



intel® NUC

Intel® NUC 8 Rugged

WORKS WHERE YOU WORK.

Reliable performance in unreliable conditions.



TOUGHNESS THAT NEVER CLOCKS OUT.

Intel® NUC 8 Rugged is a PC kit that's small on size but not on toughness or reliability. It features a fanless, ventless design to minimize particle intrusion, so it's built to survive environments most PCs can't—from a busy factory floor to a dusty warehouse. And even without a fan, it can operate in temperatures from 0-40°C to thrive in severe in-the-field conditions.

Housed in a small chassis that's slim enough to fit almost anywhere, the NUC 8 Rugged is also available as a board-only option that can be easily integrated into your own digital solutions. It's powered by an Intel® Celeron® processor, making it the ideal PC solution to keep edge analytics, digital signage, or surveillance cameras up and running around the clock. And with a 3-year warranty, it's performance that's designed to last.

Intel® NUC 8 Rugged. Works where you need it to.

24x7

The Intel NUC 8 Rugged is built to last and qualified for 24x7 sustained operations—a critical feature for most IoT and commercial operations.

80% Executives who say IoT is critical to business success¹

64B IoT devices predicted to be in operation by 2025²

15% Increase in customers for quick service restaurants who install digital signage³

FEATURES

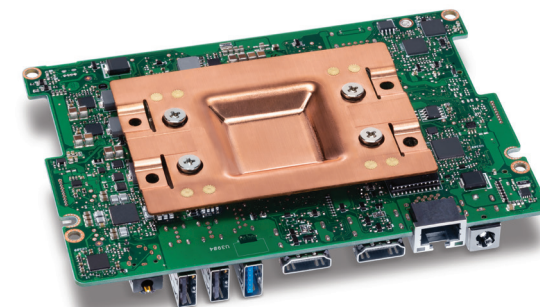
- Intel® Celeron® processor
- Fanless and ventless design
- Minimal dust intrusion
- Qualified for 24x7 operation
- Multiple mounting options
- Dual HDMI
- 2 USB 3.0 ports
- 2 USB 2.0 ports
- Internal 4-lane eDP connector
- Intel® Wireless-AC
- Bluetooth
- Intel® Gigabit LAN
- 3-year limited warranty

USAGES

- Digital signage
- Hospitals
- Medical clinics for mobile pedestal computing
- IoT
- Operator consoles in manufacturing environments
- Quick service restaurants
- Edge analytics

AVAILABILITY

Intel® NUC Kit
Intel® NUC Board



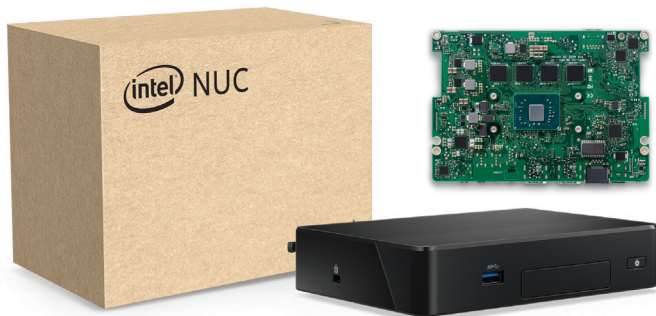
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INTEL® NUC 8 RUGGED KIT AND BOARD

Fanless and ventless, the Intel® NUC 8 Rugged isn't afraid to get a little dirty.



	Kit	Board
	NUC8CCHN	NUC8CCHBN
Processor	Intel® Celeron® Processor N3350	
Graphics	Intel® HD Graphics 500	
Memory	4 GB RAM	
Storage	64 GB eMMC soldered-down; M.2 2280 key M slot for PCIe x4 NVMe or SATA SSD	
Mounting Options	VESA mounting holes, picture frame keyholes, zip-tie indentations, 3rd party DIN rail bracket, Kensington lock with base security	—
Other Features & Technology	Dual HDMI, Qualified for 24x7 operation; delayed AC start; DC overvoltage protection, DC cable strain relief, Internal 4-lane eDP connector, Front panel expansion bay, 3-year warranty	
Operating System	Supports Microsoft Windows 10 Pro, Windows 10 IOT Enterprise, Compatible with various Linux distros	
What's Needed	22x80 PCIe x4 NVMe or SATA SSD, Operating System	—



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INTEL® NUC 8 RUGGED KIT AND BOARD

Additional Technical Specifications

Processor

- Intel® Celeron® Processor N3350 1.1 GHz to 2.4 GHz Burst, Dual Core, 2 MB cache, 6W TDP

Graphics

- Intel® HD Graphics 500
- Dual HDMI (1x HDMI 2.0a, 1x HDMI 1.4)

Storage Capabilities

- 64 GB eMMC soldered-down
- M.2 2280 key M slot for PCIe x4 NVMe or SATA SSD

System Memory

- 4 GB RAM, dual-channel (soldered-down)

Peripheral Connectivity

- Intel® i211-AT 10/100/1000 Mbps RJ45 Ethernet
- Two USB 3.0 ports (one front panel port and one back panel port)
- Two USB 2.0 ports (back panel)
- 1x internal USB 3.0 header
- 2x internal USB 2.0 headers
- EDID emulation
- Internal 4-lane eDP connector
- Intel® Wireless-AC 3168 M.2 card pre-installed w/internal antennas (kit SKUs only)

System Bios

- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V5.0b, SMBIOS 2.5
- Intel® Visual BIOS
- Intel® Express BIOS update support

Hardware Management Features

- Voltage and temperature sensing
- ACPI-compliant power management control

Expansion Capabilities

- 1x internal USB 3.0 header
- 2x internal USB 2.0 headers
- 1x RS232 serial port header
- Dual HDMI with built-in CEC
- External 3rd party antennae capability through back panel cut-outs (cables provided)

Audio

- Up to 7.1 multichannel digital audio via HDMI

Front Panel Header

- Vcc5/1A, 5Vsby/2A, 3.3Vsby/1A

Mechanical Chassis

- 6.06" x 4.25" x 1.25"
- 154 mm x 108 mm x 32 mm
- Kensington Lock ready
- 4 mounting options including VESA
- Antennae punch out panels
- DC cable strain relief attachment

Mechanical Board Size

- 5.74" x 4.01"
- 146 mm x 102 mm

Baseboard Capabilities

- 19VDC 65W power supply adapter with geo-specific AC cords
- 12 – 24VDC rear jack, internal 2x2 connector
- 5 year 24x7 sustained operation qualified⁴
- Delayed AC start
- DC transient voltage suppression

Environment Operating Temperature

- 0° C to +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 Energy Source
- Japan Energy Saving Act
2022年度基準: 15区分, 22.8kWh/年

See the power of small and rugged at
www.intel.com/NUC

¹ <https://techjury.net/stats-about/internet-of-things-statistics/>

² <https://techjury.net/stats-about/internet-of-things-statistics/>

³ <https://www.qsrmagazine.com/outside-insights/where-should-your-restaurant-stand-digital-signage>

⁴ Sustained operation for Intel® NUC products is defined as 24x7 operation for 5 years with 50% system utilization on average, with an expected service rate of 1% per year during this period.

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Actual Intel® NUC kit may differ from the image shown.

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