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Intel® NUC 12 Extreme

**Monster performance.  
small size.**

Devastate the competition with the most powerful  
Intel® NUC device available today





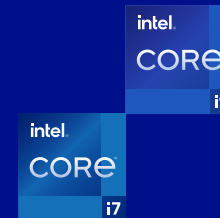
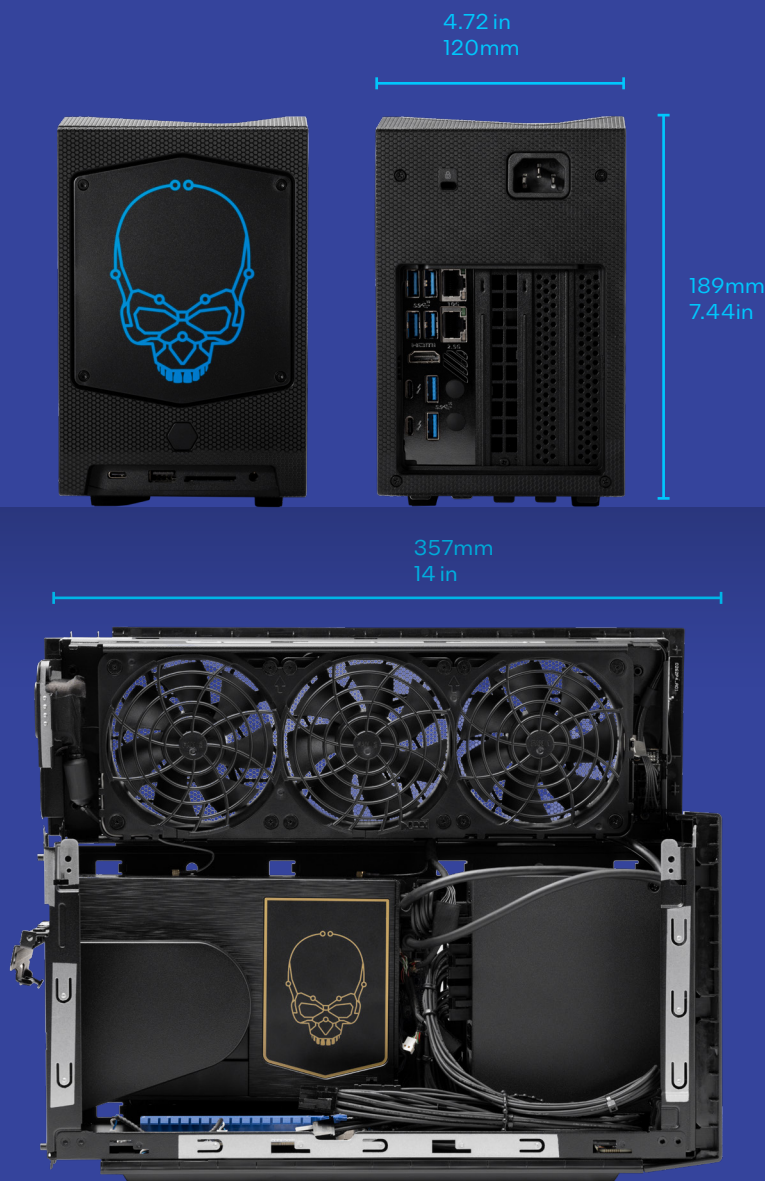
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# True immersion in a small footprint

**Get ready to play with fire.** The Intel® NUC 12 Extreme is designed to scorch the competition with **12th Gen Intel® Core™ processors** and support for up to 12-inch dual-slot graphics cards—with a PCIe x16 Gen 5 slot to support next-gen discrete graphics.

At just 4" x 14", these are the most powerful Intel® NUCs available today, and they're backed by a three-year warranty from Intel. Flexibility is built in with the modular **Intel® NUC 12 Extreme Compute Element** and the ability to customize graphics, memory, storage, and OS—including up to 64GB dual-channel memory and up to three PCIe Gen 4 SSDs. And every system comes with Intel® Wi-Fi 6E and 10GbE LAN for the latest in wired and wireless gaming performance.

With massive performance in a surprisingly small footprint, the Intel® NUC 12 Extreme gives gamers everything they need to light up the leaderboard.

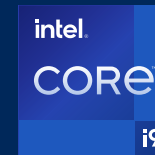


## Features

- 12th Gen Intel® Core™ i9/i7 processors
- PCIe x16 Gen5 slot for add-in discrete graphics (up to 12" in length)
- Up to 64GB dual-channel DDR4-3200 SODIMMs
- 3 M.2 key M slots
- HDMI 2.0b connector
- 2 Thunderbolt™ 4 ports
- 6 USB 3.2 Gen2 Type-A connectors
- Intel® Wi-Fi 6E AX211
- 10Gb Ethernet port standard; and additional 2.5Gb Ethernet port on Intel® Core™ i9 processor SKUs
- Intel three-year warranty

Ideal for  
**Gaming**  
**Streaming**  
**Content creation**

# Intel® NUC 12 Extreme



	NUC12EDBi9	NUC12EDBi7
Processor	<b>12th Generation Core™ i9-12900 processor</b> Up to 5.1GHz Turbo Boost Max, 8P+8E cores, 24 threads, 30MB L3 Cache	<b>12th Generation Core™ i7-12700 processor</b> Up to 4.9GHz Turbo Boost Max, 8P+4E cores, 20 threads, 25MB L3 Cache
Graphics	PCIe x16 slot for add-in discrete graphics (up to 12"), Intel® UHD Graphics 770	
Memory	Dual-channel DDR4-3200 SODIMMs, 1.2V, 64GB max	
Storage	3 x M.2 key M slots: 1 x 80 CPU-attached PCIe x4 Gen4 NVMe, 2 x 42/80 PCH-attached PCIe x4 Gen4 NVMe or SATA3 SSD RAID-0 and RAID-1 capable Intel® Optane™ SSD and Intel® Optane™ Memory M10, H10, and H20 ready	
Other Features & Technology	HDMI 2.0b connector • Two Thunderbolt™ 4 ports • Supports 3 x 4K displays • Intel® Wi-Fi 6E AX211, 802.11ax 2x2 2.4Gbps w/ 6GHz + Bluetooth® v5.2 • dual internal antennas • 6 x USB 3.2 Gen2 Type-A connectors • Up to 7.1 multichannel digital audio via HDMI or DisplayPort signals • 2 x USB 3.1 headers • 2 x USB 2.0 headers	
Operating System	Not included. Microsoft Windows, compatible w/ Windows Server 2019; compatible w/ various Linux distros	



\* Processor is pre-installed on Intel® NUC 12 Compute Element

# Intel® NUC 12 Extreme

## Additional Technical Specifications



### Processor

- 12th Generation Core™ i9-12900 processor  
Up to 5.1GHz Turbo Boost Max, 8P+8E cores, 24 threads, 30MB L3 Cache
- 12th Generation Core™ i7-12700 processor  
Up to 4.9GHz Turbo Boost Max, 8P+4E cores, 20 threads, 25MB L3 Cache

### Graphics Options

- PCIe x16 slot
- Intel® UHD Graphics 770

### Storage Capabilities

- 3 x M.2 key M slots:
  - 1 x 80 CPU-attached PCIe4 Gen4 NVMe
  - 2 x 42/80 PCH-attached PCIe x 4 Gen4 NVMe or SATA3 SSD
  - RAID-0 and RAID-1 capable
- Intel® Optane™ SSD and Intel® Optane™ Memory M10, H10, and H20 ready

### System Memory

- Dual channel DDR4-3200 SODIMMs, 1.2V, 64GB max

### Connectivity

- HDMI 2.0b port
- Mini DisplayPort 1.4 port
- Front and rear Thunderbolt™ 4 ports with 5V/9V fast phone charging profiles
- Intel® Wireless-AX 201, IEEE 802.11ax 2x2/ Wi-Fi 6E AX211 (select SKUs) + Bluetooth® 5, with internal antennas

- Six USB 3.1 Gen2 ports
- 10GbE port standard
- Intel® 2.5Gb (i225-LM) Ethernet port available on Intel® Core™ i9 processor SKUs
- SDXC slot with UHS-II support

### System BIOS

- 256Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V5.0b, SMBIOS2.5
- Intel® BIOS
- Intel® Express BIOS update support

### Hardware Management Features

- Voltage and temperature sensing
- ACPI-compliant power management control

### Expansion Capabilities

- Two internal USB 2.0 headers

### Audio

- Up to 7.1 multi-channel digital audio via HDMI or DisplayPort signals

### Operating System Compatibility

- Windows® 10
- Various Linux distros

### Environment Operating Temperature

- 0 C to +35 C

### Storage Temperature

- -20 C to +60 C

### Safety Regulations and Standards

- IEC/EN/UL 60950-1
- IEC/EN/UL 62368-1

### EMC/RF Regulations and Standards

- FCC Part 15B/15C/15E
- CISPR/EN 55032/55024
- ICES-003
- VCCI 32
- BSMI CNS 13438
- KN 32/35
- AS/NZS CISPR 32
- EN 300 328
- EN 301 893
- EN 300 440
- EN 301 489-1/3/17
- EN 62311
- AS/NZS 4268
- AS/NZS 2772.2
- ARPANSA

### Environmental Regulations

- EU RoHS
- China RoHS
- Taiwan BSMI RoHS
- REACH

### Energy Efficiency Regulations for Mini PCs

- US Energy Star and CEC
- EU ErP Directive

- China CEL
- South Korea E-standby
- Australia GEMS
- Israel Energy Source
- Japan Energy Saving Act
- 2022年度基準: 15区分, 54.7kWh/年

Level up your gaming  
[www.intel.com/NUC](http://www.intel.com/NUC)

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Actual Intel® NUC kit may differ from the image shown.

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