



INTEL® NUC 8 PRO

BUILT FOR BUSINESS. BUILT TO LAST.

Performance and value in a small package



START SMALL. EXPAND AT WILL.

Intel® NUC 8 Pro kits and boards are built for business, with a range of 8th Gen Intel® Core™ processors that deliver powerful performance for embedded IoT, surveillance, meeting rooms, and more.

Systems with Intel® Core™ i7 and i5 processors feature the Intel vPro® platform for remote management, stability, and security. Every system features new capabilities, including a Thunderbolt™ 3 port, plus USB 3.1 Gen 2 ports that transfer data at 10 Gbps—2X faster than the previous generation. Certified by Intel for 24x7 sustained operation and featuring a 3-year warranty and 3-year product lifecycle, the Intel NUC 8 Pro is designed to deliver years of nonstop performance.

Intel® NUC 8 Pro:
A Workhorse for a Range of Needs

8X MORE
BANDWIDTH WITH
THUNDERBOLT™ 3¹

FEATURES

- Intel vPro platform
- Dual HDMI 2.0a
- Thunderbolt 3
- Internal eDP connector for 4K@60Hz support
- Triple display support³
- Four USB 3.1 ports
- Intel® Gigabit LAN
- Headless and virtual display emulation
- Qualified for 24x7 operation
- 3-year limited warranty

2X FASTER DATA
TRANSFERS WITH
USB 3.1 GEN 2²

USAGES

- Embedded IoT
- Digital signage
- Digital kiosks
- Intelligent vending
- Conference room hub
- Security appliance
- Surveillance

AVAILABLE SKUs

- Intel® NUC Kit
- Intel® NUC Board



INTEL® NUC 8 PRO KITS AND BOARDS

Built with 8th generation Intel® Core™ i7 vPro® processors



	Kits		Board
	NUC8v7PNH	NUC8v7PNK	NUC8v7PNB
Processor	Intel® Core™ i7-8665U processor with Intel vPro® technology 1.8 GHz to 4.8 GHz Turbo, 4 Core, 8 Thread, 8 MB Cache, 15W, Intel® AMT v12		
Graphics	Intel® UHD Graphics 620, 300 MHz – 1.15 GHz		
Memory	Dual-channel DDR4 SODIMM slots		Dual-channel DDR4 SODIMM slots
Storage	M.2 22x42/80 slot, 2.5" 7mm SATA drive bay	M.2 22x42/80 slot	M.2 22x42/80 slot
Other Features & Technology	Dual HDMI 2.0a, Thunderbolt™ 3, 3 USB 3.1 Gen2 Ports, Intel® Wireless-AC, Intel® Gigabit LAN, Qualified for 24x7 operation, Delayed AC start, DC overvoltage protection, DC cable strain relief, Internal 4-lane eDP connector, TPM 2.0, 3-Year Limited Warranty		
Geo-Specific Power Cord	US, EU, UK, AU, CN, or No Cord Option		—
Operating System	Not Included		—
What's Needed	Memory, Storage, Operating System		—



INTEL® NUC 8 PRO KITS AND BOARDS

Built with 8th generation Intel® Core™ i5 vPro® processors



	Kits		Board
	NUC8v5PNH	NUC8v5PNK	NUC8v5PNB
Processor	Intel® Core™ i5-8365U processor with Intel vPro® technology 1.6 GHz to 4.1 GHz Turbo, 4 Core, 8 Thread 6 MB Cache, 15W, Intel® AMT v12		
Graphics	Intel® UHD Graphics 620, 300 MHz – 1.10 GHz		
Memory	Dual-channel DDR4 SODIMM slots		Dual-channel DDR4 SODIMM slots
Storage	M.2 22x42/80 slot, 2.5" 7mm SATA drive bay	M.2 22x42/80 slot	M.2 22x42/80 slot
Other Features & Technology	Dual HDMI 2.0a, Thunderbolt™ 3, 3 USB 3.1 Gen2 Ports, Intel® Wireless-AC, Intel® Gigabit LAN, Qualified for 24x7 operation, Delayed AC start, DC overvoltage protection, DC cable strain relief, Internal 4-lane eDP connector, TPM 2.0, 3-Year Limited Warranty		
Geo-Specific Power Cord	US, EU, UK, AU, CN, or No Cord Option		—
Operating System	Not Included		—
What's Needed	Memory, Storage, Operating System		—



INTEL® NUC 8 PRO KITS AND BOARDS

Built with 8th generation Intel® Core™ i3 processors



	Kits		Board
	NUC8i3PNH	NUC8i3PNK	NUC8i3PNB
Processor	Intel® Core™ i3-8145U processor 2.1 GHz to 3.9 GHz Turbo, 2 Core, 4 Thread, 4 MB Cache, 15W		
Graphics	Intel® UHD Graphics 620, 300 MHz – 1.00 GHz		
Memory	Dual-channel DDR4 SODIMM slots		Dual-channel DDR4 SODIMM slots
Storage	M.2 22x42/80 slot, 2.5" 7mm SATA drive bay	M.2 22x42/80 slot	M.2 22x42/80 slot
Other Features & Technology	Dual HDMI 2.0a, Thunderbolt™ 3, 3 USB 3.1 Gen2 Ports, Intel® Wireless-AC, Intel® Gigabit LAN, Qualified for 24x7 operation, Delayed AC start, DC overvoltage protection, DC cable strain relief, Internal 4-lane eDP connector, 3-Year Limited Warranty		
Geo-Specific Power Cord	US, EU, UK, AU, CN, or No Cord Option		—
Operating System	Not Included		—
What's Needed	Memory, Storage, Operating System		—



INTEL® NUC 8 PRO KITS AND BOARDS

Additional Technical Specifications

Processors

NUC8v7PN

- Intel® Core™ i7-8665U processor (1.8 GHz to 4.8 GHz Turbo, 4 Core, 8 Thread, 8 MB Cache, 15W)

NUC8v5PN

- Intel® Core™ i5-8365U processor (1.6 GHz to 4.1 GHz Turbo, 4 Core, 8 Thread, 6 MB Cache, 15W)

NUC8i3PN

- Intel® Core™ i3-8145U processor (2.1 GHz to 3.9 GHz Turbo, 2 Core, 4 Thread, 4 MB Cache, 15W)

Storage Capabilities

NUC8v7PNH, NUC8v5PNH, & NUC8i3PNH

- M.2 22x80 key M slot for PCIe x4 NVMe or SATA SSD
- 2.5" 7mm bay and port

NUC8v7PNK, NUC8v5PNK, & NUC8i3PNK

- M.2 22x80 key M slot for PCIe x4 NVMe or SATA SSD

System Memory

- Two DDR4 SODIMM sockets (Dual channel DDR4-2400 SODIMMs, 1.2V, 32 GB max)

Management

NUC8v7PN & NUC8v5PN

- Intel® Active Management Technology for out-of-band management

Connectivity

- Two HDMI 2.0a ports with built-in CEC
- Thunderbolt™ 3 port
- Three USB 3.1 Gen2 Type-A ports
- USB 2.0 port
- Intel® i219-LM 10/100/1000 Mbps RJ45 Ethernet

- Internal 4-lane eDP connector

NUC8v7PN & NUC8v5PN

- Intel® Wireless-AC 9560 vPro®

NUC8i3PN

- Intel Wireless-AC 9560

System BIOS

- 256 Mb 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

- 1x rear type A and 2x internal USB 2.0 headers
- 1x RS232 serial port header

Audio

- Up to 7.1 multichannel (or dual 8-channel) digital audio via HDMI

Front Panel Header

- Vcc5/1A, 5Vsby/2A, 3.3Vsby/1A

Chassis Size

Tall "H" Chassis

- 4.60" x 4.40" x 2.08"
 - 117 mm x 112 mm x 53 mm
- Slim "K" Chassis
- 4.60" x 4.40" x 1.45"
 - 117 mm x 112 mm x 37 mm

Board Size

- 4.00" x 4.09"
- 101.6 mm x 104.1 mm

Power Requirements

- 19Vdc 90W power supply adapter with geo-specific AC cords

Environment Operating Temperature

- 0° C to +35 C

Storage Temperature

- -20° C to +40° 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

The Power of Small
www.intel.com/NUC

¹8X more bandwidth with Thunderbolt 3™ than USB 3.0: Data transfer rates, different from total available bandwidth for data and display traffic, depend on system configuration. 8X improvement over USB 3.0 refers to total available bandwidth for data and display, not data transfer rates. Data transfer rates depend on system configuration.

²2X improvement over USB 3.0 refers to total available bandwidth for data and display, not data transfer rates. Data transfer rates depend on system configuration.

³USB-C to dual mini DisplayPort splitter required.

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.

