# NUC9vXQN Quartz Canyon

### Compact Workstation, Full-Sized Workhorse

Housed in a 5-liter chassis that's got 500 watts of on-board power for dual width desktop graphics cards and an Intel® Xeon® processor with Intel® vPro™ technology, the NUC9vXQN (Quartz Canyon) is designed as the smallest workstation available to support desktop graphics, giving you unsurpassed performance in a chassis that can sit on a desktop or behind a monitor. Certified to run more than 20 professional applications, whether you're using AutoCAD to design a new building or running a financial quantitative analysis, Quartz Canyon makes graphically demanding tasks easy.

### 9th Generation Processing Power

Introducing the first Intel® Xeon® NUC with 8 cores, providing uncompromised performance in unconventional packaging. With an Intel® Xeon® processor, featuring Intel® vPro™ technology, and support for up to 64GB of high speed DDR4

ECC 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 workstation experience in impressively tiny form factor.

### Render Your Toughest Tasks with Ease

Quartz Canyon has room for your latest desktop graphics, two Thunderbolt™ 3 ports for fast data transfer, and is the first Intel NUC workstation able to handle content creation tasks, data visualization, and AI learning and inference.  Rest assured knowing that this workstation has been qualified for 24/7 operation, supports ECC memory to prevent data corruption, and is tested with more than 20 professional applications.  And with Intel® vPro™ technology, issues can be fixed whether you're in the office or working remote.  Intended usages include CAD design, financial analysis, medical imaging, real-time simulations, and commercial quality post-production.

## Highlighted features

- Intel® Xeon® E-2286M Processor
- Intel® vPro™ Technology
- Intel® UHD Graphics P630
- Swappable System Blade
- PCIe x16 and x4 slots
- 16GB DDR4 ECC DRAM (64GB Max)
- 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)
- 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

- PCIe x16 and x4 slots
- Two DDR4 SO-DIMM Sockets
- Three M.2 sockets for PCIe or SATA SSDs



### 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® Xeon® E-2286M Processor (2.4GHz – 5.0GHz Turbo, Eight Core, 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 P630 (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 ECC 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

## Baseboard Power Requirements
- 500W internal power supply with geo-specific A 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
- ETSI EN 301 489-17
- 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