



User Manual

BPCWL03

Notice

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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■ 1.1 Regulations information

- CE compliance

This device is classed as a technical information equipment (ITE) in class A and is intended for use in commercial, transport, retailer, public, automation...field.

- FCC rules

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 guarantee of this device could void the user's authority to operate the equipment.

■ 1.2 Safety instructions

The following safety precautions will increase the life of the Box-PC.

Follow all Precautions and instructions.

Do not place this device underneath heavy loads or in an unstable position.

Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.

Do not expose this device to high levels of direct sunlight, high-humidity or wet conditions.

Do not block the air vents to this device or impede the airflow in any way.

Do not expose to or use near liquid, rain, or moisture.
Do not use the modem during electrical storms.

The unit can be operated at an ambient temperature of max. 60°C (140°F). Do not expose it to temperatures below -20°C (-4°F) or above 60°C (140°F).

Ideal for industrial applications: factory, engine room... etc.
Touching of Box-PC in operation at a temperature range of -20°C (-4°F) and 60°C (140°F) must be avoided.



Caution high surface temperature!

Please don't touch the set directly till the set cool down.



CAUTION: 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.

■ 1.2 Consignes de sécurité

Les mesures de précaution suivantes servent à prolonger la durée de vie de l'ordinateur. Par conséquent, veuillez observer l'ensemble des mesures de précaution et des instructions.

Ne pas poser d'objets lourds sur l'appareil ou ne pas le mettre dans une position instable.

Ne pas exposer l'appareil à de forts champs magnétiques, puisque cela pourrait causer des interférences.

Ne pas exposer l'appareil directement aux rayons du soleil, à l'humidité ou ne pas le placer dans un endroit humide.

Ne pas couvrir la fente d'aération de l'appareil ou ne pas empêcher la circulation d'air de quelque sorte que ce soit.

Ne pas utiliser l'appareil à proximité de liquides, de pluie ou d'humidité. Ne pas utiliser le modem pendant un orage.

L'appareil peut être utilisé à une température ambiante maximum de 60°C (140°F). Ne pas exposer l'appareil à une température inférieure à -20°C (-4°F) ou supérieure à 60°C (140°F).

Idéal pour les applications industrielles: usine, salle des machines, etc. Le contact direct avec le PC Box pendant le fonctionnement dans la plage de température étendue -20°C (-4°F) - 60°C (140°F) doit être évité.




Attention : température de surface élevée !


Ne touchez pas l'appareil avant qu'il n'ait refroidi.



ATTENTION : Ne pas replacer 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.

■ 1.3 Notes for this manual

 CAUTION! Important information that must be followed for safe operation.

 NOTE: Information for special situations.

■ 1.4 Release history

Version	Revision note	Date
1.0	First released	01.2021

■ 2.1 Product specification

This User's Manual provides instructions and illustrations on how to operate this Box-PC. It is recommended to read this manual carefully before using this Box-PC.

• Physical characteristic

Dimension : 245(W) x 169(D) x 57(H) mm
Weight : NW. 2.85 KG / GW. 3 KG
(depend upon the actually shipping product)

• CPU

Support Intel® 8th Generation Core™ i3 / i5 / i7, Celeron® CPU

• Memory

Support DDR4 dual channel 2400 MHz, SO-DIMM (RAM socket *2) , Max up to 64G

• Storage

1x PCIe or SATA I/F (optional)

• I/O port

4 x USB 3.0	1 x RJ45 LAN
1 x HDMI 1.4	1 x RJ45 2nd LAN (optional)
2 x Audio jacks (Mic-in & Line-out)	1 x DC-in
1 x COM (RS232 only)	


• Power

AC adapter : 90 watts, 3 pin

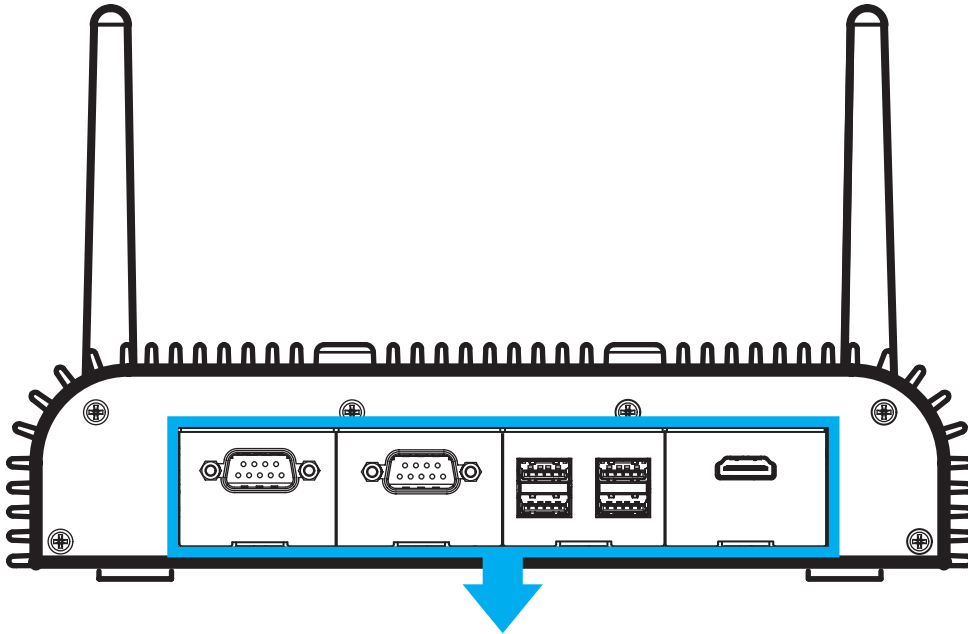









CAUTION! MODEL IS DESIGNED TO USE WITH THE DC INPUT:
(19Vdc / 4.74A) ADAPTERS. Adapter watt should follow default
setting or refer to rating label information.

2.2 Product overview

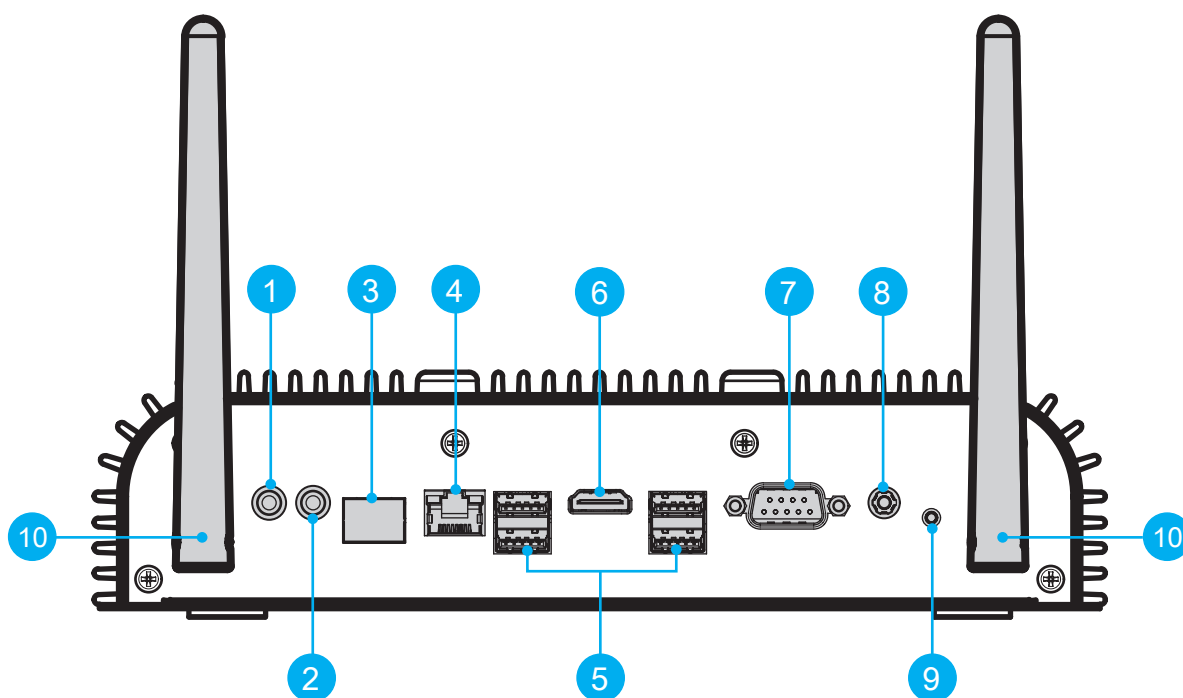
 NOTE: The product's color, I/O port, indicator location, and specification will depend upon the actually shipping product.

➤ Front Panel: Optional I/O ports are available depending on the specs of the actually shipping product.



Optional I/O Port	Occupied Sections	Specifications / Limitations
HDMI 1.4 / 2.0	1 	Choose one from four optional display boards. Max. resolution: 1. HDMI 1.4: 4k/30Hz 2. HDMI 2.0: 4k/60Hz 3. DisplayPort: 4k/60Hz 4. DVI-I/D-Sub: 1920x1080
DisplayPort 1.2 (DP)	1 	
D-Sub (VGA)	1 	
DVI-I (Single Link)	1 	
USB 2.0	1 	Maximum: 2 x Quad USB 2.0 board
COM4	1 	RS232 only
COM2, COM3	2 	RS232 / RS422 / RS485 Power supply : Ring in/5V

- Back Panel: Refer to the following illustration to identify the components on this side of the Box-PC. Features and configurations vary by model.



- 1 Headphones / Line-out jack
- 2 Microphone jack
- 3 LAN port (supports wake on LAN)(optional)
- 4 LAN port (supports wake on LAN)
- 5 USB 3.0 Ports
- 6 HDMI port
- 7 COM port (RS232 only)
- 8 Power jack (DC-IN)
- 9 Power button
- 10 Connector for WLAN Dipole antennas (optional)

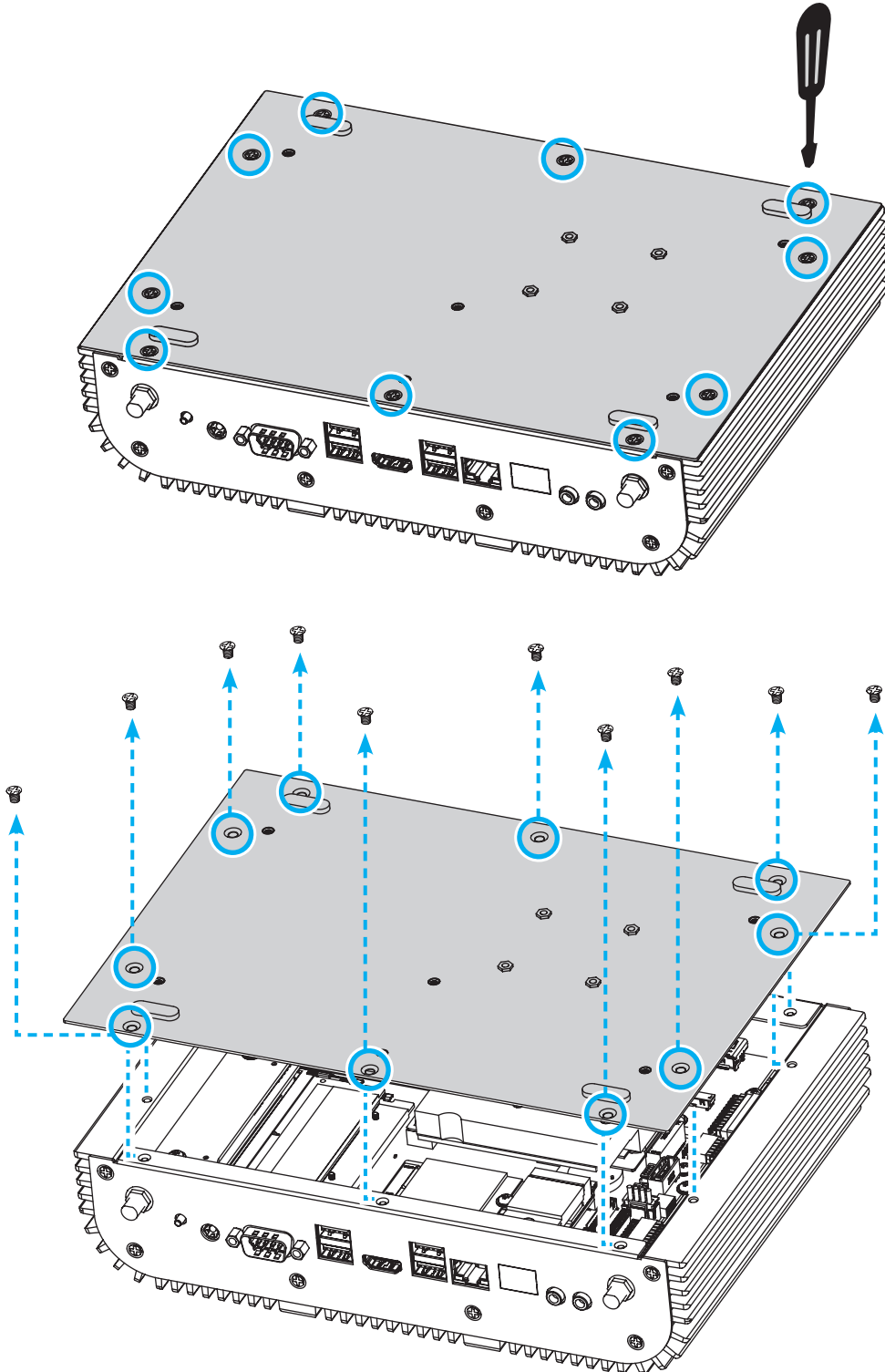
Hardware Installation

■ 3.1 Begin Installation



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

1. Unscrew the ten screws of the chassis cover and remove it.

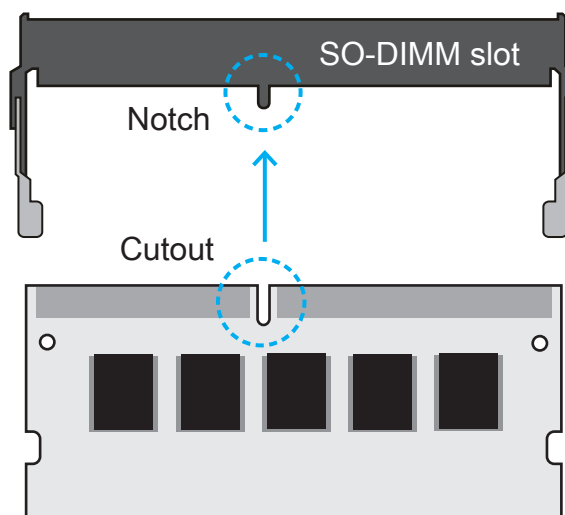


■ 3.2 Memory Module Installation

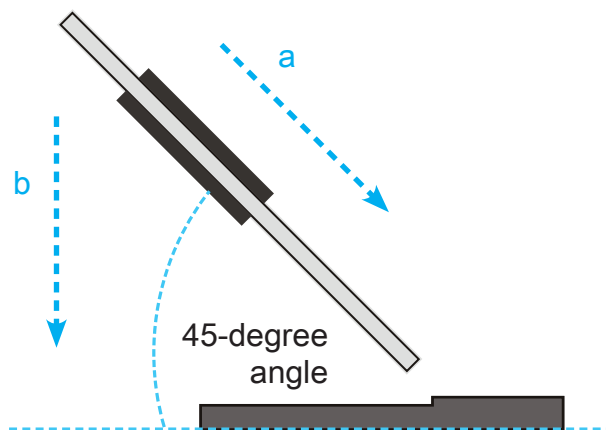


CAUTION! This motherboard does only support 1.2 V DDR4 SO-DIMM memory modules.

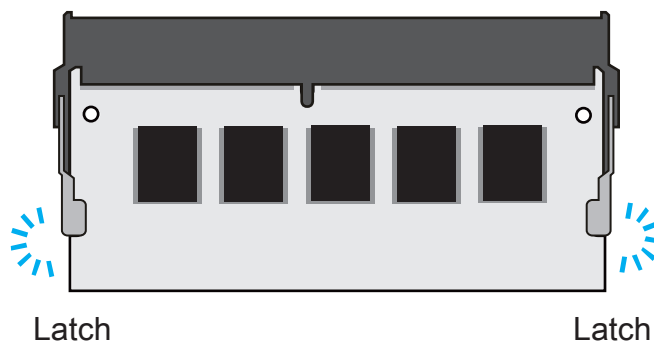
1. Locate the SO-DIMM slots on the motherboard.
2. Align the notch of the memory module with the one of the relevant memory slot.



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.



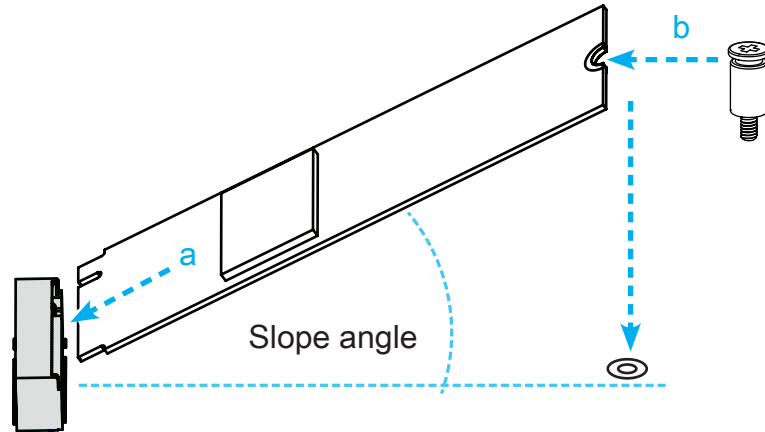
5. Repeat the above steps to install an additional memory module, if required.



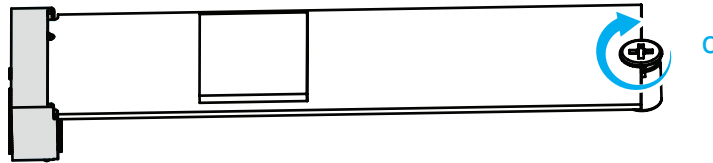
3.3 M.2 Device Installation

1. Locate the M.2 key slots on the motherboard, unfasten the screw first.

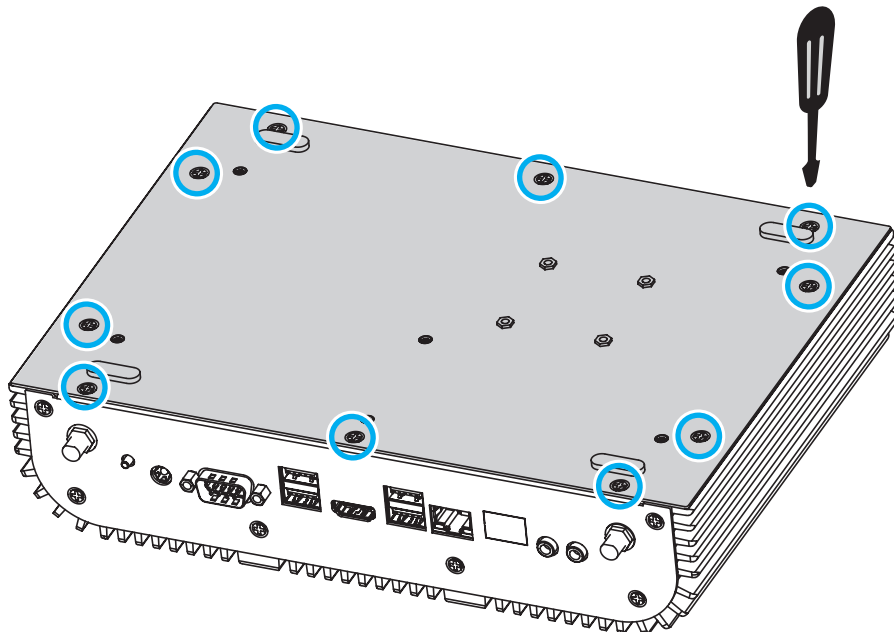
➤ M.2 2280 M key slot



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




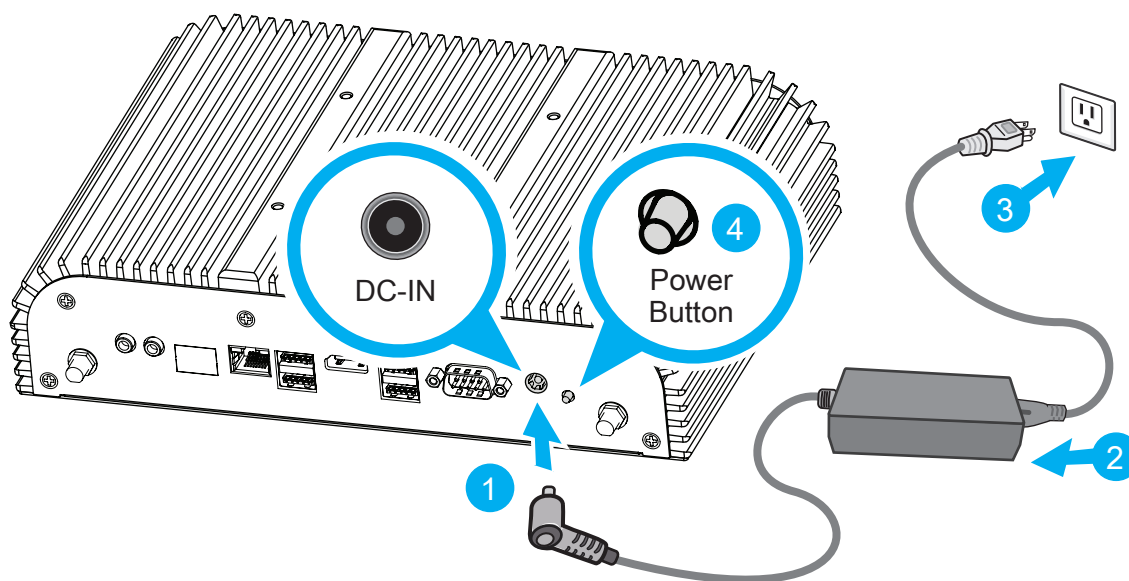
3. Please replace and affix the chassis cover with ten screws.





■ 3.4 Powering on the system

- Follow the steps (1-3) below to connect the AC adapter to the power jack (DC-IN). Press the power button (4) to turn on the system.

 NOTE: Press and hold the power button for 5 seconds to force shutdown.

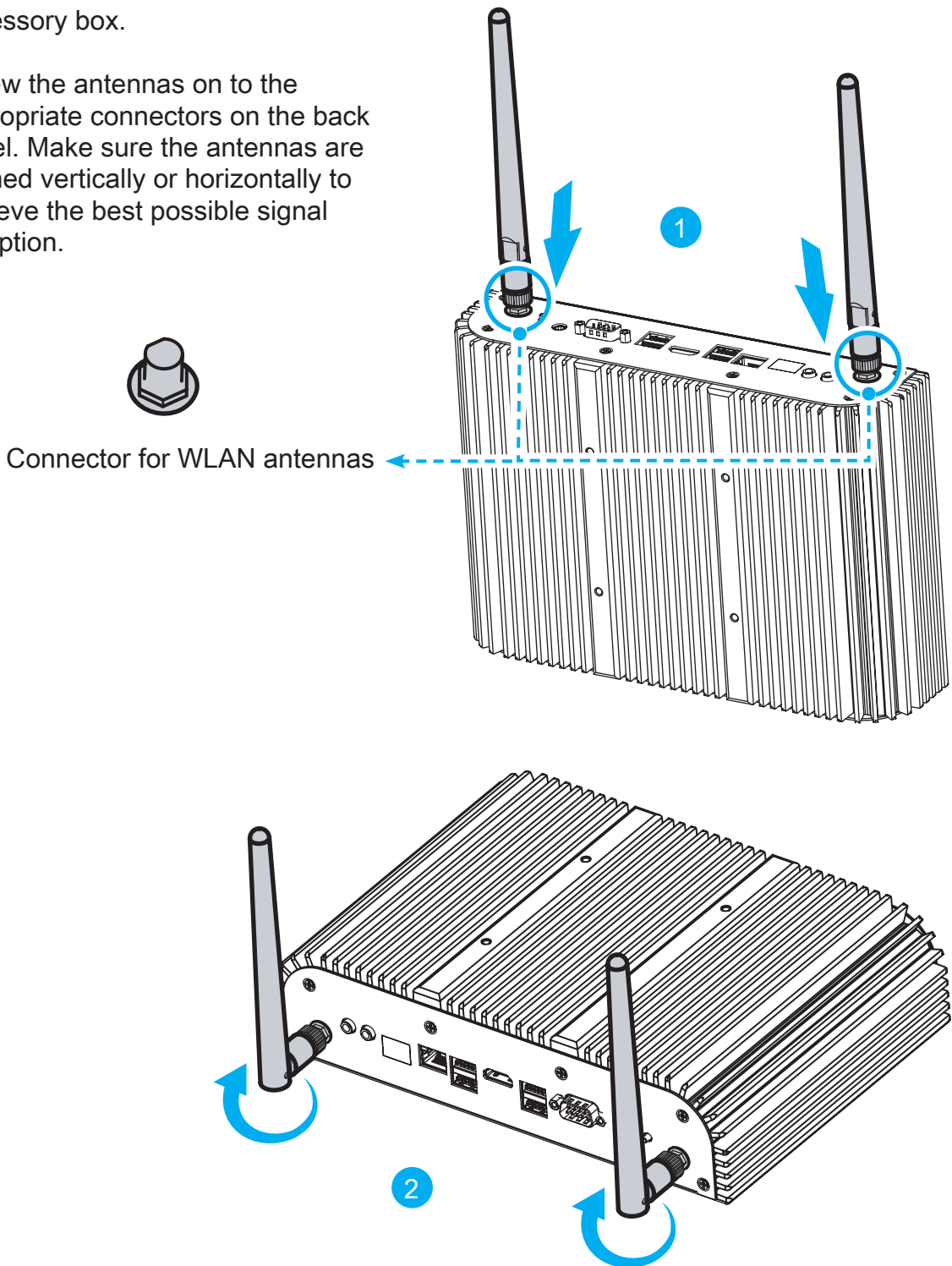


 **CAUTION:** Do not use inferior extension cords as this may result in damage to your Box-PC. The Box-PC comes with its own AC adapter. Do not use a different adapter to power the Box-PC and other electrical devices.

 NOTE: The power adapter may become warm to hot when in use. Be sure not to cover the adapter and keep it away from your body.

■ 3.5 Installation of WLAN antennas (optional)

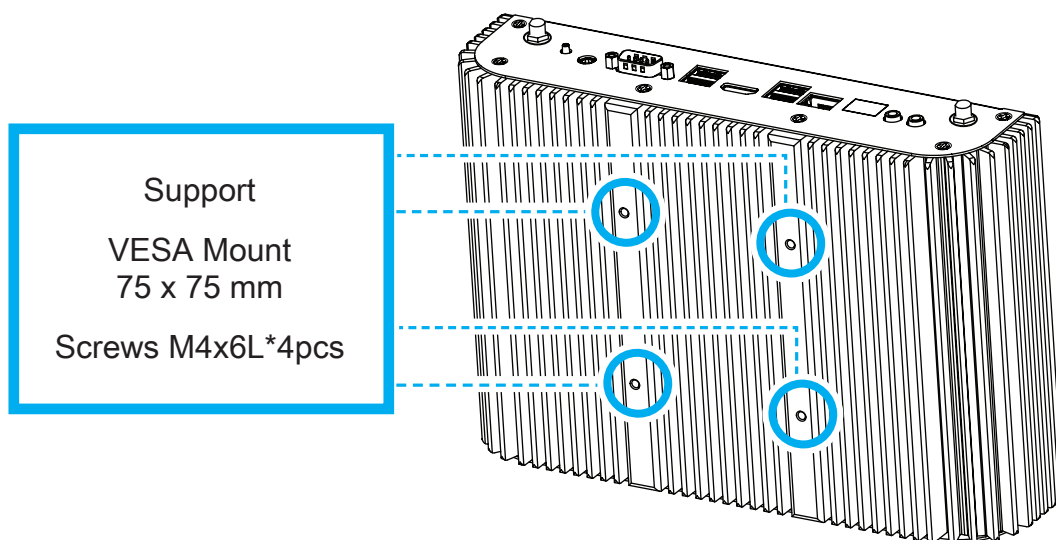
1. Take the two antennas out of the accessory box.
2. Screw the antennas on to the appropriate connectors on the back panel. Make sure the antennas are aligned vertically or horizontally to achieve the best possible signal reception.





! CAUTION: Make sure the two antennas are aligned in the correct direction.

■ 3.6 VESA mounting it to the wall (optional)

The standard VESA openings show where an arm/wall mount kit which is available separately can be attached.

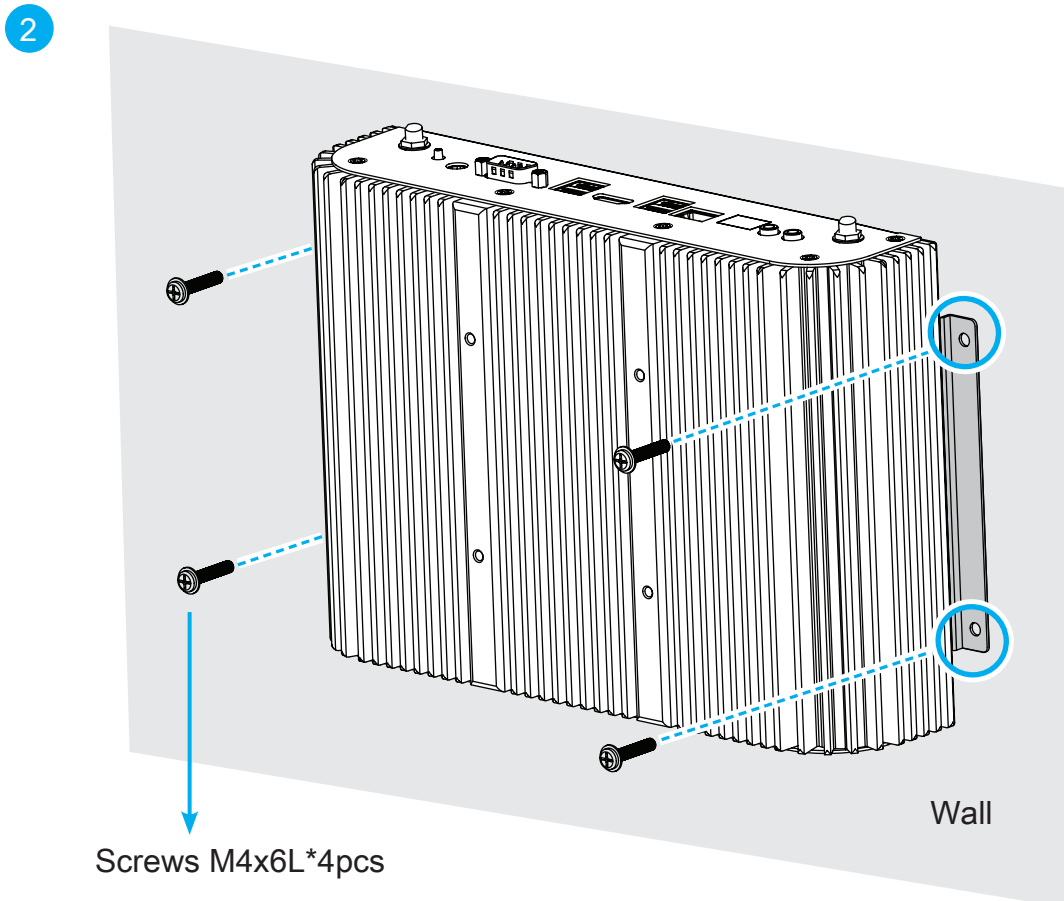
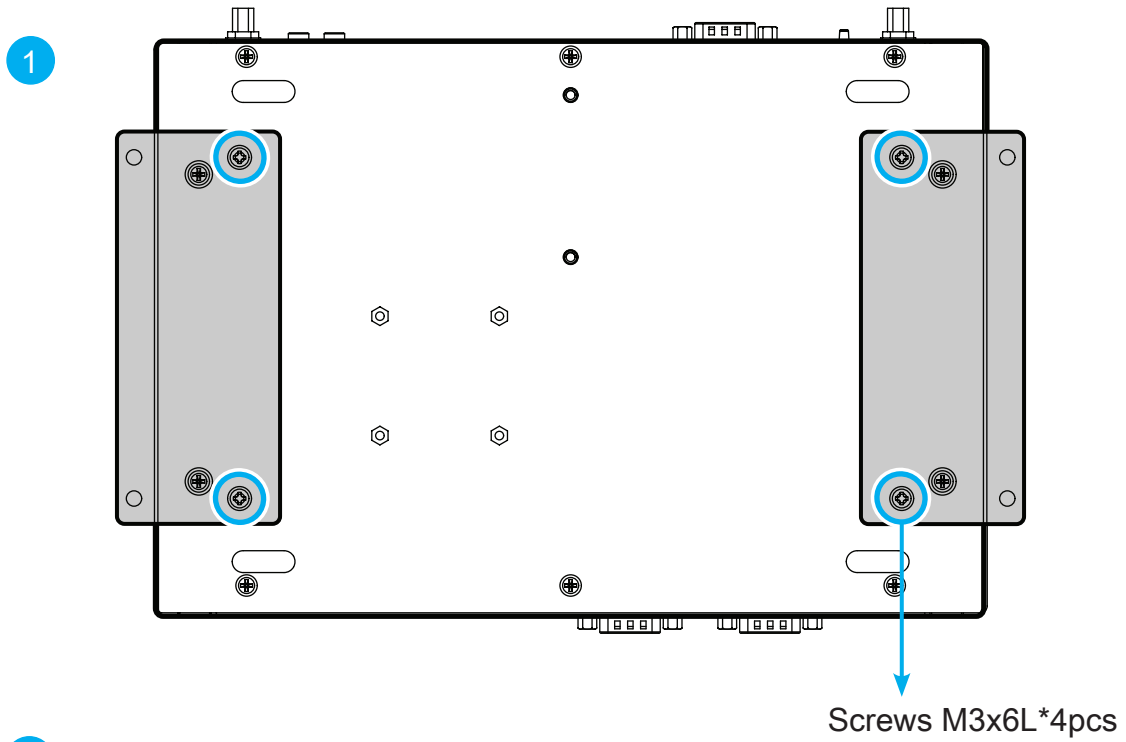


 NOTE: The Box-PC can be wall-mounted using a VESA compatible 75 mm x 75 mm wall/arm bracket. The maximum load capacity is 10 kg and mounting suitable in heights of ≤ 2 m only. The metal thickness of the VESA mount must be between 1.6 and 2.0 mm.

 REMARQUE: Le Box-PC peut être fixé au mur à l'aide d'un support mural / bras compatible VESA 75 mm x 75 mm. La capacité de charge maximale est de 10 kg et le montage convient uniquement à des hauteurs ≤ 2 m. L'épaisseur du support de montage VESA doit être comprise entre 1,6 et 2,0 mm.

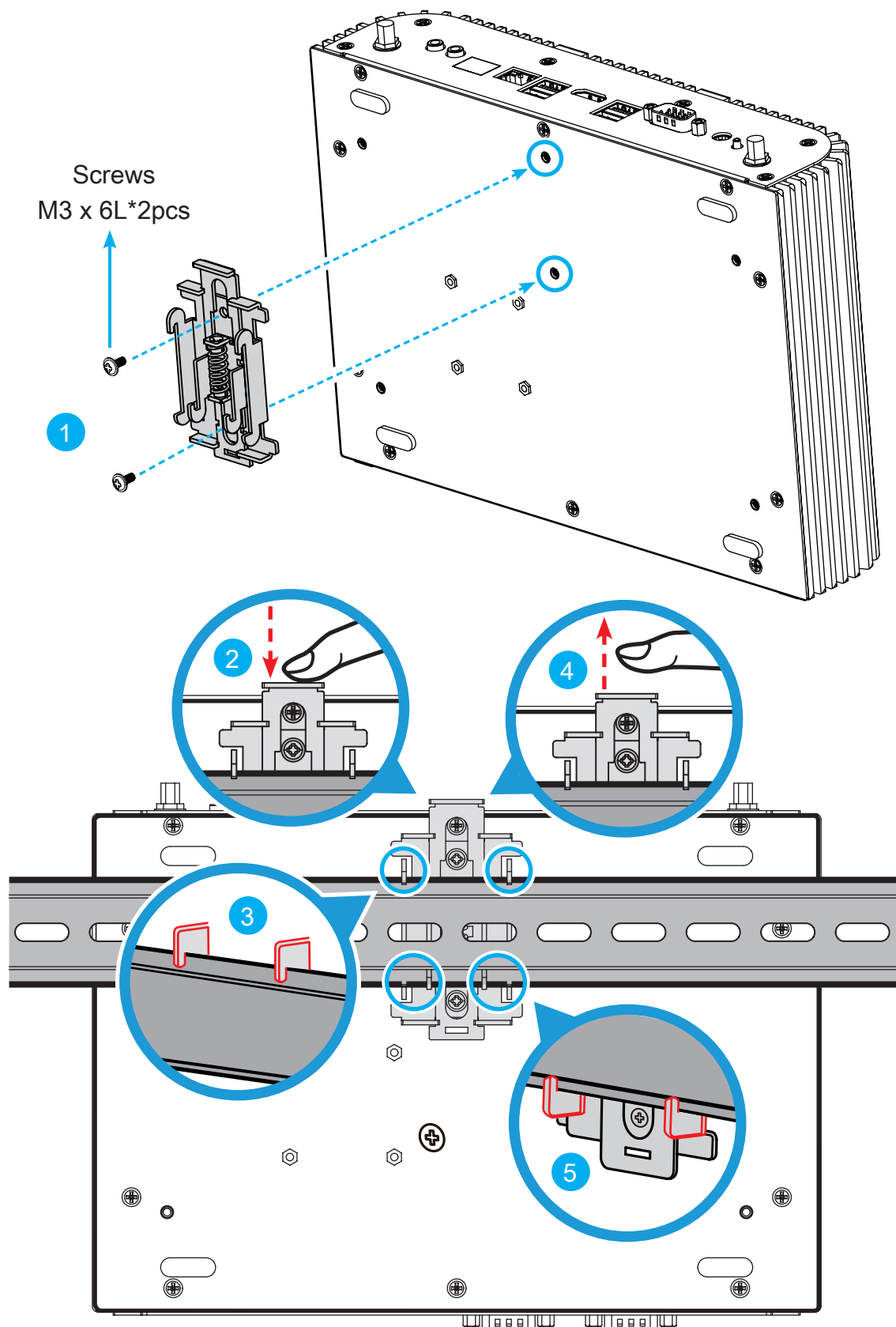
■ 3.7 Ear mounting to the wall (optional)

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



■ 3.8 Using the Din Rail (optional)

Follow the steps 1-5 to affix the Box-PC on a DIN rail.



■ 4.1 About BIOS Setup

The default BIOS (Basic Input/Output System) is already properly configured and optimized, there is normally no need to run this utility.

■ 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.



CAUTION! We strongly recommend that you change the BIOS settings only with the help of a trained service personnel.

■ 4.1.2 How to run BIOS Setup ?


To run the BIOS Setup Utility, turn on the Box-PC and press the [Del] or [F2] 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.

The setup function only can be invoked by pressing [Del] or [F2] key during POST that provide an 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.

Press [F7] key for Boot Menu.

· When OS support is Windows 10 :

1. Click the Start  menu and select Settings.
2. Select Update and Security.
3. Click Recovery
4. Under Advanced startup, click Restart now.
The system will restart and show the Windows 10 boot menu.
5. Select Troubleshoot.
6. Choose Advanced options.
7. Select UEFI Firmware Settings.
8. Click Restart to restart the system and enter UEFI (BIOS).