



NUC8i3PNH - Quad-Core i3 Tall Chassis

Easy Customization

The NUC8i3PNH (code-named Provo Canyon), built with 8th generation Intel® Core™ i3 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 Intel®

Wireless-AC 9560 and 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. Provo Canyon also provides an expansion bay to accommodate I/O, video, and LAN port add-ons. And board SKU options allow flexibility for your embedded usages.

More Performance. More Connections

The Provo Canyon has some new features including, for the first time on a Business SKU, 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. Suddenly your

clients' digital kiosks and intelligent vending machines have images that really pop and draw people in. This unit also features display emulation which enables various options including headless operation, a second virtual display, and persistent displays. And Provo Canyon is tested for 24/7 operation ensuring solutions that are built to last.

Highlighted features

- 8th Gen Intel® Core™ i3
- Intel® UHD Graphics 620
- Two DDR4-2666 SO-DIMM Sockets
- M.2 slot supports PCIe or SATA SSDs
- 2.5" SATA drive bay
- Intel® Optane™ Memory and Memory H10 ready
- Dual HDMI 2.0 Supporting 4K @ 60Hz
- Intel® Gigabit LAN with AMT Support
- Intel® Wireless-AC 9560
- Intel® Bluetooth 5.1
- Three USB 3.1 Gen2 Ports
- One USB 2.0 Port
- Digital Audio 7.1 Surround Sound
- Internal Dual-Band Antennas
- Front Panel Power Button
- 19V DC Jack (12-24V operation)
- Kensington Lock Support
- VESA Mount Kit

Customization

- Supports DDR4 RAM 4GB-64GB
- Supports M.2 SSD 128GB-2TB
- Supports 2.5 inch SATA 128GB-2TB
- Optional Back IO Panel
- Customizable lid options
- Two USB 2.0 and One USB 3.0 Internal Headers
- Consumer Electronics Control (CEC)
 Internal Header









Technical Specifications

Processor

 Intel® Core™ i3-8145U processor (2.1GHz with 3.9GHz Turbo, Quad Core, Hyper-thread, 4MB Smart Cache, 15W TDP)

Graphics

- 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

Storage Capabilities

- One M.2 socket supporting 22x80 M.2 SSDs, SATA or PCIe, Intel® Optane™ Memory or Memory H10
- One SATA 3 port for connection to 2.5" HDD or SSD

Audio

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

Hardware Management Features

- AMT supported Ethernet Controller
- Voltage and temperature sensing
- ACPI-compliant power management control
- Processor fan speed control
- Fan sensor inputs used to monitor

Peripheral Connectivity

- 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
- Intel® Dual Band Wireless-AC
- Intel® Bluetooth 5.1
- Wireless-AC 9560 is removable or disableable for security

Baseboard Power Requirements

• 19V, 90W AC-DC power adapter with detachable power cord.

Mechanical Chassis Size

- 4.61" x 4.41" x 2.05"
- 117 mm x 112 mm x 52 mm
- 0.65kg (1.4lbs) Configured

System Memory

Two DDR4 SO-DIMM sockets,
 64GB Max, 1.2V

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

Front Panel Header

 Reset, HDD LED, Power LEDs, power on/off

Expansion Capabilities

- One USB 3.0 port via a 1x10 header for functional Lid support
- Two USB 2.0 ports on two 1x4 internal headers for functional Lid support
- Optional Back IO Panel
- One Consumer Electronics
 Control header
- 2.5in Drive Mount for SATA drive

Certification and Regulations

Product Safety Regulations and Standards

- IEC 60950-1
- UL 60950-1
- EN 60950-1
- CAN/CSA-C22.2 No. 60950-1

Environment Operating Temp

- 0° C to +45° C
- Non-condensing Humidity

Storage Temperature

• -20° C to +70° C

EMC/RF Regulations and Standards (Class B)

- CISPR 52
- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- ICES-005
- EN 55052

• EN 62511

• EN 55024 • ETSI EN

• ETSI EN

- ETSI EN 500 528 501 489-1
- 501 489-1 • ETSI EN 501 489-17
- .501 895
- AS/NZS 2772.2 AS/NZS 4268
- VCCI V-2, V-5, V-4
- KN-52

• KN-24

• CNS 15458

Environmental Regulations

- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU
- China RoHS

Certified Operating Systems

- Windows 10 64-bit (Pro & Home)
- Windows 10 IoT Enterprise (64-bit only) CBB and LTSB
- Windows Server 2016
- Various Linux including:
 Ubuntu, Mint, openSUSE, etc
 (Contact Simply NUC for specifics)