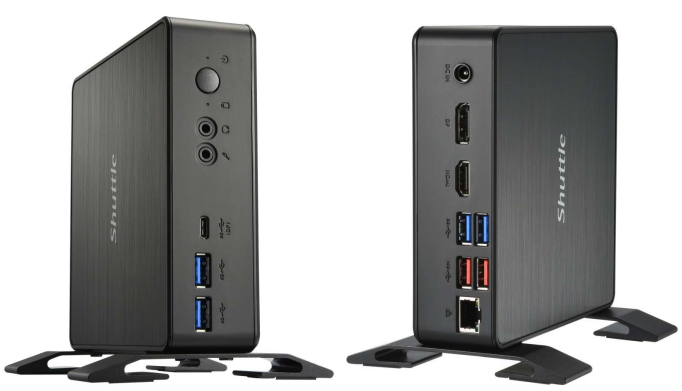
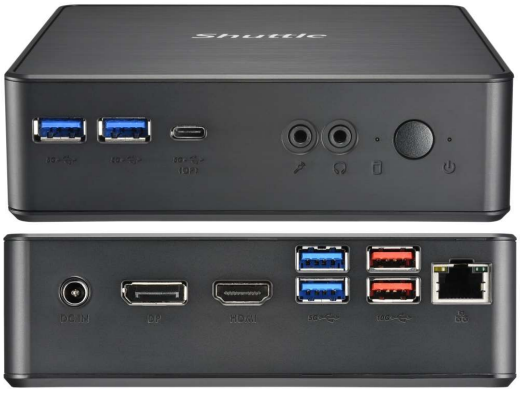
SYSTEM
XPC nano
NC4010BA
Intel Celeron 7305, Windows 11 Pro

MANY PORTS AND HIGH PERFORMANCE IN NANO-FORMAT
NC4010BA is a fully configured PC system in Nano-size with Windows 11 Pro operating system. It comes a with powerful and efficient 12th generation Intel ULV processor. Despite the small size with only 850 ml volume, it offers enormous connection variety and expansion options. Thus, up to three UHD displays (4K/60Hz) and up to seven USB 3.2 devices can be connected. This PC is ideal for Digital Signage, POS, control, office or even multimedia.





4 GB RAM 128 GB SSD | TRIPLE DISPLAY SUPPORT | HDMI 2.0b | DISPLAY-PORT 1.4a | USB-C WITH DISPLAYPORT | 6x USB 3.2 TYPE-A PORTS | INTEL LAN PORT | Supports second M.2 SSD | 2.5" HDD/SSD SUPPORT | VESA MOUNT | VERTICAL STAND | ALWAYS-ON JUMPER JP1

NANO DESIGN
■ Slim plastic chassis, black ■ Dimensions: 242 x 242 x 42 mm (LWH), 850 ml ■ Including vertical Stand and VESA mount (75/100 mm)
■ Operating temperature: 0~40 °C (non-condensing)

OPERATING SYSTEM
■ Windows 11 Pro Entry (64-Bit)

PROCESSOR
■ Intel Celeron 7305, 1x P-Core, 4x E-Core, 48 Execution Units
■ 12th generation Intel Core, code name "Alder Lake-U"
■ Soldered SoC with 15 W TDP, Intel 7 process (10 nm)

GRAPHICS
■ Integrated Intel UHD graphics (features depend on processor)
■ Supports three independent Ultra-HD displays at 60 Hz

RAM/STORAGE
■ 4 GB DDR4-3200 SO-DIMM RAM module
■ 128 GB M.2 SSD card supports PCIe/NVMe
■ Supports a second M.2 SSD card
■ 2.5" bay supports one SATA hard disk (max. 15 mm) or SSD

CONNECTORS
■ HDMI 2.0b ■ DisplayPort 1.4 ■ USB-C supports USB 3.2 Gen1 or DisplayPort 1.4 ■ 2x USB 3.2 Gen2 (max. 10 Gbps) ■ 4x USB 3.2 Gen2 (max. 5 Gbps) ■ 1x Intel Gigabit LAN (Intel 219) ■ 2x Audio (Microphone-in + Line-out) ■ DC input 19 V

POWER SUPPLY
■ External 65W / 19V power adapter

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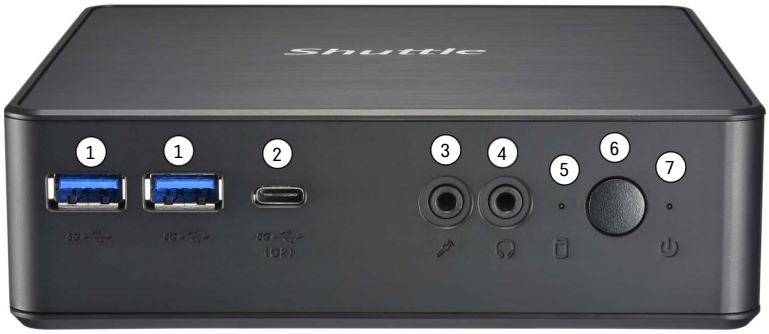
MODELS OF THE NC40U SERIES

Category	Model	Intel Processor	M.2 SSD Card	RAM memory	WLAN	Operating System	Bar Code
BAREBONE	NC40U	Celeron 7305	–	–	–	–	887993005904
	NC40U3	Core i3-1215U	–	–	–	–	887993005898
	NC40U5	Core i5-1235U	–	–	–	–	887993005881
	NC40U7	Core i7-1255U	–	–	–	–	887993005874
SYSTEM	NC4010XA	Celeron 7305	128GB PCIe/NVMe	4 GB	WLAN-ax	–	4046047104079
	NC4010BA	Celeron 7305	128GB PCIe/NVMe	4 GB	WLAN-ax	Windows 11 Pro Entry	4046047104086

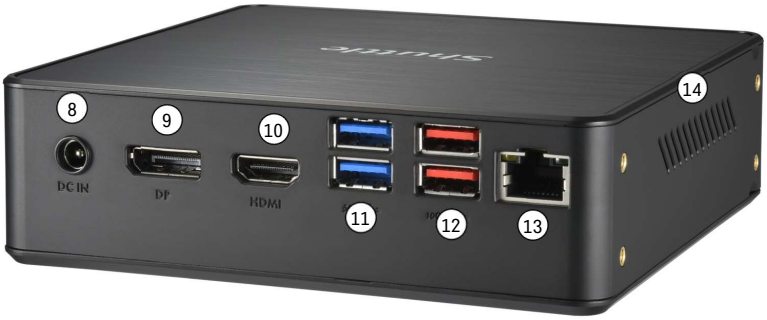
Front and Back Panel

Front Panel



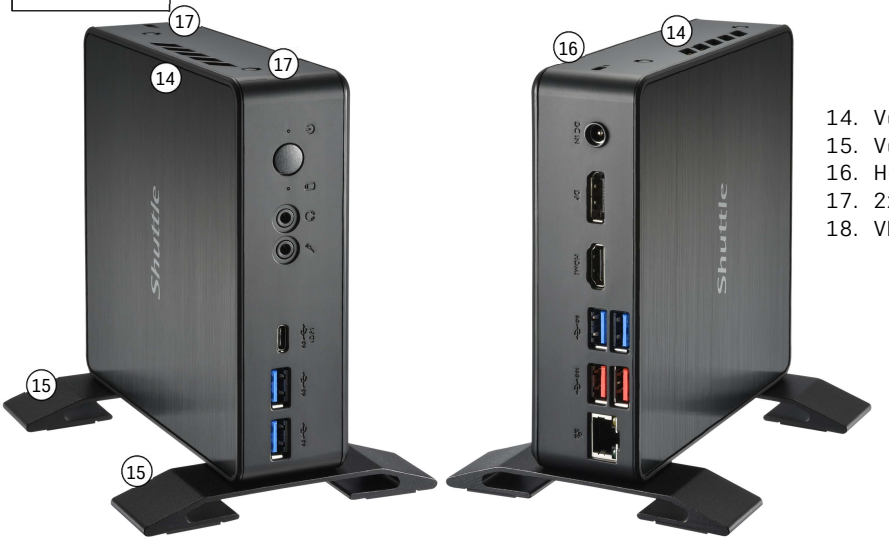
1. 2x USB 3.2 Gen 1 Port (blue)
2. USB-C (USB 3.2 Gen 1)
3. Microphone input
4. Headphones output
5. LED indicator for storage activity
6. Power button
7. LED indicator for power state

Back Panel



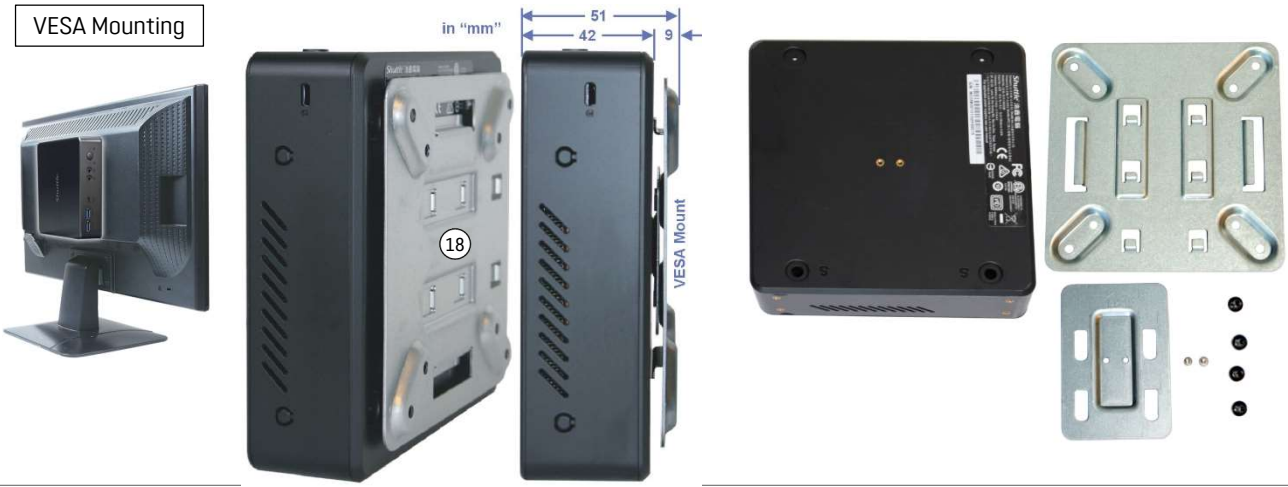
8. DC-in connector for power adapter
9. DisplayPort 1.4a audio/video output
10. HDMI 2.0b audio/video output
11. 2x USB 3.2 Gen 1 Port (blue)
12. 2x USB 3.2 Gen 2 Port (ret)
13. RJ45 Gigabit LAN Port
14. Ventilation openings

With Stand



14. Ventilation openings
15. Vertical stand
16. Hole for the Kensington Lock
17. 2x perforation for optional WLAN antennas
18. VESA mount (two parts with screws)

VESA Mounting



SHUTTLE XPC nano System NC4010BA — SPECIFICATIONS

CHASSIS	Barebone PC with a black plastic chassis Dimensions: 142 x 142 x 42 mm (LWH) = 847 ml Weight: 0.4 kg net, 1.2 kg gross Hole for Kensington Lock Includes vertical stand and 75 / 100 mm VESA mount
OPERATION POSITION	1) Horizontal 2) Vertical with stand 3) VESA-mounted behind an appropriate monitor
OPERATION SYSTEM	Windows 11 Pro Entry, 64-Bit
PROCESSOR	Model: Intel Celeron 7305 12th Generation Intel Core, code name "Alder Lake-U" System-on-a-chip architecture (SoC) with integrated memory and graphics controller FCBGA1744 package - directly soldered onto the mainboard Prozessorkerne: total 5 - Performance Cores: 1 P-Core (1 Thread) at 1.1 GHz basis clock - Efficient Cores: 4 E-Cores at 0.9 GHz basis clock Smart Cache: 8 MB TDP wattage: 15 W maximum Manufacturing process: Intel 7 (10 nm) Maximum Tjunction Temperature: 100 °C
COOLING FAN	Built-in CPU cooling fan with 4-pin connector Supports temperature-controlled RPM fan speed
INTEGRATED GRAPHICS	Intel UHD Graphics with 48 Execution Units (EU) Graphics Max Dynamic Frequency: 1.10 GHz This PC supports up to three independent screens with up to 2160@ 60 Hz (Ultra HD / 4K): 1) DisplayPort (supports DP 1.4a) 2) USB-C Port (supports DP 1.4a and USB 3.2 Gen 1) 3) HDMI-Port (supports HDMI 2.0b)
UEFI FIRMWARE	AMI BIOS in 32 MByte EEPROM with SPI interface Supports resume after power failure Supports Wake on LAN (WOL) Supports Power on by RTC Alarm Supports hardware monitoring and Watchdog function Supports Unified Extensible Firmware Interface (UEFI) Supports Firmware TPM v2.0 (fTPM) (Hardware TPM optional, on project request only)
MEMORY	4 GB DDR4-3200 SO-DIMM memory module Supports a maximum capacity of 64 GB
2.5" DRIVE BAY	Supports one Serial ATA hard disk or one SATA SSD drive in 6.35 cm / 2.5" format Device height: 15 mm (max.) Supports Serial-ATA III, 6 Gb/s (max. 600 MB/s) bandwidth Pre-installed SATA/power cable
M.2 SSD CARD	128GB SSD card in M.2-2280M form factor, supports PCIe and NVMe This PC can be equipped with another M.2-2280 SSD card
AUDIO	C-Media CM6542 Audio Codec with USB interface Two analog audio connectors (3.5 mm) on the front side: 1) Line-out (head-phones) 2) Microphone input Digital multi-channel audio output: via HDMI and DisplayPort
GIGABIT LAN	Ethernet Controller Intel i219 Supports 10 / 100 / 1.000 MBit/s operation (Gigabit) Supports WAKE ON LAN (WOL) Supports network boot by Preboot eXecution Environment (PXE)

WLAN FUNCTION	Built-in Intel WiFi-6 WLAN card with two internal antennas Model: Intel Wireless-6 AX200NGWG.NV (non vPro) Supports WiFi IEEE 802.11b/g/n/ac/ax in the 2.4 / 5 GHz band, 2T2R (2x2) Supports Bluetooth 5.2 in the 2.4 GHz band
FRONT PANEL CONNECTORS	1x USB-C (supports DisplayPort 1.4a and USB 3.2 Gen 1 at max. 5 GBit/s) 2x USB 3.2 Gen 1 Type A (max. 5 GBit/s, blue) Audio line-out / headphones (3.5 mm jack plug) Microphone input (3.5 mm jack plug) Power button Power LED (blue) Hard Disk LED (orange)
BACK PANEL CONNECTORS	DisplayPort 1.4a **[1]** HDMI 2.0b 2x USB 3.2 Gen 2 Type A (max. 10 GBps, red) 2x USB 3.2 Gen 1 Type A (max. 5 GBps, blue) Gigabit LAN (RJ45, Intel 219) DC-input connector for external power adapter (5.5 / 2.5 mm) 2x perforation (6.5 mm diameter) for optional external WLAN antennas
ALWAYS-ON JUMPER	By removing Jumper JP1 (please refer to the Quick Installation Guide) the system will start unconditionally once power is applied. [3]
CLEAR CMOS JUMPER	Short Jumper JP2 for about 10 seconds to restore factory settings of BIOS.
POWER SUPPLY	External 65 W power adapter (fanless) Input: 100~240 V AC, 50/60 Hz, max. 1.6 A Output: 19 V DC, max. 3.42 A, max. 65 W DC cable ca. 175 cm with coaxial connector: 5.5 / 2.5 mm (outer/inner diameter) The DC-input of the computer supports 19V±5%. AC cable, ca. 170 cm, 3-pin Micky MM C6 and Schuko earthed safety plug
SUPPLIED ACCESSORIES	Multi-language Quick Installation Guide Driver DVD for Windows 10/11 VESA mount set (two parts), made of steel with six screws (4x M4x10, 2x M2.5x3) Two aluminium stands (110 mm width) with four screws M3x7 for vertical operation Power adapter 65 W with AC power cord
ENVIRONMENTAL SPECIFICATIONS	Operating temperature range: 0~40 °C **[2]** Relative humidity range: 10~90% (non-condensing)Conformity/Certifications
CERTIFICATIONS / COMPLIANCE	EMI: CE, UKCA, FCC, BSMI, RCM, VCCI Safety: CB IEC60950/62368, cTUVus (UL 62368), 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)

[1] How to convert DisplayPort into HDMI/DVI
The DisplayPort outputs can be converted to HDMI or DVI by an additional, passive adapter cable. For example:
DELOCK 82590: 1 m, DisplayPort (male, 20p) to HDMI-A (male, 19p)
DELOCK 82435: 5 m, DisplayPort (male, 20p) to DVI-D (male, 24p)
The integrated graphics automatically detects the connected display and puts out the appropriate electric signal - either DisplayPort (without an adapter) or HDMI/DVI (with an adapter).

[2] Caution: For high ambient temperatures over 35 °C we strongly recommend to use SSDs (supporting at least 70 °C) instead of hard disks. Ensure free circulation of air amongst the PC and ventilation holes must stay clear.

[3] Power-on after Power Fail:
The BIOS setup provides a "Power-on after Power Fail" function that can be found under "Power Management Configuration". This function determines the PC's behaviour after power failure. As a matter of the nature of this function, it may fail after short power failures. This is why this PC also comes with a hardware-based solution. By removing Jumper JP1 (please refer to the Quick Installation Guide), the system will start unconditionally once power is applied.

SHUTTLE XPC nano BAREBONE NC40U-Series — Technical Drawings