



# Intel® NUC 12 Enthusiast Kit NUC12SNKi72VA

**User Guide** 

### **Before You Begin**



### CAUTIONS

The steps in this guide assume you're familiar with computer terminology and with the safety practices and regulatory compliance required for using and modifying computer equipment.

Disconnect the computer from its power source and from any network before performing any of the steps described in this guide.

Failure to disconnect power, telecommunications links, or networks before you open the computer or perform any procedures can result in personal injury or equipment damage. Some circuitry on the board can continue to operate even though the front panel power button is off.

Follow these guidelines before you begin:

- Always follow the steps in each procedure in the correct order.
- Create a log to record information about your computer, such as model, serial numbers, installed options, and configuration information.
- Electrostatic discharge (ESD) can damage components. Perform the procedures described in this chapter only at an ESD workstation using an antistatic wrist strap and a conductive foam pad. If such a station isn't available, you can provide some ESD protection by wearing an antistatic wrist strap and attaching it to a metal part of the computer chassis.

### **Installation Precautions**

When you install and test the Intel NUC, observe all warnings and cautions in the installation instructions.

To avoid injury, be careful of:

- Sharp pins on connectors
- Sharp pins on circuit boards
- Rough edges and sharp corners on the chassis
- Hot components (such as SSDs, processors, voltage regulators, and heat sinks)
- Damage to wires that could cause a short circuit

Observe all warnings and cautions that instruct you to refer computer servicing to qualified technical personnel.

# **Observe Safety and Regulatory Requirements**

If you don't follow these instructions, you increase your safety risk and the possibility of noncompliance with regional laws and regulations.

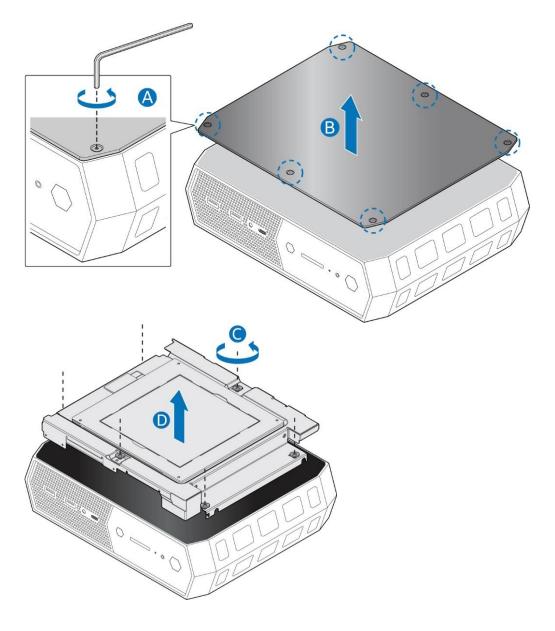
### This guide tells you how to:

- Install and remove memory
- Install an M.2 SSD
- Install a VESA mount bracket
- Connect power
- Install an operating system
- Install the latest drivers

# **Open the Chassis**

To open the Intel NUC chassis, follow these steps:

1. Unscrew the six corner screws on the bottom cover of the chassis and lift the cover.



## **Upgrade System Memory**

The Intel® NUC 12 Pro Mini PC NUC12WSK has two 260-pin DDR4 SO-DIMM sockets. 1.2V low voltage memory

#### Pre-Installed memory:

Intel® NUC 12 Pro Mini PC NUC12SKNi72VA	16GB DDR4-3200 SODIMMS
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To upgrade memory, be sure to select memory modules that meet these requirements:

- 1.2V low voltage memory
- 3200 MHz SO-DIMMs
- Non-ECC

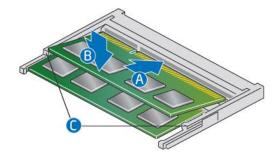
Find compatible memory modules in the Intel Product Compatibility Tool

NUC12SNKi72VA

NOTE	If you plan to install only one memory module, install it in the lower memory
	socket.

#### To install memory, follow these steps:

- 1. Observe the precautions in "Before You Begin" on page 2.
- 2. Turn off all peripheral devices connected to the computer. Turn off the computer and disconnect the power cord.
- 3. Remove the computer's bottom chassis cover.



- 4. Align the small space at the bottom edge of the memory module with the key in the socket.
- 5. Insert the bottom edge of the module at a 45-degree angle into the socket (A).
- 6. When the module is inserted, push down on the outer edge of module until the retaining clips snap into place (B). Make sure the clips are firmly in place (C).

#### To remove a SO-DIMM, follow these steps:

- 1. Observe the precautions in "Before You Begin" on page 2.
- 2. Turn off all peripheral devices connected to the computer. Turn off the computer and disconnect the power cord.
- 3. Remove the computer's bottom chassis cover.
- 4. Gently spread the retaining clips at each end of the memory socket, which causes the module to pop out of the socket (C).
- 5. Holding the module by the edges, lift it away from the socket, and store it in an anti-static package.

- 6. Reinstall and reconnect any parts you removed or disconnected to reach the memory sockets.
- 7. Replace the computer's cover and reconnect the power cord.

### Install an M.2 SSD

The Intel NUC Pro Mini PC NUC12SKNi72VA support an 80mm SSD.

#### Pre-Installed M.2:

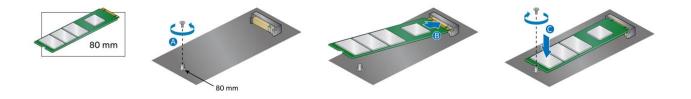
Intel® NUC 12 Pro Mini PC NUC12SKNi72VA	1TB Gen 4 NVMe SSD
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Find compatible M.2 SSDs in the Intel Product Compatibility Tool

NUC12SNKi72VA

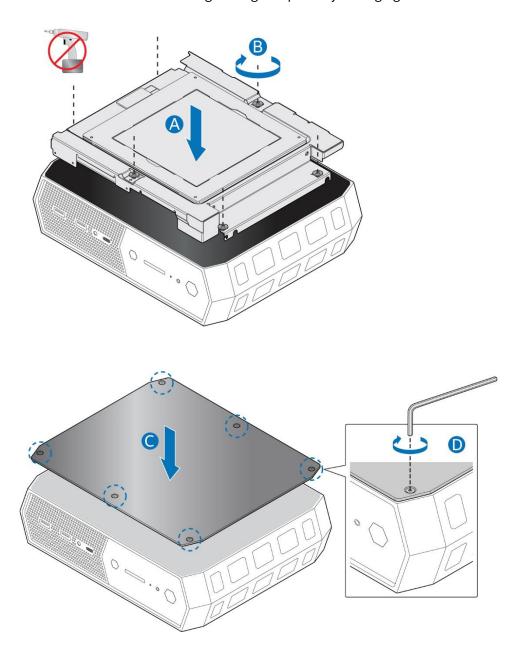
### If you're installing an 80mm M.2 SSD:

- 1. Remove the small silver screw from the 80mm (A) metal standoff on the motherboard.
- 2. Align the small notch at the bottom edge of the M.2 card with the key in the connector.
- 3. Insert the bottom edge of the M.2 card into the connector (B).
- 4. Secure the card to the standoff with the small silver screw (C).



# **Close the Chassis**

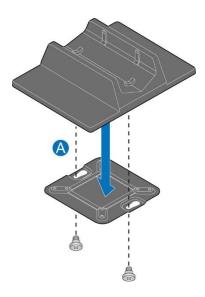
After all components have been installed, close the Intel NUC chassis. Intel recommends this be done by hand with a screwdriver to avoid over-tightening and possibly damaging the screws.



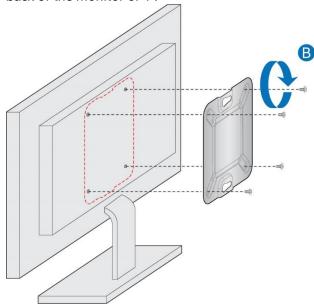
# **Attach and Use the VESA Bracket (Optional)**

Follow these instructions to attach and use the VESA mount bracket:

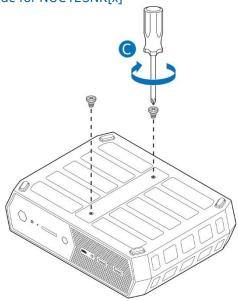
1. Remove VESA bracket from the default stand.



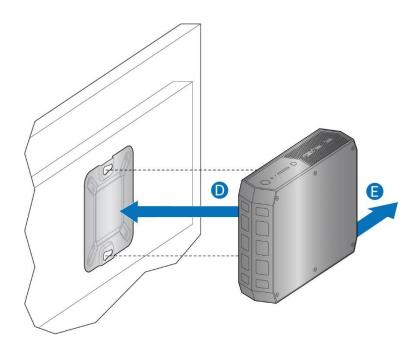
2. Using the four small black screws that were included in the box, attach the VESA bracket to the back of the monitor or  $\mathsf{TV}$ 



3. Attach the two slightly larger black screws to the bottom chassis cover of the Intel NUC.



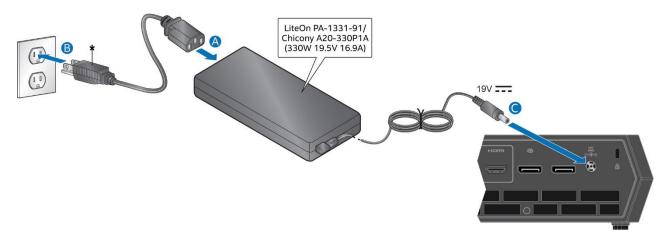
4. Slide the Intel NUC onto the VESA mount bracket.



## **Connect Power**

Country-specific power cords are included in the Intel NUC Kit box.

### Connect AC power



Each Intel NUC model includes either a region-specific AC power cord or no AC power cord (only the power adapter).

Product codes	Power cord type
RNUC12SNKi72VAU	US power cord included.
RNUC12SNKi72VA1	

## **Install an Operating System**

Refer to <u>Supported Operating Systems</u> for a list of Intel-validated Windows\* operating systems and versions of Linux that have been reported as compatible by Intel NUC owners.

Refer to Operating System Installation for system requirements and installation steps.

### **Install Intel NUC Drivers**

To download the latest Microsoft\* Windows\* drivers and BIOS updates, use the <a href="Intel® Driver & Support Assistant">Intel® DSA</a>) or go to Download Center:

#### NUC12SNKi72VA

Drivers are available for the following features:

- Chipset
- Graphics
- Intel® Management Engine
- Wireless and/or Gigabit Ethernet (depending on how you connect)
- Bluetooth®—required if you use Bluetooth devices
- Audio—required if you use the 3.5mm audio jack
- Thunderbolt
- Consumer Infrared (CIR)—required if you use an infrared remote control
- Card Reader—required if you use an SD card for extra storage
- Intel® Rapid Storage Technology—required if you plan to configure RAID