

Breakthrough Performance in the Harshest Environments



Intel Processors



DDR5 Memory



Fanless



PCIe 4.0x4 M.2 SSD



Dual LAN



HDMI CEC



AI noise-canceling



MyASUS



Kensington Lock



4K

Making Amazing Experiences Possible

Rugged

- Quiet, fanless design with fewer moving parts
- IP50 dust-resistant chassis with cover plugs for unused ports
- Up to 50°C external ambient operating temp. tolerance (tall chassis)
- Flexible mounting options and small footprint

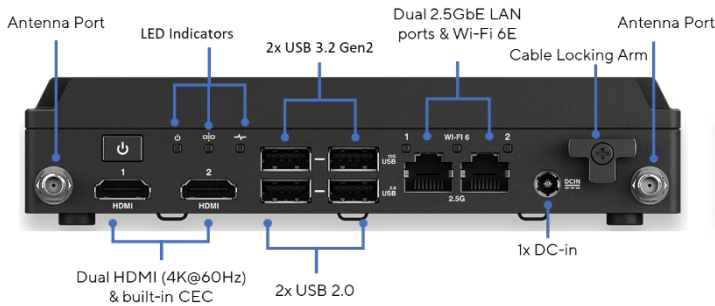
Robust

- Firmware and hardware capabilities that support 24/7 operation, including display emulation, HDMI-CEC, auto CMOS restart, and input power protection
- WMI API support to provide local or remote users with display device information enabling network management of different Windows operational environments
- Back panel LEDs provide at-a-glance health assessment of monitored apps, persistent displays, player failover, and cloud connectivity

Ready to Work*

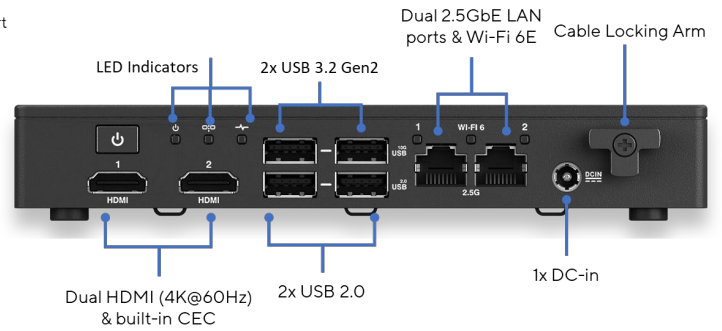
- Intel® TCC and TSN capabilities for industrial applications (x7425E SKU only)
- Hardware capabilities and support for visual applications (dual HDMI ports with 4K60 capabilities)
- MIPI CSI headers that connect to off-the-shelf, third-party MIPI CSI camera modules for industrial applications (on Board SKU only)

Overview



Intel ATOM NUC 13 Rugged with:

- Intel® Atom™ x7211E Processor (2c/6W @ 50°C)
- Intel® Atom™ x7425E Processor (4c/12W @ 40°C)



Intel INSIDE NUC 13 Rugged with Intel® N50 Processor (2c/6W @ 40°C)

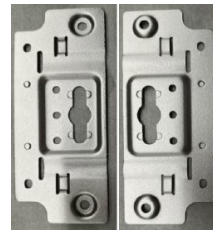
Accessories List



AC Power Adapter and Cord



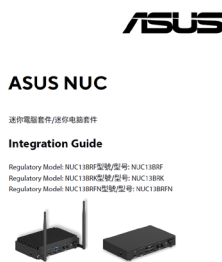
Zip Lock Bag with I/O Plugs



Mounting Brackets (for DIN and VESA)



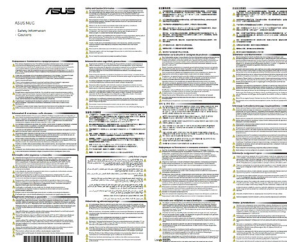
VESA Mount Screws



Integration Guide



Regulatory Flyer



Safety/Caution Flyer

Feature Table




| Power | |
|--------------------------|-------------|
| PD input | 20DC @ 3.5A |
| Security | |
| fTPM 2.0 | Y |
| dTPM 2.0 | N |
| Kensington Lock | Y |
| Padlock Ring | N |
| Chassis Intrusion Notice | N |

| BIOS | |
|-------------------------|---|
| AC Power Loss | Y |
| HDMI-CEC | Y |
| Crash Free | Y |
| EZ Flash | N |
| PXE/WOL | Y |
| USB Single Port Control | Y |
| BIOS Customization | |
| Boot Logo | Y |
| BIOS Setting | Y |
| SMBIOS (DMI) | Y |

| MyASUS | |
|-----------------------------|---|
| Smart Fan Control | Y |
| AI Noise Cancellation | Y |
| Wi-Fi Smart Connect | Y |
| System Diagnosis | Y |
| Others | |
| ASUS NUC Pro Software Suite | Y |
| Fanless | Y |




ASUS NUC 13 Rugged



| Model | | NUC13BRB (Boards: Config A & C) | NUC13BRK (Config A) | NUC13BRF (Config B) NUC13BRFN (Config C) |
|------------------|----------|---|---|---|
| OS | | Supports: <ul style="list-style-type: none"> Windows 10 IOT-Enterprise LTSC 64-bit Ubuntu 22.04 LTS (basic tests only) RedHat Enterprise Linux 9 (basic tests only) Windows 11 Pro 64-bit | Supports: <ul style="list-style-type: none"> Windows 10 IOT-Enterprise LTSC 64-bit Ubuntu 22.04 LTS (basic tests only) RedHat Enterprise Linux 9 (basic tests only) Windows 11 Pro 64-bit | Supports: <ul style="list-style-type: none"> Windows 10 IOT-Enterprise LTSC 64-bit Ubuntu 22.04 LTS (basic tests only) RedHat Enterprise Linux 9 (basic tests only) Windows 11 Pro 64-bit |
| Photo | |  |  |  |
| CPU | | Intel® Processor N50 (TDP 6W) for Config A Board <i>or</i> Intel® Atom® x7425E (TDP 6W/12W) for Config C Board | Intel® Processor N50 (TDP 6W) | Intel® Atom® x7211E (TDP 6W) for Config B <i>or</i> Intel® Atom® x7425E (TDP 12W) for Config C |
| Chipset | | Integrated | | |
| Graphics | | Intel® UHD Graphics Technology | | |
| Memory | | 1x SO-DIMM DDR5 4800 MT/s memory 8GB - 16GB | | 1x SO-DIMM DDR5 4800 MT/s memory 8GB~16GB optional "in-band" ECC support |
| Storage | | 64GB eMMC soldered-down 1x M.2 2280 slot PCIe x2 NVMe SSD 1x M.2 3042 Slot (SATA SSD/PCI x1/USB3.2 Gen2) | | |
| Wireless Network | | Supports: <ul style="list-style-type: none"> Intel® Wi-Fi 6E AX210 + Bluetooth® v5.3 (Config A Board) Intel® Wi-Fi 6E AX210 (External Antenna) + Bluetooth® v5.3 (Config C Board) | Intel® Wi-Fi 6E AX210 + Bluetooth® v5.3 | Intel® Wi-Fi 6E AX210 (External Antenna) + Bluetooth® v5.3 |
| WWAN (LTE/SIM) | | Intel® Atom® x7425E: WWAN* (EM06-A\EM06-E or FM101-GL) + Bluetooth® v5.3 + (External Antenna) for Config C Board | | Intel® Atom® x7425E: WWAN* (EM06-A\EM06-E or FM101-GL) + Bluetooth® v5.3 + (External Antenna) for Config C |
| LAN | | Dual 2.5G Ethernet, 10/100/1000/2500 Mbps | Dual 2.5G Ethernet, 10/100/1000/2500 Mbps | Dual 2.5G Ethernet, 10/100/1000/2500 Mbps |
| NIC | | Intel® Processor N50 SKU - 2x i226-V | Intel® Processor N50 SKU - 2x i226-V | Intel® Atom® x7211E : 2x i226-V (Config B) Intel® Atom® x7425E : 2x i226-LM (Config C) |
| Interface | Side I/O | -- | | |
| | Rear I/O | 2 x USB 3.2 Gen2 Type A 2 x USB 2.0 Type A 2 x USB 2.0 Headers (internal) 2 x HDMI 2.1 TMDS Ports with Built-In CEC Support 2 x 4K@60Hz display or 2 x 1080@60Hz (2 x HDMI 2.1 TMDS) 2 x RJ45 LAN Port 1 x DC-in | 2 x USB 3.2 Gen2 Type A 2 x USB 2.0 Type A 2 x USB 2.0 Headers (internal) 2 x HDMI 2.1 TMDS Ports with Built-In CEC Support 2 x 4K@60Hz display or 2 x 1080@60Hz (2 x HDMI 2.1 TMDS) 2 x RJ45 LAN Port 1 x DC-in | 2 x USB 3.2 Gen2 Type A 2 x USB 2.0 Type A 2 x USB 2.0 Headers (internal) 2 x HDMI 2.1 TMDS Ports with Built-In CEC Support 2 x 4K@60Hz display or 2 x 1080@60Hz (2 x HDMI 2.1 TMDS) 2 x RJ45 LAN Port 1 x DC-in |
| Power Supply | | 65W Power Adapter for Config A Board 90W Power Adapter for Config C Board | 65W Power Adapter | 90W Power Adapter |

ASUS NUC 13 Rugged



| Model | NUC13BRB (Boards: Config A & C) | NUC13BRK (Config A) | NUC13BRF (Config B) NUC13BRFN (Config C) |
|-------------------------|--|--|---|
| Photo |  |  |  |
| Dimensions | 146 x 101.7 x 17.39H mm | 174 x 108 x 25.9H mm (internal heatsink) [H: +3.4mm rubber feet] | 174 x 108 x 35.8H mm (external heatsink) [H: +3.4mm rubber feet] |
| Weight | 0.1780kg | 0.7146kg | 1.0369kg (Config B and Config C) <i>or</i> 1.0458kg (Config C) |
| Ambient Operating Temp | 0°C - 40°C | 0°C - 40°C | 0°C - 50°C |
| Humidity | 0% - 95% Relative Humidity | | |
| Acoustic (Full Loading) | <35 dBA <i>*Test results will vary slightly depending on the HDD/SSD SKU selected by customer</i> | | |
| Accessories | | AC Adapter+Power Cord Warranty Card Quick Start Guide VESA Mount | AC Adapter+Power Cord Warranty Card Quick Start Guide VESA Mount |
| Availability | 3 Year | 3 Year | 5 Year |
| Warranty | 3 Year | 3 Year | 3 Year |

| *WWAN QVL | | |
|----------------------|---------------|---------|
| m.2 30x42 | EM06-A\EM06-E | Quectal |
| m.2 30x42 | FM101-GL | Fibocom |
| | | |
| CPU | 5 Years | 3 Years |
| Intel® Atom® x7211E | YES | NO |
| Intel® Atom® x7425E | YES | YES |
| Intel® Processor N50 | NO | YES |
| Intel® Processor N50 | NO | YES |