ZBOX

# C SERIES

# USER'S MANUAL CI665/CI645/CI625 NANO

# ZOTAC ZBOX 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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# **Product specifications**

#### **Processor**

- Intel Core i7-1165G7 (quad-core 2.8GHz, up to 4.7GHz) for ZBOX CI665NANO
- Intel Core i5-1135G7 (quad-core 2.4GHz, up to 4.2GHz) for ZBOX CI645NANO
- Intel Core i3-1115G4 (dual-core 3.0GHz, up to 4.1GHz) for ZBOX CI625NANO

#### **Onboard graphics**

- Intel Iris Xe Graphics for ZBOX CI665NANO/ZBOX CI645NANO
- Intel UHD Graphics for ZBOX CI625NANO
- HDMI 2.0 (max resolution: 3840x2160 @60Hz)
- DP 1.4 (max resolution: 4096x2160 @60Hz)

#### **Memory support**

- 2 x DDR4-3200/2666 SODIMM Slot
- Up to 64 GB of memory

#### **USB** ports

- 4 USB 3.1 10Gbps
- 1 USB 2.0

#### Storage support

- · SATA 6.0 Gb/s transfer rates
- Supports one 2.5-inch SATA HDD/SSD (9.5mm max height)
- One M.2 PCIe x4 SSD slot (22/30, 22/42)

#### **Network support**

- Dual Gigabit (10/100/1000Mbps) LAN
- IEEE 802.3 compatible

#### Wi-Fi support

• 802.11ac Wi-Fi (dual-band), Bluetooth 5.0

#### Audio

Digital 8 Channel Audio (LPCM/bitstream via HDMI)

# **Power Supply**

• 19V/65W Power Supply

#### **Operating System support**

Windows 10 64-bit ready

#### **Product Dimensions**

- 204mm x 129mm x 68mm
- The device does not support S3 power state due to Intel chipset limitation.

# **Safety information**

Your ZOTAC ZBOX 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.

#### Setting up your system

- Read and follow all instructions in the documentation before operating 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.
- 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 temperatures between 0°C and 35°C.
- If you use an extension cord, please use the UL listed cord and make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

# Care during use

- 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 onto the system.
  - > The system does not function properly even if you follow the operating instructions.
  - > The system was dropped or the cabinet is damaged.

#### Welcome

Congratulations on your purchase of the ZOTAC ZBOX nano. The following illustration displays the package contents of your new ZOTAC ZBOX nano. If any of the below items are damaged or missing, contact your retailer.

#### Package contents

- 1 x ZOTAC ZBOX nano
- 1 x VFSA mount
- 1 x AC Adapter (optional)
- 1 x Power Cord (optional)
- 1 x Antenna
- · 1 x USB flash drive with OS drivers
- · 1 x Quick Start Guide
- · 1 x Warranty Card



# Getting to know your ZOTAC ZBOX nano Front view



Refer to the diagram below to identify the components on the front of the ZBOX nano

#### 1. Power button

The power button turns the system 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 transfered 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 out signal to amplified speakers or headphones.

#### 7. Microphone jack

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

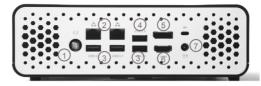
#### 8. USB 3.1 port

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 this port for USB 3.1 devices for maximum performance with USB 3.1 compatible devices.

#### 9. Thunderbolt 4 port

The Thunderbolt 4 port is compatible with Thunderbolt 4 device such as external graphics, DisplayPort device and USB Type-C device.

#### **Rear view**



Refer to the diagram below to identify the components on the back of the system.

#### 1. WiFi antenna connector

The WiFi antenna connector supports the included WiFi antenna.

#### 2. Ethernet ports

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

# 3. 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.

#### 4. USB 2.0 port

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

## 5. DisplayPort

DisplayPort supports both external (box-to-box) and internal (laptop LCD panel) display connections.

#### 6. HDMI port

The HDMI (High Definition Multimedia Interface) port supports a UHD device such as an LCD TV or monitor to allow viewing on a larger external display.

# 7. 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.

# **Customizing the ZOTAC ZBOX nano**

Before installing hardware, please follow the instructions below to remove the cover of your ZOTAC ZBOX nano.

1. Remove the four thumb screws securing the bottom cover into place.





2. Remove the bottom cover.





# Installing an M.2 SSD module

1. Remove the four screws securing the bracket.



2. Remove the bracket.



3. Locate the M.2 PCIe x4 SSD slot and remove the screw from the screw bolt. (tool required, not included)



4. Attach the screw to the M.2 PCIe x4 SSD module.



5. Insert the M.2 PCIe x4 SSD module into the slot at a 45 degree angle.



6. Gently press down on the M.2 PCle x4 SSD module, install the SSD screw and the bracket.



Note: Windows models include SSD module pre-installed.

# Installing a memory module

 Locate the SO-DIMM memory slots and insert a SO-DIMM memory module into the slot at a 45 degree angle.



Gently press down on the memory module until it locks into place by the arms of the memory slot.



Note: This ZOTAC ZBOX nano accomodates two DDR4 SO-DIMM memory modules. You must install at least one module for the system to function. Windows models include memory pre-installed.

#### Removing the memory module

 Locate the SO-DIMM memory slot and gently press the two arms securing the memory module outwards, as shown in the image below, to release the memory module.



2. Remove the memory module from the slot at a 45-degree angle.



# Installing a hard disk drive

1. Locate the hard disk bracket, remove the 2 screws, and remove the hard disk bracket as shown in the image below.



2. Install the hard disk bracket onto a 2.5-inch SATA hard disk drive / SSD with 2 screws.



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



4. Reinstall the screws for the hard disk bracket.



#### Note:

1. After installing the hard disk drive / SSD and memory module, please remove the corresponding protective film.





2. The thermal pad is default for 7mm height HDD / SSD, if you use a 9.5mm hard disk drive / SSD, please make sure to remove the thermal pad for the HDD / SSD.





# Setting up your ZOTAC ZBOX nano

Please connect your peripherals before using your ZOTAC ZBOX nano



#### 1. Connecting the WiFi antenna

Connect the WiFi antenna to the WiFi antenna connector.

#### 2. 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.

#### 3. 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.

#### 4. Connecting to USB 2.0 devices

Connect USB 2.0 devices such as keyboards, mice, cameras and hard disk drives.

#### 5. Connecting a DisplayPort display

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

#### 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 the power adapter and turning on the ZBOX 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 ZOTAC ZBOX nano is not in use, unplug the power adapter or switch off the AC outlet to conserve power.

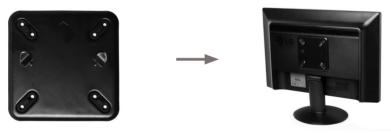
# **Positioning the ZOTAC ZBOX nano**

- Do not position the ZOTAC ZBOX nano where the ventilation holes are covered. To guarantee proper use, leave 4 inches (10 cm) of spacing in front of the ventilation holes.
- ZOTAC ZBOX nano mini-PC systems provide ample connectivity in a tiny form factor, please choose connectors and cables in appropriate sizes to avoid interference.

#### Mounting the ZOTAC ZBOX nano to an LCD monitor

You can attach your ZOTAC ZBOX nano to the back of a VESA75/100 compliant monitor.

Secure the VESA mount to the LCD monitor using 4 screws (not included).
 Disclaimer: ZOTAC cannot be held liable for damages resulting from an improper installation.



Align the ZOTAC ZBOX nano mounting holes to the VESA mount attachment pegs. Attach the ZOTAC ZBOX nano to the VESA mount and gently press down to secure the ZBOX nano to the mount.



3. Connect the ZOTAC ZBOX nano to your LCD monitor with an HDMI/DP cable.



# **Installing drivers and software**

#### **Installing an operating system**

Depending on the ZOTAC ZBOX nano model, the system may not ship with an operating system pre-installed. The user must install the operating system before the ZOTAC ZBOX nano can be used. The following operating systems are supported:

· Windows 10 64-bit

Follow the instructions below to install an operating system:

- 1. Attach the USB flash drive via USB 3.1 port.
- 2. Wait for the ZOTAC ZBOX nano to boot from the USB flash drive.
- 3. Follow the onscreen directions to install the operating system.
- Install system drivers to gain full functionality of the ZOTAC ZBOX nano hardware and features.

# **Installing system drivers**

Before you can use the full features of the ZOTAC ZBOX nano, the system drivers must be installed. The following types of operating systems are supported by the USB flash drive:

· Windows 10 64-bit

Follow the instructions below to install the system drivers:

- Insert the 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.
- 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
- Thunderbolt
- Intel(R) HID Event Filter
- · CardReader Driver
- Dynamic Tuning Driver
- GNA Driver
- Each driver must be installed individually to ensure proper operation of the ZOTAC ZBOX nano.
- 3. 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 ZOTAC ZBOX nano**

#### **Configuring a wireless connection**

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

- Double-click the wireless network icon (pic) in the notification area.
- Select the wireless network you want to connect to from the list and click Connect.
- 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.

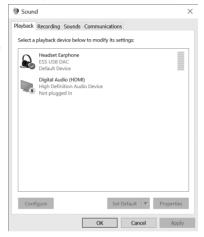


#### **Configuring audio output**

Follow the steps below to enable audio output when connecting the ZOTAC ZBOX nano to a

TV or receiver via DP/HDMI adapter.

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



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