

NUC11TNFv5/i5- Quad-Core i5 vPro Fanless

Stay Cool, Clean and Silent

The NUC11TNFv5/i5, built with 11th Gen Intel® Core™ i5 vPro® processors (Non-vPro available), Intel® Xe Graphics, and fanless “Porcoolpine” chassis, delivers the performance and innovation for small space and embedded solutions without the use of a blower or fan. Whether you’re creating a digital kiosk, deploying intelligent vending, or refreshing enterprise PCs, the NUC11TNFv5/i5 can get the job done easily. With the option of Intel® Wi-Fi 6 and Bluetooth 5.1 and the option to run Windows® 10, Linux, or another OS, the NUC11TNFv5/i5 delivers the flexibility to build the exact solution your situation needs.

I/O Performance and Flexibility

The NUC11TNFv5/i5 has some new features including, for the first time on a commercial NUC, a Thunderbolt™ 4 port. Combine that with two full-sized HDMI 2.0b ports to power up to quad brilliant 4K displays at 60 Hz. Suddenly your 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. Equipped with dual USB 2.0 on the internal header, Porcoolpine allows for additional expansion IO if more USBs, Ethernet or Serial ports are needed. We can configure to your specific needs. And Porcoolpine is tested for 24/7 operation ensuring solutions that are built to last.

Safe and Secure

With Intel® vPro™ technology you can get ahead of security threats. The built-in hardware-enhanced security means you can keep data and credentials secure, and remote manageability is perfect for installations such as unattended digital kiosks and intelligent vending. This hardware offers Trusted Platform Module (TPM) 2.0 which addresses the growing concern over boot process integrity and offers better data protection. In addition you can physically lock down your NUC11TNFv5/i5 via the built-in Kensington lock or an optional locking VESA mount kit available from Simply NUC.

Highlighted features

- 11th Gen Intel® Core™ i5-1145G7 or i5-1135G7
- Intel® Xe Graphics
- Intel® vPro® Technology (1145G7 only)
- Two DDR4-3200 SO-DIMM Sockets
- M.2 Slot Supports PCIe Gen 4 SSDs
- 2.5” SATA drive bay
- Dual HDMI 2.0b supporting 4K @ 60Hz
- Intel® 2.5 Gigabit LAN
- One Thunderbolt 4 Port
- One Thunderbolt 3 Port
- Three USB 3.2 Gen 2 Ports
- One USB 2.0 Port
- Digital Audio 7.1 Surround Sound
- TPM 2.0
- Legacy Serial on a DE-9M connector
- RP-SMA Dual-Band Antennas
- Front Panel Power Button
- 19V DC Jack (12-20v operation)
- Kensington Lock Support
- VESA Mount Kit
- 0-40C Operating Temperature

Customization

- 11th Gen Intel Core i7 1145G7 (vPro)
- Supports DDR4 RAM 4GB-64GB
- Supports M.2 SSD 128GB-8TB
- Secondary M.2 Supports 2.5” SSD 128GB-8TB
- Intel® Wi-Fi 6 + Bluetooth 5.1
- Optional Back IO Panel
- Two USB 2.0 Internal Headers
- One RS-232 Serial 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

Processor

- Intel® Core™ i5-1145G7 vPro® Processor (2.6GHz@28W, up to 4.4GHz Turbo, 4 Cores, 8 Threads, 8MB L3 Cache)
- Or 11th Gen Intel® Core™ i5 1135G7 Processor (2.4Ghz@28W, up to 4.2Ghz Turbo, 4 Cores, 8 Threads, 8MB Cache)

Storage Capabilities

- One M.2 Socket Supporting 22x80 M.2 SSDs, PCIe Gen 4
- One SATA 3 port for connection to 2.5" HDD or SSD

Audio

- Up to 7.1 surround audio via HDMI

Hardware Management Features

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

Graphics

- Intel® Iris™ Xe Graphics
- Two HDMI 2.0b Ports with HDCP 2.2
- Built-in CEC for Both Ports
- Support for a 3rd and 4th monitor via Thunderbolt 4 with DisplayPort

Peripheral Connectivity

- Intel® 2.5 Gigabit LAN w/ AMT support (AMT is vPro only)
- Three Super-Speed USB 3.2 Gen 2 Ports (Two Front and One Rear)
- One Rear USB 2.0 Port
- Two Rear USB 3.2 Gen 2 Ports on Type-C Connector (One Thunderbolt 4; One Thunderbolt 3)
- Intel® Wi-Fi 6 + BT 5.1 AX201 module can be added as an upgrade option

Baseboard Power Requirements

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

Mechanical Chassis Information

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

System Memory

- Two DDR4 SO-DIMM sockets, 64GB Max, 3200Mhz, 1.2V

System Bios

- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Intel® Visual BIOS
- Intel® Express BIOS Update Support

Front Panel Header

- Reset, HDD LED, Power LEDs, Power On/Off
- Vcc5/1A, 5Vsby2A, 3.3Vsby1A

Expansion Capabilities

- One M.2 for Panel Expansion – incl. Dual LAN/USB 2.0 Expansion Panel
- Two USB 2.0 Ports on Two 1x4 Internal Headers
- Two Consumer Electronics Control Headers
- 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

EMC/RF Regulations and Standards (Class B)

- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- CISPR 52
- ICES-005
- EN 55052
- EN 55024
- ETSI EN 500 528
- ETSI EN 501 489-1

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 +70° C

Certified Operating Systems

- Windows 10 64-bit (Pro & Home)
- Windows 10 IoT
- Windows Server 2019
- Linux (Fedora)