Beast Canyon i9 - NUC11BTMi9

Disrupting the Gaming Industry

Enjoy portable desktop performance in a small form factor with a 650W internal power supply. Beast Canyon comes 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 3080. An additional x4 slot can accommodate add-in cards for additional features and performance. Beastly performance – this mini gaming machine is thermally cool, extremely quiet, and disruptively small.

Intel® NUC 11 Extreme kit: Built to Win

Introducing the 11\textsuperscript{th} Gen Intel\textregistered Core\textsuperscript{TM} i9 NUC with 8 cores, providing uncompromised performance for gaming, VR, and content creation. With an Intel\textregistered Core\textsuperscript{TM} 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\textsuperscript{™} 4, DisplayPort, and HDMI capability for your optimal visual experience and up to six 4K displays.

Game, Create and Watch in 4K

No more playing around. Small, powerful Intel® NUC 11 Extreme Kits are designed for domination. Beast 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 your VR world. You also have the performance you need to create content without having to wait as your video and images render. Climb the leaderboard and keep your advantage with Beast Canyon, powerful performance in an 8L system.

Highlighted features
- 11\textsuperscript{th} Gen Intel\textregistered Core\textsuperscript{™} i9-11900KB
- Intel® UHD Graphics
- PCIe Gen4 x16 and x4 Gen4 slots
- Two DDR4-3200 SO-DIMM Sockets
- One M.2 slot for PCIe Gen4
- Two M.2 sockets for PCIe Gen3 or SATA SSDs
- One CPU-attached M.2 slot 42/80/110 PCIe X4 Gen 4
- Intel® Optane™ Memory ready
- HDMI 2.0b supporting 4K @ 60Hz
- Dual Thunderbolt 4 (supports Alt-DP)
- Intel® 2.5 Gb LAN
- Intel® Wi-Fi 6E
- Intel® Bluetooth 5.2
- Internal Dual-Band Antennas
- Eight USB 3.2 Gen 2 Ports (10Gb/s)
- SDXC card slot (UHS-II)
- Digital Audio 7.1 Surround Sound
- Front 3.5mm headset jack
- Kensington lock support
- 650W 80+ Gold internal power supply
- Customizable RGB lighting
- User-replaceable RGB-backlit front logo

Customization
- Supports DDR4 RAM Max 64GB
- Supports 3x M.2 SSDs
- Supports Full Size 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
  - (3.3GHz to 5.0GHz Turbo, 8-Core, 16-Thread, 24MB Cache, 65W)

### Storage Capabilities
- Three M.2 key M slots, one 2280 PCIe Gen4 slot and two 42/80 PCIe Gen3 slots
- CPU-attached M.2 slot 42/80/110 PCIe X4 Gen4
- RAID 0 and RAID 1 capable
- SDXC slot with UHS-II support

### Graphics
- Intel® UHD Graphics (350 MHz – 1.45 GHz)
- One HDMI 2.0b port (4K @ 60Hz)
- Two Thunderbolt™ 4 ports (4K @ 60Hz)
- Up to six displays at 4K resolution (Intel UHD Graphics)
- PCIe X16 Gen4 slot up to 350W, up to 12” card length, dual-slot capable

### System Memory
- Dual Channel DDR4-3200 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

### Audio
- Up to 7.1 surround audio via HDMI or Display-Port signals
- 3.5mm front stereo headset jack

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

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

### Peripheral Connectivity
- Intel 2.5Gb LAN port (I225-LM)
- Two front Super-Speed USB 3.2 Gen 2 on Type-A ports
- Six rear Super-Speed USB 3.2 Gen 2 Type-A ports
- Two Thunderbolt™ 4 ports
- Intel® Wi-Fi 6E AX210 2.4Gbps with dual internal antennas
- Intel® Bluetooth 5.2 with internal antenna
- PCIe X16 Gen4 slot with 8 pin & 2x6+2-pin PCIe power connectors, up to 350W
- PCIe X4 Gen4 slot

### Baseboard Power Requirements
- 650W 80+ Gold internal power supply with geo-specific AC cords

### Mechanical Chassis Size
- 14” x 7.4” x 4.7”
- 357 x 189 x 120 mm (~8L)

### 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

### Environment Operating Temp
- 0° C to +40° C
- Non-condensing Humidity

### Storage Temperature
- -20° C to +60° C

### Certification and Regulations

**Product Safety Regulations and Standards**
- IEC 60950-1
- UL 60950-1
- EN 60950-1
- CAN/CSA-C22.2 No. 60950-1

**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
- 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 Server
- Linux distributions