Intel® NUC 8 Rugged

WORKS WHERE YOU WORK.

Reliable performance in unreliable conditions.
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.**

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

**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

**EXECUTIVES WHO SAY IoT IS CRITICAL TO BUSINESS SUCCESS**
- 80%

**IoT DEVICES PREDICTED TO BE IN OPERATION BY 2025**
- 64B

**INCREASE IN CUSTOMERS FOR QUICK SERVICE RESTAURANTS WHO INSTALL DIGITAL SIGNAGE**
- 15%
### INTEL® NUC 8 RUGGED KIT AND BOARD
Fanless and ventless, the Intel® NUC 8 Rugged isn't afraid to get a little dirty.

<table>
<thead>
<tr>
<th>Kit</th>
<th>Board</th>
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</thead>
<tbody>
<tr>
<td>NUCCCHKR</td>
<td>NUC8CCHB</td>
</tr>
<tr>
<td><strong>Processor</strong></td>
<td>Intel® Celeron® Processor N3350</td>
</tr>
<tr>
<td><strong>Graphics</strong></td>
<td>Intel® HD Graphics 500</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>4 GB RAM</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>64 GB eMMC soldered-down; M.2 2280 key M slot for PCIe x4 NVMe or SATA SSD</td>
</tr>
<tr>
<td><strong>Mounting Options</strong></td>
<td>VESA mounting holes, picture frame keyholes, zip-tie indentations, 3rd party DIN rail bracket, Kensington lock with base security</td>
</tr>
<tr>
<td><strong>Other Features &amp; Technology</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>Supports Microsoft Windows® 10 Pro, Windows 10 IOT Enterprise, Compatible with various Linux distros</td>
</tr>
<tr>
<td><strong>What’s Needed</strong></td>
<td>22x80 PCIe x4 NVMe or SATA SSD, Operating System</td>
</tr>
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</table>
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 3268 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, SM BIOS 32.5
• 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
• Analog audio stereo output jack

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 qualified
• 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 60950-1
• 6 year 24x7 qualified

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

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

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Available in different channels may vary.

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

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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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