

USER'S MANUAL

EMBEDDED
SOLUTIONS

ZP-CI333 NANO

User's Manual



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Every effort has been made to ensure that the contents of this manual are correct and up to date. However, the manufacturer makes no guarantee regarding the accuracy of its contents, and reserves the right to make changes without prior notice.

CAUTION:

Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

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Specifications

Microprocessor Support Operating Systems

- Intel Celeron J6412 (2.0GHz/2.6GHz, 1.5MB cache)
- Supports Windows 11, Windows 10, Windows 10 IoT ENT LTSC and Ubuntu 20.04 LTS Linux

Onboard Graphics Support

- Intel UHD Graphics
- 2x HDMI 2.0 (max resolution: 4096×2160 @60Hz)
- 1x DP 1.2 (max resolution: 4096×2160 @60Hz)

System Memory Support

- 2x DDR4 3200 SO-DIMM slots
- Up total 32 GB of memory

USB Ports

- 1x USB3.0 Type-C
- 3x USB3.1 Type-A
- 1x USB2.0 Type-A

Audio

- 1x 3.5mm stereo out & 1x Microphone input

Onboard Serial ATA

- Supports one 2.5-inch SATA III HDD/SSD bay (max 9.5mm height)

Expansion Slot

- One M.2 2242/2260 key-M socket for SATA SSD

Card Reader

- SD/SDHC/SDXC card reader slot

Network

- 1x Gigabit Ethernet LAN
- Supports Wake-on-LAN

WiFi Support (optional)

- WIFI 6E, IEEE 802.11 a/b/g/n/ac/ax
- Bluetooth 5.2

H/W watchdog timer

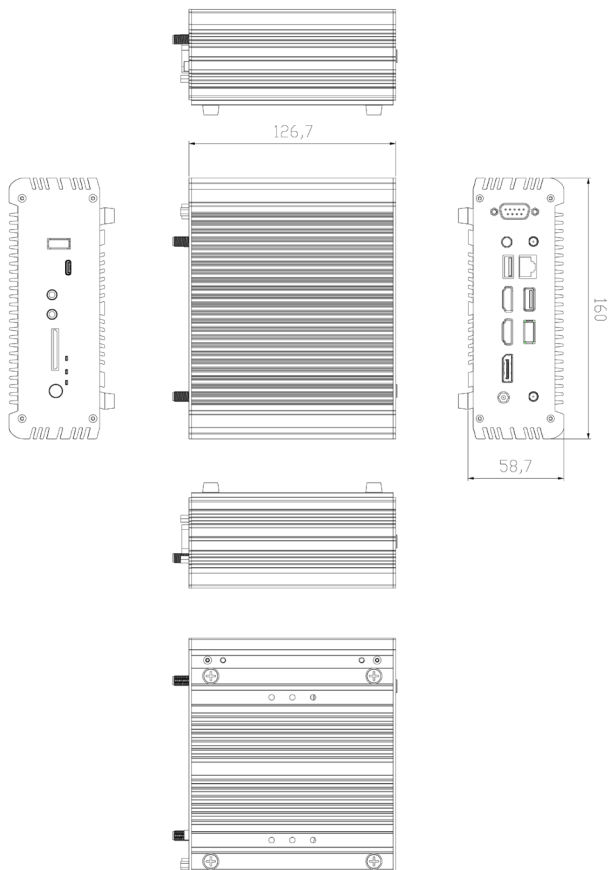
- Timeout value = 1 ~ 255. Unit: minute/second

Universal AC Adapter

- DC output = DC19V/40W

Case Dimension

- 160mm x 126.7mm x 58.7mm



Safety instructions

ZP-CI333 NANO is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

- ❖ Read and follow all instructions in the documentation before you operate your system.
- ❖ Do not use this product near water or a heat source such as a radiator.
- ❖ Set up the system on a stable surface with the provided stand. Never use the system alone without the stand.
- ❖ Openings on the chassis are for ventilation. Do not block or cover these openings.
- ❖ Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- ❖ Use this product in environments with ambient temperature on below conditions:
Main unit: -20°C - +45°C
AC adapter: +0°C ~ +40°C
- ❖ Do not walk on the power cord or allow anything to rest on it.
- ❖ Do not spill water or any other liquids on your system.
- ❖ When the system is turned off, a small amount of electrical current still flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- ❖ If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
 - The power cord or plug is damaged.
 - Liquid has been spilled into the system.
 - The system does not function properly even if you follow the operating instructions.
 - The system was dropped or the cabinet is damaged.
 - The system performance changes.

Package contents

Thank you for choosing our ZP-CI333 NANO. The following illustration displays the package contents of your new ZP-CI333 NANO. If any of the below items are damaged or missed, contact your retailer.

- 1 x ZP-CI333 NANO
- 1 x L-shaped mounting kit
- 1 x VESA mounting kit
- 1 x AC adapter
- 1 x Power Cord
- 2 x WiFi Antenna
- 1 x USB flash drive
- 1 x User's manual (soft copy)

Getting to know your ZP-CI333 NANO

Front view



1. Power button

The power button turns the mini-PC ON and OFF.

2. Power LED

The Power LED is always ON when power is on.

3. SATA status LED

The SATA LED blinks when data is being written onto or read from the SATA.

4. Wi-Fi status indicator

The Wi-Fi LED is always ON when data is being transferred over Wi-Fi.

5. Memory card reader

The built-in memory card reader reads SD/SDHC/SDXC cards used in devices such as digital cameras, MP3 players, mobile phones and PDAs.

6. Headphone/Audio Out jack

The stereo headphone jack (3.5mm) is used to connect the system's audio output signal to amplified speakers or headphones.

7. Microphone input

The microphone input is designed to connect a microphone for video conferencing, voice narrations or simple audio recordings.

8. USB 3.0 Type-C port

The USB 3.0 Type-C port supports the SuperSpeed USB 3.0 devices. Use the port for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

9. USB 3.1 port

The USB 3.1 port supports the SuperSpeed USB 3.1 devices and is backwards compatible with USB 3.0/2.0/1.1 devices. Use the ports for USB 3.1 devices for maximum performance with USB 3.1 compatible devices.

Rear view



1. COM port

Use the COM port to connect serial devices such as mouse or fax/modem.

2. WiFi antenna connectors

The WiFi antenna connector supports the included WiFi antenna.

3. Display Continuity Switch

For digital signage application, in some situations the HDMI/DP hot-plug detection may be unwanted. The Display Continuity Switch (self-maintain) on back panel connects/disconnects the Hot-Plug Detect (HPD) signals coming from HDMI 1, HDMI 2 and DP connectors.

4. Ethernet port

The eight-pin RJ-45 LAN port supports standard Ethernet cable for connections to local area networks (LAN) with speeds of 10/100/1000Mbps.

5. USB 2.0 port

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mice, cameras and hard disk drives.

6. USB 3.1 ports

The USB 3.1 port supports the SuperSpeed USB 3.1 devices and is backwards compatible with USB 3.0/2.0/1.1 devices. Use this port for USB 3.1 devices for maximum performance with USB 3.1 compatible devices.

7. HDMI ports

The HDMI (High Definition Multimedia Interface) port supports with HDMI2.0, max resolution 4096x2160 @60Hz.

8. DisplayPort

DisplayPort supports external connection up to DP1.2, max resolution 4096x2160 @60Hz.

9. Power input (DC19V)

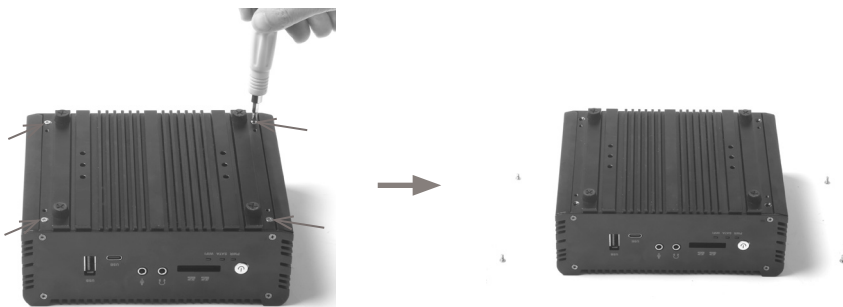
The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the PC. To prevent damage to the PC, always use the supplied power adapter.

⚠ The power adapter may become warm to hot when in use. Do not cover the adapter and keep it away from your body.

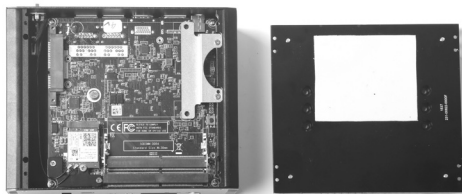
Installing hardware inside ZP-CI333 NANO

Before installing hardware, please follow the instructions below to remove the cover of your ZP-CI333 NANO.

1. Remove the four screws of bottom cover.



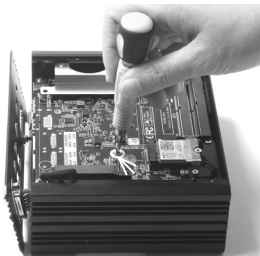
2. Remove the bottom cover.



3. Remove the four screws of rear cover.



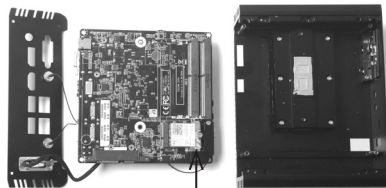
4. Remove the seven screws as shown below.



5. Remove the the hard drive bracket, and remove the screw as shown below.

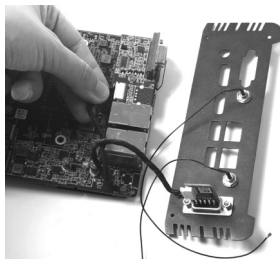


6. Take the the board out from the box.



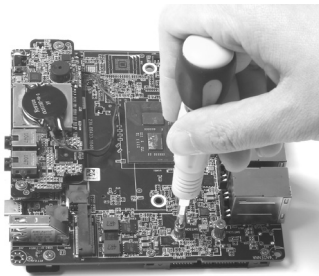
The plastic buckle
is to prevent the
Wi-Fi cables from
falling out.

7. Turn the board upside down, and gently remove the COM connector.



Installing an M.2 SSD module

1. Locate the M.2 SSD mounting screw, and release the screw.



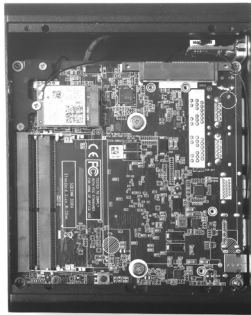
2. Insert the M.2 SSD module into the socket.



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3. Gently press down on the M.2 SSD module, and install the screw to secure the M.2 SSD module.

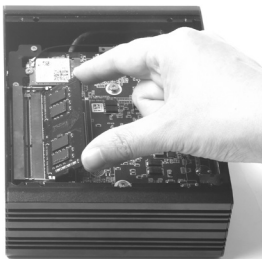


4. Install the board into the box with screws.

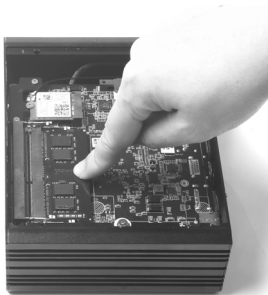


Installing a memory module

1. Insert the memory module into the socket.

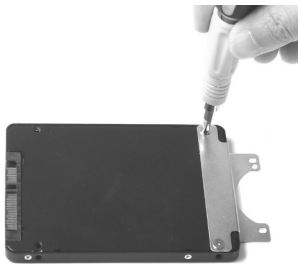


2. Gently press down on the memory module until it is locked by the arms of the socket.



Installing a hard disk drive

1. Install the hard disk bracket onto a 2.5-inch SATA hard disk drive /SSD with two screws.



2. Insert the hard disk drive /SSD into the socket and gently slide into the connector.

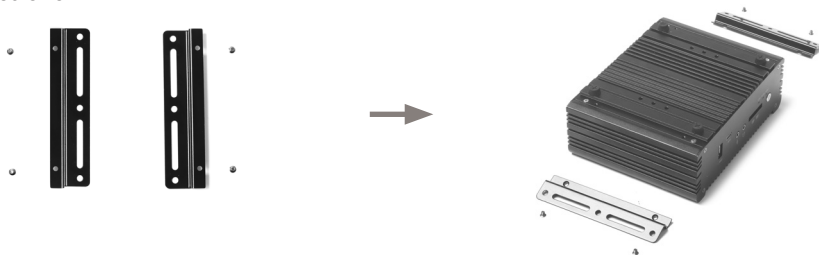


3 Reinstall the screw for the hard disk bracket.



Installing the L-shaped mountings

1. Locate the bottom cover upwards, and take out the L-shaped mounting kit and shipped screws.



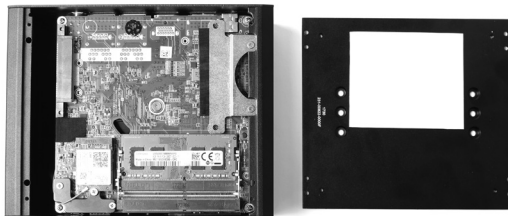
2. Install the L-shaped mountings to the bottom cover with screws.



Installing your ZP-CI333 NANO to a monitor

You can also install your ZP-CI333 NANO to the back of a monitor. To do so:

1. Unscrew and remove the bottom cover.



2. Install the VESA mounting kit to the bottom cover with four screws as shown below.



-
3. Reinstall the bottom cover to the ZP-CI333 NANO.



4. Install the ZP-CI333 NANO to the monitor.



- ⚠ **Mechanical Loading Stability** - Mounting of the equipment on the backside of the monitor should be lay this equipment on a reliable surface when install. A drop or fall could cause injury.

Setting up your ZP-CI333 NANO

Please connect your peripherals before using your ZP-CI333 NANO.



1. Connecting a COM device

Connect serial devices such as mouse or fax/modems.

2. Connecting the WiFi antenna

Connect the WiFi antenna to the WiFi antenna connector.

3. Connecting to a network device

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a network hub, switch or router.

4. Connecting to USB 2.0 device

Connect USB device like wired/wireless keyboards (varying with areas), mouse devices and printers to the USB ports on the system rear panel.

5. Connecting to USB 3.1 devices

Connect USB 3.1 devices such as external hard disk drives, SSDs and flash drives to the USB 3.1 port on the system rear panel.

6. Connecting to an HDMI display

Connect one end of an HDMI cable to an HDTV or monitor, and the other end to the HDMI port on the system rear panel.

7. Connecting a DisplayPort display

Connect the DisplayPort connector to the DP port of the monitor or display.

8. Connecting the power adapter and turning on the ZP-CI333 NANO

Connect the supplied AC adapter to the DC IN jack on the system rear panel and then press the power switch on the front panel to turn on the system.

☞ When your ZP-CI333 NANO is not in use, unplug the power adapter or switch off the AC outlet to conserve power.

Installing drivers and software

Installing an operating system

The ZP-CI333 NANO does not ship with an operating system preinstalled. The user must install the operating system before the ZP-CI333 NANO can be used. The following operating systems are supported:

- Windows 10/ 11
- Windows 10 IoT ENT LTSC
- Ubuntu 20.04 LTS

Follow the instructions below to install an operating system:

1. Attach external USB flash drive via USB 3.1 ports.
2. Wait for the ZP-CI333 NANO to boot from the drive.
3. Follow the onscreen directions to install the operating system.
4. Install system drivers to gain full functionality of the ZP-CI333 NANO hardware and features.

Installing system drivers

Before you can use the full features of the ZP-CI333 NANO, the system drivers must be installed. The following types of operating systems are supported by the ZP-CI333 NANO USB flash drive:

- Windows 10/ 11
- Windows 10 IoT ENT LTSC
- Ubuntu 20.04 LTS

Follow the instructions below to install the system drivers:

1. Insert the ZP-CI333 NANO USB flash drive.
If autorun is enabled, the driver installation main menu will show up automatically.
If autorun is disabled, you may click the file *Launch.EXE* to bring up the driver installation main menu.
2. The following drivers are available on the USB flash drive:



- Intel Chipset Driver
- Intel Graphics Driver
- Realtek Ethernet PCI-E Driver
- Wireless Network Driver
- Bluetooth Driver
- Intel Management Engine
- Intel HID Driver
- CardReader Driver
- Intel SerialIO

☞ Each driver must be installed individually to ensure proper operation of the ZP-CI333 NANO.

1. Select the driver you want to install. The driver installer should launch.
4. Follow the onscreen instructions to install the drivers.
5. Restart the system.

Using your ZP-CI333 NANO

Configuring a wireless connection

Please follow the instructions below to connect to a wireless network:

1. Double-click the wireless network icon in the notification area.
2. Select the wireless network you want to connect to from the list and click Connect.
3. After connection is established, you will see “Connected.”

Note 1: For security concerns, Do NOT connect to an unsecured network, otherwise, the transmitted information without encryption might be visible to others.

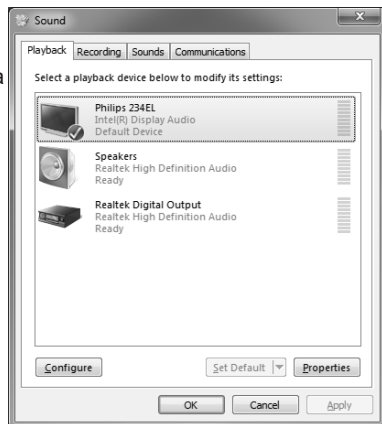
Note 2: Enter the network security key if necessary.



Configuring audio output

Follow the steps below to enable audio output when connecting the ZP-CI333 NANO to a TV or receiver via HDMI/DP adapter.

1. Access the Sound settings via the system Control Panel.
2. Under Playback devices, click the display device that corresponds with your audio compatible display.
3. Click the “Set Default” button in the lower right hand corner.
4. Click “OK” to exit the setup.



Watch Dog Timer function

This device support Watch Dog Timer. The detail of Watch Dog Timer function, user manual, demonstration application and source code for Windows and Linux can refer to the Watch Dog Timer driver folder on the USB driver.



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