Intel® NUC kit NUC9VXQNX

Intel® NUC kit NUC9V7QNX

Intel® NUC kit NUC9i9QNX

Intel® NUC kit NUC9i7QNX

Intel® NUC kit NUC9i5QNX

User Guide

<January 2020>

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Revision History

Date	Revision	Description
<Jan 2019>	1.0	Initial release.

1.0 Introduction

This User Guide provides step-by-step installation instructions for these products:

- Intel® NUC kit NUC9VXQNX
- Intel® NUC kit NUC9V7QNX
- Intel® NUC kit NUC9i9QNX
- Intel® NUC kit NUC9i7QNX
- Intel® NUC kit NUC9i5QNX

1.1 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.

1.2 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

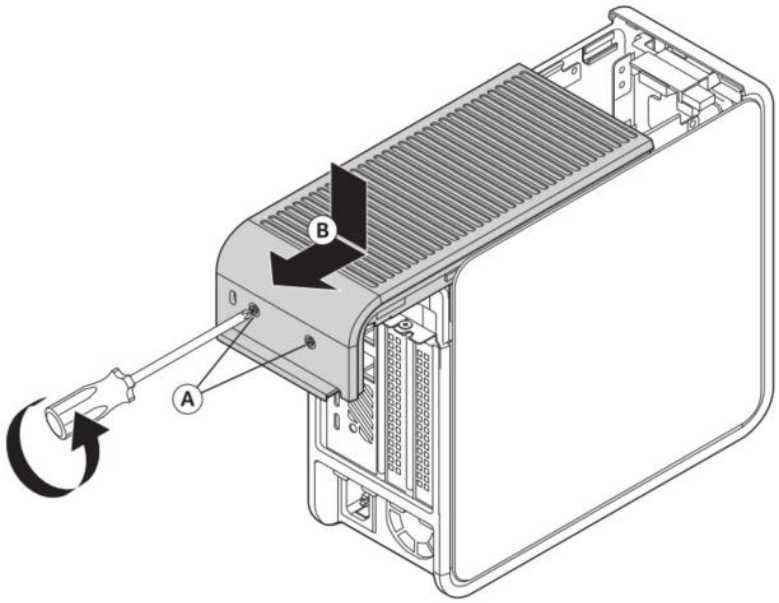
Observe all warnings and cautions that instruct you to refer computer servicing to qualified technical personnel.

1.3 Observe Safety and Regulatory Requirements

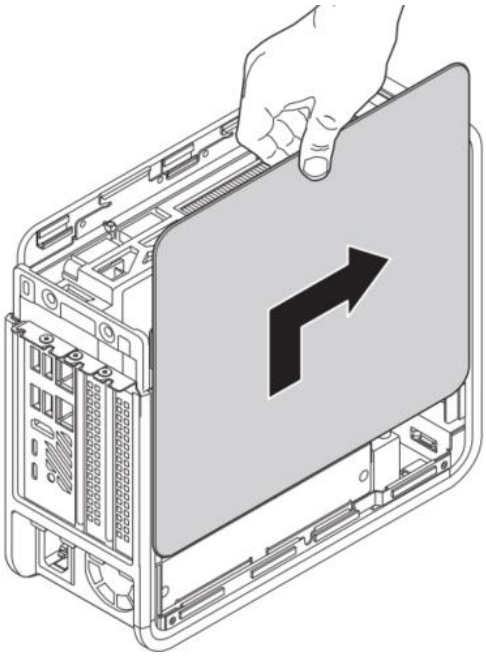
If you don't follow these instructions, you increase your safety risk and the possibility of noncompliance with regional laws and regulations.

2.0 Open the Chassis

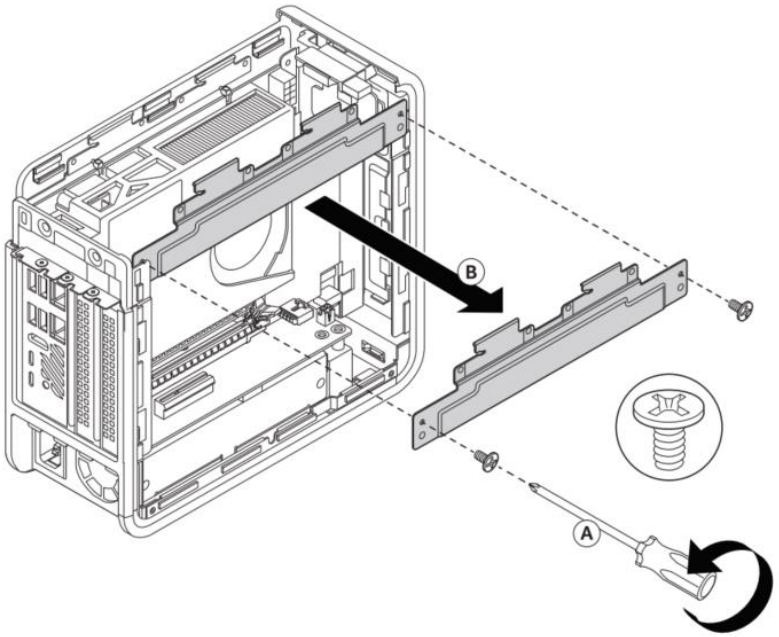
1. Unscrew the two top screws on the rear side of the chassis and shift the cover:



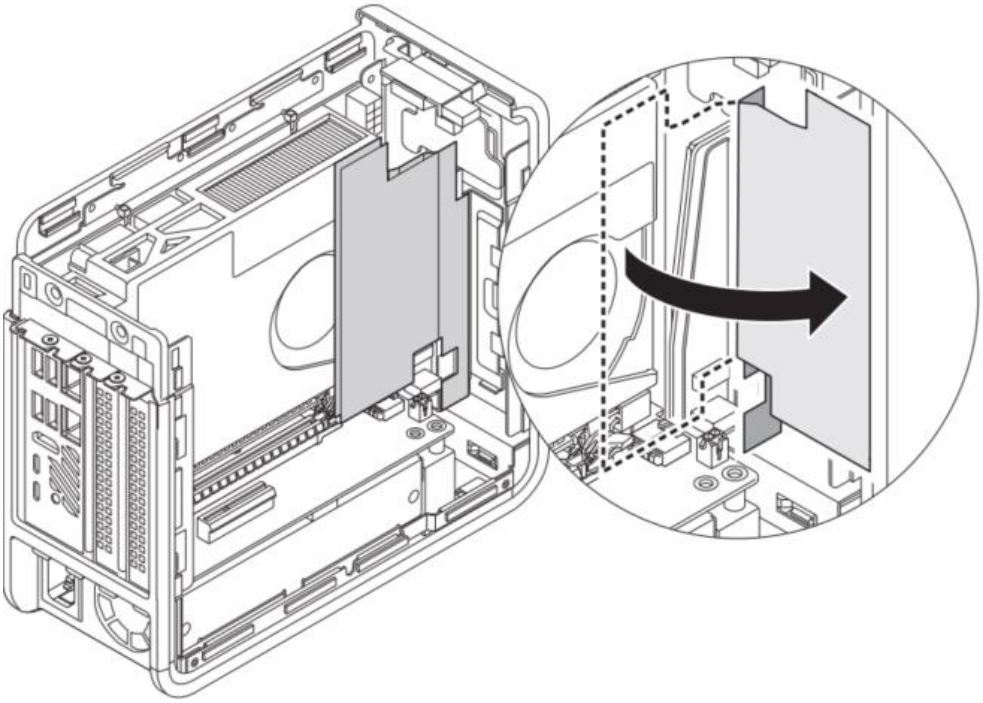
2. Remove the left side panel:



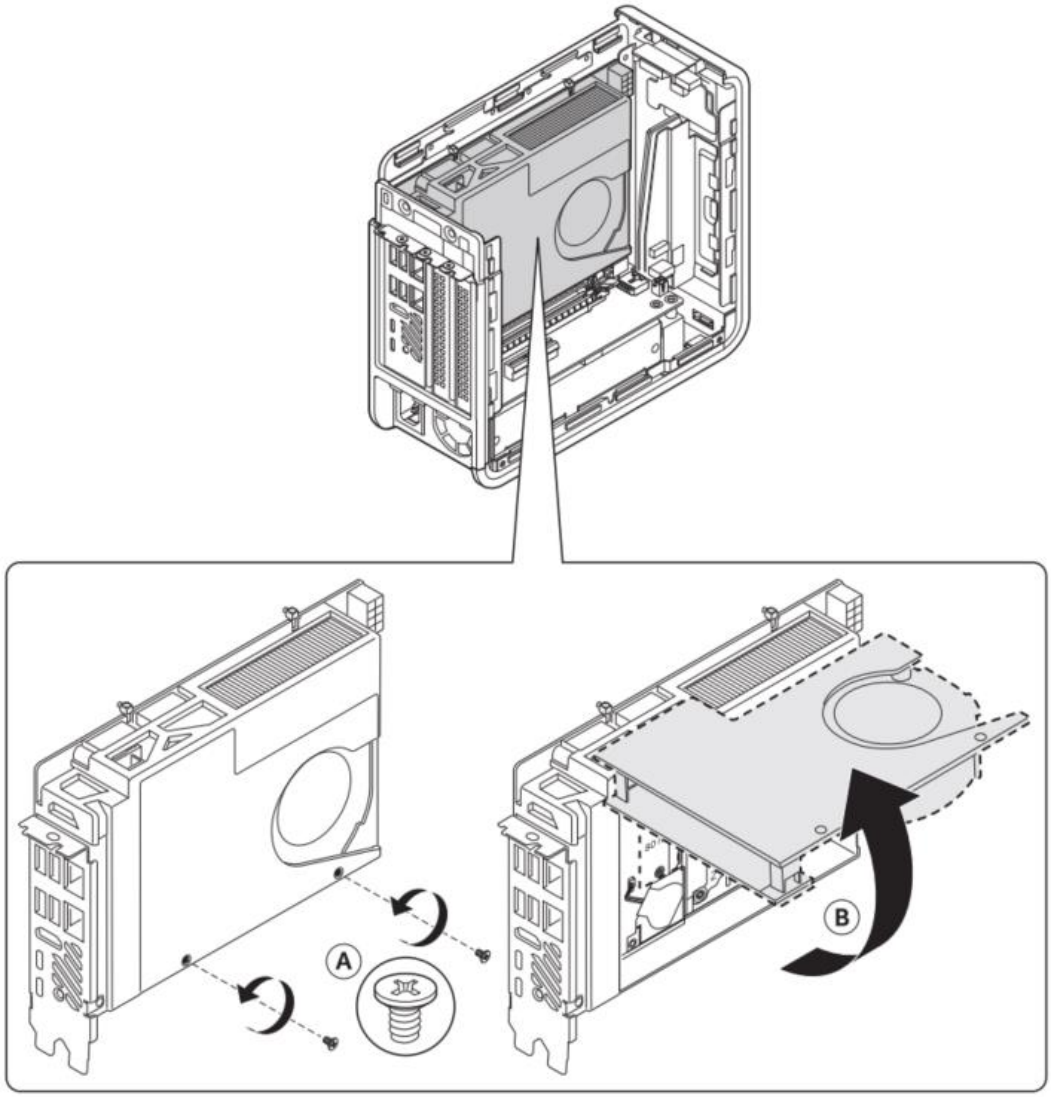
3. Remove the cross bar bracket:



4. Fold the air guide back:



5. Unscrew the two bottom screws and open the NUC door:



3.0 System Memory

Intel® NUC kit NUC9VXQNX, NUC9V7QNX, NUC9i9QNX, NUC9i7QNX and NUC9i5QNX have two 260-pin DDR4 SO-DIMM sockets. Be sure to select memory modules that meet these requirements:

- 1.2V low voltage memory
  - 1.35V via XMP support – NUC9i9QNX, NUC9i7QNX and NUC9i5QNX SKUs Only
- 2666 MHz SO-DIMMs
- Max capacity - 64GB
- Non-ECC
  - ECC supported by the NUC9VXQNX only

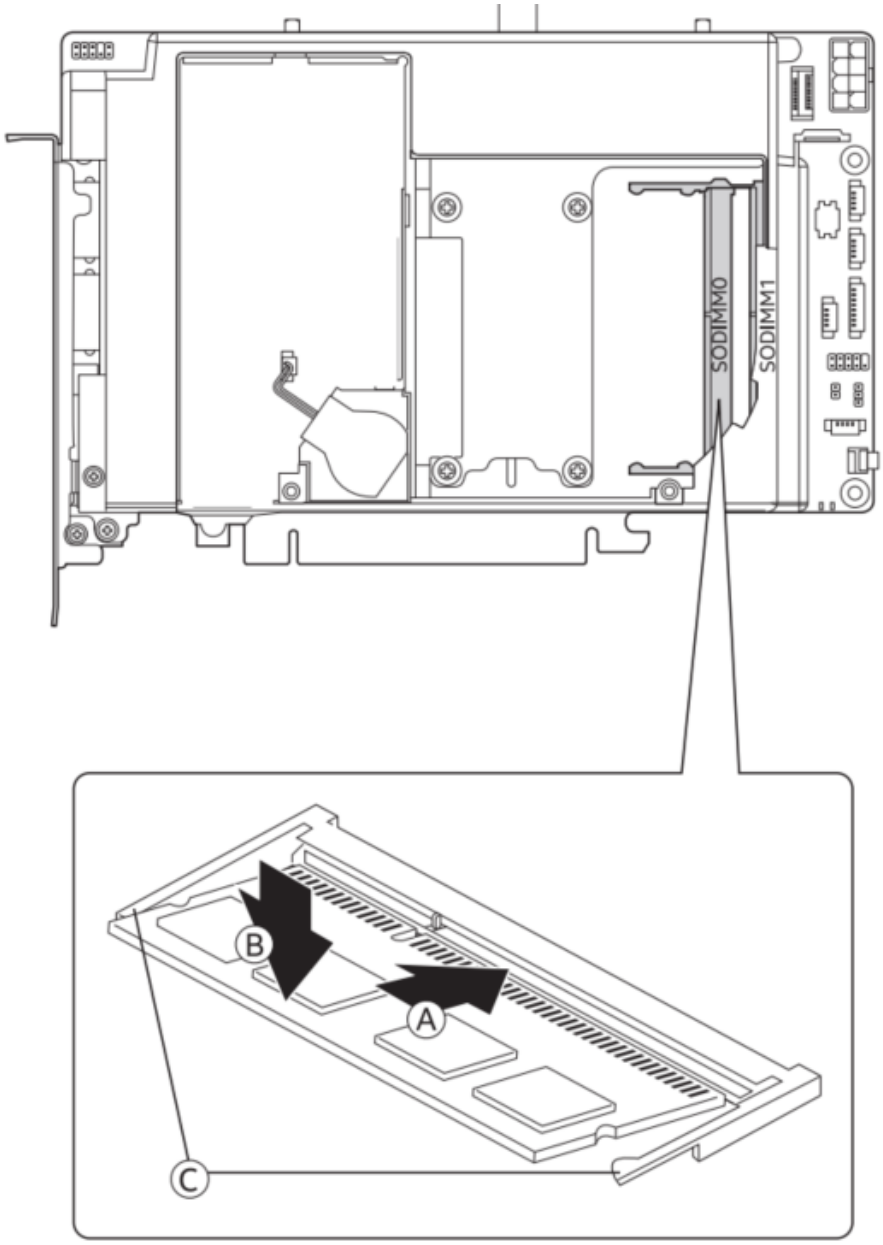
Find compatible memory modules in the Intel Product Compatibility Tool

- NUC9VXQNX
- NUC9V7QNX
- NUC9i9QNX
- NUC9i7QNX
- NUC9i5QNX

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 5.
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 5.
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.

4.0 Change the M.2 SSD

Intel® NUC kit NUC9VXQNX, NUC9V7QNX, NUC9i9QNX, NUC9i7QNX and NUC9i5QNX support dual 42, 80 and single 110mm SSDs.

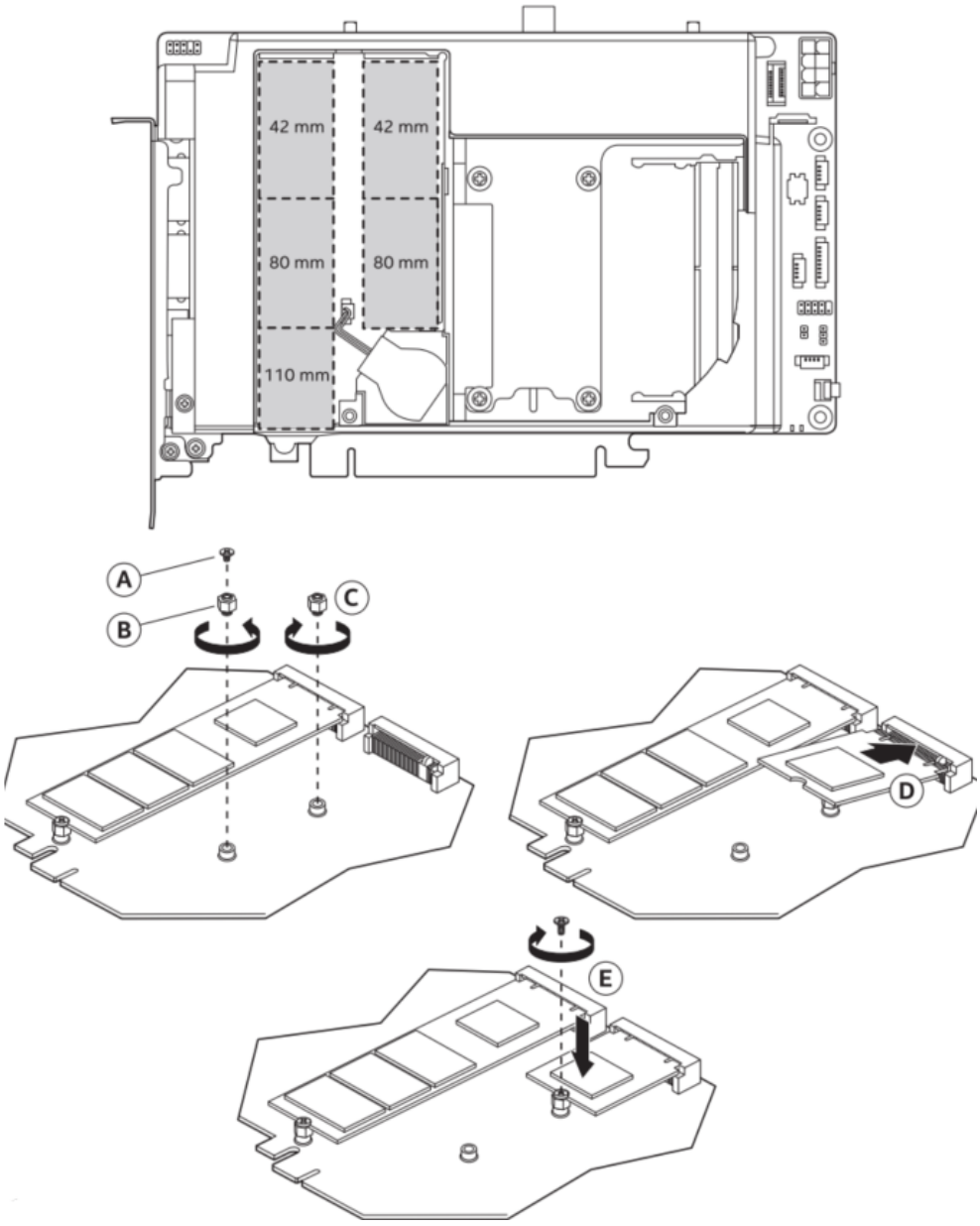
There are no pre-installed SSD available out of the box for the above SKUs.

Find compatible M.2 SSDs in the Intel Product Compatibility Tool:

- NUC9VXQNX
- NUC9V7QNX
- NUC9i9QNX
- NUC9i7QNX
- NUC9i5QNX

To install a different M.2 SSD:

1. Remove the small silver screw from the 110mm, 80mm or 42mm metal standoff on the board (A).
2. Remove the pre-installed SSD from the connector if there are any.
3. Make sure there is the metal standoff in the right position, depending on the length of the SSD you are going to install (B or C)
4. Align the space at the bottom of the new M.2 SSD to the key on the connector (D).
5. Secure the card to the standoff with the small silver screw (E).


42 mm
42 mm
80 mm
80 mm
110 mm
A
B
C
D
E

5.0 Install a 2.5” SSD or Hard Drive

Intel® NUC kit NUC9VXQNX, NUC9V7QNX, NUC9i9QNX, NUC9i7QNX and NUC9i5QNX support an additional 2.5” Solid State Drive (SSD) or Hard Disk Drive (HDD).

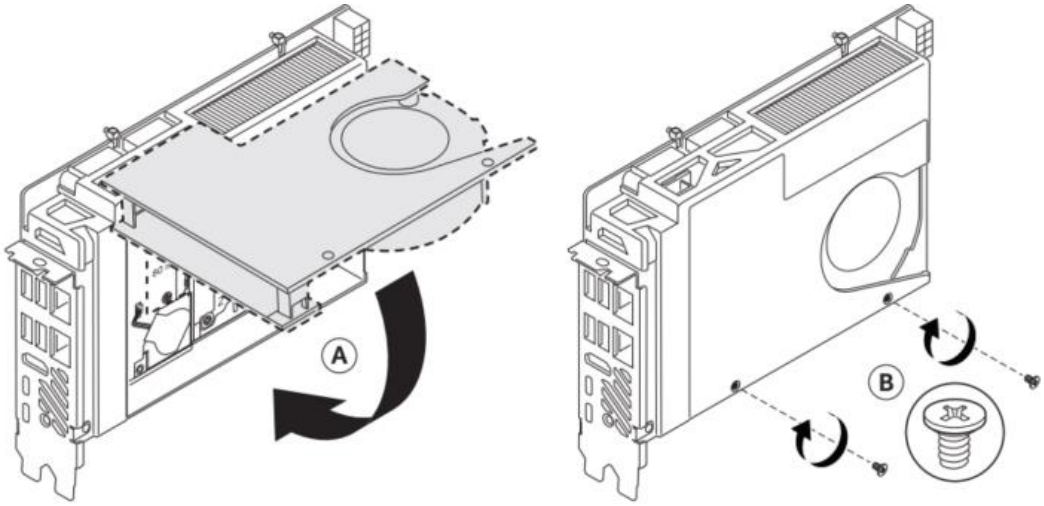
Find compatible 2.5” drives in the Intel Product Compatibility Tool:

- NUC9VXQNX
- NUC9V7QNX
- NUC9i9QNX
- NUC9i7QNX
- NUC9i5QNX

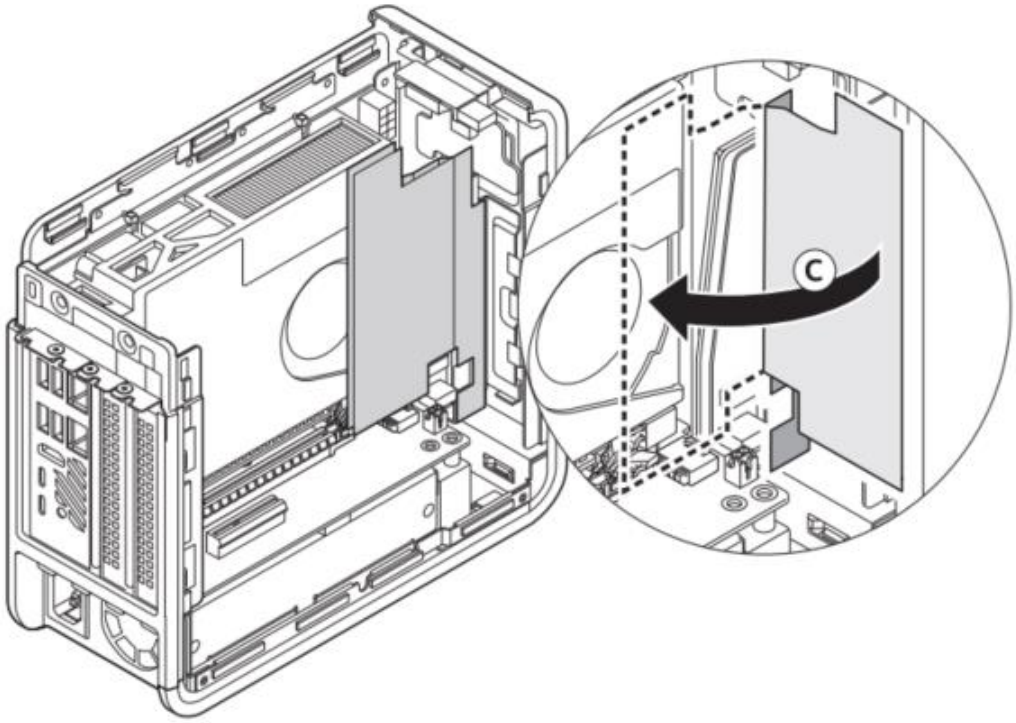
6.0 Close the Chassis

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.

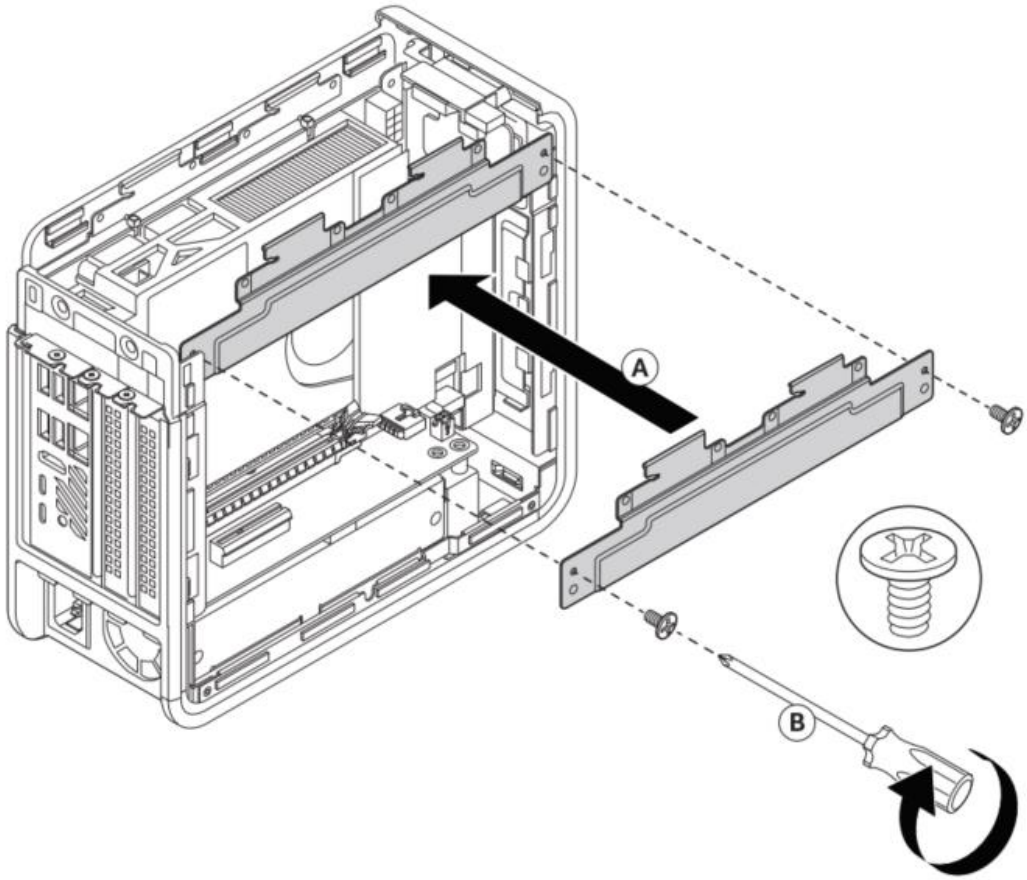
1. Close the NUC door and connect two bottom screws:



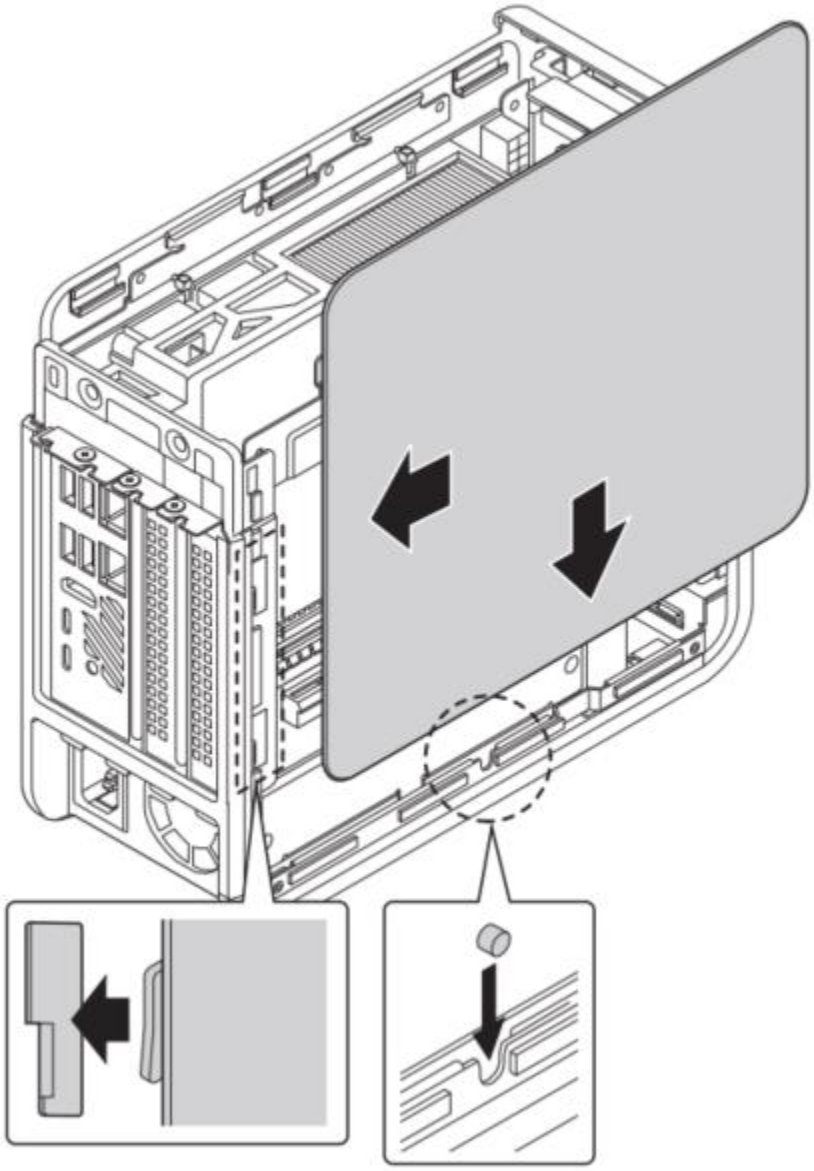
2. Fold the air guide into place:



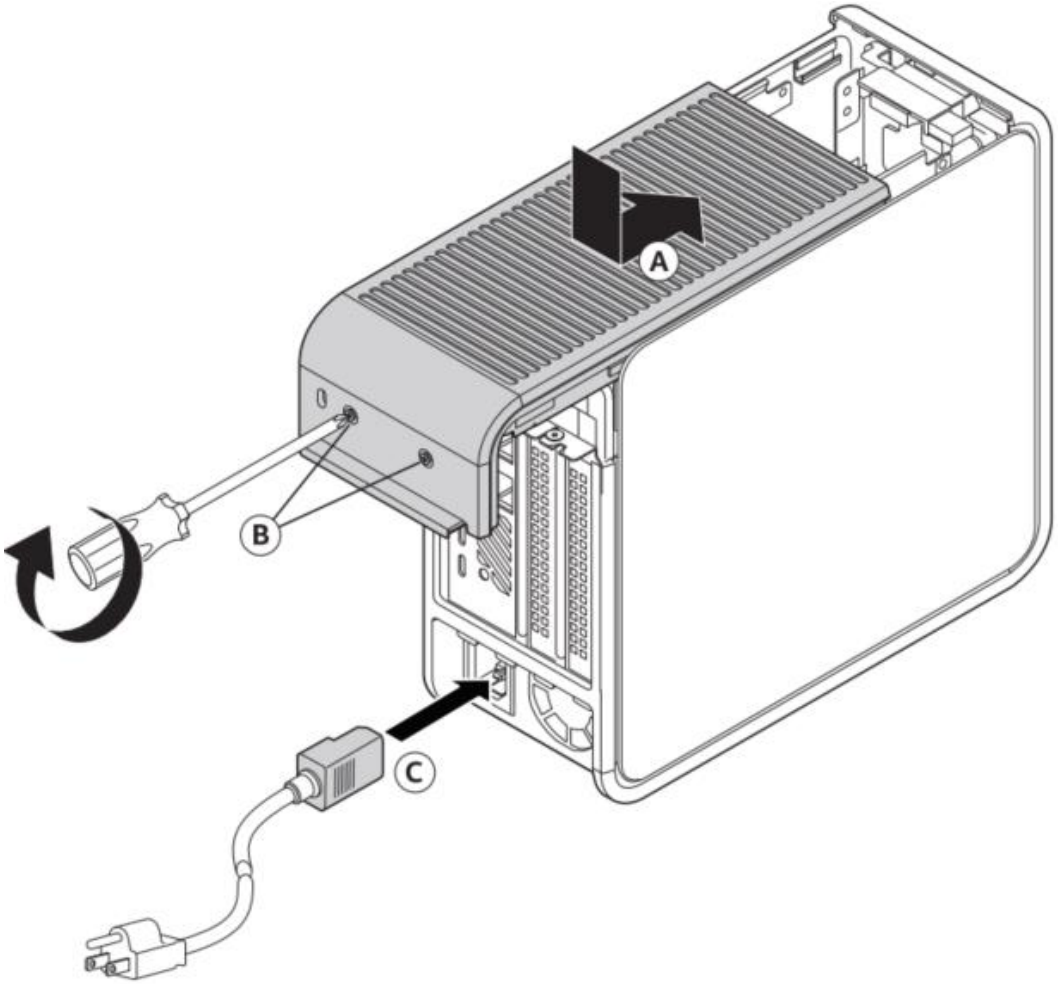
3. Install cross bar bracket:



4. Install the left side panel:

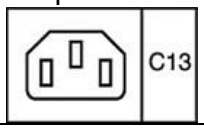


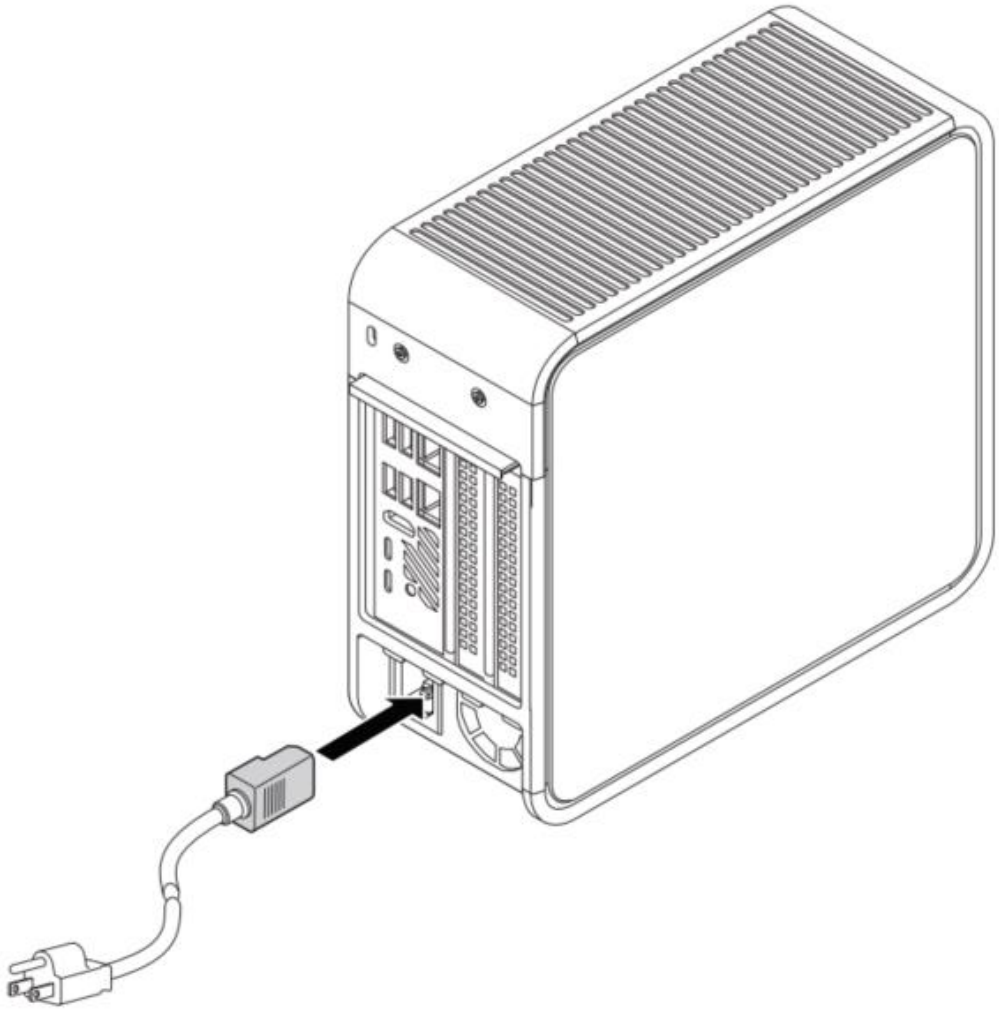
5. Install the top cover and apply the power cable:



7.0 Connect Power

Each Intel NUC model includes either a region-specific AC power cord or no AC power cord.

Product codes	Power cord type
BKNUC9VXQNX BKNUC9V7QNX BXNUC9i9QNX BXNUC9i7QNX BXNUC9i5QNX	No power cord included. An AC power cord needs to be purchased separately. The connector on the power adapter is a C13 type connector. 
BKNUC9VXQNX1 BKNUC9V7QNX1 BXNUC9i9QNX1 BXNUC9i7QNX1 BXNUC9i5QNX1	US power cord included.
BKNUC9VXQNX2 BKNUC9V7QNX2 BXNUC9i9QNX2 BXNUC9i7QNX2 BXNUC9i5QNX2	EU power cord included.
BKNUC9VXQNX3 BKNUC9V7QNX3 BXNUC9i9QNX3 BXNUC9i7QNX3 BXNUC9i5QNX3	UK power cord included.
BKNUC9VXQNX4 BKNUC9V7QNX4 BXNUC9i9QNX4 BXNUC9i7QNX4 BXNUC9i5QNX4	Australia/New Zealand power cord included.
BKNUC9VXQNX6 BKNUC9V7QNX6 BXNUC9i9QNX6 BXNUC9i7QNX6 BXNUC9i5QNX6	China power cord included.



8.0 Install an Operating System

See Supported Operating Systems for a list of Intel-validated Windows* operating systems.

The Intel Product Compatibility Tool lists versions of Linux* that have been reported as compatible by Intel NUC owners. If you need assistance with Linux on your Intel NUC, check the distribution's website and forums for peer assistance.

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

9.0 Install the Latest Device Drivers and Software

Here are the options for keeping device drivers current:

- Allow the Intel® Driver & Support Assistant (Intel® DSA) to detect out-of-date drivers
- Manually download drivers, BIOS, and software from Download Center:
  - NUC9VXQNX
  - NUC9V7QNX
  - NUC9i9QNX
  - NUC9i7QNX
  - NUC9i5QNX

The following device drivers and software are available.

- Intel® Chipset Device Software
- Intel® Graphics
- Intel® Management Engine
- Intel® Gigabit Ethernet
- Intel® Wireless
- Intel® Bluetooth
- Realtek* High Definition Audio
- Intel® Rapid Storage Technology
- Thunderbolt® Networking Driver