BAREBONE
XPC nano
NE10N

Processor: Intel N100 (fanless)

AFFORDABLE NANO-PC WITH ENHANCED PERFORMANCE

The fanless Shuttle XPC nano Barebone NE10N comes with powerful and efficient 12th generation Intel N100 processor, codenamed "Alder Lake-N". Despite the nano format with only 600 ml volume, it offers enormous connection variety and expansion options. Thus, up to two UHD displays (4K/60Hz) and up to six USB devices can be connected, and one M.2-2280 NVMe SSD card and one DDR4 module can be installed. The NE10N series is ideal for Digital Signage, POS, control, office or even multimedia.

INTEL N100 SoC CPU · DUAL DISPLAY SUPPORT · HDMI 2.0 · DISPLAY-PORT 1.4 · NVMe M.2 SSD SUPPORT · DDR4 SO-DIMM SUPPORT · 6x USB · 1 Gbps LAN PORT · VESA MOUNT · FANLESS · 24 / 7 OPERATING · WIN11 / LINUX SUPPORT

NANO DESIGN

■ Slim plastic chassis, black ■ Dimensions: 135 x 115 x 39 mm (LWH), height: 41.3 mm incl. rubber feet, volume: 606 ml ■ Weight: 0.6 kg net, 1.5 kg gross ■ Including VESA mount (supports 75x75 / 100x100 mm)
■ Operating temperature: 0~40 °C (non-condensing)

OPERATING SYSTEM

■ An operating system is not included
■ Supports Windows 11 and Linux (64-bit)
Please download Windows drivers from https://go.shuttle.eu/NE10N

PROCESSOR

■ Intel N100, TDP: 6 W, Turbo Clock max. 3.4 GHz
■ 12th generation Intel Core, code name "Alder Lake-N"
■ Soldered SoC, Intel 7 process (10 nm)

GRAPHICS

■ Integrated Intel UHD graphics
■ Supports two independent Ultra-HD displays at 60 Hz

RAM MEMORY SUPPORT

■ 1x 260-pin SO-DIMM slot ■ Supports up to 16 GB DDR4-3200

M.2 STORAGE

■ 1x M.2-2280M slot supports M.2 SSD card (PCIe Gen 3 NVMe or SATA)

CONNECTORS

■ HDMI 2.0 ■ DisplayPort 1.4 ■ 4x USB 3.2 Gen2 (max. 10 Gbps)
■ 2x USB 2.0 ■ 1x Gigabit LAN (Motorcomm YT6801) ■ 2x Audio (Micro-phone-in + Line-out) ■ DC input 19 V

POWER SUPPLY

■ External 65W / 19V power adapter

OTHER

■ Hardware TPM-Chip: Infineon SLB9670VQ2.0

OPTIONAL WLAN

■ M.2-2230E slot supports one optional WLAN module
■ Two internal WLAN antennas pre-installed

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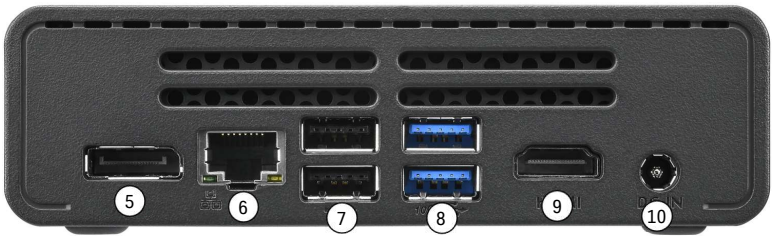
Product Views

Front View

1. Power Button with LED
2. 2x USB 3.2 Gen 2 Port (max. 10 Gbps)
3. Microphone input
4. Headphones output

Rear View



5. DisplayPort 1.4 audio/video output
6. RJ45 Gigabit LAN port
7. 2x USB 2.0
8. 2x USB 3.2 Gen 2 Port (max. 10 Gbps)
9. HDMI 2.0 port audio/video output
10. DC-input for 19V power adapter

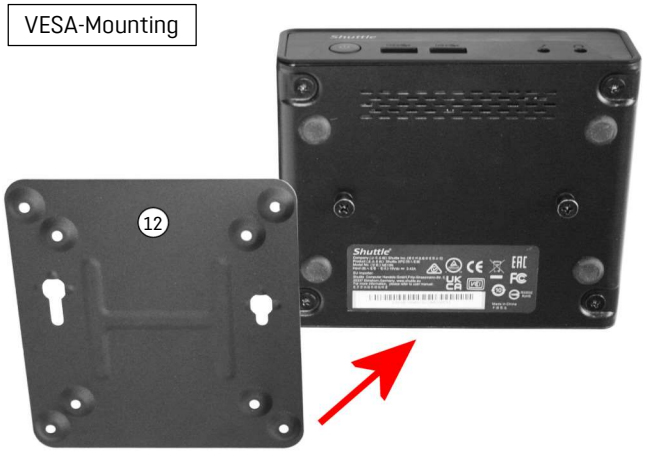
Left Side

Right Side

11. Hole for the Kensington Lock
    (the lock with cable is not included)

12. VESA mount

VESA-Mounting



SHUTTLE XPC nano BAREBONE NE10N — SPECIFICATIONS

FANLESS & SILENT	Completely fanless, virtually noiseless Passive cooling through convective heat transfer Perfect to be used in noise-sensitive environments Fanless means less dust and thus virtually no maintenance required
24/7 NONSTOP OPERATION	24/7 Nonstop Operation This device is approved for 24/7 permanent operation. Requirements: - Free air circulation around the PC must be guaranteed. - Ventilation holes must be kept clear.
CHASSIS	Slim PC with black chassis made of plastic Dimensions: 135 x 115 x 39 mm (WLH) = 0.6-litre Height including rubber feet: 41.3 mm Weight: 0.6 kg net and 1.5 kg gross One hole for Kensington Locks (right-hand side) VESA mount included (supports 75x75 mm and 100x100 mm Standard)
OPERATION SYSTEM	This system comes without operating system. It is compatible with - Windows 11 (64-bit) - Linux (64-bit) Windows 11 driver download: https://go.shuttle.eu/NE10N
PROCESSOR	Model: Intel® Processor N100 Max. Turbo clock frequency: 3.4 GHz Code name: "Alder Lake-N" 10 nm structure, FCBGA1338 package (soldered) CPU cores / Threads: 4 / 4 L2 Cache: 6 MB Thermal Design Power (TDP): 6 W System-on-Chip processor (SoC) with integrated graphics processor, no chipset required Passive processor cooling without fan
INTEGRATED GRAPHICS	The Graphics Processing Unit (GPU) is integrated in the processor Intel® UHD Graphics, GPU frequency: max. 750 MHz Supports DirectX 12.1, OpenGL 4.6, OpenCL 3.0, Intel Quick Sync Video Execution Units (EU): 24 Dual Display Support via two video outputs: - HDMI 2.0: max. 4096 x 2160 @ 60 Hz - DisplayPort 1.4: max. 4096 x 2160 @ 60 Hz Supports two digital UHD/4K displays simultaneously.
UEFI FIRMWARE	UEFI Firmware 32 MB Flash ROM AMI UEFI BIOS Firmware Based on the Unified Extensible Firmware Interface (UEFI) Supports Power-fail-resume / AC power-on state / always-on Supports Wake-on-LAN (WOL) from S3, S4, S5 ACPI states Supports boot up from external flash memory cards CMOS battery (type CR2032 with connecting cable)
HARDWARE TPM	Supports DTPM 2.0 with Infineon SLB9670VQ2.0 (can be deactivated)
MEMORY SUPPORT	1x SO-DIMM slots with 260 pins Supports DDR4-3200 (PC4-25600U) SDRAM at 1.2V Supports one RAM module with max. 16 GB capacity Supports two unbuffered DIMM modules (no ECC)
M.2-2280M SSD SLOTs	M.2-2280 M-key slot Interfaces: PCI-Express Gen. 3.0 and SATA Supports M.2 cards with a width of 22 mm and a length of 80 mm (type 2280) Supports SATA SSDs (BM-Key) or NVMe PCIe SSDs (M-Key)

M.2-2230-SLOT FOR WLAN CARDS	Interface: PCI-Express and USB 2.0 Supports M.2 cards with a width of 22 mm and a length of 30 mm (type 2230) The slot is located underneath the SSD card. This PC comes with two pre-installed internal WLAN antennas with I-PEX4/MHF-IV connectors. Use a standard WLAN module, e.g. Realtek AW-XB547NF or Intel AX200/210/211 (not included).
AUDIO	Senary SN6140-CNZR audio controller Two analog audio connectors (3.5 mm): 1) Line out (head-phones) 2) Microphone input Digital multi-channel audio output: via HDMI and DisplayPort
GIGABIT LAN	One RJ45 connector supports lokal network at 10/100/1000 Mbps. Motorcomm YT6801 Ethernet LAN controller Supports Wake-on-LAN
FRONT PANEL CONNECTORS	Power button Power LED (blue = power-on, orange = S3 mode) 2x USB 3.2 Gen 2 Type A (blue, max. 10 Gbps) Audio Line-Out (headphones) 3.5 mm Microphone Input 3.5 mm
BACK PANEL CONNECTORS	HDMI 2.0 Video/Audio DisplayPort 1.4 Video/Audio 2x USB 3.2 Gen 2 Type A (blue, max. 10 Gbps) 2x USB 2.0 (black) 1x Gigabit Ethernet LAN (1 Gbps, RJ45) DC input for the external power adapter (supports 19V)
POWER SUPPLY	External 65 W AC/DC power adapter (fanless) AC Input: 100 ~ 240 V AC, 50 ~ 60 Hz, max. 1.5 A Automatic AC voltage adjust DC Output: 19 V, max. 3.42 A, max. 65 W DC Connector: 5.5 / 2.5 mm (outer/inner diameter) AC cable with 3-pin Micky MM C6 and Schuko earthed safety plug
SUPPLIED ACCESSORIES	Multi-language user guide (EN, DE, FR, ES, JP, KR, SC, TC) VESA mount for 75 / 100 mm standard (black) Two flat-head screws, M3 x 3.5 mm with offset (connects VESA mount to PC) Four screws M4 x 6 mm (to affix VESA mount on the PC) External 65 W power adapter with power cord (with protective-earth contacts) A DVD driver disk is not supplied. Windows 11 driver download: https://go.shuttle.eu/NE10N
ENVIRONMENTAL SPECIFICATIONS	Operating temperature range: 0 ~ 40 °C Relative humidity range: 10 ~ 90 % (non-condensing)
CERTIFICATIONS / COMPLIANCE	EMI: CE, UKCA, FCC, RCM, VCCI, BSMI Safety: CB IEC 60950-1/62368-1, cTUVus (UL 62368-1), BSMI Other: RoHS, Energy Star, ErP This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU directives: (1) 2004/108/EC relating to electromagnetic compatibility (EMC), (2) 2006/95/EC relating to Electrical Equipment designed for use within certain voltage limits (LVD), (3) 2009/125/EC relating to ecodesign requirements for energy-related products (ErP)