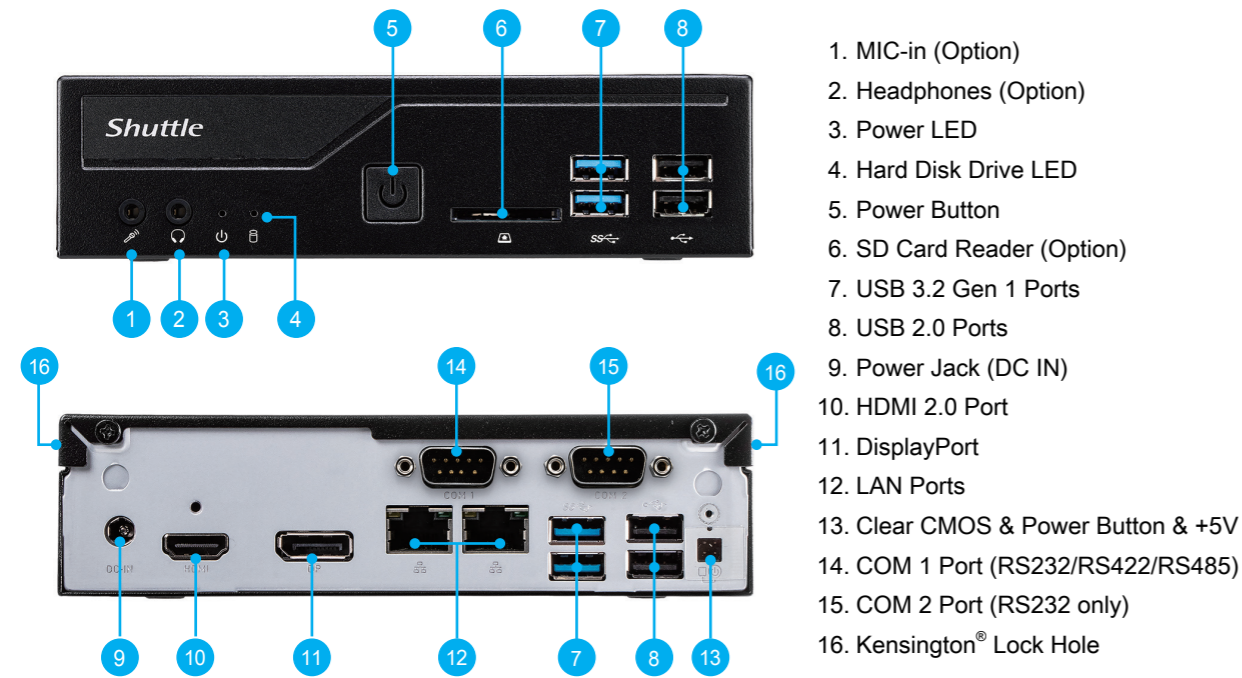


More information on this product can be found at: <http://bit.ly/DH410>
 更多本產品資訊，請造臨：<http://bit.ly/DH410>
 Weitere Informationen zu diesem Produkt finden Sie unter: <http://bit.ly/DH410>
 Pour plus d'informations sur ce produit, visitez: <http://bit.ly/DH410>

Puede encontrar más información sobre este producto en: <http://bit.ly/DH410>
 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。<http://bit.ly/DH410>
 Для получения дополнительной информации об этом продукте перейдите по ссылке: <http://bit.ly/DH410>
 更多本产品信息，请访问：<http://bit.ly/DH410>

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

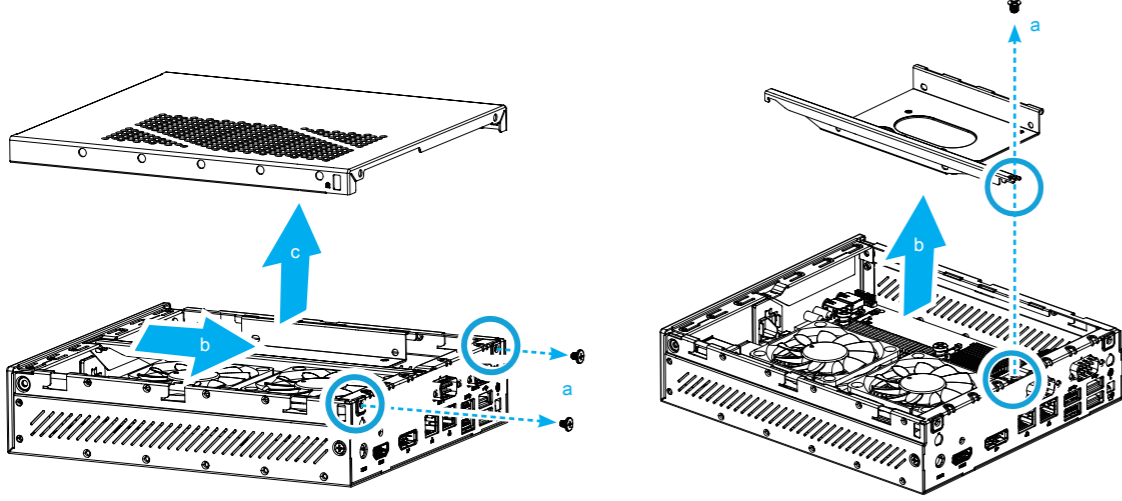


Hardware Installation 硬體安裝 \ Hardware Installation \ Installation du matériel \ Instalación de hardware \ ハードウェアのインストール \ Установка оборудования \ 硬件安装

A. Begin Installation

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

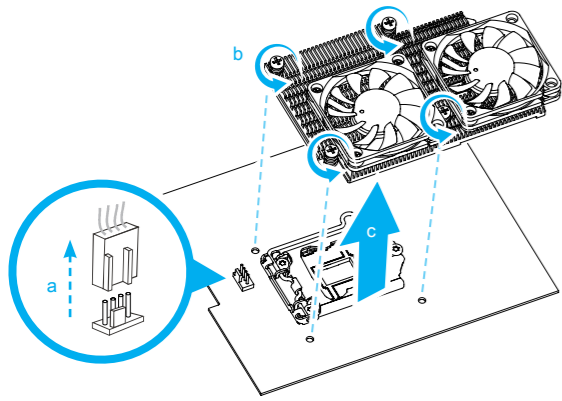
1. Unscrew the two screws of the chassis cover. Slide the cover backwards and upwards.
2. Unfasten the rack mount screw and remove the rack.



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

B. CPU and ICE Module Installation

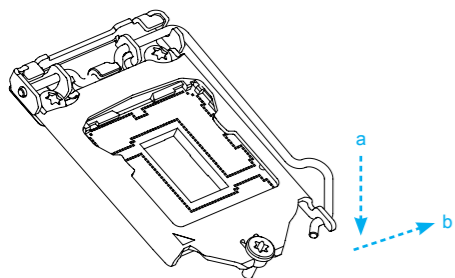
1. Unfasten the four ICE module attachment screws and unplug the fan connector. Remove the ICE module from the chassis and put it aside.



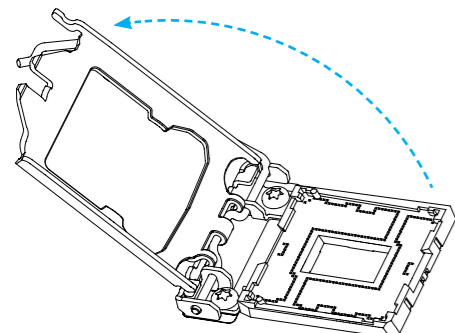
➤ Follow the steps below to correctly install the CPU into the motherboard CPU socket.

⚠ 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.

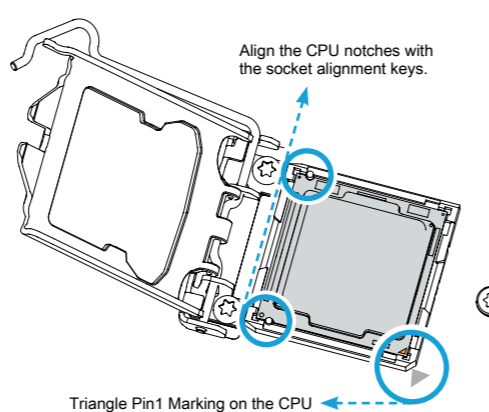


3. Lift the metal load plate on the CPU socket.



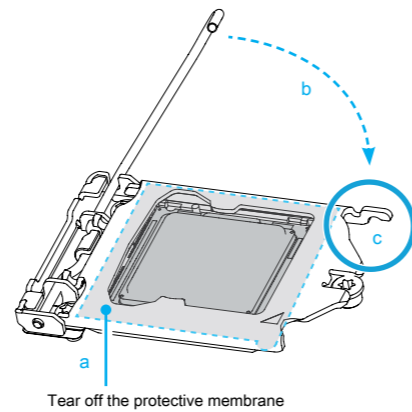
⚠ DO NOT touch the socket contacts. To protect the CPU socket, always use the protective socket cover when the CPU is not installed.

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.

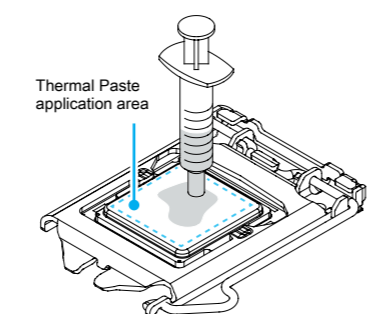


⚠ Please be aware of the CPU orientation, DO NOT force the CPU into the socket to avoid bending of pins on the socket and damage of CPU!

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.

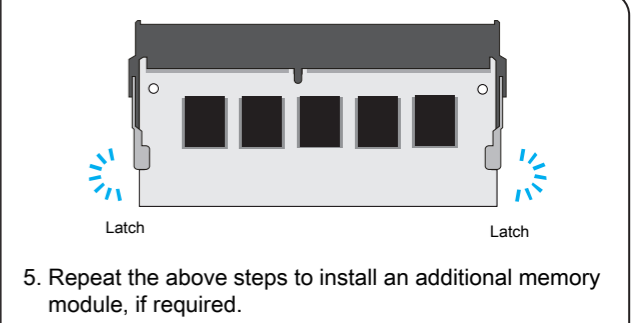
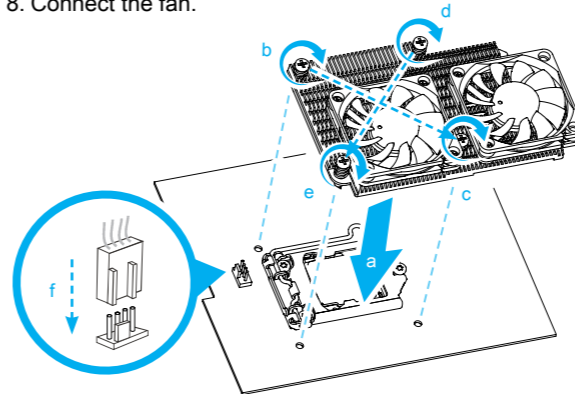


6. Spread thermal paste evenly on the CPU surface.



⚠ Please do not apply excess amount of thermal paste.

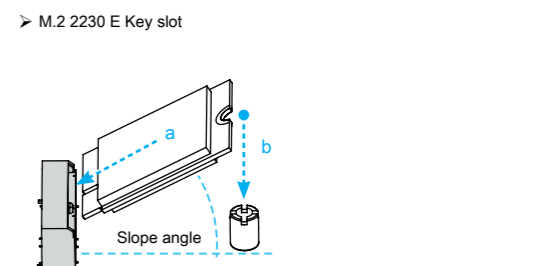
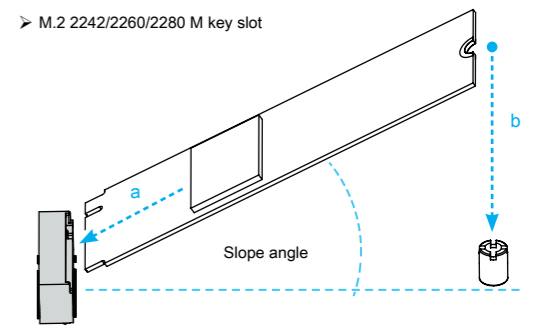
7. Screw the ICE module to the motherboard. Note to press down on the opposite diagonal corner while tightening each screw.
8. Connect the fan.



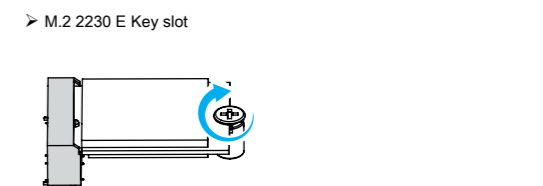
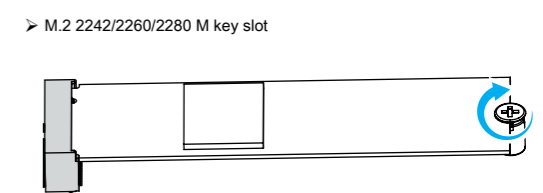
5. Repeat the above steps to install an additional memory module, if required.

D. M.2 Device Installation

1. Locate the M.2 key slots on the motherboard.



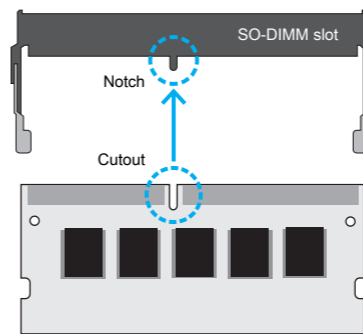
2. Install the M.2 device into the M.2 slot and secure with the screw.



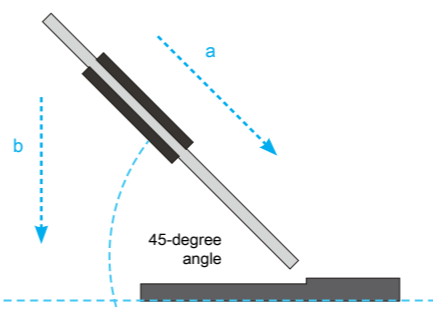
C. Memory Module Installation

⚠ 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.

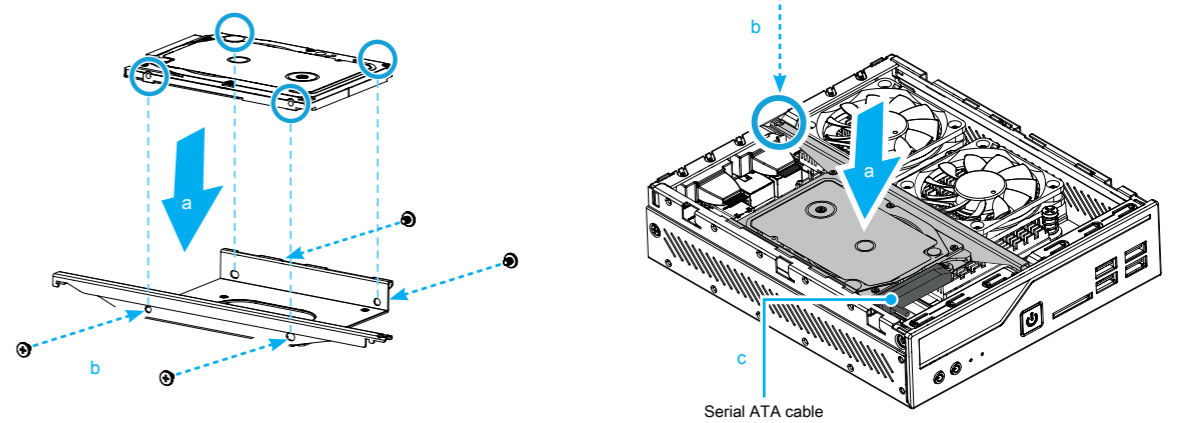


3. Gently insert the module into the slot in a 45-degree angle.
4. Carefully push down the memory module until it snaps into the locking mechanism.



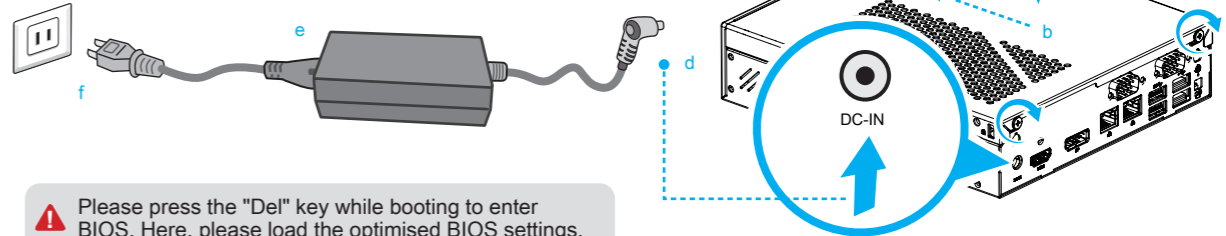
E. HDD or SSD Installation

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 screws. Connect the Serial ATA 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，以相同或同等的電池更換。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.
 バッテリーを間違えてセットすると、このコンピュータが損傷の原因となります。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，以相同或同等的電池更換。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。

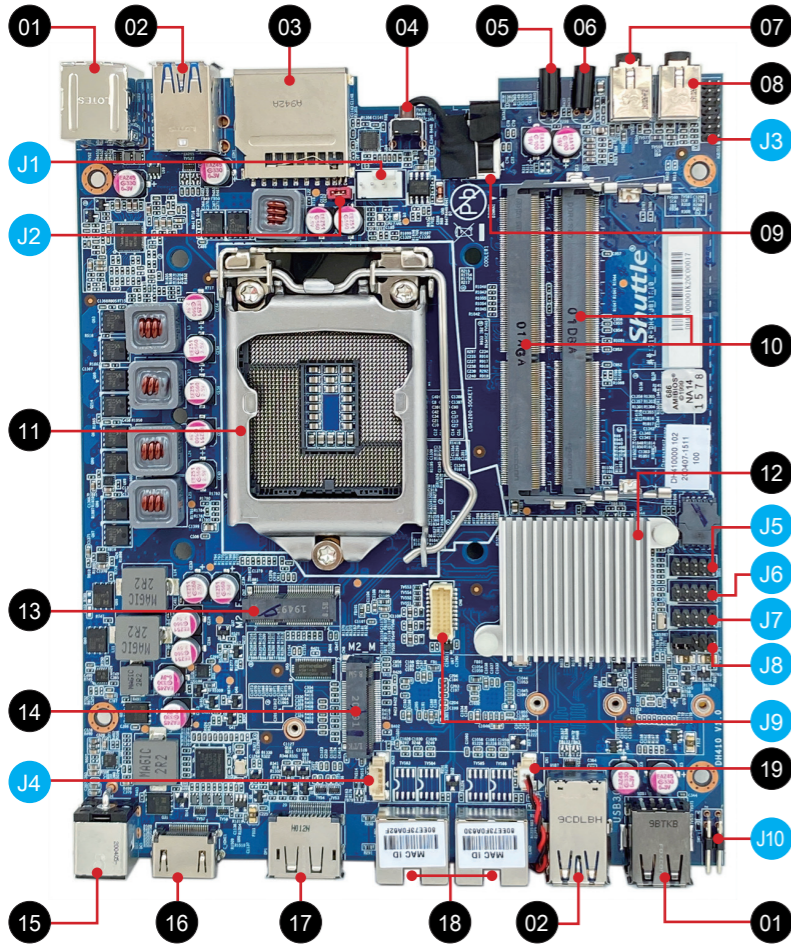
注意：仅适用于海拔 2000m 以下安全使用，在海拔 2000m 以上使用时，可能有安全隐患。

注意：允许产品使用的最高环境温度 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できません。

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.

CE 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.



- 01. USB 2.0 Port
 USB 2.0 連接埠
 USB 2.0-Anschlüsse
 Prises USB 2.0
 Puertos USB 2.0
 USB 2.0 埠
 USB 2.0 端口
- 02. USB 3.2 Gen 1 Ports
 USB 3.2 Gen 1 連接埠
 USB 3.2 Gen 1-Anschlüsse
 Prises USB 3.2 Gen 1
 Puertos USB 3.2 Gen 1
 USB 3.2 Gen 1 埠
 USB 3.2 Gen 1 端口
- 03. SD Card Reader (Option)
 SD 讀卡機 (選配)
 SD Cardreader (optional)
 Lecteur de carte mémoire SD (optionnel)
 Lector de tarjetas sd (opcional)
 SDカードリーダー (オプション)
 Считыватель SD-карт (опция)
 SD 卡片阅读器 (可选)
- 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

- 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 (Option)
 耳機孔 (選配)
 Kopfhörer-Ausgang (optional)
 Prise casque (optionnel)
 Auriculares (opcional)
 イヤホン (オプション)
 Гнездо для наушников (опция)
 耳机孔 (可选)
- 08. MIC-in (Option)
 麥克風插孔 (選配)
 Mikrofon-Eingang (optional)
 Entrée Micro (optionnel)
 Micrófono (opcional)
 Мик (オプション)
 Гнездо для микрофона (опция)
 麦克风插孔 (可选)
- 09. SATA connector
 SATA 排線插座
 SATA-Anschluss
 Connecteur SATA
 Base de conexiones SATA
 SATA コネクタ
 SATA 埠
 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 LGA1200
 LGA1200 處理器插座
 Socket für LGA1200-CPU's
 Socket Processeur LGA1200
 Zócalo LGA1200 de CPU
 プロセッサソケット LGA1200
 Разъем процессора LGA1200
 LGA1200 处理器插座
- 12. Intel® H410 Chipset
 Intel® H410 晶片組
 Intel® H410 Chipsatz
 Intel® H410 Chipset
 Intel® H410 Conjunto de chips
 Intel® H410 晶片組
 Набор микросхем Intel® H410
 Intel® H410 晶片組
- 13. 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 埠
 М.2 2230 E 插槽
 M.2 2230 E key 插槽
- 14. 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 埠
 М.2 2242/2260/2280 M 插槽
 M.2 2242/2260/2280 M key 插槽
- 15. Power Jack (DC IN)
 DC 電源連接埠
 DC-Stromanschluss
 DC-Stromanschluss
 Prise alimentation DC
 Conexión de la fuente de alimentación (CC)
 DC 電源 埠
 Гнездо для подключения питания (DC IN)
 电源插孔 (直流电输入)
- 16. HDMI 2.0 Port
 HDMI 2.0 連接埠
 HDMI 2.0-Anschluss
 Prise HDMI 2.0
 Puerto HDMI 2.0
 HDMI 2.0 埠
 HDMI 2.0 埠
 HDMI 2.0 埠
- 17. DisplayPort
 DisplayPort 連接埠
 DisplayPort-Anschluss
 Prise DisplayPort
 DisplayPort
 DisplayPort
 DisplayPort
 DisplayPort 埠
 DisplayPort 埠
- 18. LAN Ports
 網路連接埠
 Netzwerk-Anschlüsse
 Prises LAN
 Puertos LAN
 LAN 埠
 LAN 埠
 Сетевые LAN-порты
 LAN 埠
- 19. Battery connector
 電池插座
 Anschluss für die Batterie
 Connecteur de pile
 Conector de batería
 Батарея-коннектор
 Разъем для батареи
 電池接口

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	SPEED_SENSE
4	PWM_CTRL

J2 AC auto power-on
 回電自動開放
 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

JP2	
Pin	Signal Name
1	AMP+ (From U30_pin5)
2	GND

J3 Audio connector (optional)
 音效接頭 (選配)
 Audio-Anschluss (optional)
 Connecteur audio (optionnel)
 Conector del Audio (opcional)
 オーディオコネクタ (オプション)
 Аудио разъем (дополнительно)
 音效接頭 (可选)

AUDIO1	
Pin	Signal Name
1	PULL AGND
2	LINE_R
3	NA
4	LINE_L
5	PULL AGND
6	FRONT_L
7	NULL
8	FRONT_SENSE
9	PULL AGND
10	FRONT_R
11	FR_AUDIO-JD
12	MIC1_R
13	AGND
14	MIC1_L

J4 USB connector
 USB 插座
 USB-Anschluss
 Connecteur USB
 Conector del USB
 USB コネクタ
 USB 埠
 USB 埠

CN12	
Pin	Signal Name
1	GND
2	USB1P_C
3	USB1N_C
4	USBPW01 (+5V)

J5 Debug header \ Debug 插座 \ Debug-Anschluss
 Connecteur Debug \ Conexión Debug \ デバッグヘッダ
 Отладочный разъем \ Debug 接头

Pin	Signal Name
1	LPC_24M
2	LAD1
3	SIORST-
4	LAD0
5	LFRAME-
6	+3.3V
7	LAD3
8	GND
9	LAD2
10	NULL

J6 COM port (R232/RS422/RS485) \ COM 插座 \ COM-Ausgang
 Port COM \ Puerto COM \ COM 埠
 COM 埠 \ COM-порт \ COM 接头

Pin	Signal Name
1	DCD_485TX-
2	RX_485TX+
3	TX_422RX+
4	DTR_422RX-
5	GND
6	DSR
7	RTS
8	CTS
9	COM_-XRI1
10	NULL

J7 COM port (RS232) \ COM 插座
 COM-Ausgang \ Port COM
 Puerto COM \ COM 埠
 COM-порт \ COM 接头

Pin	Signal Name	Pin	Signal Name
1	DCD	2	RX
3	TX	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	COM_-XRI2	10	NULL

J8 COM 1 & COM 2 power switch \ COM 1 & COM 2 電源開關
 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 电源开关

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

Configure COM 1 with the first jumper:

- Short Pin 1-2: Pin 9 = R11 (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 = R12 (default)
- Short Pin 6-8: Pin 9 = +5V
- Short Pin 8-10: Pin 9 = +12V

Pin	Signal Name	Pin	Signal Name
1	-XRI1	2	COM_-XRI1
3	-XRI2	4	COM_-XRI2
5	+5V	6	+5V
7	COM1_PWR	8	COM2_PWR
9	+12V	10	+12V

J9 VGA connector (optional) \ VGA 插座 (選配) \ VGA-Anschluss (optional)
 Connecteur VGA (optionnel) \ Conector del VGA (opcional)
 VGA コネクタ (オプション) \ VGA 埠 (дополнительно) \ VGA 接头 (可选)

CN6					
Pin	Signal Name	Pin	Signal Name	Pin	Signal Name
1	GND	2	GND	3	VGASCL
4	GND	5	VGASDA	6	GND
7	GND	8	GND	9	CRT_VSYNC_R
10	GND	11	CRT_HSYNC_R	12	GND
13	GND	14	GND	15	BOUT-O
16	VGA_PWR	17	GOUT-O	18	VGA_PWR
19	ROUT-O	20	VGA_PWR		

J10 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, +5V
 清除 CMOS & 电源按钮 & +5V

SW1	
Pin	Signal Name
1	RTCST-
2	+5V
3	GND
4	PWRSW-