NUC9i9QN Ghost Canyon

Disrupting the Gaming Industry

Enjoy portable desktop performance in a small form factor with a 500W internal power supply. Ghost Canyon is the first modular NUC with upgradeable components including compute blade options with configurable memory and storage. A PCIe x16 slot supports desktop discrete graphics, with performance levels up to NVIDIA GeForce RTX 2070. An additional x4 slot can accommodate add-in cards for additional features and performance. Like a ghost on your desk – this mini gaming machine is thermally cool, extremely quiet, and disruptively small.

9th Generation Processing Power

Introducing the first unlocked Intel® Core™ i9 NUC with 8 cores, providing uncompromised performance for gaming, VR, and content creation. With an Intel® Core™ i9 processor and support for up to 64GB 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.

Game, Create and Watch in 4K

Ghost Canyon will provide brilliant 4K and VR experiences at home. 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. Connect your Intel® Ghost Canyon NUC to a WiFi device for rich visuals and audio without the clutter of cables.

Highlighted features

- 9th Gen Intel® Core™ i9-9980HK
- Intel® UHD Graphics 630
- PCIe x16 and x4 slots
- Two DDR4-2666 SO-DIMM Sockets
- Three M.2 sockets for PCIe or SATA SSDs
- Intel® Optane™ Memory 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)
- SDXC card slot (UHS-II)
- Digital Audio 7.1 Surround Sound
- Front 3.5mm headset jack
- Rear Speaker/TOSLink Combo Jack
- Kensington lock support
- 500 watt internal power supply

Customization

- Supports DDR4 RAM 8GB-64GB
- Supports 2x M.2 SSDs128GB-2TB
- Supports Mini-ITX Graphics Cards
- Swappable System 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® i9-9980HK processor (2.4GHz to 5.0GHz Turbo, 8-Core, 16-Thread, 16MB Cache, 45W)

Storage Capabilities
- Three 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
- SDXC slot with UHS-II support

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 8" card-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 slot with 6+2-pin & 6-pin PCIe power connectors (up to 225W)
- PCIe x4 slot

Front Panel Header
- Reset, HDD LED, Power LEDs, power on/off

System Memory
- Dual Channel DDR4 SO-DIMMs (64GB Max), 1.2V
- 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

Baseboard Power Requirements
- 500W internal power supply with geo-specific AC cords

Mechanical Chassis Size
- 9.4" x 8.5" x 3.8"
- 238 mm x 216 mm x 96 mm

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

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