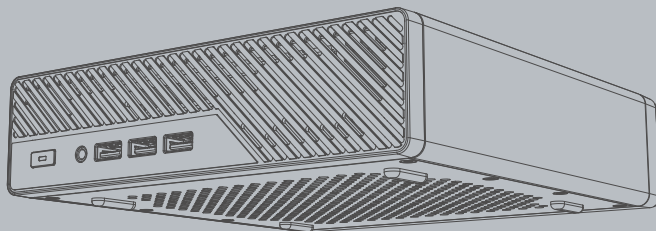




## New Gen Mini Workstation Series

Copyright © 2022 Micro Computer (HK) Tech Limited.



Disclaimer And Safety Instructions / English ( 1 )

免责声明与安全须知 / 中文 (11)

Haftungsausschluss Und Sicherheitshinweise / Deutsch (20)

免責事項及安全上の注意事項 / 日本語 (29)

Descargo De Responsabilidad E Instrucciones De Seguridad / español (38)

Dichiarazioni E Istruzioni Di Sicurezza / Italiano (47)

Avis De Non-responsabilité Et Instructions De Sécurité / Français (56)

User Manual / English ( 3 )

用户手册 / 中文 (12)

Bedienungsanleitung / Deutsch (21)

取扱説明書 / 日本語 (30)

Manual De Usuario / español (39)

Manuale D'uso / Italiano (48)

Manuel Utilisateur / Français (57)

## • Disclaimer

1. Thank you for purchasing MS-01 product.
2. The contents mentioned in this disclaimer are related to your safety, legal rights and responsibilities. Please pay attention to any warnings, cautions and attention signs on the instructions and product labels, and install according to the instructions in the instructions.
3. The product is relatively complex, and users need to have basic hands-on installation skills and safety knowledge. You should be careful during installation.
4. Before using this product, please read the instructions carefully to ensure that the product can be set up correctly. Failure to follow the instructions, warnings, cautions, and attention signs may damage the product or data, and may result in personal or property injury or loss.
5. Once you use this product, you are deemed to have carefully read the content requirements of the disclaimer, warning, caution, and attention signs, understood and accepted all the contents. You promise to take full responsibility for the consequences of using this product. You promise to use this product only for legitimate purposes and agree to this statement and any policies and guidelines formulated by MINISFORUM.
6. In addition to the warranty terms, MINISFORUM is not legally responsible for damage or injury caused directly or indirectly by using this product, especially those caused by failure to operate in accordance with safety guidelines. Users should follow the instructions mentioned in this statement and all safety guidelines.
7. The final interpretation right of this statement belongs to MINISFORUM.

- ⚠ Warning: When an M.2 hard drive is inserted into the PCIe4.0x4 M.2 slot, please make sure "the M.2 NVME drive support switch" is in the "ON M.2" position, otherwise your M.2 hard drive may be damaged.
- ⚠ Warning: All M.2 solid-state drive slots only support SSDs with the NVME protocol and do not support SATA protocol. If you insert an SSD with the SATA protocol incorrectly, your SSD may be damaged.
- ⚠ Caution: When removing the PCIe expansion card, please make sure that your fingers are not between the PCIe expansion card and the casing, otherwise your fingers may be pinched.
- ⚠ Attention: When you insert a high-power PCIe expansion card such as a graphics card, please purchase and use a 19V~240W power adapter separately. Otherwise, abnormal shutdown may occur.

## • Safety Precautions

1. Dust, moisture and drastic temperature changes will affect the product life, so please try to avoid placing the product in these places.
2. The suitable temperature for the MINI PC and accessories is 0°C ~ 35°C.
3. Before you using this product, make sure you leave enough space around the device for ventilation. Please don't block or cover these openings. Never insert objects of any kind into the ventilation openings.
4. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.
5. When you use the power extension cords, the total current of all connected products should be within the rated current of cables, ensuring stable operation.

## • Maintenance Guideline

1. Do not step on the power cord or put anything on your Mini PC.
2. Do not spill water or any other liquid over this product.
3. There's still some current passing through even when the system is off. To avoid severe damage caused by possible electric shock, plug out all power cables from sockets temporarily before cleaning or moving this product.
4. If you encounter the technical problems with the product unplug the power cord and contact a qualified service technician or your retailer.

## • FAQ

1. The start-up speed may be slow in the following situations: unexpected restart, BIOS reset, memory bank replacement, and SSD replacement. Generally speaking, the start-up speed will return to normal after one successful power-on and power-off process.
2. The core graphics card will occupy a part of the memory as GPU-specific memory.

## FCC Statement:

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 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 to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

## FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, Human proximity to the antenna shall not be less than 20cm(8 inches)during normal operation.

The device user manual must contain the following information: The user manual must be filed as an exhibit in the application filing [14]

- o FCC regulations restrict the operation of this device to indoor use only.
- o The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft except the operation of this device is permitted in large aircraft while flying above 10,000 feet.
- o Operation of transmitters in the 3.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

## 2

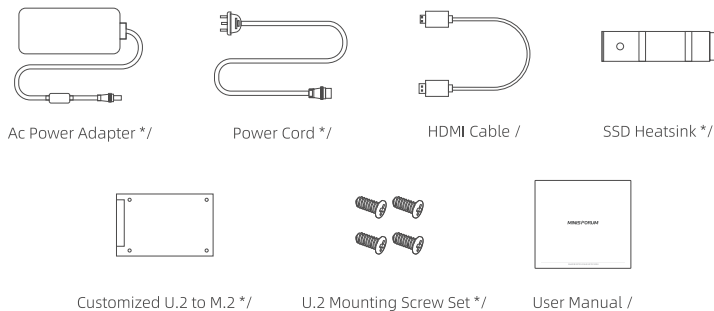
## Conventions Used In This Manual

Note: --- This message contains additional instructions for this item.

Important! --- This information contains instructions that must be followed.

Warning! --- This message contains information about user safety and product safety.

### Package Contents

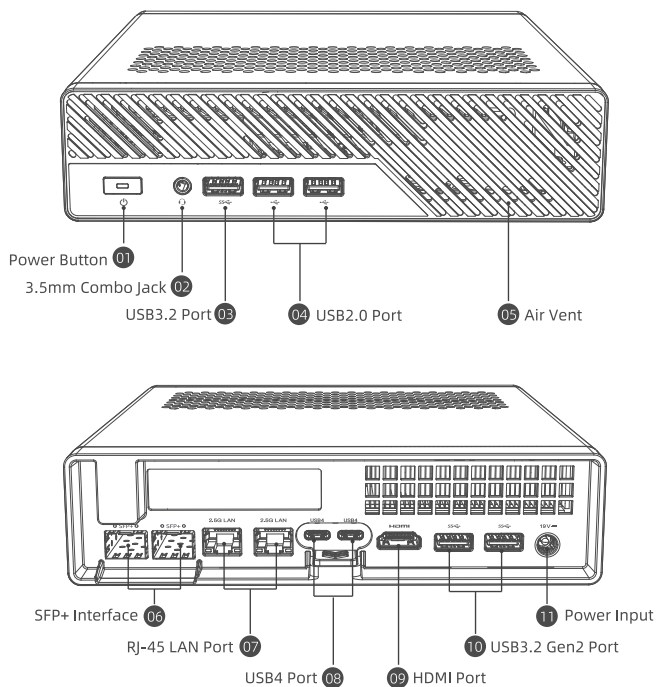


#### NOTE:

\* The power adapter and other accessories included in the box will vary depending on the model parameter or area purchased.

## 3

## Getting To Know Your Mini PC



# Interface

## 01 Power Button

The power button allows you to turn the Mini PC on /off. You can press the power button to put your Mini PC to sleep mode or press it for 10 seconds to force shutdown your Mini PC.

## 02 3.5mm Combo Jack

This connector is used to connect audio output signals to a power amplifier or headphones. You can also use it to connect an external microphone or output signals from audio equipment.

## 03 USB3.2 Port

USB3.2 (Universal Serial Bus) port provides a transfer rate of up to 5 Gbit/s. It can be connected to keyboards, pointing devices, cameras, hard disks, printers and scanners.

## 04 USB2.0 Port

The USB (Universal Serial Bus) port is compatible with USB2.0 or USB1.1 devices such as keyboards, and printers.

## 05 Air Vent

The air vents allow your Mini PC chassis to expel hot air out.

**Important!** For optimum heat dissipation and air ventilation, ensure that the air vents are free from obstructions (such as Paper, books, clothes, transmission lines).

## 06 SFP+ Interface

SFP+ network interface supports standard SFP+ DAC cable, fiber optic module, or RJ45-SFP+ conversion module. Supports 10Gbps/1Gbps rate.

## 07 RJ-45 LAN Port

This RJ-45 network interface supports standard Ethernet cables and can be connected to a local area network. (Transmission speed 2.5Gbps)

## 08 USB4 Port

This interface supports USB4 transmission protocol, with a maximum data transmission rate of 40Gbps. Support Alt DP audio and video output, only support 5V output, support PCIe data transmission, and support Thunderbolt Ethernet.

## 09 HDMI Port

The HDMI port (High-Definition Multimedia interface) is a uncompressed, fully digital audio/video interface that provides a common data connection channel for compatible devices, Which can be used to connect external display devices and televisions.

## 10 USB3.2 Gen2 Port

USB3.2 Gen2 (Universal Serial Bus) port provides a transfer rate of up to 10 Gbit/s. It can be connected to keyboards, pointing devices, cameras, hard disks, printers and scanners.

## 11 Power Input

The power adapter can convert AC power to DC power. The converted power provides power to your Mini PC through the power input interface. To avoid damaging your Mini PC, please use the power adapter provided with the product.

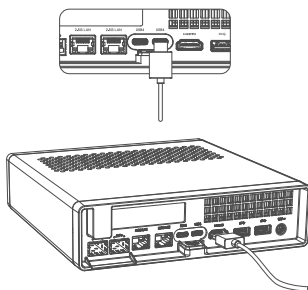
**Warning!** When the power supply is in use, the temperature of the power adapter may rise and become hot. Do not place the power adapter close to your body.

Power adapter: DC 19V

# 4

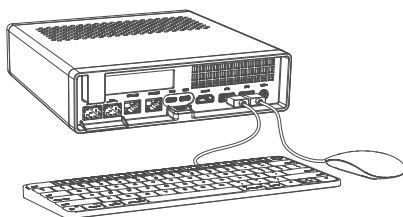
## Getting Started With Your Mini PC

1



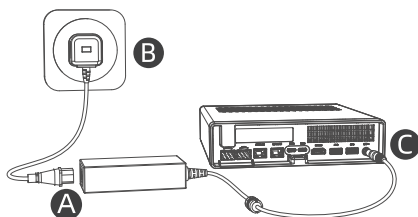
Connect the display to the Mini PC's HDMI port/USB4 port.

2



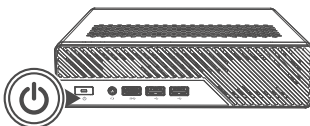
Connect the keyboard and mouse.

3



Connect the provided power adapter to your Mini PC.

4



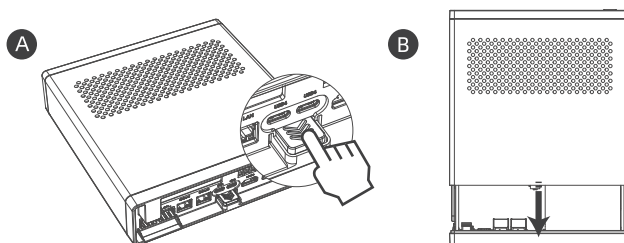
Turn on the power and start the Mini PC.

If the Mini PC is frozen or slow to respond, press and hold the power button at least for 10 seconds to force it shutdown.

To put your Mini PC on Sleep mode, press the Power button once.

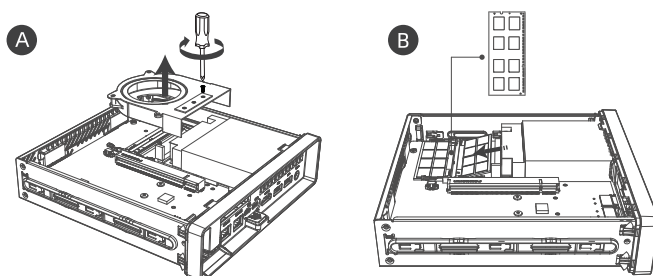
## Installation Guide

- 1 While pressing the button, pull out the motherboard case.



### DIY SSD

- 2 First remove the radiator, and then insert the memory into the memory slot as shown.

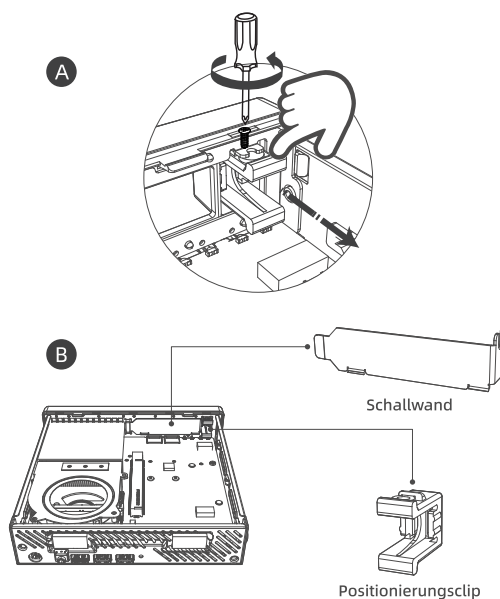


### DIY PCIe Expansion Card



PCIe Expansion Card reminder: When using an M.2 hard drive, the switch must be in the M.2 ON position, otherwise the hard drive may be damaged.

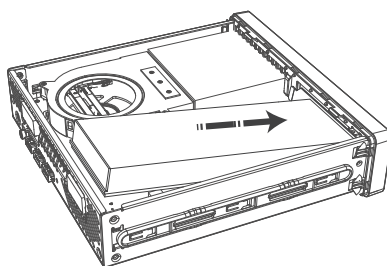
- 3 First use a tool to unscrew the positioning clamp screw, press the positioning clamp to take it out, and remove the baffle.



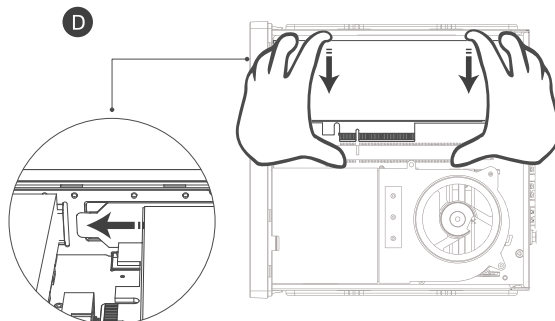
- 4 Insert the expansion card into the motherboard slot in an oblique direction, and insert the expansion card parallel into the PCIe slot with both hands.

**Note:** Only half-height single-slot PCIe expansion cards are supported.

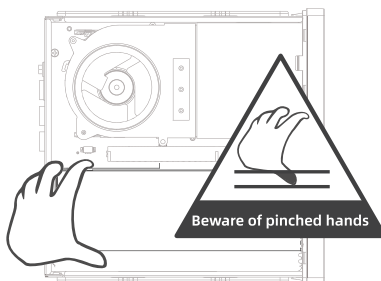
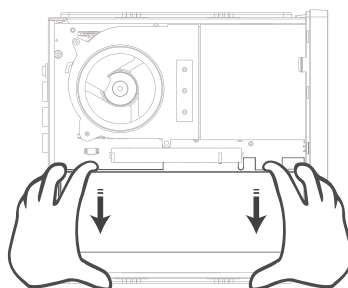
C



D

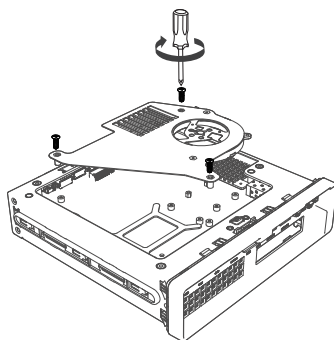


**Warn!** The correct way to disassemble the expansion card is as shown in the figure, and be careful not to pinch your hands.



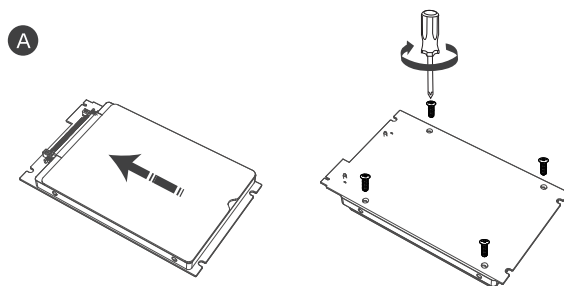


- 5 Turn it over and use tools to remove the heat dissipation bracket.

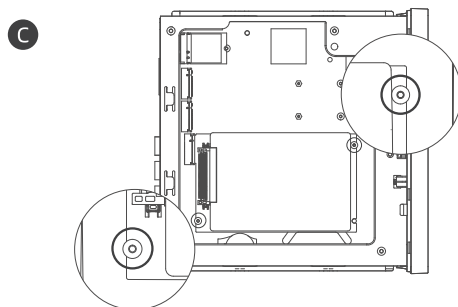
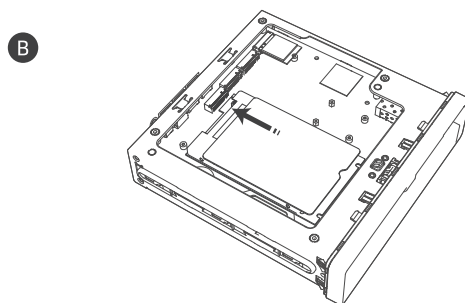


## DIY Customized U.2 To M.2

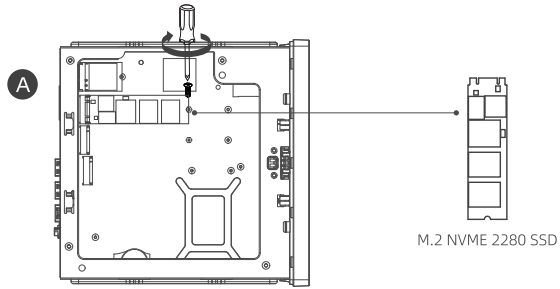
- 6 Assemble the U.2 hard drive to the U.2 to custom M.2 adapter card and lock the screws.



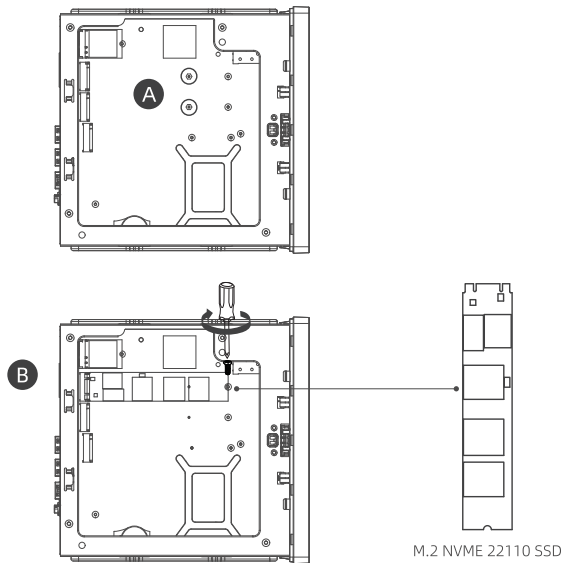
- 7 Insert the U.2-to-private-M.2 adapter card into the M.2 slot and align it with the positioning post.



- 8 Insert the SSD card into the card slot at an angle and secure it with screws.

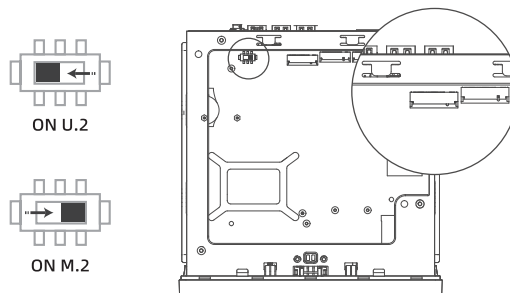


- 9 **Note:** To installation 22110 SSD, you need to use a tool to unscrew the hexagonal screw post first.

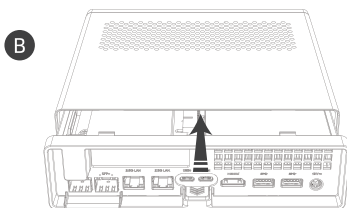
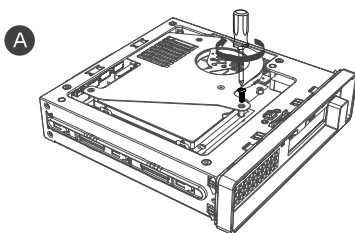


**Warn!**

- 1: When using a U.2 hard drive in this slot, you need to turn on the ON U.2 switch;  
2: When using an M.2 hard drive in this slot, make sure the switch is in the ON M.2 position. If the switch is not ON M.2, the M.2 hard drive may be damaged.



- 10 Re-tighten the screws of the heat dissipation bracket and install the motherboard case into the chassis.



## • 免责声明

1. 感谢您购买MS-01产品。
2. 本免责声明所提及的内容关系到您的安全、合法权益及责任，请留意说明书、产品标签上的任何警告、小心、注意标识，按照说明书的指示安装。
3. 产品较为复杂，用户需要具备基本的动手安装能力以及安全常识，安装时应小心安装。
4. 使用本产品之前，请仔细阅读说明书以确保能对产品进行正确设置，不按照说明书上指示的警告、小心、注意标识设置可能会损坏产品或数据，可能会导致人身、财产伤害或损失。
5. 一旦使用本产品，即视为您已经仔细阅读免责声明、警告、小心、注意标识的内容要求，理解和接受全部的内容。您承诺对使用本产品带来的后果负全部责任，您承诺仅出于正当目的使用本产品并同意本声明以及MINISFORUM制定的任何政策、指引条款。
6. 除保修条款外，MINISFORUM对于直接或间接使用本产品造成的损坏、伤害，特别是不按照安全指引操作带来的损坏、损失和伤害不负法律责任，用户应遵循本声明及说明书提及的所有安全指引。
7. 本声明的最终解释权归 MINISFORUM所有。

- ▲ 警告：当M.2硬盘插在PCIE4.0x4得硬盘槽位时,请确保硬盘支持开关在“ ON M.2”位置,否则可能会损坏您得M.2硬盘。
- ▲ 警告： 所有的M.2固态硬盘槽位,均仅支持NVME协议的SSD。不支持SATA协议的SSD,若错误的插入了SATA协议的SSD,可能会导致您的SSD损坏。
- ▲ 小心：当拆卸PCIE拓展卡时,请确保您得手指没有在PCIE拓展卡和外壳中间,否则可能会导致您手指夹伤。
- ▲ 注意：当您插入独立显卡等大功率PCIE拓展卡时,请单独购买并使用19V 240W电源适配器,否则可能会出现异常关机得情况。

## • 注意事项

1. 灰尘、湿气以及剧烈的温度变化都会影响本产品的使用寿命,因此请尽量避免放置在这些地方。
2. 本产品只应在温度为0°C至35°C的环境下使用。
3. 使用本产品时,请务必保持产品附近留有足够的散热空间。请避免让纸张碎片、螺丝及线头等小东西靠近本产品之适配器、插槽、孔位等处,避免出现短路及接触不良等情况发生。请勿将任何物品塞入本产品机件内,以避免引起设备短路或电路损毁。
4. 当您在安装或操作本产品时,请务必将产品与身体保持至少20厘米的距离。
5. 当您使用电源延长线的时候, 请确保所有接入产品的总电流不超过线材的额定电流,以保障产品稳定运行。

## • 保养指南

1. 请勿踩踏电源线或搁置任何东西在您的Mini PC上。
2. 请勿将水或任何其他液体洒到本产品上。
3. 关闭系统时, 仍然会有少量电流流过, 为避免可能的电击造成严重损害,在清理或搬动本产品之前,请先将所有的电源线暂时从电源插槽中拔掉。
4. 如果遇到产品存在技术问题, 请拔下电源线并与我们的服务技术人员或授权零售商联系。

## • FAQ

1. 当遇到下面几种情况时, 开机速度可能会变慢: 意外重启; 重置Bios, 更换内存条, 更换SSD。通常而言, 在正常运行一次开机后, 启动速度会恢复正常。
2. 核心显卡会占用一部分内存作为GPU专用内存。

## 2

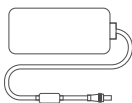
## 本手册中使用的约定

说明：--- 本信息包含对此项目的额外说明。

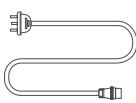
重要！--- 本信息包含必须遵守的信息说明。

警告！--- 本信息包含维护使用者安全以及产品安全相关信息说明。

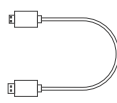
### 随附配件



电源适配器 \*



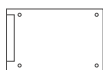
电源线 \*



HDMI 线 /



SSD 散热片 \*



U.2转私有M.2转接卡 \*



U.2安装螺丝组 \*



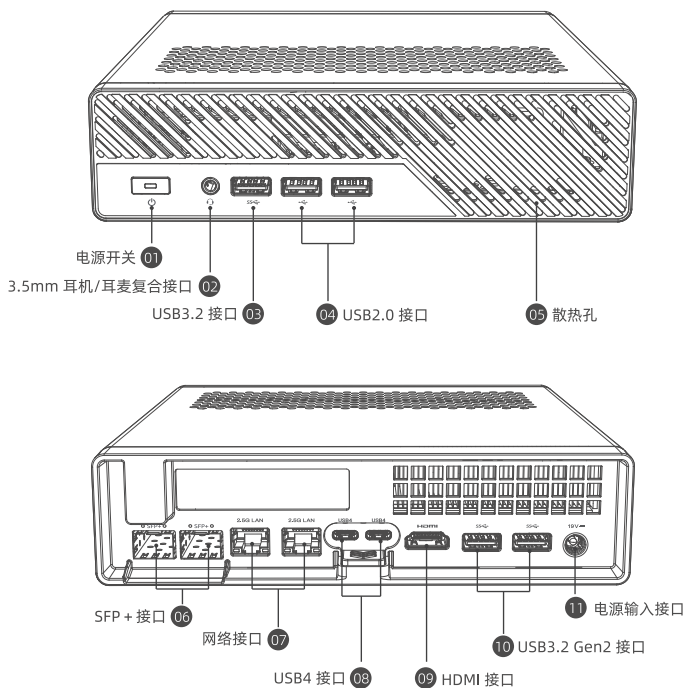
用户手册 /

注意：

\* 包装盒内随附的电源适配器及其他配件会因型号参数或购买地区而异。

## 3

## 了解您的迷你电脑



## 接口介绍

### 01 电源开关

按下此开关以开启/关闭Mini PC；在开启Mini PC的状态下，按下此开关以进入省电模式，长按10秒可强制关闭Mini PC。

### 02 3.5mm 耳机/耳麦复合接口

这个接头用来连接音频输出信号至功率放大器或耳机。您也可以用来连接外接麦克风或从音频设备输出信号。

### 03 USB3.2 接口

USB3.2 (Universal Serial Bus) 接口传输速度最高可达5.0Gbps可连接键盘、指向设备、摄像机、硬盘、打印机以及扫描仪等。

### 04 USB2.0 接口

这个USB (Universal Serial Bus) 2.0接口兼容于采用USB2.0或USB1.1规范的设备，像是键盘、打印机等。

### 05 散热孔

这些散热孔可以将热空气排出Mini PC机箱外。

**重要！** 请勿让纸张、书本、衣物、传输线或任何其他物品挡住散热孔，否则可能会造成机器过热。

### 06 SFP + 接口

SFP+网络接口，支持标准SFP+的DAC线，光纤模块，或RJ45-SFP+转换模块。支持10Gbps/1Gbps速率。

### 07 网络接口

这个RJ-45网络接口支持标准的以太网线，可以连接局域网等。(传输速度2.5Gbps)

### 08 USB4 接口

这个接口支持USB4传输协议，数据最大传输速率40Gbps。支持Alt DP音视频输出，仅支持5V对外供电，支持PCIe数据传输，支持雷电以太网。

### 09 HDMI 接口

HDMI接口是个未压缩的全数字化音频/视频接口，为兼容设备提供通用的数据连接渠道，连接外部显示设备和电视。

### 10 USB3.2 Gen2 接口

USB3.2 Gen2 (Universal Serial Bus) 接口传输速度最高可达10.0Gbps可连接键盘、指向设备、摄像机、硬盘、打印机以及扫描仪等。

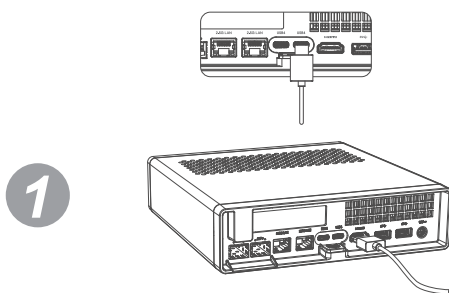
### 11 电源输入接口

电源适配器可以将交流电源转换为直流电源，转换的电源通过电源输入接口提供电力给您的Mini PC，为了避免损害您的Mini PC，请使用产品随附的电源适配器。

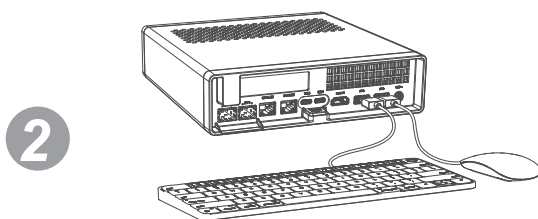
**警告！** 当电源正在使用中，电源适配器的温度可能会上升变热，请勿将电源适配器靠近您的身体。

电源适配器: DC 19V

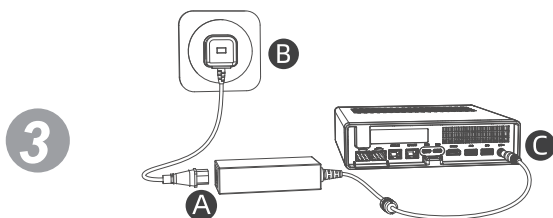
## 4 开始使用您的迷你电脑



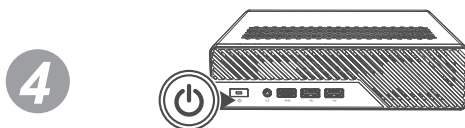
将显示器连接到Mini PC的HDM接口或者USB4 接口。



连接键盘与鼠标。



连接Mini PC的电源适配器。



打开电源，启动Mini PC。

如果您的Mini PC长时间没有响应，请长按电源键至少10秒钟直到您的Mini PC关闭。

若要让您的Mini PC进入睡眠状态，请按下次电源键一次。