Product Brief

INTEL® NUC KIT NUC7i7BNHX1

**Intel® NUC: Accelerated
Now with Intel® Optane™ Memory**

The Shape that Fits the Future.

GO SMALL GET BIG.

Get ready to play hard and fast while still taking advantage of the performance you need for content creation, photo editing, or complex work. The Intel® NUC Kit NUC7i7BNHX1 is built with a dual-core 7th generation Intel® Core™ i7 processor and has Intel® Turbo Boost Technology 2.0 for unprecedented power and responsiveness to help your productivity soar.

The Intel NUC7i7BNHX1 includes Intel® Optane™ Memory[1] which makes you ready for the future. By pairing Intel Optane Memory with high capacity HDD storage media, you get amazing performance and responsiveness as well as shorter boot times, faster application launches, and more responsive browsing—exactly what you want for play or work.

New features let you use Windows® 10 to its full potential

The Intel NUC7i7BNHX1 has some cool new features including a dual-array front micro-phone so you can take advantage of Cortana's* capabilities if you install Windows® 10 with no additional hardware needed. There's also a front power button and a multi-color LED ring so you can personalize the NUC with the look you want, along with 7.1 surround sound via the HDMI* port so that you can be deeply immersed in your music, movies, and games. Or listen with headphones via the front microphone/audio jack. The choice is yours.

With four USB 3.0 ports, including a charging port, you can connect a USB keyboard, mouse, and printer, and still have room to charge your phone or connect external storage.

Intel® Iris™ Plus Graphics and Thunderbolt™ 3

Intel® Iris™ Plus Graphics lets you see images in brilliant 4K and adds better definition and clarity, letting you watch theater-quality 4K videos in your living room or see the sneaky moves your opponent is trying to make on your favorite game. The Intel NUC7i7BNHX1 can connect up to three 4K monitors so you can spread your game across screens. The kit also comes with Thunderbolt™ 3 which supports up to 40 Gbps transfer speeds, connection to external graphics, and has built-in 10 GbE for networking with another Thunderbolt 3 system.

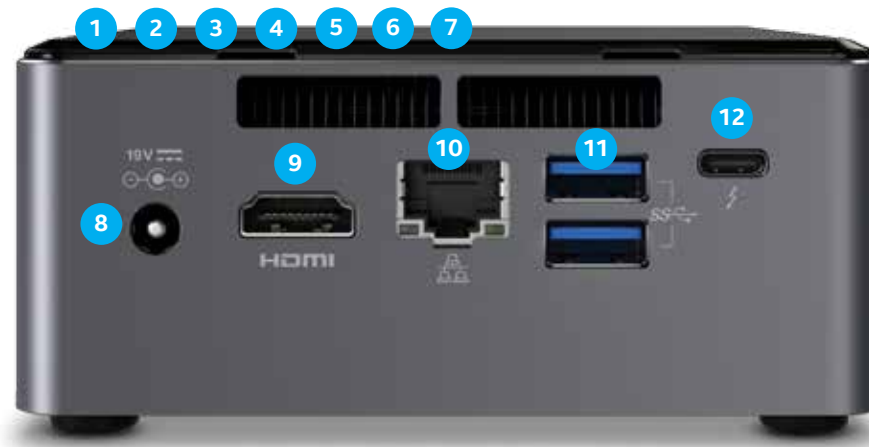## Cut the cords, not the performance

The Intel NUC7i7BNHX1 comes with Intel® 802.11ac wireless, Intel's fastest wireless available today, for connectivity right out-of-the-box. This makes it simple to immediately access files in the cloud, and with built-in Bluetooth* 4.2, you can connect wireless peripherals like headsets and keyboards.

INTEL® NUC: Go small, get big.

POWER, CAPABILITIES, AND PERFORMANCE IN FOUR INCHES SQUARE

Highlighted Features

1   7th generation Intel® Core™ i7-7567U processor

2   Intel® Iris™ Plus Graphics 650

3   Two DDR4 SO-DIMM sockets (up to 32 GB, 2133 MHz)

4   1x SATA3 port for connection to 2.5" HDD or SSD

5   M.2 slot with flexible support for a 42 or 80 mm M.2 SSD

6   Intel® Optane™ Memory (16 GB)

7   Intel® Dual Band Wireless-AC 8265 and Bluetooth* 4.2

8   Back panel DC power connector (12–19V)

9   One full-size HDMI* 2.0 display port supporting 8 channel audio (7.1 surround sound)

10 Intel® Gigabit LAN

11 Two USB 3.0 ports on the back panel

12 Thunderbolt™ 3 port with support for USB* 3.1 gen 2, DisplayPort* 1.2 and 40 Gb/s Thunderbolt

13 Kensington lock support

14 Support for user-replaceable third-party lids

15 Micro SD card slot

16 Consumer infrared sensor

17 Two USB 3.0 ports (including one charging port) on the front panel

18 Front panel headphone/microphone jack

19 Front panel power button

20 Dual-array front microphones

21 Multi-color front panel LED ring

INTEL® NUC KIT NUC7i7BNHX1

Technical Specifications

Processor
- Intel® Core™ i7-7567U processor (3.5 GHz to 4.0 GHz Turbo², Dual Core 4 MB cache, 28W TDP)

Graphics
- Intel® Iris™ Plus Graphics 650
- One HDMI* 2.0 port with 4K at 60 Hz
- Thunderbolt™ 3 port with support for USB* 3.1 Gen 2, DisplayPort* 1.2 and 40 Gb/s Thunderbolt

System Memory
- Two DDR4 SO-DIMM sockets (up to 32 GB, 2133 MHz), 1.2V

Intel® Optane™ Memory
- 16 GB preinstalled

Storage Capabilities
- Micro SDXC slot with UHS-I support on the side
- One M.2 connector supporting 22x42 or 22x80 M.2 SSD
- One SATA3 port for connection to 2.5" HDD or SSD (up to 9.5 mm thickness)

Peripheral Connectivity
- Intel® Gigabit LAN
- Thunderbolt 3 port with support for USB* 3.1 Gen 2, DisplayPort* 1.2 and 40 Gb/s Thunderbolt
- Four Super Hi-Speed USB 3.0 ports (two back panel ports and two front ports including one charging port)

- Two additional Hi-Speed USB 2.0 ports via internal header
- Intel® Dual Band Wireless-AC 8265 (802.11ac), 2x2, up to 867 Mbps
- Dual Mode Bluetooth* 4.2

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

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

Expansion Capabilities
- Two Internal USB 2.0 ports via two 1x4 headers (for replaceable lid support)
- One AUX_PWR header
- One Consumer Electronics Control header

Audio
- Up to 7.1 surround audio via HDMI
- Headphone/microphone jack on the front panel
- Dual-array microphones on the front panel

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

Mechanical Chassis Size
- 4.53" x 4.37" x 2.01"
- 115 mm x 111 mm x 51 mm

Baseboard Power Requirements
- 19V, 65W wall-mount AC-DC power adapter

Environment Operating Temperature
- 0° C to +40° C

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

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 32
- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- ICES-003
- EN 55032
- 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-2, V-3, V-4
- KN-32
- KN-24
- CNS 13438

Environmental Regulations
- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU
- China RoHS - Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products

Look for Intel® NUC with Intel Inside® at www.intel.com/NUC

experience
what's inside™