

Item no.: 398572

**DS50U - Barebone XPC slim Intel Celeron 7305 2xSODIMM DDR5 2xM.2 1xSATA 1x**

from **338,10 EUR**

Item no.: 398572  
shipping weight: 2.90 kg  
Manufacturer: Shuttle



 [Product Description](#)

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XPC slim DS50UFanless 1.3-litre PC in industrial design with integrated ULV processorThe DS50U series offers slim, fanless barebone PCs in a robust metal housing with versatile connectivity options. The soldered Intel Gen12/13 ULV processor delivers sufficient performance for the playback of 2160p/60 videos in 4K resolution. Two digital connections for UHD displays and a traditional VGA port are available. Components are easy to install: two DDR5 memory modules, a 2.5" drive and two M.2 2280 SSD cards can be accommodated behind the practical housing cover. A 4G/5G module can also be optionally integrated in the second M.2 slot using the WWN04 adapter kit. Thanks to completely passive cooling, the system is practically maintenance-free, suitable for 24/7 continuous operation and also very energy-efficient. Ideal for professional applications such as digital signage, POS, control, office or as a media PC.- equipped with Intel Celeron processor 7305 (Gen 12)- up to 64 GB DDR5 memory- 1x 2.5 Gbit + 1x Gigabit Ethernet- three M.2 slots (2x M.2-2280, 1x M.2-2230)- 2x USB 3.2 (10 Gbit), 4x USB 3.2 (5 Gbit), 2x USB 2.0, 1x COM- 1x HDMI 2.0b, 1x DisplayPort 1.4, 1x VGA- Space for 1x 2.5" HDD/SSD and 2x M.2 SSD- External antenna connections for optimum Wi-Fi reception- Suitable for 12 or 19 V DC- Optional DIN rail/19" mountingFanless and quietPassive cooling, no fan noiseIdeal for noise-sensitive environmentsLess contamination from dust - therefore practically maintenance-free 24/7 continuous operationThis device is officially approved for 24-hour continuous operation (24/7).Requirements:- Free air circulation in the area surrounding the PC- Freely accessible ventilation holes on the device.- If a hard disk is installed, it must also be approved by the manufacturer for 24/7 operation. HousingSlim PC (nettop) with black steel housingWithout fan, complete with passive coolingThe installation slot for memory modules, 2.5" drive and M.2 cards is easily accessible behind the rear panel.cardsare easily accessible behind two cover platesDimensions: 20 x 16.5 x 3.95 cm (LWH) = 1.3 litresWeight: 1.6 kg net and 2.3 kg grossTwo openings for Kensington Lock and numerousM3 threaded openings on both sides of the housing. Operating position:1) Vertical: The device is usually operated in an upright position using the supplied stand (DisplayPort connection facing upwards).2) VESA mount: Use the supplied VESA mount to install the device behind a suitable monitor, for example. Operating systemThis barebone system is supplied without an operating system.It is compatible with Windows 10/11 (64-bit) and Linux (64-bit). ProcessorModel: Intel Celeron 7305Codename: Alder Lake-U (12th generation Intel Core)Performance cores (P-cores): 1 core (1 thread), clock rate: 1.1 GHzEfficiency cores (E-cores): 4 cores (4 threads), clock speed: 0.9 GHzSmart cache (L3): 8 MBPower dissipation (PL1 TDP): max. 15 WMaximum junction temperature: 100 °CSystem-on-a-chip architecture (SoC) with integrated memory and graphics controllerBGA1700 housing - soldered directly onto the mainboardManufacturing process: Intel 7 process (improved 10 nm process) Integrated graphicsIntel UHD GraphicsGraphics clock frequency: max. 1100 MHzExecution units (EUs): 48Supports up to three independent displays1) DisplayPort 1.4 supports Ultra HD @ 60 Hz2) HDMI 2.0b supports Ultra HD @ 60 Hz3) D-Sub/VGA supports analogue displays Mainboard / BIOSProprietary mainboard especially for the DS50U seriesSupports resume after power failure2) Supports Wake on LAN (WOL)Supports power on by RTC alarmSupports booting from M.2SSD cards and USB devicesAMI BIOS in 32 MByte EEPROM with SPI interfaceSupports hardware monitoring and watchdog functionSupports the Unified Extensible Firmware Interface (UEFI)Supports firmware TPM (fTPM) version 2.0 Power supplyExternal 90 W power supply (fanless)Input: 100-240 V AC, 50/60 Hz, max. 1.6 AOutput: 19 V DC, max. 4.74 A, max. 90 WLength of DC cable: approx. 170 cmLength of AC mains cable: approx. 170 cm (3-pin with C6 cloverleaf and Schuko plug) DC inputDC plug: 5.5 / 2.5 mm (outer/inner diameter)The DC input of the computer supports an external power supply with 12V±5% and 19V±5%. Memory support2x SO-DIMM slot with 262 pinsSupports DDR5-4800 (PC5-38400) SDRAM with 1,1 VAAlso supports memory modules with a higher frequency specificationSupports dual-channel modeSupports a maximum of 32 GB per slotTotal capacity maximum 64 GBSupports unbuffered DIMM modules (no ECC or registered)Two thermal pads for the RAM modules are included in the scope of delivery 2.5" drive bay with SATA connectionSupports one Serial ATA hard drive or one SATA SSD drive in 6.35 cm / 2.5" formatDrive height max. 9.5 mmSupports Serial ATA III, 6 Gb/s (600 MB/s) data transfer rateSupports the Unified Extensible Firmware Interface (UEFI)Note: A SATA cable is not required. Two M.2-2280 slots for SSD cardsThis product has two M.2-2280 Key-M slots- M.2 cards with 22 mm width and 80 mm length are supported (type 2280)- One M.2 SSD card with PCIe/NVMe interface is supported- The second M.2 SSD card must have a SATA interface.SSD card must have a SATA interface- the second slot can also be used for the optional WWN04 kit to install a 4G/5G network module.M.2 slot for WLAN cardsSlot: M.2-2230 Type EInterfaces: PCI-Express Gen. 3.0 X1 and USB 2.0The M.2-2230 plug-in cards used must be 22 mm wide and 30 mm long (type 2230)The device has two pre-installed antenna cables.A WLAN expansion card in M.2-2230 format and two WLAN antennas are required for the WLAN function.format and two WLAN antennas are required.Optional Shuttle accessory: WLN-M1 Sound functionAudio Realtek® ALC888S High-Definition AudioTwo analogue 3.5 mm audio connections on the front: 1) 2-channel line-out (headphones)2) Microphone inputDigital multi-channel audio output via HDMI and DisplayPort Dual network (2.5G + 1G)Two RJ45 network connectionsNetwork chips used:1) left: Intel i219 Ethernet controller supports 1,000 / 100 / 10 Mbit/s data transfer rate2) right: Intel i226 Ethernet controller supports 2,500 / 1,000 / 100 Mbit/s data transfer rateSupports WAKE ON LAN (WOL)Supports booting from the network via Preboot eXecution Environment (PXE) Ports/buttons on the front4x USB 3.2 Gen 1 (max. 5 Gbit/s, blue)2x USB 3.2 Gen 2 (max. 10 Gbit/s, red)Microphone inputAudio line-out (headphones)On/off buttonPower indicator LED (blue)Hard drive LED (yellow) Rear connectionsDisplayPort 1.4 [3]HDMI 2.0bD-Sub/VGA2x USB 2.0 (black)2x Intel RJ45 network (left: 1 Gbit/s and right: 2.5 Gbit/s)Serial COM port (5V / 12V, switchable: RS232 / RS422 / RS485) [1]DC input for external power supplyFour-pin connector (2.54 mm pitch) for power button, Clear CMOS and 5 V DC [4]2x connectors for external WLAN antennas Always-on jumperIf jumper JP1 is removed (see quick guide), the PC will start unconditionally as soon as the power supply is established. [2]Scope of deliveryMultilingual installation guideTwo metal feet with four M3 x 7 mm screwsVESA bracket for 75/100 mm standard (two metal brackets)Four M3 x 7 mm screws (connects VESA bracket to PC)Four M4 x 10 mm screws (connects VESA bracket to external mounting)Two M3 x 5 mm screws for mounting a 2.5" driveTwo M3 x 5 mm screws for mounting M.2-cards4x thermal pad for cooling optional components:- 2x for M.2SSD card (approx. 70 x 20 x 4 mm)- 2x for RAM module (approx. 50 x 15 x 2 mm and 60 x 20 x 1 mm)Driver DVD for WindowsExternal 90W power supply unit with mains connection cable (with earthing contact) Optional accessories-PCP11:Adapter cable for a second COM port (replaces the VGA port)- CXP01:Adapter cable for an external power button- WLN-M1:WLAN module (supports WLAN/Bluetooth) with two external antennas and cables- PRM01:2U rack panel for two Shuttle XPC slim- DIR01:DIN rail mounting kit (for 35 mm DIN rails)- WWN04:4G/5G kit with antennas - enables the use of an optional 4G/5G card in the M.2-format and a nano SIM card Environmental parametersPermissible operating temperature range: 0-40 °C [5]Relative humidity, non-condensing: 10-90 % Conformity and certificatesEMI: CE, FCC, BSMI, RCM, VCCI Safety: CB, BSMI, cTUVusOther: RoHS, Energy Star, ErPThis device is categorised as Class B information technology equipment (ITE) and is primarily intended for use in residential and office environments. The CE mark confirms conformity with the following EU directives:(1) Directive 2014/30/EU on electromagnetic compatibility (EMC)(2) Directive 2014/35/EU on the safety of electrical equipment (LVD)(3) Directive 2009/125/EC on the ecodesign of energy-related products (ErP)Notes:[1] Jumper for COM port configuration:Pin 9 of the two COM ports is a multifunctional connection. The mainboard jumper JP2 can be used to configure whether pin 9 is switched as a "RingIndicator" (RI) or provides an external power supply of 5 V or 12 V. Both COM ports can be configured individually.The COM 1 connection can be set to either RS232, RS422 or RS485 in the BIOS setup.The second COM port (COM 2) only supports RS232 mode. The connection is only available on the mainboard in the standard configuration of this product. To route this interface to the outside as a D-Sub connection, you need the appropriate adapter (e.g. the optional accessory PCP11) and you have to do without the VGA connection.[2] Automatic switch-on after power failure:In the BIOS setup under "Power Management Configuration" there is the function "Power-on after Power Fail", which defines how the PC reacts after a power failure. In principle, however, this function can fail in the event of very short power failures, meaning that this product also has a pure hardware solution. If jumper J9 is removed (see quick guide), the PC will start as soon as the power supply is restored.[3]Convert DisplayPort to HDMI/DVIThe DisplayPort output can be converted to HDMI or DVI using an inexpensive, passive adapter cable. For example:DELOCK 82590: 1m, DisplayPort (male, 20P) to HDMI-A (male, 19P)DELOCK 82435: 5m, DisplayPort (male, 20P) to DVI-D (male., 24P)The integrated graphics function recognises the characteristics of the connected display and outputs the appropriate electrical signal - either DisplayPort (without adapter) or HDMI/DVI (with adapter).Conversely, a monitor with DisplayPort cannot be connected to the HDMI output via a simple, passive adapter.[4] Four-pin connector on the rearThis enables the connection of an external power button.In addition, a 5 V DC voltage is provided for external components and the CMOS memory can be cleared using a jumper (Clear CMOS). A suitable cable is available as optional accessory CXP01.[5] Attention:For high ambient temperatures from 35 °C, it is recommended to use SSDs instead of hard disks.100% FANLESSThanks to energy-saving technology in combination with a sophisticated cooling system, no fans are required. No operating noise, fewer moving parts and therefore lower maintenance costs.WIRED REMOTE STARTINGThis model has a remote switch-on connection. Using any two-pole cable, special buttons can be connected via pins on the rear panel, which then enable the machine to be started remotely.TWO NETWORK CONNECTORSThis function is particularly useful for important network applications. It has a 2.5 Gbps Ethernet port and an additional Gigabit port, which enables physically separated networks and offers a large bandwidth overall.SPACe FOR A 2.5" DRIVEAs a supplement to an NVMe SSD, this model also provides a home for classic data storage devices in the 2.5-inch format\*. Hard drives and SSDs in this format offer many terabytes of storage space.(\*up to a height of 9.5 mm)UP TO 64 GB OF DDR5 RAMModern professional applications consume a particularly large amount of memory. With up to 64 GB of RAM, this Mini-PC is up to any demanding task.ADD-ONS VIA M.2 MODULEThree M.2 slots enable expansion with storage media and additional modules, such as for Wi-Fi or 5G. Thanks to the PCI Express connection, large amounts of data can be transported quickly via the M.2 slot. 2x M.2-2280 for NVMe/SATA SSDs1x M.2-2230 for a Wi-Fi module or similarSERIAL PORTThe classic interface. COM ports are still required for professional applications, for example in POS systems and in products from science and industry.GREAT FLEXIBILITY IN DISPLAY SELECTIONThree different graphics outputs, with both digital and analogue signals, offer great flexibility in the choice of display. This model has an HDMI 2.0, DisplayPort and VGA connection.ANTI-THEFT PROTECTIONThe Kensington security slot on the side of the housing (also called K-Slot or Kensington Lock) serves as an anti-theft device. Suitable security solutions in various designs are available from specialist retailers.EXTERNAL ANTENNA CONNECTORSTwo RP-SMA antenna connectors are pre-installed on the back of the device. Internal WLAN modules can be connected quickly thanks to the MHF IV cables already in the housing.

## Specifications

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