Menu

- Operating system support [UEFI OS]
  If will support UEFI mode compatible operating systems.

- NVME Device
  AHCI NVME SSD info will be displayed
· Intel Virtualization Technology
  When enabled, VMM can take advantage of additional hardware features provided by Vanderpool technology

· Operating mode (Optional)
  Enable Blance mode/20db mode

· For details of Control center, please refer to the following instructions
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.

Key Management:

Enables expert user to modify Secure Boot Policy variables without full authentication.
4.2.4 Boot Menu

- **Boot Configuration**
  Configure Settings during System Boot.

- **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.