



NUC7i7DNFE - Quad-Core i7 vPro Fanless

Who said small isn't powerful?

The Simply NUC7i7DNFE, the first fanless quad-core i7 vPro NUC is able to run multiple applications and drive multiple 4K displays simultaneously. Additional IO and storage can easily be added. There is even a Legacy Serial port. All of this in a small 7.5" x 4" x 3" sized package which can mount behind your monitor, on the wall, or be located in plain sight due to its small size and beautiful look. The passive cooling system is totally silent.

Built for Business

The Simply NUC7i7DNFE 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 NUC7i7DNFE 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 NUC7i7DNFE 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. The fanless design and no moving parts also provides hassle-free operation in dirty or dusty environments.

Cut the cords, not the Performance

The Simply NUC7i7DNFE 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 Wireless-AC
- Intel® Bluetooth 4.2
- Four USB 3.0 ports
- Two USB 2.0 ports
- Digital Audio 7.1 Surround Sound
- Legacy Serial on a DE-9M connector
- RP-SMA Dual-Band Antennas
- Front panel power button
- 19V DC Jack (12-24v operation)
- VESA Mount Kit

Customization

- Two DDR4 SO-DIMM Sockets
- M.2 slot supports PCi or SATA SSDs
- Internal 2.5 inch SATA Bay
- Dawson Canyon Optional IO Panel
- USB 3.0 Type-B Option





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

Storage Capabilities

- 128GB M.2 SATA pre-installed.
- One M.2 socket supporting 22x80 M.2 SSDs, SATA or PCle, 2TB SATA or PCIe SSD Max. Intel® Optane™ Memory ready
- One SATA 3 port for connection to 2.5" HDD or SSD (up to 15 mm) (4TB Max SSD or 5TB HDD)

Audio

• Up to 7.1 surround audio via HDMI

Peripheral Connectivity

- Intel® Gigabit LAN w/ AMT support
- Four Super-Speed USB 3.0 ports (two on back panel and two on front panel)
- Two USB 2.0 ports on front panel
- One Super-Speed USB 3.0 via internal header (optional Type-B)
- 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 is Removable or Disableable for security.

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

Hardware Management Features

- Trusted Platform Module (TPM) 2.0
- AMT supported Ethernet Controller
- Voltage and temperature sensing
- ACPI-compliant power management control

Baseboard Power Requirements

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

Mechanical Chassis Information

- 7.5" x 4" x 3" (190 mm x 102 mm x 76 mm)
- VESA Mount Kit (Plate and Screws)
- 1.5kg (3.4lbs) Fully-Assembled with Antennas (no 2.5in drive or power adapter)

Expansion Capabilities

- One Internal USB 3.0 port via a 1x10 header (for optional IO)
- Two reusable USB 2.0 ports on two 1x4 internal headers
- One AUX PWR connector
- One Consumer Electronics Control
- 2.5in Drive Mount for SATA drive.
- Planned LTE Radio

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 55024
- ETSI EN 500 528
- ETSI EN 501 489-1
- ETSI EN 501 489-17
- ETSI EN 501 895
- EN 62511
- AS/NZS 2772.2
- VCCI V-2, V-5, V-4
- AS/NZS 4268
- 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)