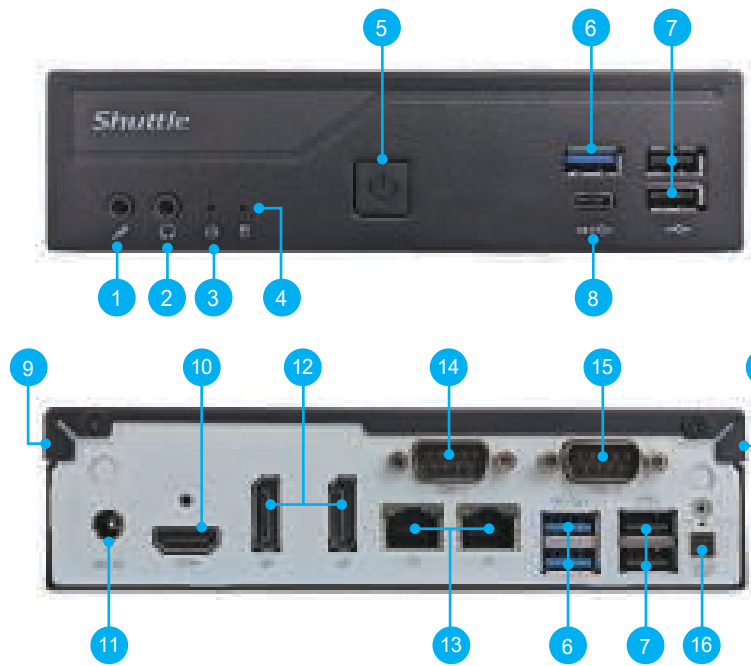


More information on this product can be found at: <https://bit.ly/DH610>
更多本產品資訊，請蒞臨：<https://bit.ly/DH610>
Weitere Informationen zu diesem Produkt finden Sie unter: <https://bit.ly/DH610>
Pour plus d'informations sur ce produit, visitez: <https://bit.ly/DH610>

Puede encontrar más información sobre este producto en: <https://bit.ly/DH610>
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/DH610>
Для получения дополнительной информации об этом продукте перейдите по ссылке: <https://bit.ly/DH610>
更多本产品信息，请访问：<https://bit.ly/DH610>

Product Overview

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



1. MIC-in
2. Headphones
3. Power LED
4. Hard disk drive LED
5. Power Button
6. USB 3.2 Gen1 Type-A Ports
7. USB 2.0 Ports
8. USB 3.2 Gen1 Type-C Port
9. Kensington® Lock Hole
10. HDMI 2.0 Port
11. Power Jack (DC IN)
12. DisplayPort
13. LAN Ports
14. COM 1 Port (RS232/RS422/RS485)
15. COM 2 Port (RS232 only)
16. Clear CMOS & Power Button & +5V

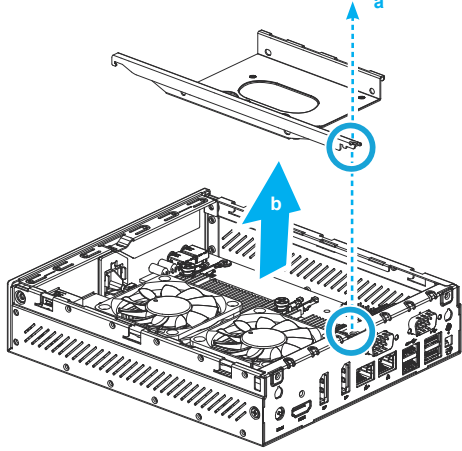
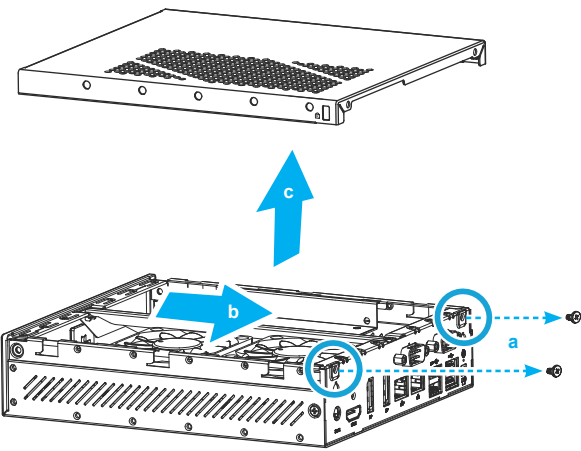
Hardware Installation

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 \ 硬件安裝

A. Begin Installation

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

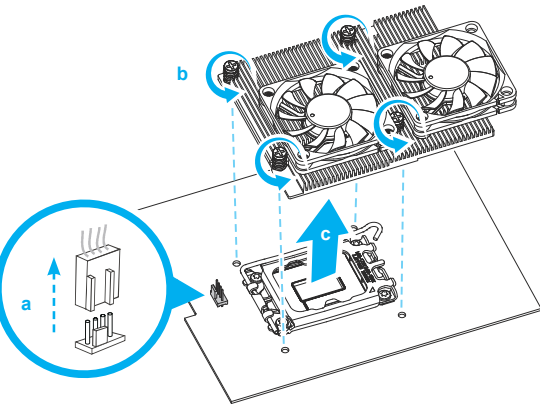
1. Unscrew the two screws of the chassis cover. Slide the cover backwards and upwards.
2. Unfasten the rack mount screw and remove the rack.



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

B. CPU and ICE Module Installation

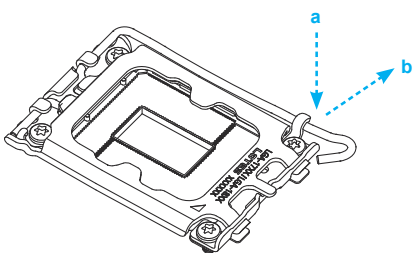
1. Unfasten the four ICE module attachment screws and unplug the fan connector. Remove the ICE module from the chassis and put it aside.



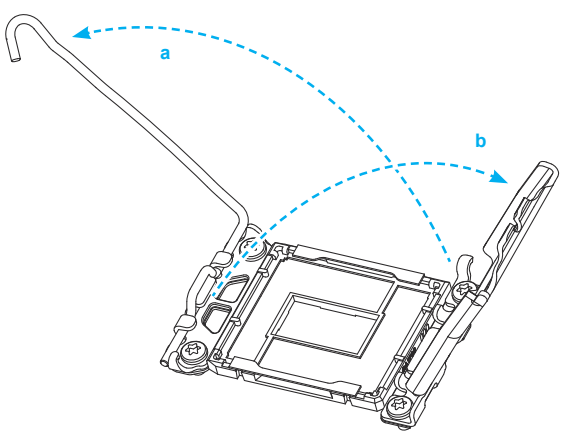
➤ Follow the steps below to correctly install the CPU into the motherboard CPU socket.

⚠ 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.

2. Unlock and raise the socket lever.

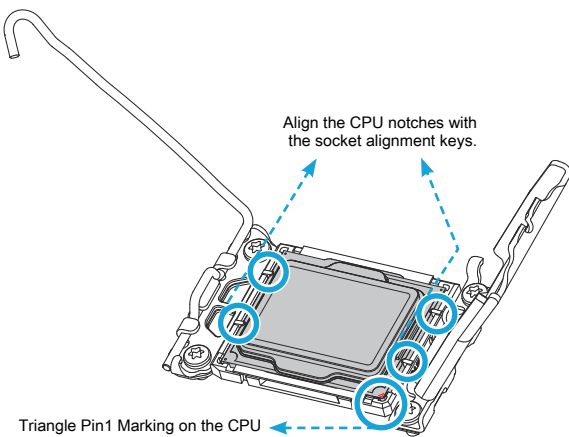


3. Lift the metal load plate off the CPU socket.



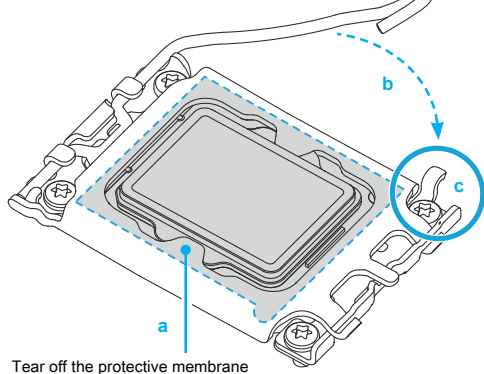
⚠ DO NOT touch the socket contacts. To protect the CPU socket, always use the protective socket cover when the CPU is not installed.

4. 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.

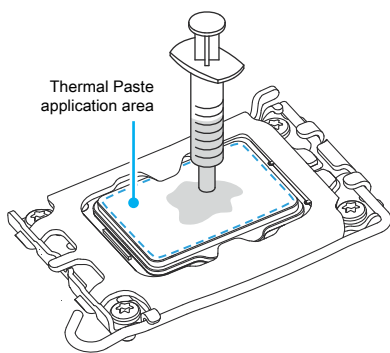


⚠ Please be aware of the CPU orientation, DO NOT force the CPU into the socket to avoid bending of pins on the socket and damage of CPU!

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

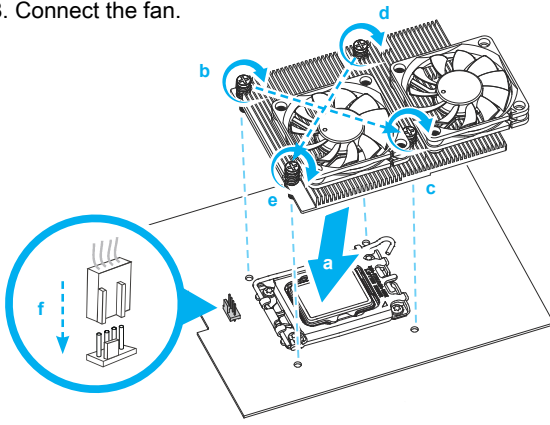


6. Spread thermal paste evenly on the CPU surface.



⚠ Please do not apply excess amount of thermal paste.

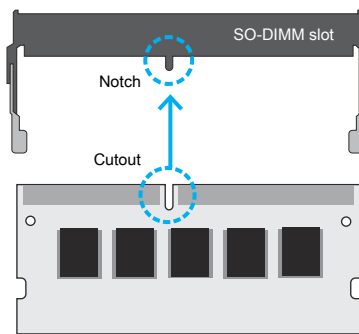
7. Screw the ICE module to the motherboard. Note to press down on the opposite diagonal corner while tightening each screw.
8. Connect the fan.



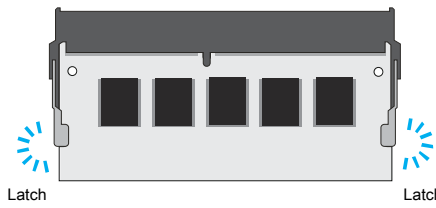
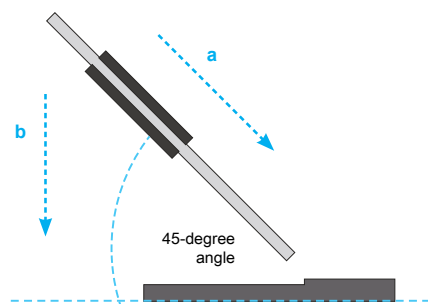
C. Memory Module Installation

⚠ This motherboard does only support 1.2 V DDR4 SO-DIMM memory modules.

1. Locate the SO-DIMM slots on the motherboard.
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.

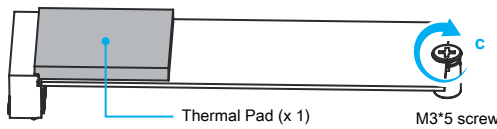
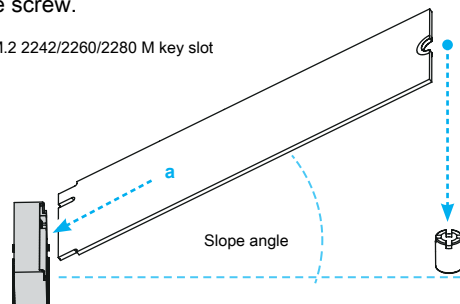


5. Repeat the above steps to install an additional memory module, if required.

D. M.2 Device Installation

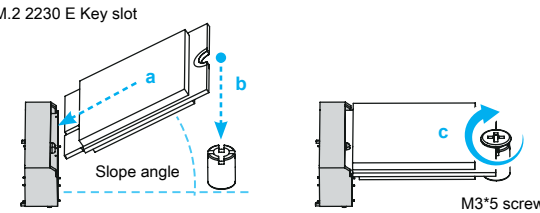
1. Locate the M.2 key slots on the motherboard.
2. Install the M.2 device into the M.2 slot and secure with the screw.

➤ M.2 2242/2260/2280 M key slot

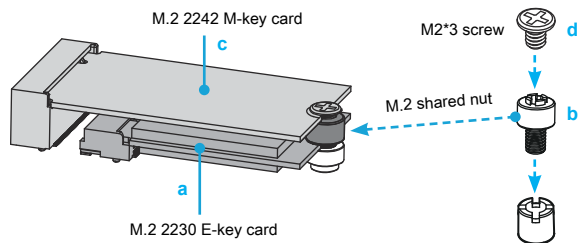


⚠ Pasting the supplied thermal pad on the M.2 SSD can effectively reduce its temperature.

➤ M.2 2230 E Key slot

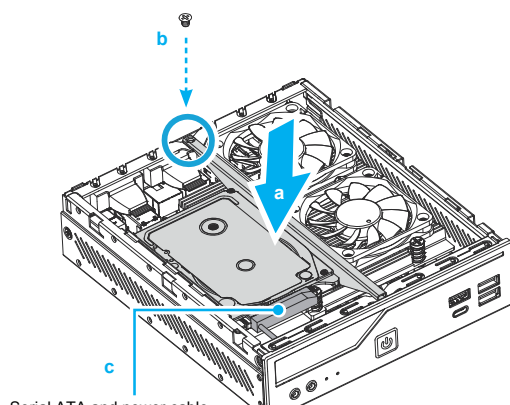
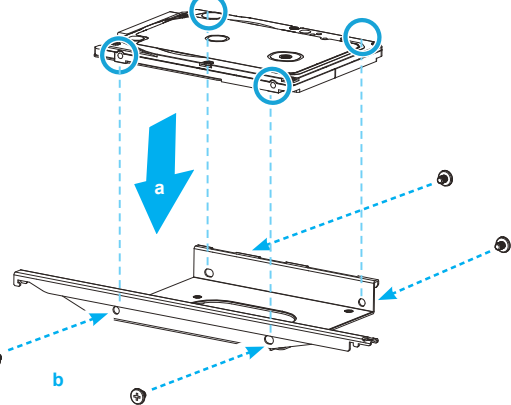


⚠ When installing M.2 2242 M-key and M.2 2230 E-key at the same time, please use "M.2 shared nut" (see picture) to lock M.2 2230 E-key card on socket, then install M.2 2242 M-key card by M2*3 screw as the next step.



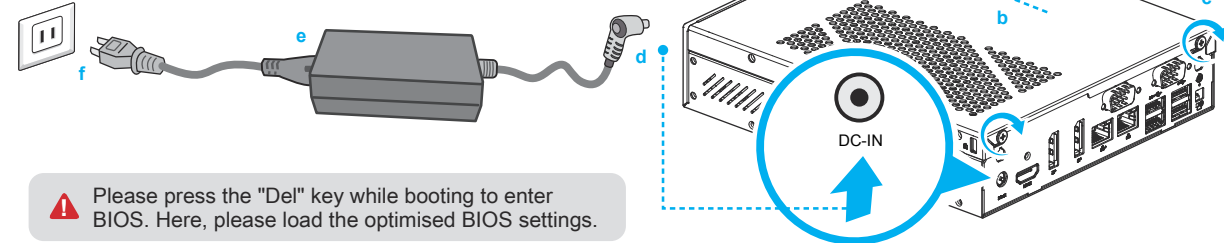
E. HDD or SSD Installation

1. Place an HDD or SSD in the rack and secure with the four screws from the sides.
2. Slide the rack back into the chassis and refasten the screw. Connect the Serial ATA and power cable to the HDD or SSD.



F. Complete

1. Please replace and affix the case cover with two screws, then connect the power cord.
2. Complete.



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

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 according to the manufacturer's instructions.
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，以相同或同等之電池更換。請依照製造商的使用說明處理廢電池。
Das unkorrekte Austauschen der Batterie kann diesen Computer beschädigen. Ersetzen Sie die Batterie nur durch den von Shuttle empfohlenen Typ oder ein gleichwertiges Modell. Entsorgen Sie gebrauchte Batterien gemäß den Herstellerangaben.
Ne pas remplacer correctement la pile peut endommager l'ordinateur. Remplacez-la uniquement par un modèle identique ou un équivalent comme recommandé par Shuttle. Débarrassez-vous des piles usagées d'après les instructions du constructeur.
La sustitución incorrecta de la batería puede dañar este equipo. Sustituya la batería únicamente por una igual o equivalente recomendada por Shuttle. Deseche las baterías usadas según las instrucciones del fabricante.
バッテリーを間違ってセットすると、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。使用済みバッテリーは、メーカーの指示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. Утилизация использованной батареи должна следовать инструкции производителя.
更換電池方式錯誤可能會損壞本電腦。僅能依 Shuttle 的建議，以相同或同等之電池更換。請依照製造商的使用說明處理廢電池。

注意：仅适用于在非热带气候条件下安全使用，在热带气候条件下使用时，可能有安全隐患。



注意：仅适用于海拔 2000m 以下安全使用，在海拔 2000m 以上使用时，可能有安全隐患。



注意：允许产品使用的最高环境温度 为 40°C。

All bundled parts, power cord included, shall not be used without this product.
電源ケーブル等、すべての付属品は本機以外ではご使用になれません。

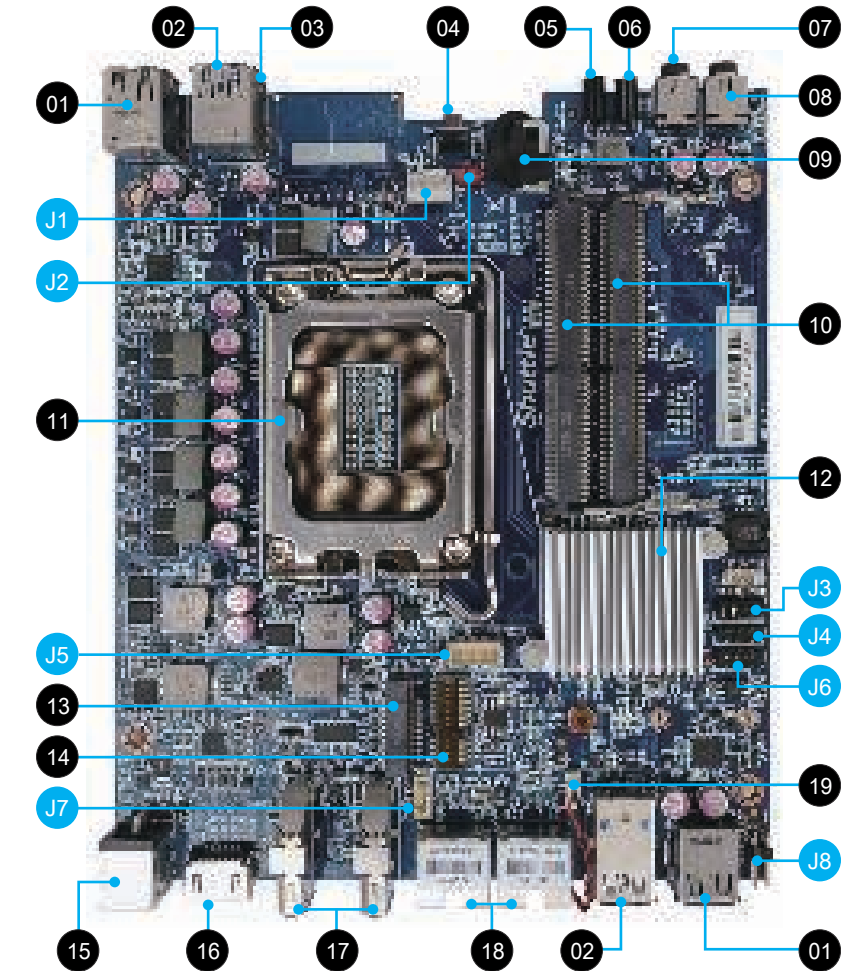
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



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.

Motherboard Illustration

主機板說明 \ Mainboard-Abbildung \ Illustration de la carte mère \ Ilustración de la placa base
メインボード図 \ Материнская плата. Иллюстрация \ 主機板说明



06. Power LED
電源指示燈
Betriebsanzeige-LED
Indicateur alimentation
LED de encendido
電源 LED
LED-индикатор питания
电源指示灯

07. Headphones
耳機孔
Kopfhörer-Ausgang
Prise casque
Auriculares
イヤホン
Гнездо для наушников
耳机孔

08. MIC-in
麥克風插孔
Mikrofon-Eingang
Entrée Micro
Micrófono
マイク
Гнездо для микрофона
麦克风插孔

09. SATA connector
SATA 排線插座
SATA-Anschluss
Connecteur SATA
Base de conexiones SATA
SATA コネクタ
SATA разъем
SATA 接口

10. DDR4 SO-DIMM slots
DDR4 SO-DIMM 插槽
DDR4 SO-DIMM Steckplätze
Slot mémoire SO-DIMM DDR4
zócalo de DDR4 SO-DIMM
DDR4 SO-DIMM スロット
Слот памяти DDR4 SO-DIMM
DDR4 SO-DIMM 插槽

11. Processor socket LGA1700
LGA1700 處理器插座
Sockel für LGA1700-CPU's
Socket Processeur LGA1700
Zócalo LGA1700 de CPU
プロセッサソケットLGA1700
Разъем процессора LGA1700
LGA1700 处理器插座

12. Intel® H610 Chipset
Intel® H610 晶片組
Intel® H610 Chipsatz
Prises HDMI 2.0
Intel® H610 Chipset
Intel® H610 Conjunto de chips
Intel® H610 チップセット
Набор микросхем Intel® H610
Intel® H610 芯片組

13. M.2 2242/2260/2280 M key slot
M.2 2242/2260/2280 M key 插槽
M.2-2242/2260/2280 (M) Steckplatz
Emplacement M.2 2242/2260/2280 M
Ranura M.2 2242/2260/2280 M
M.2 2242/2260/2280 M キースロット
Слот M.2 2242/2260/2280 M ключ
M.2 2242/2260/2280 M key 插槽

14. M.2 2230 E key slot (supports CNVi)
M.2 2230 E key 插槽 (支援 CNVi)
M.2-2230 (E) Steckplatz (unterstützt CNVi)
Emplacement M.2 2230 E (compatible CNVi)
Ranura M.2 2230 E (soporta CNVi)
M.2 2230 E キースロット (CNVi 対応)
Слот M.2 2230 E ключ(поддержка CNVi)
M.2 2230 E key 插槽(支持 CNVi)

15. Power Jack (DC IN) \ DC 電源連接埠
DC-Stromanschluss \ Prise alimentation (CC)
Conexión de la fuente de alimentación (CC)
Гнездо для подключения питания (DC IN)
DC 電源ポート \ 电源插孔 (直流电輸入)

16. 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 端口

18. LAN Ports
網路連接埠
Netzwerk-Anschlüsse
Prises LAN
Puertos LAN
LAN 端口
Сетевые LAN-порты
LAN 端口

17. DisplayPort
DisplayPort 連接埠
DisplayPort
Prise DisplayPort
DisplayPort
ディスプレイポート
DisplayPort
DisplayPort 端口

19. Battery connector
電池插座
Anschluss für die Batterie
Connecteur de pile
Conector de batería
バッテリーコネクタ
Разъем для батареи
電池接头

01. 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 端口
USB 2.0 端口

02. 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 端口
USB 3.2 Gen1 Type-A 端口

03. USB 3.2 Gen1 Type-C Port
USB 3.2 Gen1 Type-C 連接埠
USB 3.2 Gen1 Typ-C Anschluss
Prise USB 3.2 Gen1 Type-C
Puerto USB 3.2 Gen1 tipo C
USB 3.2 Gen1 Type-C 端口
USB 3.2 Gen1 Type-C 端口
USB 3.2 Gen1 Type-C 端口

04. Power Button \ 電源按鈕
Ein-/Aus-Button
Bouton d'alimentation
Botón de encendido
電源スイッチ
Кнопка питания \ 电源按钮

05. Hard disk drive LED
硬碟指示燈 \ Festplatten-LED
Indicateur disque dur
Diodo LED del disco duro
ハードディスクドライブ LED
LED-индикатор жесткого диска
硬盘指示灯

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

CPU_FAN1	
Pin	Signal Name
1	GND
2	+12V
3	FAN IO
4	FAN PWM

J2 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 \ 回电自动开启电源
Восстановление AC Авто включение

JP1	
Pin	Signal Name
1	AUTO_PWR_ON
2	GND

J3 COM 1 & COM 2 power switch
COM 1 & COM 2 電源切換
Konfiguration von COM 1 & COM 2
Gestion de l'alimentation des COM 1 & COM 2
COM 1 & COM 2 Enchufe Interruptor
COM 1 & COM 2 電源 スイッチ
Переключатель питания COM 1 & COM 2
COM 1 & COM 2 电源切换

COM PORT Pin 9 "Ring Indicator" (RI) configuration:

Configure COM 1 with the first jumper:

- Short Pin 1-2: Pin 9 = RI1 (default)
- Short Pin 5-7: Pin 9 = +5V
- Short Pin 7-9: Pin 9 = +12V

Configure COM 2 with the second jumper:

- Short Pin 3-4: Pin 9 = RI2 (default)
- Short Pin 6-8: Pin 9 = +5V
- Short Pin 8-10: Pin 9 = +12V

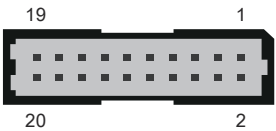
JP2	
Pin	Signal Name
1	XRI1 (to transceiver IC)
2	COM_-XRI1 (to COM1 Header)
3	XRI2 (to transceiver IC)
4	COM_-XRI2 (to COM2 Header)
5	+5P0V_S0 (Power)
6	+5P0V_S0 (Power)
7	COM1_PWR (to COM1 Header)
8	COM2_PWR (to COM2 Header)
9	+12P0V_S0 (Power)
10	+12P0V_S0 (Power)

J4 COM port \ COM 插座 \ COM-Ausgang \ Port COM
Puerto COM \ COM へッダ \ COM-порты \ COM 接头

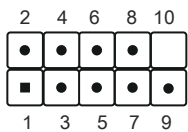
COM2			
Pin	Signal Name	Pin	Signal Name
1	DCD	6	DSR
2	RX	7	RTS
3	TX	8	CTS
4	DTR	9	RI
5	GND	10	NULL

J5 VGA connector \ VGA 插座 \ VGA-Anschluss \ Connecteur VGA
Conector del VGA \ VGA コネクター \ VGA разъем \ VGA 接头

CN3					
Pin	Signal Name	Pin	Signal Name	Pin	Signal Name
1	GND	2	GND	3	VGA_SCL
4	GND	5	VGA_SDA	6	GND
7	GND	8	GND	9	CRT_VSYNC
10	GND	11	CRT_HSYNC	12	GND
13	GND	14	GND	15	BOUT-O
16	VGA_PWR	17	GOUT-O	18	VGA_PWR
19	ROUT-O	20	VGA_PWR		



J6 COM port
COM 插座
COM-Ausgang
Port COM
Puerto COM
COM へッダ
COM-порты
COM 接头



COM1			
Pin	Signal Name		
	RS232	RS422	RS485
1	DCD	TXD-	DATA-
2	RXD	TXD+	DATA+
3	TXD	RXD+	NA
4	DTR	RXD-	NA
5	GND	GND	GND
6	DSR	NA	NA
7	RTS	NA	NA
8	CTS	NA	NA
9	RI	NA	NA
10	NULL	NULL	NULL

J7 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

CN6	
Pin	Signal Name
1	GND (Power Ground)
2	Data+ (USB 2.0 Data pin)
3	Data- (USB 2.0 Data pin)
4	VBUS (USB power 5.0V/0.5A)



J8 Clear CMOS & power button & +5V
清除 CMOS & 電源按鈕 & +5V
Clear CMOS & Einschalt-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 & 电源按钮 & +5V

SW1	
Pin	Signal Name
1	RTC Reset
2	VCC_AUX (Power source 5.0V/0.5A) (Enable in S0 mode only)
3	GND
4	Power SW

