

NUC9i7VX –Vortex i7 Gaming Desktop

Like a Ghost in a Vortex

Enjoy portable desktop performance in an ultra-compact 7.9-liter powder coated steel chassis with full-length GPU compatibility. Vortex is equipped with a 650W internal Cooler Master SFX power supply specifically designed for the chassis, GPU, and the Intel NUC 9 Extreme Compute Element Blade. A PCIe x16 slot supports full-length desktop discrete graphics. This mini gaming machine is thermally cool, extremely quiet, and disruptively small.

9th Generation Processing Power

Vortex featuring Intel® 8 core processors, providing uncompromised performance for gaming, VR, and content creation. With an Intel® processor and support for up to 64 GB of high speed DDR4 RAM, you have more CPU power than ever in a NUC form factor. Combine this with desktop discrete graphics, Thunderbolt™ 3,

DisplayPort, and HDMI capability for your optimal visual experience and up to six 4K displays. To keep this power cool, twin 92mm fans immediately remove heat from the system further improving thermal efficiency. Heavy ventilation flanks all sides of the chassis, increasing ventilation.

Game, Create and Watch in 4K

Vortex will provide brilliant 4K and VR experiences at home. Full color customization with addressable RGB lighting, you can feel the flow with full color fun, and perfect match your PC's theme. You can watch theater-quality videos, grab a game controller and answer the call of duty, or immerse yourself in a VR world of choice. You also have the performance you need to create content without having to wait as your video and images render. With Vortex connect your Intel® NUC to a WiFi device for rich visuals and audio without the clutter of cables.

Highlighted features

- 9th Gen Intel® Core™ i7-9750H
- Intel® UHD Graphics 630
- PCIe x16
- Two DDR4 SO-DIMM Sockets
- Two M.2 sockets for PCIe or SATA SSDs
- Intel® Optane™ SSD, Memory M10 and Memory H10 ready
- HDMI 2.0 supporting 4K @ 60Hz
- Dual Thunderbolt 3 (supports Alt-DP)
- Dual Intel® Gigabit LAN
- Intel® Wi-Fi 6
- Intel® Bluetooth 5
- Internal Dual-Band Antennas
- Six USB 3.1 Gen 2 Ports (10Gb/s)
- Digital Audio 7.1 Surround Sound
- Front 3.5mm headset jack
- Rear Speaker/TOSLink Combo Jack
- Kensington lock support
- A-RGB LED lighting
- 2 x 92mm PWM 2600RPM cooling fans
- 370 x 214 x 128 mm (7.9 L)
- 650W internal Cooler Master PSU
- Chassis available in Black and White

Customization

- Supports DDR4 RAM 4GB-64GB
- Supports M.2 SSDs 128GB-2TB
- Supports Full-Length Graphics Cards
- Swappable Compute Element Blade



Simply NUC Services

You can order this NUC in your various configurations, as well as your corporate OS Image loaded and ready to deploy.

Technical Specifications

Processor

- Intel® i7-9750H processor (2.6GHz to 4.5GHz Turbo, 6-Core, 12-Thread, 16MB Cache, 45W)

Storage Capabilities

- Two M.2 key M slots, one 42/80 slot and two 42/80/110 slots
- M.2 supports both PCIe and SATA
- RAID 0 and RAID 1 capable

Audio

- Up to 7.1 surround audio via HDMI or Display-Port signals
- Stereo Headset jack (TRRS) on the front panel
- Combo 3.5mm speaker/TOSLink optical audio jack on rear panel

Hardware Management Features

- Processor fan speed control
- Voltage and temperature sensing
- Fan sensor inputs used to monitor fan activity
- ACPI-compliant power management control

Graphics

- Intel® UHD Graphics 630 (350MHz-1.25GHz)
- One HDMI 2.0 port (4K @ 60Hz)
- Two Thunderbolt™ 3 ports supporting DP 1.4
- Up to 3 displays at 4K resolution
- PCIe x16 slot supports full-length, double-width graphics cards

Peripheral Connectivity

- Two Intel® Gigabit LAN ports (i219-LM and i210-AT)
- Two front Super-Speed USB 3.1 Gen 2 on Type-A connectors
- Four rear Super-Speed USB 3.1 Gen 2 ports on Type-A connectors
- Two rear USB 3.1 Gen 2 ports on Type-C connectors
- Intel® Wi-Fi 6 AX200 2.4Gbps with internal antenna
- Intel® Bluetooth 5.0 with internal antenna
- PCIe x16

Front Panel Header

- Reset, HDD LED, Power LEDs, power on/off

System Memory

- Dual Channel DDR4 SO-DIMMs (64GB Max)
- Intel® Optane™ ready

System Bios

- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V3.0b, SMBIOS2.5
- Intel® Visual BIOS
- Intel® Express BIOS update support

Preinstalled Lighting Support

- 1 ARGB lighting strip
- 1 ARGB controller included

Mechanical Chassis Size

- 370 x 214 x 128 mm (7.9 L)
- 650W internal Cooler Master PSU

Fan Support

- Dual 92mm PWM 2600RPM cooling fans

Expansion Capabilities (under Lid)

- Internal dual USB 3.1 headers
- Internal dual USB 2.0 headers
- Internal front panel audio and CEC
- SATA power connector

Certification and Regulations

Product Safety Regulations and Standards

- IEC 60950-1
- UL 60950-1
- EN 60950-1
- CAN/CSA-C22.2 No. 60950-1

Environment Operating Temp

- 0° C to +40° C
- Non-condensing Humidity

Storage Temperature

- -20° C to +60° C

EMC/RF Regulations and Standards (Class B)

- FCC CFR Title 47, Chapter I, Part 15, Subparts A, B, C, E
- CISPR 22
- ICES-003
- EN 55022
- EN 55024
- ETSI EN 300 328
- ETSI EN 301 489-1
- ETSI EN 301 489-17
- ETSI EN 301 893
- EN 62311
- AS/NZS 2772.2
- AS/NZS 4268
- VCCI V-3, V-4
- KN-22
- KN-24
- CNS 13438

Environmental Regulations

- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU
- China RoHS

Certified Operating Systems

- Windows 10 64-bit (Pro & Home)
- Windows 10 IoT Enterprise - (64-bit only) CBB and LTSB
- Windows 10 Server
- Linux distributions