

NUC8v7PNB - Quad-Core i7 vPro Motherboard

Easy Customization

The NUC8v7PNB (code-named Provo Canyon), built with 8th generation Intel® Core™ i7 vPro™ processors, delivers the performance and innovation for small space and embedded solutions. Whether you're creating a digital kiosk, deploying intelligent vending, or refreshing enterprise PCs, the Provo Canyon can get the job done easily. With the option to run Windows® 10 or Linux or another OS, the Provo Canyon delivers the flexibility to build the exact solution your solution needs.

Build Embedded Solutions

The Provo Canyon NUC board enables incredible flexibility and expandability depending on your customers' needs. It has some new features including a high-speed Thunderbolt™ 3 port to complement the two full-sized HDMI 2.0a ports for powering up to three brilliant 4K displays at 60 Hz. This unit also features display emulation which enables various options including headless operation, a second virtual display, and persistent displays. The board includes a 4-lane eDP connector that allows you to

create interactive touch systems perfect for digital signage or intelligent vending. The NUC8v7PNB board also has an internal power connector with a 12-24 volt input range so your systems stay up and running no matter the fluctuation in power. The board ships without a wireless card so you can choose what's best for the solution you're building.

Safe and Secure

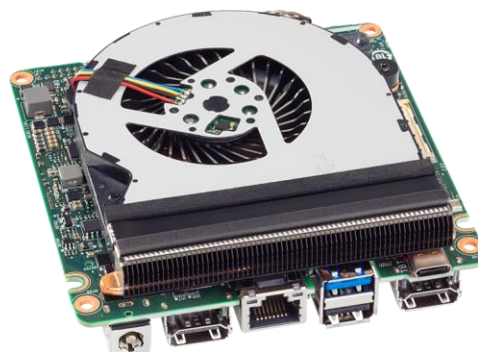
With Intel® vPro™ technology you can help your customers get ahead of security threats. The built-in hardware-enhanced security means you can keep client data and credentials secure, and remote manageability is perfect for installations such as unattended digital kiosks and intelligent vending. This hardware offers Intel® Trusted Platform Module (TPM) which addresses the growing concern over boot process integrity and offers better data protection. In addition, Intel® Remote Secure Erase lets you wipe an Intel SSD on a lost or stolen system or wipe all data and encryption keys for enterprise clients, making any data that was on the drive, virtually impossible to retrieve.

Highlighted features

- 8th Gen Intel® Core™ i7 vPro
- Intel® HD Graphics 620
- Two DDR4-2666 SO-DIMM Sockets
- M.2 slot supports PCI or SATA SSDs
- Intel® Optane™ Memory ready
- Dual HDMI 2.0 supporting 4K @ 60Hz
- Intel® Gigabit LAN with AMT Support
- Three USB 3.1 Gen2 Ports
- One USB 2.0 Port
- Digital Audio 7.1 Surround Sound
- TPM 2.0
- Internal Dual-Band Antennas
- 19V DC Jack (12-24v operation)*
- VESA Mount Kit

Customization

- Supports DDR4 RAM 4GB-64GB
- Supports M.2 SSD 128GB-2TB
- SATA drive connector
- Legacy Serial port option
- Two USB 2.0 and One USB 3.0 Internal Headers
- Consumer Electronics Control (CEC) Internal Header



Simply NUC Services

You can order this NUC in your various configurations, as well as your corporate OS Image loaded and ready to deploy.

Technical Specifications

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| <p>Processor</p> <ul style="list-style-type: none"> Intel® Core™ i7-8665U vPro processor (1.8GHz with 4.8GHz Turbo, Quad Core, Hyper-thread, 8MB Smart Cache, 15W TDP) | <p>Graphics</p> <ul style="list-style-type: none"> Intel® HD Graphics 620 Two HDMI 2.0a ports with HDCP 2.2 Built-in CEC for both ports Support for a 3rd monitor via Thunderbolt 3 | <p>System Memory</p> <ul style="list-style-type: none"> Two DDR4 SO-DIMM sockets, 64GB Max, 1.2V |
| <p>Storage Capabilities</p> <ul style="list-style-type: none"> One M.2 socket supporting 22x80 M.2 SSDs, SATA or PCIe, Intel® Optane™ Memory One SATA 3 port for connection to 2.5" HDD or SSD | <p>Peripheral Connectivity</p> <ul style="list-style-type: none"> Intel® Gigabit LAN w/ AMT support Three Super-Speed USB 3.1 Gen2 ports (one on back panel and two on front panel) One back USB 2.0 port One back USB 3.1 Gen 2 ports on Type-C Connector One M.2 socket supporting optional 22x30 M.2 wireless solutions | <p>System Bios</p> <ul style="list-style-type: none"> 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 |
| <p>Audio</p> <ul style="list-style-type: none"> Up to 7.1 surround audio via HDMI | | <p>Front Panel Header</p> <ul style="list-style-type: none"> Reset, HDD LED, Power LEDs, power on/off |
| <p>Hardware Management Features</p> <ul style="list-style-type: none"> Trusted Platform Module (TPM) 2.0 AMT supported Ethernet Controller Voltage and temperature sensing ACPI-compliant power management control Processor fan speed control Fan sensor inputs used to monitor fan activity | <p>Baseboard Power Requirements</p> <ul style="list-style-type: none"> 19V, 90W AC-DC power adapter with detachable power cord. US Cord sold separately*, other countries available <p>Mechanical Board Size</p> <ul style="list-style-type: none"> 4" x 4.1" 102 mm x 104 mm | <p>Expansion Capabilities</p> <ul style="list-style-type: none"> One USB 3.0 port via a 1x10 header Two USB 2.0 ports on two 1x4 Headers One M.2 22x30 socket Optional Legacy Serial Connector One AUX_PWR connector One Consumer Electronics Control |

Certification and Regulations

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| <p>Product Safety Regulations and Standards</p> <ul style="list-style-type: none"> IEC 60950-1 UL 60950-1 EN 60950-1 CAN/CSA-C22.2 No. 60950-1 | <p>EMC/RF Regulations and Standards (Class B)</p> <ul style="list-style-type: none"> CISPR 52 FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E ICES-005 EN 55052 ETSI EN 500 528 ETSI EN 501 489-1 ETSI EN 501 489-17 EN 55024 ETSI EN 501 895 EN 62511 AS/NZS 2772.2 VCCI V-2, V-5, V-4 KN-52 CNS 15458 | <p>Environmental Regulations</p> <ul style="list-style-type: none"> RoHS Directive 2011/65/EU WEEE Directive 2012/19/EU China RoHS |
| <p>Environment Operating Temp</p> <ul style="list-style-type: none"> 0° C to +40° C Non-condensing Humidity <p>Storage Temperature</p> <ul style="list-style-type: none"> -20° C to +60° C | | <p>Certified Operating Systems</p> <ul style="list-style-type: none"> Windows 10 64-bit (Pro & Home) Windows 10 IoT Enterprise - (64-bit only) CBB and LTSC Windows Server 2016 Various Linux including: Ubuntu, Mint, openSUSE, etc (Contact Simply NUC for specifics) |