

Product Brief



INTEL® NUC KIT NUC7i3BNHX1

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



intel OPTANE™
MEMORY



4K60 DISPLAY CAPABILITY

INTEL® HD GRAPHICS	7.1 SURROUND SOUND
--------------------	--------------------



The Shape that Fits the Future.

Product Brief



INTEL® NUC KIT NUC7i3BNHX1

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



The Shape that Fits the Future.

WHO SAYS SMALL ISN'T POWERFUL?



Manage your life right now. The Intel® NUC Kit NUC7i3BNHX1 is built with the 7th generation Intel® Core™ i3 processor give you the performance to handle anything your household throws at it. From sharing and backing up your files—including your digital photos—to managing your home automation, the Intel NUC sits at the center of your smart home or entertainment center. And its small size means it fits in the family room, the kitchen, the den, or wherever you want to place it.

The Intel NUC7i3BNHX1 includes Intel® Optane™ Memory¹ which makes you ready for the future. By easily installing and 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. Intel NUC7i3BNHX1 has room for a 2 TB HDD, so you have the room to store and back up all your important files.

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

The Intel NUC7i3BNHX1 has some cool new features including dual-array front microphones 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 and movies. 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've got room to connect a USB keyboard, mouse, and printer, and still have a port to charge your phone or connect external storage. There's also a USB Type-C* port that provides USB 3.1 for faster data transfer or DisplayPort* 1.2.

Intel® HD Graphics via an HDMI* port

Intel® HD 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 photos the way they were meant to be seen. And the 60 Hz refresh rate keeps mouse and cursor movement crisp, and your eyes from tiring when you're using your system for late night homework.

Cut the cords, not the performance

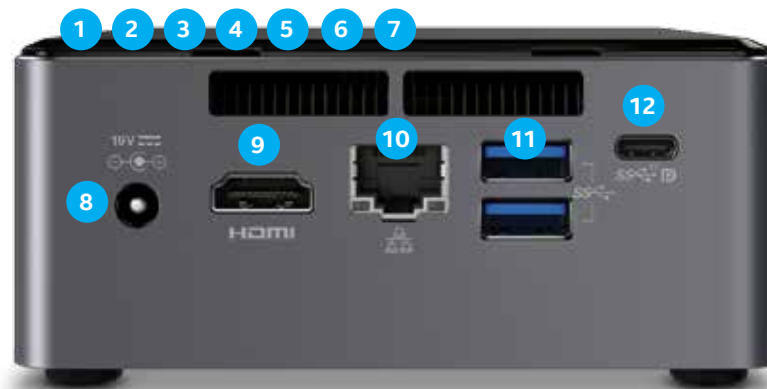
The Intel NUC7i3BNHX1 comes with Intel® 802.11ac wireless, Intel's fastest wireless available today, for connectivity right out-of-the-box. This makes it simple to immediately access files in the cloud, and with built-in Bluetooth* 4.2, you can connect wireless peripherals like headsets and keyboards.

INTEL® NUC: Go small, get big.

POWER, CAPABILITIES, AND PERFORMANCE IN FOUR INCHES SQUARE

Highlighted Features

- 1 7th generation Intel® Core™ i3-7100U processor
- 2 Intel® HD Graphics 620
- 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 USB Type-C port providing DisplayPort* 1.2 or USB 3.1 gen 2
- 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 NUC7i3BNHX1

Technical Specifications

Processor

- Intel® Core™ i3-7100U processor (2.4 GHz, Dual Core, 3 MB Cache, 15W TDP)

Graphics

- Intel® HD Graphics 620
- One HDMI* 2.0 port with 4K at 60 Hz
- USB Type-C port with DisplayPort* 1.2

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
- USB Type-C port providing USB 3.1 Gen 2 with data transfer up to 10 Gbps
- 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

¹ Intel technologies may require enabled hardware, specific software, or services activation. Performance varies depending on system configuration. Check with your system manufacturer or retailer or learn more at intel.com/optanememory. Intel products are not intended for use in medical, life-saving, or life-sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

All products, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice. Availability in different channels may vary.

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

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT, EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS. INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT.