

intel® NUC

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 Mini PCs, boards, and kits 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 Mini PC
- Intel® NUC Kit
- Intel® NUC Board



INTEL® NUC 8 PRO MINI PCS, KITS, AND BOARDS

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



	Kits		Mini PCs			Board
	NUC8v7PNH	NUC8v7PNK	NUC8v7PNKQC	NUC8v7PNKQ	NUC8v7PNKQU	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		16 GB Dual-channel DDR4-2400			Dual-channel DDR4 SODIMM slots
Storage	M.2 22x42/80 slot, 2.5" 7mm SATA drive bay	M.2 22x42/80 slot	Intel® SSD 512 GB NVMe			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		US, EU, or No Cord Option	Not Included	US, EU	—
Operating System	Not Included		Windows® 10 Pro	Not Included	Windows® 10 Pro with Intel Unite®	—
What's Needed	Memory, Storage, Operating System		—	Operating System, Power Cord	—	—



INTEL® NUC 8 PRO MINI PCS, KITS, AND BOARDS

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



	Kits		Mini PCs			Board
	NUC8v5PNH	NUC8v5PNK	NUC8v5PNKWC	NUC8v5PNKW	NUC8v5PNKWU	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		8 GB Dual-channel DDR4-2400			Dual-channel DDR4 SODIMM slots
Storage	M.2 22x42/80 slot, 2.5" 7mm SATA drive bay	M.2 22x42/80 slot	Intel® SSD 512 GB NVMe			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		US, EU, or No Cord Option	Not Included	US, EU	—
Operating System	Not Included		Windows® 10 Pro	Not Included	Windows® 10 Pro with Intel Unite®	—
What's Needed	Memory, Storage, Operating System		—	Operating System, Power Cord	—	—



INTEL® NUC 8 PRO MINI PCS, KITS, AND BOARDS

Built with 8th generation Intel® Core™ i3 processors



	Kits		Mini PCs		Board
	NUC8i3PNH	NUC8i3PNK	NUC8i3PNKOC	NUC8i3PNKO	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		4 GB Dual-channel DDR4-2400		Dual-channel DDR4 SODIMM slots
Storage	M.2 22x42/80 slot, 2.5" 7mm SATA drive bay	M.2 22x42/80 slot	256 GB NVMe		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		US, EU, or No Cord Option	Not Included	—
Operating System	Not Included		Windows® 10 Pro	Not Included	—
What's Needed	Memory, Storage, Operating System		—	Operating System, Power Cord	—



INTEL® NUC 8 PRO MINI PCS, 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

- 19V_{DC} 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.

