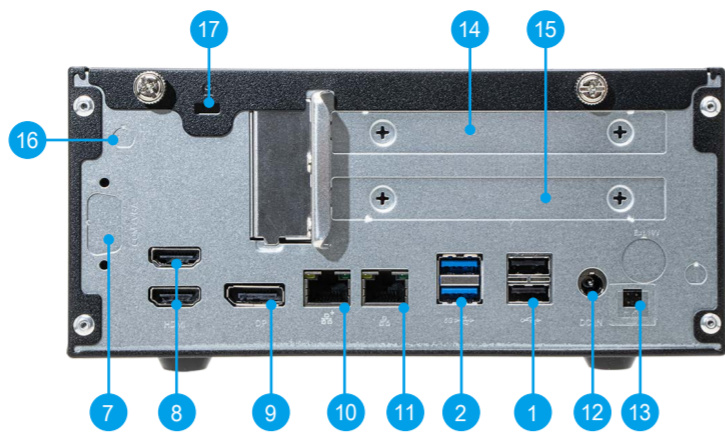


More information on this product can be found at: <https://bit.ly/S-XH610G2>
 更多產品資訊，請參閱：<https://bit.ly/S-XH610G2>
 Weitere Informationen zu diesem Produkt finden Sie unter: <https://bit.ly/S-XH610G2>
 Pour plus d'informations sur ce produit, visitez: <https://bit.ly/S-XH610G2>

Puede encontrar más información sobre este producto en: <https://bit.ly/S-XH610G2>
 本製品の詳細な情報については、次のURLより確認頂けます。<https://bit.ly/S-XH610G2>
 Для получения дополнительной информации об этом продукте перейдите по ссылке: <https://bit.ly/S-XH610G2>
 更多產品資訊，請訪問：<https://bit.ly/S-XH610G2>

Product Overview

產品外觀 \ Produktübersicht \ Présentation du produit \ Resumen del producto \ 製品概要 \ Обзор продукта \ 产品外观



1. USB 2.0 Ports
2. USB 3.2 Gen1 Type-A Ports
3. MIC-in
4. Headphones
5. Power switch / Power LED
6. Hard disk drive LED
7. COM port (optional)
8. HDMI 2.0 Ports
9. DisplayPort
10. 2.5Giga LAN Port
11. Giga LAN Port
12. Power Jack (DC IN)
13. Clear CMOS & Power Button & +5V
14. PCIe x1 slot
15. PCIe x16 slot
16. Perforation for optional WLAN (optional)
17. Kensington® Lock hole

Hardware Installation

硬體安裝 \ Hardware Installation \ Installation du matériel \ Instalación de hardware \ ハードウェアのインストール \ Установка оборудования \ 硬件安装

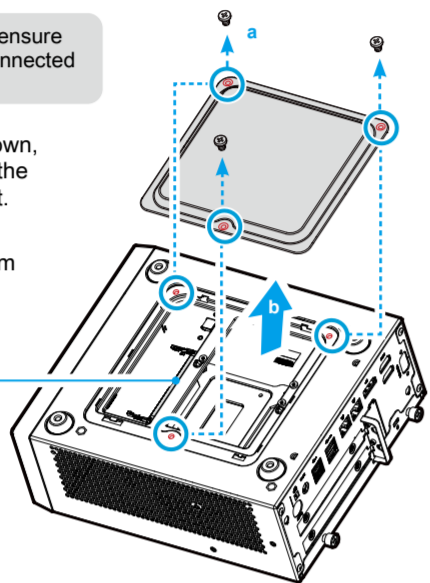
A. HDD or SSD Installation

For safety reasons, please ensure that the power cord is disconnected before opening the case.

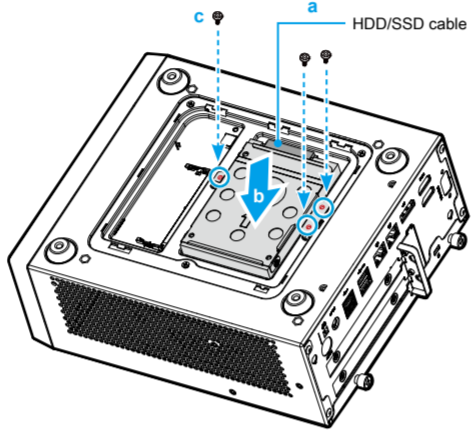
1. Turn your XH610G2 upside down, then unscrew three screws of the HDD/SSD cover and remove it.

Install the memory module (thermal pad 50 x 15 x 2.25 mm for DIMMB2 slot), if required (refer step C).

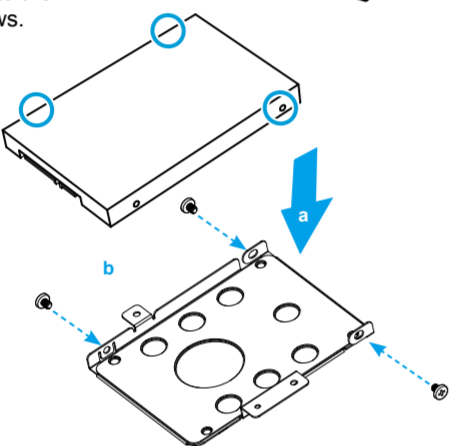
SO-DIMM slot (DIMMB2)



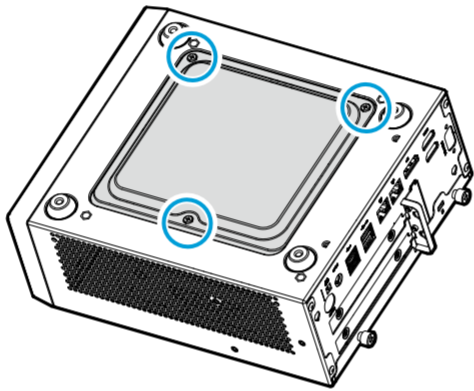
3. Tear off the adhesive tape of the HDD cable. Install the HDD or SSD in the chassis using its bracket. Affix with three screws and connect the HDD or SSD with an HDD/SSD cable.



2. Mount the HDD/SSD into the bracket with three screws.



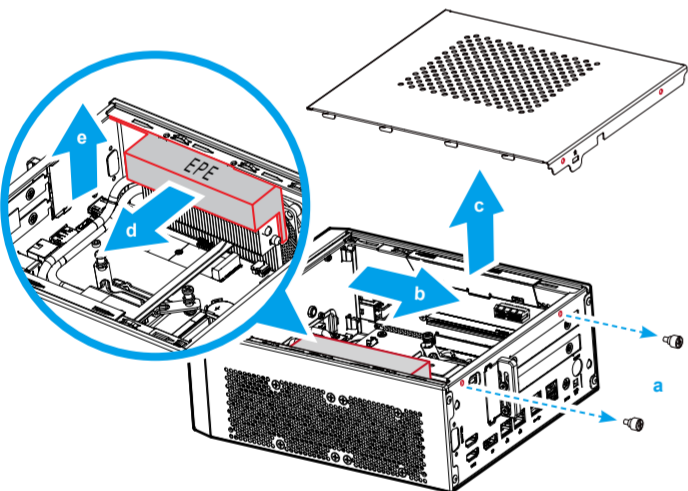
4. Replace the HDD/SSD cover and refasten three screws.



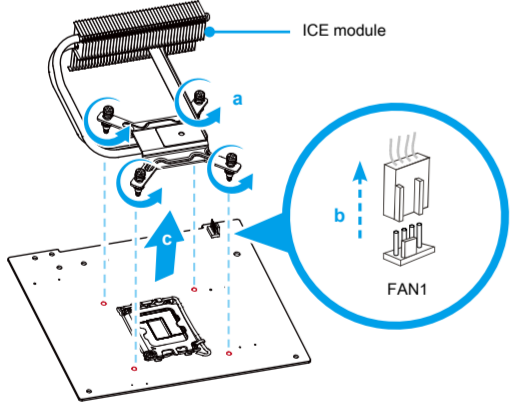
The product's colour and specifications may vary from the actually shipped product.

B. CPU and ICE Module Installation

1. Unscrew these two thumbscrews of the chassis cover, slide the cover backwards and upwards. Then remove the EPE protective foam from the top of the thermal fins.



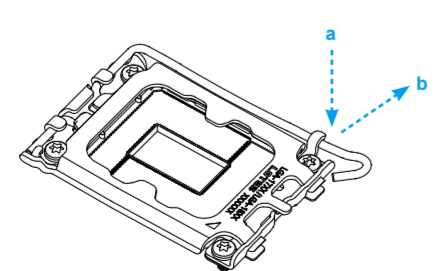
2. Unfasten the four ICE module attachment screws and unplug the fan connector. Remove the ICE module from the chassis and put it aside.



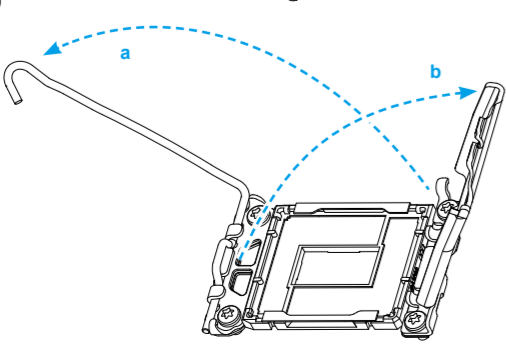
- Follow the steps below to correctly install the CPU into the motherboard CPU socket.

This CPU socket is fragile and can easily be damaged. Always use extreme care when installing a CPU and limit the number of times you remove or change the CPU. Before installing the CPU, make sure to turn off the computer and unplug the power cord from the power outlet to prevent damage of the CPU.

3. Unlock and raise the socket lever.

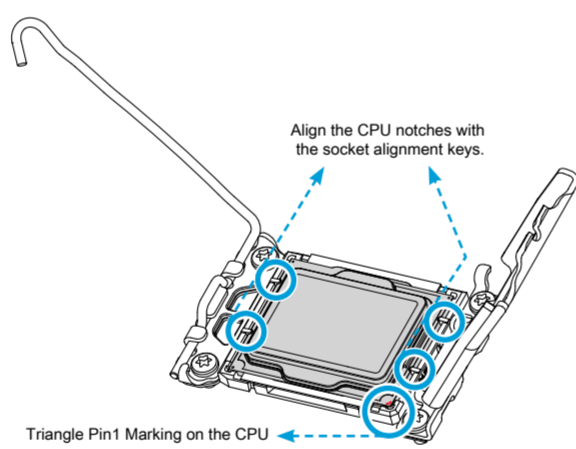


4. Lift the metal load plate off the CPU socket.



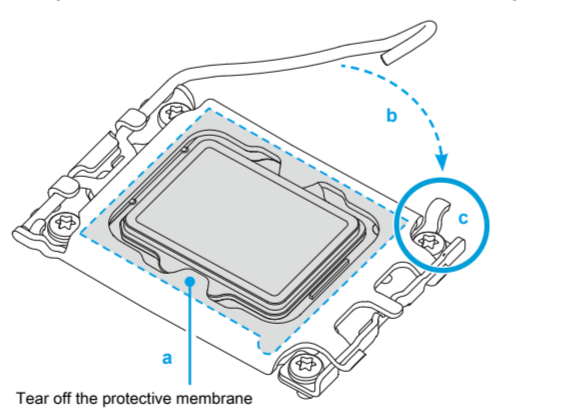
DO NOT touch the socket contacts. To protect the CPU socket, always use the protective socket cover when the CPU is not installed.

5. Please orientate the CPU correctly and align the CPU notches with the socket alignment keys. Make sure the CPU sits perfectly horizontal, then push it gently into the socket.

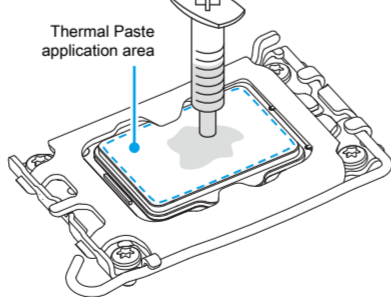


Please be aware of the CPU orientation, DO NOT force the CPU into the socket to avoid bending of pins on the socket and damage of CPU!

6. Tear off the protective membrane from the metal load plate. Close the metal load plate, lower the CPU socket lever and lock in place.



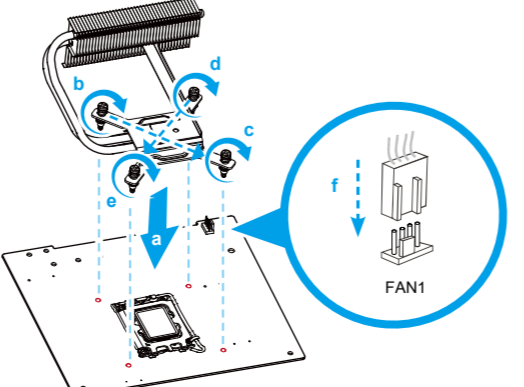
7. Spread thermal paste evenly on the CPU surface.



Please do not apply excess amount of thermal paste.

8. Screw the ICE module to the motherboard. Note to press down on the opposite diagonal corner while tightening each screw.

9. Connect the fan.

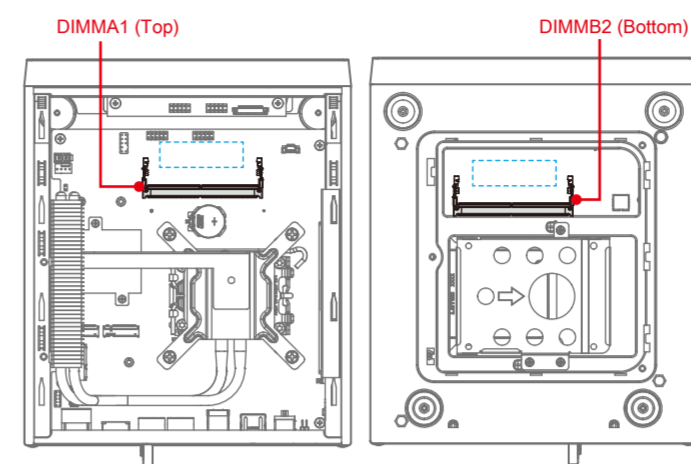


C. Memory Module Installation

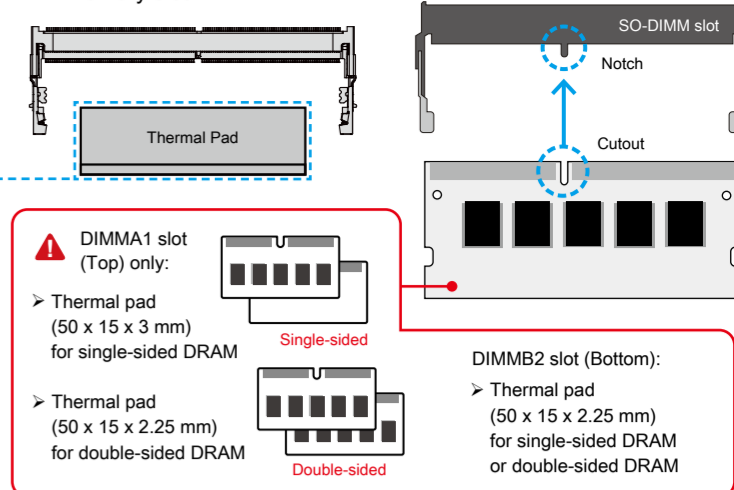
This motherboard does only support 1.1 V DDR5 SO-DIMM memory modules.

1. Locate the SO-DIMM and paste the thermal pad on the motherboard, which can effectively reduce its temperature.

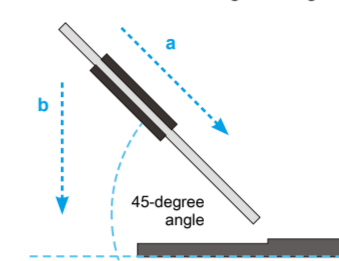
SO-DIMM slot	DRAM	Thermal pad
DIMMA1 (Top)	Double-sided	50 x 15 x 2.25 mm
	Single-sided	50 x 15 x 3 mm
DIMMB2 (Bottom)	Single-sided or Double-sided	50 x 15 x 2.25 mm



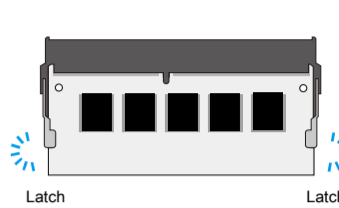
2. Align the notch of the memory module with the one of the relevant memory slot.



3. Gently insert the module into the slot in a 45-degree angle.

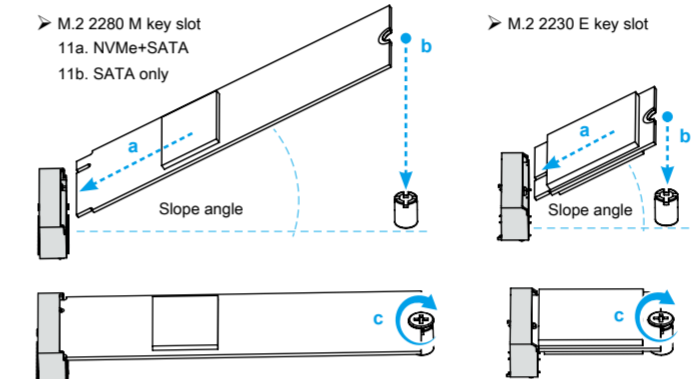


4. Carefully push down the memory module until it snaps into the locking mechanism.



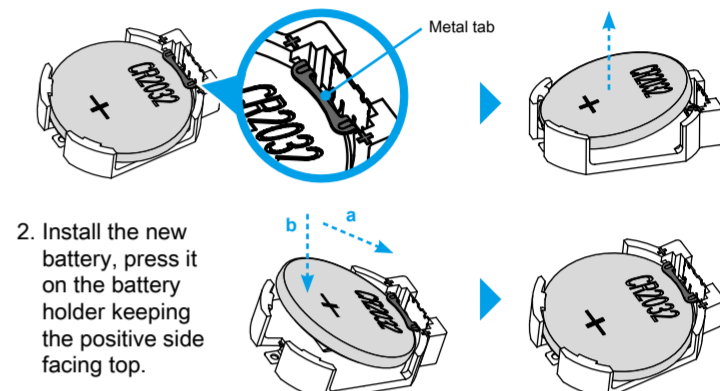
D. M.2 Device Installation

1. Locate the M.2 key slots on the motherboard.
2. Install the M.2 device into the M.2 slot and secure with the screw.



E. How to change the battery

1. Use a flat-blade screwdriver to gently pry the metal tab to disengage the battery from the battery holder.

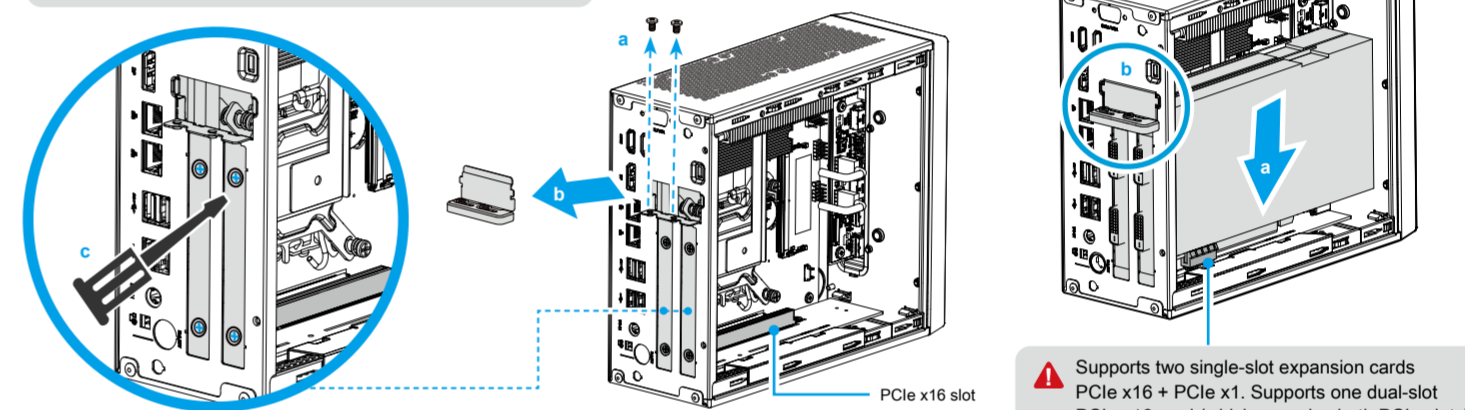


2. Install the new battery, press it on the battery holder keeping the positive side facing top.

F. Installation of Expansion Card

1. Unfasten the expansion slot bracket screw. Remove the back panel bracket and put it aside.

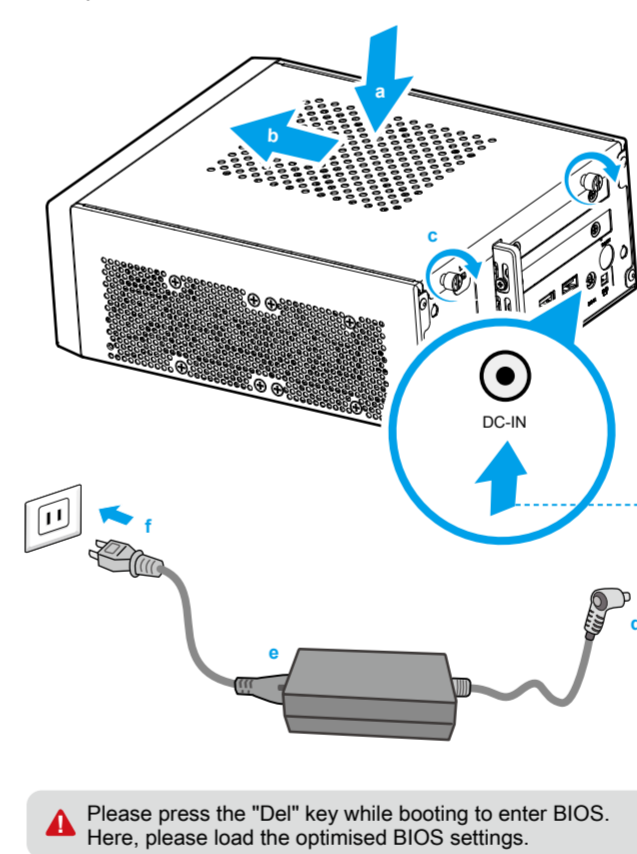
The maximum permitted size for display cards is 205 x 120 x 45 mm. The display cards must be installed on the riser card, not on the motherboard.



Supports two single-slot expansion cards PCIe x16 + PCIe x1. Supports one dual-slot PCIe x16 card (which occupies both PCIe slots).

G. Complete

1. Replace the cover and tighten the thumbscrews, then connect the power cord.
2. Complete.

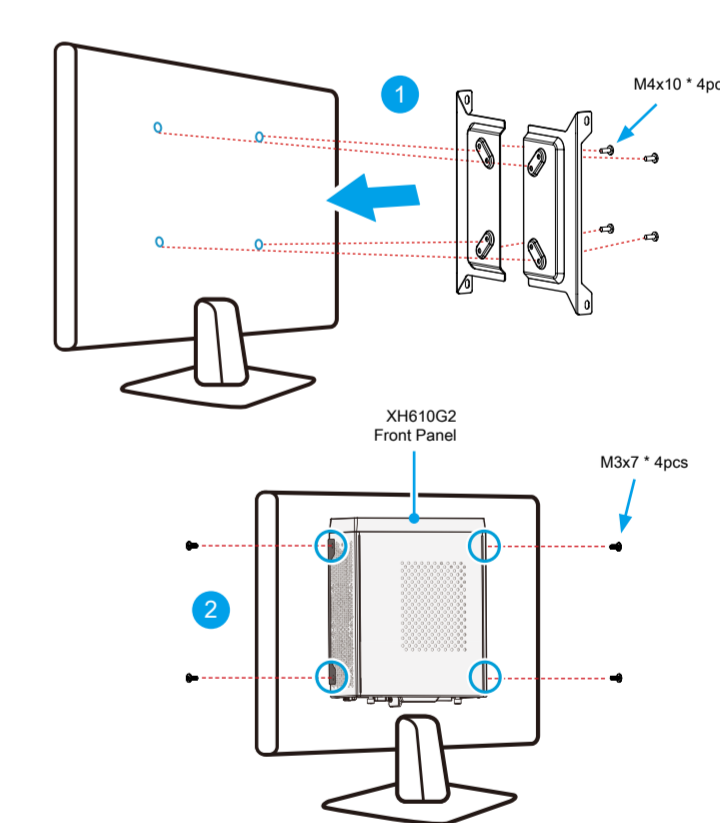


Please press the "Del" key while booting to enter BIOS. Here, please load the optimised BIOS settings.

H. Installation of VESA Mount

- Follow the steps 1-2 to install the VESA mount.

Supports 75x75 mm and 100x100 mm VESA standard.



Safety Information

安全資訊 \ Sicherheitshinweise \ Informations de sécurité \ Información de seguridad \ 安全に関する情報 \ Информация о безопасности \ 安全信息

Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent as recommended by Shuttle. Dispose of used batteries in accordance with the laws of your country.

更換電池方式錯誤可能會損壞本電腦以及引發爆炸、火災或其他危險。僅能依 Shuttle 的建議，以相同或同等的電池更換。請根據您所在國家/地區的法律規定處理廢電池。

Das unkorrekte Austauschen der Batterie kann diesen Computer beschädigen. Ersetzen Sie die Batterie nur durch den gleichen Typ oder ein gleichwertiges, von Shuttle empfohlenes Modell. Entsorgen Sie gebrauchte Batterien gemäß den gesetzlichen Vorschriften in Ihrem Land. Ne pas remplacer correctement la pile peut endommager l'ordinateur. Remplacez-la uniquement par un modèle identique ou un équivalent comme recommandé par Shuttle. Éliminez les piles usagées conformément à la législation en vigueur dans votre pays.

La sustitución incorrecta de la batería puede dañar este equipo. Sustituya la batería únicamente por una igual o equivalente recomendada por Shuttle. Elimine las pilas usadas de acuerdo con los requisitos legales de su país.

バッテリーを間違えてセットすると、このコンピュータが損傷する原因となります。交換する際は、Shuttle が推奨するバッテリーと同じものまたは同等のものだけを使用するようにしてください。使用済みのバッテリーは、お住みの国の法律に従って処分してください。

Неправильная замена батареи может привести к повреждению компьютера. Батарея должна соответствовать стандарту производителя Shuttle или быть идентичной предыдущей. Утилизируйте использованные батареи в соответствии с законодательством вашей страны.

更換電池方式錯誤可能會損壞本電腦。僅能依 Shuttle 的建議，以相同或同等的電池更換。請根據您所在國家/地區的法律規定處理廢電池。

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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.

This device meets the requirements for the EU conformity in accordance to the currently valid EU directives.

Dieses Produkt erfüllt die Anforderungen für die EU-Konformität entsprechend der aktuell geltenden EU-Richtlinien.

Ce produit répond aux exigences de la conformité UE suivant les directives européennes actuellement en vigueur.

WARNING THIS PRODUCT CONTAINS A BUTTON BATTERY

If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours. Keep batteries out of reach of children. If you think batteries may have been swallowed or placed inside any part of the body, seek immediate medical attention.

1. The statement "remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate."

(a) Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.

(b) Even used batteries may cause severe injury or death.

(c) Call a local poison control center for treatment information.

(d) Indicating the compatible battery type CR2032.

(e) Indicating the nominal battery voltage.

(f) Non-rechargeable batteries are not to be recharged.

(g) Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.

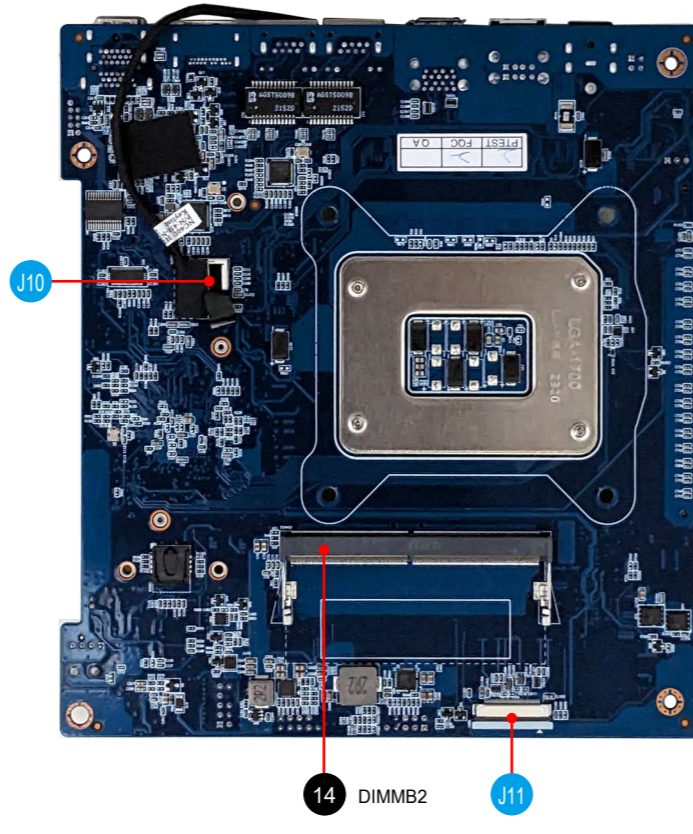
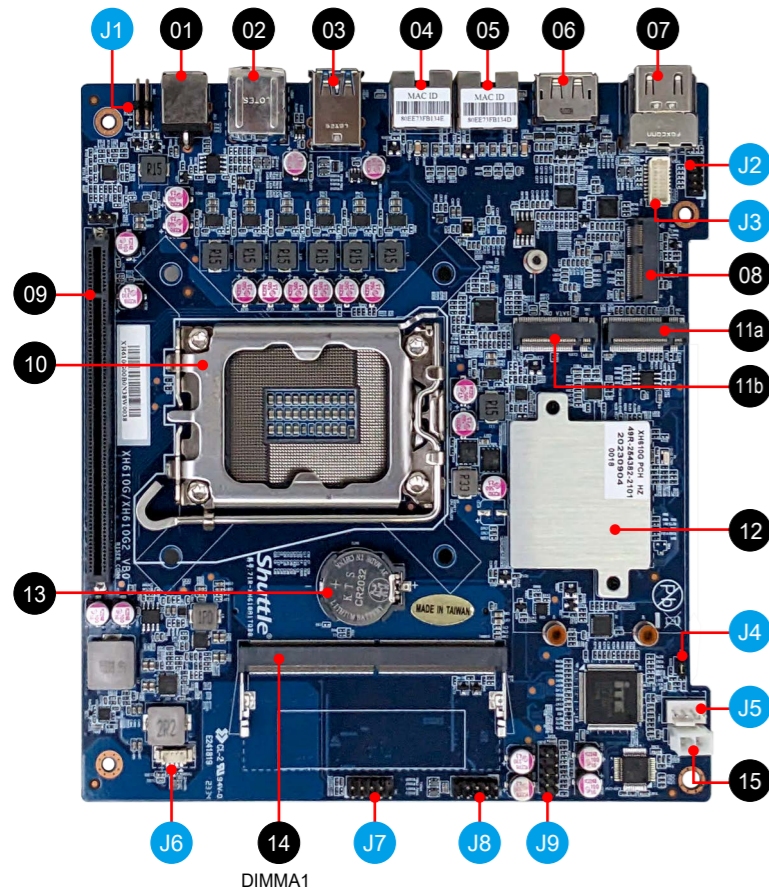
2. This Product contains a button Battery/coin cell batteries

(a) Ensure the batteries are installed correctly according to polarity (+ and -).

(b) Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.

(c) Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.

(d) Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.



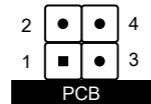
- 01. Power Jack (DC IN)
DC 電源連接埠
DC-Stromanschluss
Prise alimentation DC
Conexión de la fuente de alimentación (CC)
DC 電源ポート
Гнездо для подключения питания (DC IN)
電源插孔 (直流电输入)
- 02. USB 2.0 Ports \ USB 2.0 連接埠
USB 2.0 Anschlüsse \ Prises USB 2.0
Puertos USB 2.0 \ USB 2.0 端口
USB 2.0 порты \ USB 2.0 端口
- 03. USB 3.2 Gen1 Type-A Ports
USB 3.2 Gen1 Type-A 連接埠
USB 3.2 Gen1 Typ-A-Anschlüsse
Prises USB 3.2 Gen1 Type-A
Puertos USB 3.2 Gen1 tipo A
USB 3.2 Gen1 Type-A 端口
USB 3.2 Gen1 Type-A порты
USB 3.2 Gen1 Type-A 端口
- 04. Giga LAN Port \ Giga 網路連接埠
Gigabit LAN Port \ Port LAN Gigabit
Puerto LAN Gigabit \ Гигабит LAN 端口
Giga LAN порт локальной сети \ Giga LAN 連接埠
- 05. 2.5Giga LAN Port
2.5Giga 網路連接埠
2.5G LAN Port
Port LAN 2.5 Gigabit
Puerto LAN 2.5G
2.5 Гигабит LAN 端口
RU 2,5-гигабитный сетевой порт
2.5Giga LAN 連接埠
- 06. DisplayPort \ DisplayPort 連接埠 \ DisplayPort
Prises DisplayPort \ Puertos DisplayPort
ディスプレイポート (DisplayPort)
DisplayPort \ Displayport 端口
- 07. HDMI 2.0 Ports \ HDMI 2.0 連接埠 \ HDMI 2.0-Anschlüsse
Prises HDMI 2.0 \ Puertos HDMI 2.0 \ HDMI 2.0 端口
HDMI 2.0 порты \ HDMI 2.0 端口
- 08. M.2 2230 E key slot \ M.2 2230 E key 插槽
M.2-2230 (E) Steckplatz \ Emplacement M.2 2230 E
Ranura M.2 2230 E \ M.2 2230 E 插槽
Слот M.2 2230 E ключ \ M.2 2230 E key 插槽
- 09. PCIe x16 slot \ PCIe x16 插槽
PCIe-x16-Steckplatz \ Slot PCIe x16
Puerto LAN Gigabit \ Гигабит LAN 端口
Giga LAN порт локальной сети \ Giga LAN 連接埠
- 10. Processor socket LGA1700
LGA1700 處理器插座
Socket für LGA1200-CPU's
Socket Processeur LGA1700
Zócalo LGA1700 de CPU
Процессорный разъем LGA1700
Разъем процессора LGA1700
LGA1700 处理器插座
- 11a. M.2 2280 M key slot (NVMe+SATA)
M.2 2280 M key 插槽 (NVMe+SATA)
M.2-2280 (M) Steckplatz (NVMe+SATA)
Emplacement M.2 2280 M (NVMe+SATA)
Ranura M.2 2280 M (NVMe+SATA)
M.2 2280 M 插槽 (NVMe+SATA)
Слот M.2 2280 M ключ (NVMe+SATA)
M.2 2280 M key 插槽 (NVMe+SATA)
- 11b. M.2 2280 M key slot (SATA only)
M.2 2280 M key 插槽 (僅適用於 SATA)
M.2-2280 (M) Steckplatz (nur für SATA)
Emplacement M.2 2280 M (uniquement en SATA)
Ranura M.2 2280 M (solo SATA)
M.2 2280 M 插槽 (SATA のみ)
Слот M.2 2280 M ключ (только SATA)
M.2 2280 M key 插槽 (仅适用于 SATA)
- 12. Intel® H610 Chipset
Intel® H610 晶片組
Intel® H610 Chipsatz
Intel® H610 Chipset
Intel® H610 Conjunto de chips
Intel® H610 晶片組
Набор микросхем Intel® H610
Intel® H610 晶片組
- 13. CMOS battery holder
CMOS 電池座
CMOS Batterie-Halterung
Support de batterie CMOS
Soporte de pila de CMOS
CMOS/Батарея-держатель
Держатель батареи CMOS
CMOS 電池槽
- 14. DIMM slots
DDR5 SO-DIMM 插槽
DDR5 SO-DIMM Steckplätze
Slot mémoire SO-DIMM DDR5
zócalo de DDR5 SO-DIMM
DDR5 SO-DIMM 插槽
Слот памяти DDR5 SO-DIMM
DDR5 SO-DIMM 插槽
- 15. 5V Power Supply connector
5V 電源供應連接埠
5 Volt Netzteilanschluss
Connecteur d'alimentation 5 volts
Conexión de la alimentación de 5 voltios
5V 電源コネクタ
Разъем питания 5 В
5V 电源供应端口

Jumper Settings

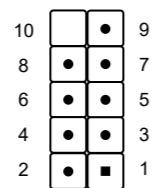
Jumper 設定 \ Jumper-Einstellungen \ Réglages cavaliers \ Configuración de los puentes
 ジャンパー設定 \ Настройки переключателя \ Jumper 設定

- J1 Clear CMOS & power button & +5V
清除 CMOS & 電源按鈕 & +5V
Clear CMOS & Power Button & +5V
Reset CMOS & Bouton d'alimentation & +5V
Clear CMOS & Botón de encendido & +5V
CMOS クリア & 電源スイッチ & +5V
Сброс CMOS, внешняя кнопка питания, +5 В
清除 CMOS & 電源按鈕 & +5V

SW2			
Pin	Signal Name	Pin	Signal Name
1	RTC_RST-	2	+5P0V_S0
3	GND	4	EXT_PWR_SW



- J2 COM Port \ COM 插座
COM-Ausgang \ Port COM
Puerto COM \ COM 插座
COM- порты \ COM 接头



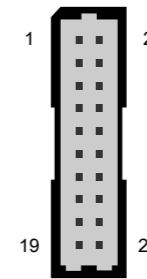
COM1 (RS232)			
Pin	Signal Name	Pin	Signal Name
1	DCD	2	RXP
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	XRI	10	NULL

Jumper Settings

Jumper 設定 \ Jumper-Einstellungen \ Réglages cavaliers \ Configuración de los puentes
 ジャンパー設定 \ Настройки переключателя \ Jumper 設定

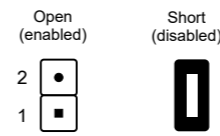
- J3 VGA Connector \ VGA 插座 \ VGA-Anschluss
Connecteur VGA \ Conector del VGA
VGA コネクター \ VGA разъем \ VGA 接头

VGA1			
Pin	Signal Name	Pin	Signal Name
1	GND	11	HSYNC
2	GND	12	GND
3	VGASCL	13	GND
4	GND	14	GND
5	VGASDA	15	BOUT
6	GND	16	+VGA_PWR
7	GND	17	GOUT
8	GND	18	+VGA_PWR
9	VSYNC	19	ROUT
10	GND	20	+VGA_PWR



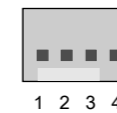
- J4 AC auto power-on \ 回電自動開啟電源
Automatisches Einschalten bei Spannungsversorgung
Démarrage automatique à la mise sous tension
Encendido automático con suministro de corriente
AC 自動電源オン
Восстановление AC Авто включение
回电自动开启电源

JP1	
Pin	Signal Name
1	AUTO_PWR_ON
2	GND



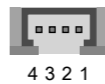
- J5 Fan connector \ 風扇連接埠
Lüfteranschluss \ Connecteur ventilateur
Conector del ventilador \ FAN コネクタ
Разъем вентилятора \ 風扇插座

FAN1	
Pin	Signal Name
1	GND
2	+12P0V_S0
3	FAN_IO
4	FAN_CTL

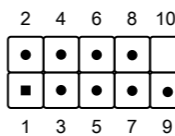


- J6 USB 2.0 cable connector \ USB 2.0 排線插座
Anschluss für USB 2.0-Kabel \ Connecteur câble USB 2.0
Conexión para cable USB 2.0 \ USB 2.0 ケーブルコネクタ
Разъем USB 2.0- кабеля \ USB 2.0 扁平电缆插座

USB4	
Pin	Signal Name
1	GND
2	USB_DP
3	USB_DN
4	+USB_PWR



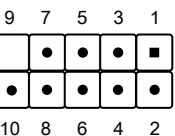
- J7 Power header
電源插座
Power-Anschluss
Connecteur power
Base de conexiones Power
Power コネクタ
Разъем питания
电源接头



SW1			
Pin	Signal Name	Pin	Signal Name
1	SATA_LED_P	2	PWR_LED_P
3	SATA_LED_N	4	PWR_LED_N
5	RST_BTN_N	6	PWR_SW_N
7	GND	8	GND
9	NC	10	NULL

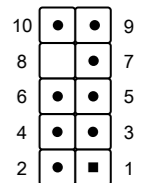
- J8 USB connector \ USB 插座
USB-Anschluss \ Connecteur USB
Conector del USB \ USB コネクター
USB разъем \ USB 接头

USB1			
Pin	Signal Name	Pin	Signal Name
1	+USB_PWR	2	+USB_PWR
3	USB2_DN	4	USB1_DN
5	USB2_DP	6	USB1_DP
7	GND	8	GND
9	NULL	10	GND



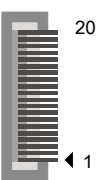
- J9 Front audio header \ 前面板音效插座
Frontansicht des Audio-Headers
Vue de face du connecteur audio
Vista frontal de la hilera de pines de audio
前面オーディオヘッダ
Передний Аудио разъем \ 前面板音效插座

AUDIO1			
Pin	Signal Name	Pin	Signal Name
1	MIC_L	2	GND
3	MIC_R	4	GND
5	HP_R	6	MIC_JD
7	SENSE	8	NULL
9	HP_L	10	HP_JD



- J10 2.5" SATA cable connector
2.5" SATA 排線連接器
SATA-Anschluss für 2,5"-Laufwerke
Connecteur SATA pour disques 2.5
Puerto SATA para unidades de disco de 2.5"
2.5" SATA ケーブルコネクタ
2,5- дюймовый разъем SATA
2.5" SATA 排线连接器

SATA1			
Pin	Signal Name	Pin	Signal Name
1	DEVSLP	11	+5P0V_S0
2	GND	12	GND
3	NC	13	GND
4	NC	14	GND
5	GND	15	SATA_TXP
6	NC	16	SATA_TXN
7	GND	17	GND
8	+5P0V_S0	18	SATA_RXN
9	+5P0V_S0	19	SATA_RXP
10	+5P0V_S0	20	GND



- J11 Front USB 3.0 header
前置 USB 3.0 插座
USB-3.0-Anschluss (für vorne)
Port USB 3.0 (façade)
Conexión delantera USB 3.0
フロント USB3.0 用ピンヘッダ
Разъем USB 3.0 порта (передняя панель)
前置 USB 3.0 插座



USB5					
Pin	Signal Name	Pin	Signal Name	Pin	Signal Name
1	+3P3V_S5	11	USB32_P2_TX_DP	21	USB32_P1_TX_DN
2	+5P0V_S5	12	GND	22	GND
3	+5P0V_S5	13	USB2_DN	23	USB32_P1_RX_DP
4	+5P0V_S5	14	USB2_DP	24	USB32_P1_RX_DN
5	PWR_USB32_ON	15	GND	25	GND
6	GND	16	GND	26	PWR_USB32_ON
7	USB32_P2_RX_DN	17	USB2_DP	27	+5P0V_S5
8	USB32_P2_RX_DP	18	USB2_DN	28	+5P0V_S5
9	GND	19	GND	29	+5P0V_S5
10	USB32_P2_TX_DN	20	USB32_P1_TX_DP	30	+3P3V_S5