

Intel NUC 10

Intel NUC 10 Performance Kit - Core i7 Processor User Manual

Model: NUC 10 | **Brand:** Intel

INTRODUCTION

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your Intel NUC 10 Performance Kit with Intel Core i7 Processor. The Intel NUC 10 is a compact, high-performance mini-PC designed for various applications, offering a customizable platform for your computing needs.

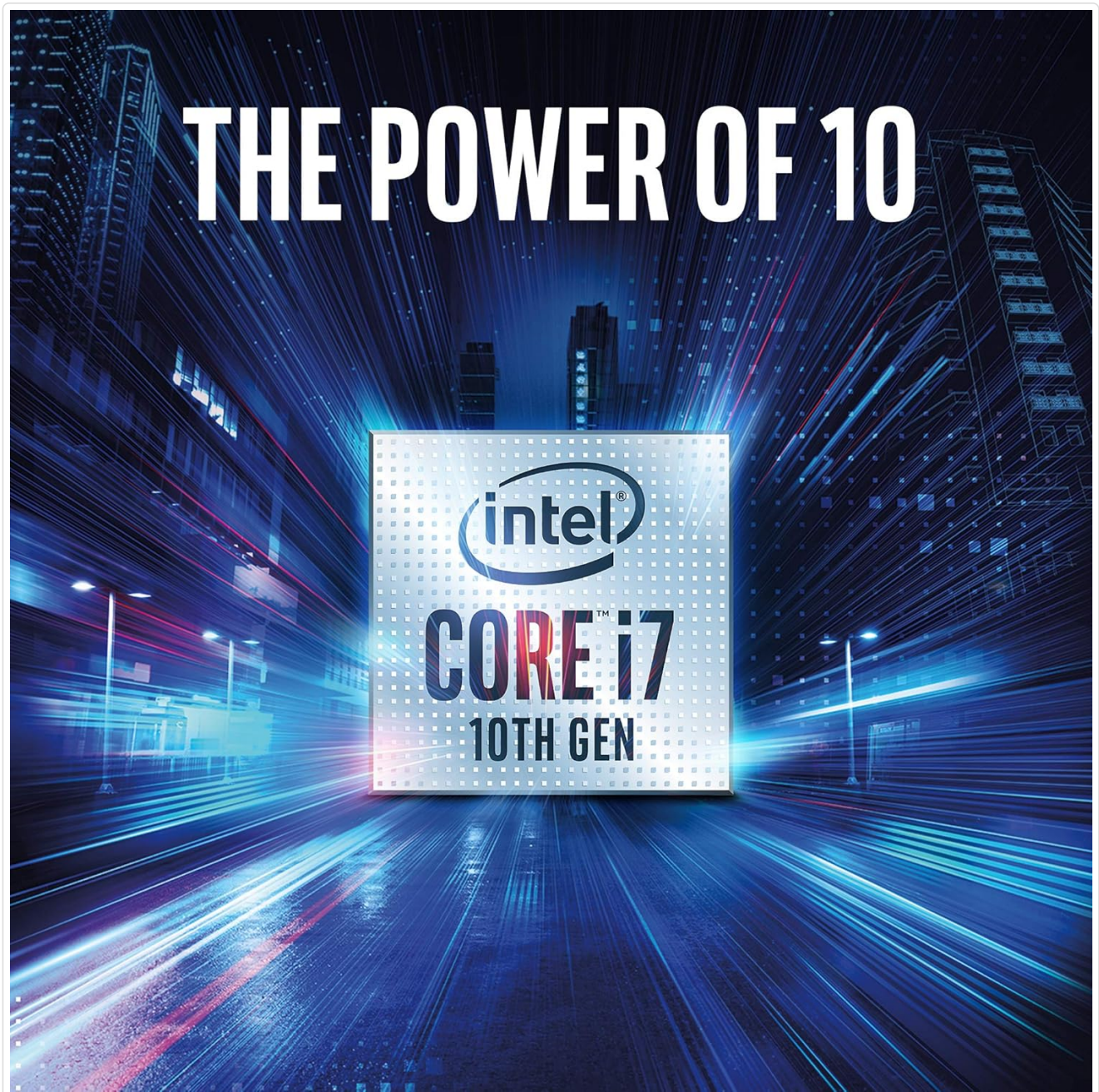


Image: Intel Core i7 10th Generation Processor branding, highlighting the core technology of the NUC 10.

Key features of the Intel NUC 10 Performance Kit include:

- 10th Generation Intel Core i7 Processor for robust performance.
- Integrated Intel UHD 4K Graphics for high-resolution display support.
- Versatile connectivity with Thunderbolt™ 3, USB 3.1, and HDMI 2.0A ports.
- Support for Intel Optane™ Memory to enhance storage performance.
- Minimal footprint and VESA mountable design for flexible placement.

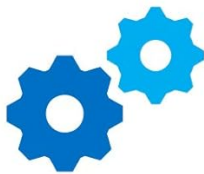
- **10TH GEN INTEL® CORE™ i7 PROCESSOR**
- **INTEL® UHD 4K GRAPHICS**
- **THUNDERBOLT™ 3, USB 3.1 & HDMI 2.0A PORTS**
- **SUPPORTS INTEL® OPTANE™ MEMORY TO GIVE SSD-LIKE PERFORMANCE TO AN HDD**
- **MINIMAL FOOTPRINT & MOUNTABLE TO BACK OF DISPLAY**

Image: A list of key features for the Intel NUC 10, including processor, graphics, ports, and memory support.

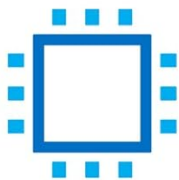
As a performance kit, the NUC 10 offers full customization, allowing users to choose their preferred operating system, memory (RAM), and storage solutions to meet specific requirements.

FULLY CUSTOMIZABLE KIT

Choose your ideal:



OPERATING SYSTEM (OS)



MEMORY



STORAGE

Image: Illustration showing the customizable aspects of the NUC 10 kit: Operating System, Memory, and Storage.

SETUP

The Intel NUC 10 Performance Kit requires user-supplied memory (RAM) and storage (SSD/HDD) for full functionality. Follow these steps for initial setup:

1. **Unpack Components:** Carefully remove the NUC chassis and any included accessories from the packaging.
2. **Prepare for Internal Access:** The NUC chassis typically has screws on the bottom or sides that need to be removed to access the internal components. Refer to the specific model's diagram for screw locations.
3. **Install Memory (RAM):** Locate the SODIMM slots on the motherboard. Align the memory module with the slot, ensuring the notch matches, and press down firmly until the clips on the sides snap into place.
4. **Install Storage:**
 - **M.2 SSD:** Insert the M.2 SSD into its designated slot at an angle, then gently push it down and secure it with the provided screw.
 - **2.5-inch SSD/HDD:** If your NUC model supports a 2.5-inch drive, mount it into the drive bay and connect the SATA data and power cables.
5. **Close Chassis:** Once all internal components are installed, reattach the cover and secure it with the screws.

6. Connect Peripherals:

- Connect your monitor(s) using HDMI or Thunderbolt 3 ports.
- Plug in your keyboard and mouse to the available USB ports.
- Connect to a network via Ethernet or ensure Wi-Fi antennas are properly connected (if applicable).

7. **Power On:** Connect the power adapter to the NUC and a power outlet. Press the power button to start the system.

8. **Operating System Installation:** The NUC kit does not come with an operating system. You will need to install your preferred OS (e.g., Windows 10, Linux distribution) from a bootable USB drive. Access the BIOS/UEFI settings (usually by pressing F2 or Delete during boot) to configure boot order if necessary.



Image: The compact Intel NUC 10 integrated into a modern desk environment, demonstrating its small form factor.

OPERATING

Operating the Intel NUC 10 is similar to any standard desktop computer. Ensure all necessary drivers for your installed operating system are up-to-date for optimal performance.

- **Power Button:** The power button is located on the front or side of the unit. Press once to power on, and press again for a short duration to initiate a graceful shutdown (if configured in your OS). A long press will force a shutdown.
- **USB Ports:** Utilize the various USB ports (including USB 3.1 and Thunderbolt 3) for connecting external devices such as storage drives, printers, and other peripherals.
- **Video Output:** Connect to displays using the HDMI 2.0A or Thunderbolt 3 ports. The Intel UHD Graphics supports 4K resolution.
- **Network Connectivity:** Use the Ethernet port for wired network access or connect to a wireless network via the integrated Wi-Fi.
- **Audio:** An audio jack is available for headphones or external speakers.



Image: A detailed view of the rear ports on the Intel NUC 10, including power, HDMI, Ethernet, USB, and Thunderbolt 3.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your Intel NUC 10.

- **Dust Removal:** Periodically clean the exterior and ventilation grilles with a soft, dry cloth. For internal cleaning, carefully open the chassis (refer to setup instructions for access) and use compressed air to remove dust from the fan and heatsink. Ensure the system is powered off and unplugged before cleaning.
- **Software Updates:** Keep your operating system, drivers, and BIOS/UEFI firmware updated. Visit the official Intel support website for the latest drivers and firmware for your NUC model.
- **Thermal Paste:** If you experience persistent overheating or fan noise, the thermal paste on the CPU might need to be replaced. This is an advanced procedure and should only be performed by experienced users or qualified technicians.
- **Component Upgrades:** The NUC 10 allows for upgrades of RAM and storage. When upgrading, ensure compatibility with your specific NUC model and follow proper installation procedures to avoid damage.

TROUBLESHOOTING

If you encounter issues with your Intel NUC 10, refer to the following common troubleshooting steps:

- **No Power:**
 - Verify the power adapter is securely connected to both the NUC and a working power outlet.

- Test the power outlet with another device.
- Ensure the power button is functioning correctly.
- **No Display:**
 - Check all video cable connections (HDMI, Thunderbolt 3) between the NUC and the monitor.
 - Ensure the monitor is powered on and set to the correct input source.
 - Try a different video cable or monitor if possible.
- **Operating System Not Booting:**
 - Access BIOS/UEFI settings (F2 or Delete during boot) and verify the boot order.
 - Check if the installed storage drive (SSD/HDD) is detected in the BIOS/UEFI.
 - If recently installed, ensure the OS installation was successful and complete.
- **Excessive Fan Noise or Overheating:**
 - Ensure the NUC is placed in a well-ventilated area and not obstructed.
 - Clean dust from the fan and vents as described in the Maintenance section.
 - Update BIOS/UEFI firmware, as it may contain fan control improvements.
- **Peripheral Not Detected:**
 - Try connecting the peripheral to a different USB port.
 - Ensure the peripheral has the necessary drivers installed on your operating system.
 - Test the peripheral on another computer to rule out device failure.

SPECIFICATIONS

Feature	Detail
Brand	Intel
Model Number	NUC 10
Product Dimensions	11.7 x 11.2 x 3.8 cm
Item Weight	1.36 Kilograms
CPU Brand	Intel
CPU Type	Core i7
Processor Socket	BGA 413
Number of Processors	1
Memory Type	DDR4 SDRAM (User-supplied)
Wireless Type	Bluetooth
Total USB Ports	6 (Includes USB 3.1 and Thunderbolt 3)
USB 2.0 Ports	1
Wattage	95 W

Supported OS	Windows 10 (User-installed)
Model Year	2020
Human Interface Input	Button

WARRANTY AND SUPPORT

The Intel NUC 10 Performance Kit typically comes with a 3-year warranty provided by Intel. For detailed warranty terms and conditions, please refer to the official Intel documentation included with your product or visit the Intel support website.

For technical support, driver downloads, and additional resources, please visit the official Intel support portal:

[Intel NUC Support](#)

Always ensure you have your product's serial number and model information ready when contacting support.