intel nuc + SCALE COMPUTING

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

intel CORE vPRO i7

intel CORE vPRO i5

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 legacy and modern applications on the same infrastructure. Entire fleets of clusters can be managed with SC//Fleet Manager, the cloud-hosted 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.

Ideal for

Enterprise

Key Features

- 11th 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® Xᵉ 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
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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

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Additional Technical Specifications

The Power of Small
www.intel.com/NUC

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® Xᵉ 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 301 893
- 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