Simply NUC

intel Technology Provider
Platinum 2019

NUC7i7DNBE - Quad-Core i7 vPro Motherboard

Who said small isn't powerful?

The Simply NUC7i7DNBE is the first Quad-Core i7 NUC in the familiar 4" x 4" x 2" sized package, able to run multiple applications or drive multiple 4K displays simultaneously. There is even support for a Legacy Serial port (optional). The active cooling system adjusts as needed to provide quiet during light loads where it isn't needed as much, and barely audible cooling when more is needed.

Built for Business

The Simply NUC7i7DNBE is built with the 8th generation quad-core Intel® Core™ i7 vPro processor to give you the performance to handle anything you throw at it.

The Simply NUC7i7DNBE is designed for 24/7 operation and is perfect for refreshing enterprise PCs, Digital Signage, POS terminals, and other continuous use applications.
With the remote management features found in vPro processors, paired with AMT Ethernet devices, you can remotely access and control the hardware outside of the operating system. The system also has room for up to a 2TB HDD or 4TB SSD, so you can backup or store important files.

Extended Life and Extended use

The Simply NUC7i7DNBE has a 3-year product life for you to design into your application and be able to purchase for years to come. These systems can also run Microsoft Server 2016, VMWare and various Linux Server Distros, making them perfect small, but very powerful, servers.

They are just as comfortable running Windows 10 Pro as part of a corporate environment as they are at running specific demanding applications. For these reasons, many large companies are choosing to standardize on this one piece of hardware for their many different product lines.

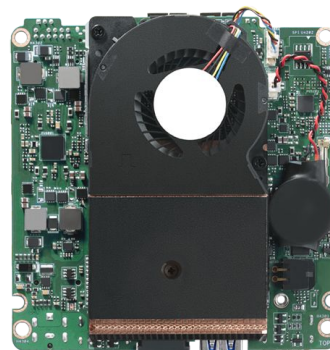### Cut the cords, not the Performance

The Simply NUC7i7DNBE comes with Intel® 802.11ac wireless, called Gigabit wireless, 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 and the 7.1 surround sound helps to deeply immerse you in your content.

Highlighted features

- 8th Gen Intel® Core™ i7 vPro
- Intel® HD Graphics 620
- 4GB DDR4 (64GB Max)
- 128GB M.2 SSD (2TB Max)
- Intel® Optane™ Memory ready
- Dual HDMI 2.0 supporting 4K @ 60Hz
- Intel® Gigabit LAN with AMT Support
- Intel® Dual Band (Gb) Wireless
- Intel® Bluetooth 4.2
- Four USB 3.0 ports
- Digital Audio 7.1 Surround Sound
- Internal Dual-Band Antennas
- 19V DC Jack (12-24v operation)
- VESA Mount Kit

Customization

- Two DDR4 SO-DIMM Sockets
- M.2 slot supports PCI or SATA SSDs
- SATA drive connector
- Legacy Serial port option
- Two USB 2.0 and one USB 3.0 headers
- Consumer Electronics Control (CEC) header for 2nd HDMI port

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

Processor
- Intel® Core™ i7-8650U vPro processor (1.9 GHz with 4.2GHz Turbo, Quad Core, Hyper-thread, 8 MB Smart Cache, 15W TDP)

Graphics
- Intel® HD Graphics 620
- Two HDMI 2.0 ports one with CEC and the second with optional CEC via internal header.

System Memory
- 4GB DDR4-2133 pre-installed.
- 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

Storage Capabilities
- 128GB M.2 SATA pre-installed.
- One M.2 socket supporting 22x80 M.2 SSDs, SATA or PCIe, 2TB SATA or PCIe SSD Max. Intel® Optane™ Memory ready
- One SATA 3 port for connection to 2.5" HDD or SSD (4TB SSD or 5TB HDD Max)

Peripheral Connectivity
- Intel® Gigabit LAN w/ AMT support
- Four Super-Speed USB 3.0 ports (two on back panel and two on front panel)
- Intel® Dual Band Wireless-AC 8265 (802.11ac), 2x2, up to 867 Mbps
- Dual Mode Bluetooth 4.2
- Wireless 802.11ac + BT 4.2 Radio can be removed or disabled for added security.

Front Panel Header
- Reset, HDD LED, Power LEDs, power on/off

Audio
- Up to 7.1 surround audio via HDMI

Expansion Capabilities
- One USB 3.0 port via a 1x10 header
- Two USB 2.0 ports on two 1x4 headers
- One AUX_PWR connector
- One Consumer Electronics Control header

Hardware Management Features
- 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

Baseboard Power Requirements
- 19V, 65W AC-DC power adapter with detachable power cord.
- US Cord included, others available

Mechanical Board Size
- 4" x 4"
- 102 mm x 102 mm

Certification and Regulations

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 52
- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- ICES-005
- EN 55052
- ETSI EN 500 528
- ETSI EN 501 489-17
- EN 62511
- AS/NZS 2772.2
- VCCI V-2, V-5, V-4
- KN-52
- CNS 15458
- EN 55024
- ETSI EN 501 489-1
- ETSI EN 501 895
- AS/NZS 4268
- KN-24

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

Environment Operating Temp
- 0° C to +40° C
- Non-condensing Humidity

Storage Temperature
- -20° C to +60° C

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)