intel. NUC +



Breakthrough Performance at the Edge

Intel® NUC Enterprise Edge Compute Built with Scale Computing

Get the performance of Intel[®] NUC as a small, powerful edge solution that can be deployed almost anywhere







A Leap Forward in Edge Performance



The Intel® NUC Enterprise Edge Compute Built with Scale Computing combines the powerful performance of Intel® NUC Mini PCs with Scale Computing's expertise in edge computing and hyperconverged solutions. The result is a small, powerful, and efficient HCI edge solution that can be deployed almost anywhere and delivers the latest in Intel® NUC performance and reliability.

Intel® NUC Mini PCs are optimized for the small spaces and low power requirements of edge deployments, and Scale Computing's lightweight SC//Platform makes it easy to simultaneously run

Ideal for

Enterprise

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	i7		i5	GRAPHICS	





legacy and modern applications on the same infrastructure. Entire fleets of clusters can be managed with SC//Fleet Manager, the cloudhosted console, and SC//HyperCore makes it possible to manage storage, compute, and virtual machines from a single pane of glass.

With the combined benefits of Intel® NUC and the SC//Platform, the solution gives businesses the simplicity, efficiency, and enterprise-ready virtualization they need for a wide range of deployments at the edge.

Key Features

- Ilth Gen Intel[®] Core[™] processors available with Intel
 vPro[®] technology (Intel[®] Core[™] i5 or i7 processors)
- Intel[®] Iris[™] Xe graphics support immersive
- collaboration on up to four 4K displays
- 2x Thunderbolt[™] ports (DP & USB 3.2, Type-C) for fast data transfers
- Intel[®] Ethernet Controller i225-LM, up to 2.5 Gbps
- Intel[®] Wi-Fi 6 AX201 (M.2)
- 2x SSD M.2 slots, 22x80 key M & M.2 22x42 key B
- Expandable & Dual LAN/Six USB
- Matte textured chassis, replaceable lid, Kensington lock with base security, DC cable strain relief
- Intel[®] Watchdog Timer Utility to autonomously increase application uptimes, Auto CMOS reset, Display Emulation
- 3-year product availability and three-year warranty

Built with Intel[®] Core[™] i7 vPro[®] processors Intel[®] NUC Enterprise Edge Compute Built with Scale Computing



	Kits		
	NUC11TNHv70L (Dual LAN)		
Processor	11th Generation Intel® Core™ i7-1185G7 processor with Intel vPro® Technology 3.0 GHz@28W, up to 4.8 GHz Turbo, 4 Cores, 8 Threads, 12 MB L3 Cache		
Graphics	Intel® Iris® X° Graphics, Up to 96 EUs		
Memory	16GB, 32GB, or 64GB DDR4		
Storage	512GB, 1TB, 2TB, 4TB, or 8TB M.2 NVMe SSD		
Networking	Dual Intel® i225-LM 2.5Gb Ethernet ports (RJ45)		
Wi-Fi	Intel® Wi-Fi 6 AX201 (Intel vPro® capable)		
Other Features & Technology	2x HDMI 2.0b ports 2x Thunderbolt™ ports (incl. DP 1.4a and USB 4.0) Intel® i225-LM Ethernet port 3x USB 3.2 Gen 2 type A ports 1x USB 2.0 type A port Discrete TPM 2.0 Qualified for 24x7 operation Quad display support Delayed AC start; Auto CMOS reset; DC input voltage protection 3-Year Limited Warranty		
Geo-Specific Power Cord	Geo-specific to IEC320-C5 connector		
Operating System	SC//HyperCore		



Built with Intel[®] Core[™] i5 vPro[®] processors Intel[®] NUC Enterprise Edge Compute Built with Scale Computing



	Kits		
	NUC11TNHv50L (Dual LAN)		
Processor	11th Generation Intel® Core™ i5-1145G7 processor with Intel vPro® Technology 2.6 GHz@28W, up to 4.4 GHz Turbo, 4 Cores, 8 Threads, 8 M		
Graphics	Intel® Iris® Xe Graphics, Up to 80 EUs		
Memory	16GB, 32GB, or 64GB DDR4		
Storage	512GB, 1TB, 2TB, 4TB, or 8TB M.2 NVMe SSD		
Networking	Dual Intel® i225-LM 2.5Gb Ethernet ports (RJ45)		
Wi-Fi	Intel® Wi-Fi 6 AX201 (Intel vPro® capable)		
Other Features & Technology	2x HDMI 2.0b ports 2x Thunderbolt™ ports (incl. DP 1.4a and USB 4.0) Intel® i225-LM Ethernet port 3x USB 3.2 Gen 2 type A ports 1x USB 2.0 type A port Discrete TPM 2.0 Qualified for 24x7 operation Quad display support Delayed AC start; Auto CMOS reset; DC input voltage protection 3-Year Limited Warranty		
Geo-Specific Power Cord	Geo-specific to IEC320-C5 connector		
Operating System	SC//HyperCore		



Intel[®] NUC Enterprise Edge Compute Built with Scale Computing



Software-Defined Storage

All components—storage, virtualization, software and hardware—interface directly through the SC//HyperCore hypervisor and storage layers to create an ideal computing platform that can be deployed anywhere — from the data center to the edge of the network.

- Enable configurable SSD priority allocation at the individual virtual disk-level and intelligent data block priority based on block I/O heat mapping
- Discover all block storage devices—including flash-based solid-state disks (SSDs) and conventional spinning disks (SATA or SAS)
- Aggregate block storage devices across all nodes of SC//HyperCore into a single managed pool of storage
- Allow sophisticated data redundancy, load balancing intelligence, and I/O-tiered prioritization
- Efficiently use flash storage when available for tiered data placement

Software-Managed Compute

SC//HyperCore is a lightweight, type 1 (bare metal) hypervisor that is integrates directly into the OS kernel and leverages the virtualization offload capabilities provided by modern CPU architectures. Specifically, SC//HyperCore is based on components of the KVM hypervisor, which has been part of the Linux mainline kernel for many years and has been extensively field-

proven in large-scale environments.

- Single, unified, and redundant system
- All-in-one architecture makes it easy to deploy fully integrated, highly available virtualization right out of the box
- Operates as a redundant and elastic private "cloud"
- Scale seamlessly with automatic incorporation of additional nodes
- Handle hardware failures gracefully with minimal effort or disruption

Real-time Monitoring of Resources and Health

SC//Fleet Manager consolidates real-time conditions and resource utilization for all of your SC//HyperCore clusters. Instead of having to navigate to individual cluster UIs, SC//Fleet Manager gives administrators the ability to look at every cluster from a single pane of glass.

- Centrally manage all deployments
- Drill down from full fleet to individual VMs
- Proactive alerting, highlighting areas that need attention
- Single Sign-on (Microsoft & Google supported)
- Firmware upgrade management
- Monitor individual hardware devices and health within a cluster
- Monitor VM status, Disk Usage and CPU utilization from the SC//Fleet Manager interface
- One-click access to SC//HyperCore



Intel[®] NUC Enterprise Edge Compute

Built with Scale Computing

Additional Technical Specifications

Processors

NUC11TNHv70L

 Intel® Core™ i7-1185G7 processor with Intel vPro® Technology (3.0 GHz@28W, up to 4.8 GHz Turbo, 4 Cores, 8 Threads, 12 MB L3 Cache)

NUC11TNHv50L

 Intel[®] Core[™] i5-1145G7 processor with Intel vPro[®] Technology (2.6 GHz@28W, up to 4.4 GHz Turbo, 4 Cores, 8 Threads, 8 MB L3 Cache)

Storage

• 512GB, 1TB, 2TB, 4TB, or 8TB M.2 NVMe SSD

System Memory

• 16GB, 32GB, or 64GB DDR4

Graphics

Intel[®] Iris[®] X^e Graphics

Connectivity

- Dual HDMI 2.0b (4K@60 Hz), with built-in CEC per port
- Thunderbolt[™] 4 port (incl. DP 1.4a and USB 4.0) and one Thunderbolt[™] 3 port (incl. DP 1.4a and USB 4.0) on select SKUs
- Three USB 3.2 Gen2 type A ports
- One USB 2.0 type A port
- Intel[®] i225-LM 10/100/1000/2500
 Mbps RJ45 Ethernet
- Dual LAN tall SKU: 2nd Intel® i225-LM Ethernet and two additional USB 2.0 ports on expansion module

System BIOS

• 256 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play

- Advanced configuration and power interface V5.0b, SMBIOS2.5
- Intel[®] BIOS
- Intel[®] Express BIOS update support

Hardware Management Features

- Discrete TPM 2.0
- Voltage and temperature sensing
- ACPI-compliant power management control

Expansion Capabilities

- Two internal USB 2.0 headers (all USB ports with individual USB power control)
- Front panel header with Vcc5/1A, 5Vsby2A, 3.3Vsby/1A
- Expansion bay with pre-punched bracket for adding 1 DB9 port, or other I/O ports, on tall chassis

Audio

• Up to 7.1 multichannel (or 8-channel) digital audio on HDMI and DP type C ports

Advanced Features

Qualified for 24x7 operation
Delayed AC start; Auto CMOS reset; DC input voltage protection

Operating System Compatibility

- SC//HyperCore
- Various Linux distros

Chassis

• 4.60" x 4.40" x 2.12"

• 117 mm x 112 mm x 54 mm

Power Requirements

- 12 20VDC ±5% input on rear jack, internal 2x2 power connector, with OVP/UVP
- 19VDC power supply adapter with geo-specific AC cords (IEC C5 connector)

Environment Operating Temperature

• 0° ~40° C

Storage Temperature

■ -20° C to +40° C

Safety Regulations and Standards

IEC/EN/UL 60950-1
IEC/EN/UL 62368-1

EMC/RF Regulations and Standards

FCC Part 15B/15C/15E
CISPR/EN 55032/55024

- ICES-003
- VCCI 32
- BSMI CNS 13438
- KN 32/35
- AS/NZS CISPR 32
- EN 300 328
- EN 301893
- EN 300 440
- EN 301 489-1/3/17
- EN 62311 • AS/NZS 4268
- AS/NZS 2772.2
- ARPANSA

Environmental Regulations

- EU RoHS
- China RoHS
- Taiwan BSMI RoHS
- REACH

Energy Efficiency Regulations for Mini PCs

US Energy Star and CEC EU ErP Directive China CEL South Korea E-standby Australia GEMS Israel MEPS

Japan Energy Saving Act 2022年度基準: 15区 分,36.0kWh/年

Intel® Wi-Fi 6 (Gig+) products support optional 160 MHz channels, enabling the fastest possible theoretical maximum speeds (2402 Mbps) for typical 2x2 802.11ax PC Wi-Fi products.

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