Aspen PN50 – AMD Ryzen R7-4800U

Form and Function

Aspen PN50 is an ultracompact computer that delivers powerful performance for a wide variety of home and business applications. Featuring the latest AMD Ryzen™ 4000 Renoir mobile processor with Radeon™ Vega graphics, and support for high-speed 3200 MHz DDR4 memory, Aspen PN50 is ready to take on demanding workloads, yet its diminutive size takes up minimal space on a desk and makes it suited for applications where traditional PCs won't fit – from digital signage to home-theater setups.

Feature Rich

Aspen PN50 supports up to 8K resolution at 60 Hz or up to four displays simultaneously, with up to 4K resolution at 60 Hz, providing ultra-realistic visuals. It is also suitable for flexible business scenarios,

Wi-Fi 6 (802.11ax) networking ensures stable, high-speed data transfers, even in crowded networking environments, and dual USB-C ports support data transfer and DisplayPort functionality over a single cable. Aspen PN50 is also ready for Microsoft Cortana, with integrated dual-array front microphones for convenient voice control, and features an infrared (IR) sensor, letting users control applications via remote control.

Performance

Aspen PN50 is powered by the latest AMD Ryzen™ 4000 Renoir mobile processor, which delivers a system performance uplift of up to 14% and provides up to 35% better performance in daily multitask computing, comparing with mainstream mobile processors – providing powerful computing capacity and enabling easy multitasking and smooth operation.

Highlighted features

- AMD® Ryzen™ R7-4800U CPU
- AMD® Radeon™ Vega 8 Graphics
- Two DDR4-3200 SO-DIMM Sockets
- M.2 slot supports PCI or SATA SSDs
- 2.5" SATA drive bay
- HDMI 2.0a supporting 4K
- Two DP 1.4 via USB-C ports
- DisplayPort 1.4
- 10/100/1000 Mbps RJ45 Ethernet
- Intel® Wi-Fi 6
- Intel® Bluetooth 5
- Three USB 3.2, gen 1, type-A ports
- Two USB 3.2, gen 2, type-C ports
- IR receiver port for remote control
- Internal Dual-Band Antennas
- Card reader (SD/SDHC/SDXC/MMC)
- Audio combo mic in / line out
- Built-in dual microphone with Cortana
- 19VDC 65W power supply adapter
- Kensington lock slot
- VESA mount kit

Customization

- Supports DDR4 RAM 4GB-64GB
- Supports M.2 SSD 128GB-2TB
- Supports 2.5 SATA 64Gb-8TB

Simply NUC Services
You can order this NUC in your various configurations, as well as your corporate OS Image loaded and ready to deploy.

Technical Specifications

Processor
- AMD® Ryzen™ R7-4800U CPU 1.8 GHz, 4.2 GHz Turbo, 8C/16T, 15W

Storage Capabilities
- One M.2 socket supporting 22x80 M.2 SSDs, SATA or PCIe, 2TB Max
- One SATA port for 2.5" HDD or SSD, 8TB Max. (7mm and 9.5mm only)
- 3-in-1 card reader: SD/SDHC/MMC

Audio
- Up to 7.1 surround via HDMI
- Front headset jack
- Front mic jack
- Built-in dual microphone array with support for Microsoft Cortana

Graphics
- AMD® Radeon™ Vega 8 Graphics, up to 1.75 GHz
- DisplayPort 1.4 (Supports up to up to 7680 x 4320@30Hz, or 5120 x 2280 @120Hz)
- One HDMI 2.0a port (Supports up to 3840 x 2160 @60Hz)
- Two USB Type-C ports with DisplayPort 1.4 (Supports up to 7680 x 4320 @30Hz, or 5120 x 2280@120Hz)
- Max 8K @ 60Hz display or 4x 4K displays @ 60Hz

Peripheral Connectivity
- 10/100/1000 Mbps RJ45 Ethernet
- Three USB 3.1 Gen2 Type-A ports (two back; one front)
- Two USB 3.1 Gen2 Type-C ports (one back; one front)
- Intel® Wi-Fi 6 AX200 (802.11ax), 2x2, up to 2.4 Gbps with Bluetooth 5
- Consumer infrared receiver on front
- Built-in dual microphone with support for Microsoft Cortana

Baseboard Power Requirements
- 19V, 65W AC-DC power adapter with detachable power cord

Mechanical Chassis Size
- 4.5" x 4.5" x 1.9"
- 115 x 115 x 49 mm

System Memory
- Two DDR4-3200 SO-DIMM sockets, 64GB Max, 1.2V

Front Panel Header
- Reset, HDD LED, Power LEDs, power on/off

Expansion Capabilities
- 2.5in drive bay for SATA drive
- HDMI CEC header

Certification and Regulations

Product Safety Regulations and Standards
- UL 60950-1
- CAN ICES-3(B)/NMB-3(B)

Environment Operating Temp
- 0° C to +35° C
- Non-condensing Humidity

EMC/RF Regulations and Standards
- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- BSMI
- CB
- CE
- FCC
- CCC
- Energy Star
- C-Tick
- Wi-Fi Certified
- RF Certified
- VCCI

Environmental Regulations
- RoHS Directive 2011/65/EU
- EU REACH and Article 33
- Japan RoHS (JIS-C-0950)

Certified Operating Systems
- Windows 10 64-bit (Pro & Home)