Item no.: 375259
DH32U - XPC slim

from **379,14 EUR**

Item no.: 375259
shipping weight: 2.10 kg
Manufacturer: Shuttle

📄 Product Description

XPC slim DH32UPowerful 1.3-litre PC with "Tiger Lake-U" processor supports four Ultra HD displaysPowerful 1.3-litre PC with "Tiger Lake-U" processor supports four Ultra HD displaysThis space-saving slim PC integrates an economical Gen 11 Intel ULV processor "Tiger Lake-U" and supports no less than four Ultra HD displays with 60 Hz refresh rate via HDMI 2.0b. The small metal housing with included VESA mounts, the variety of connections and reliable operation at temperatures of up to 50 °C make this product the ideal basis for digital signage, kiosks, surveillance and other professional applications.- Intel Pentium Gold 7505 processor- 4× HDMI 2.0b- Up to 64 GB DDR4 memory- Two M.2 slots (1× M.2-2280, 1× M.2-2230)- Dual Gigabit Ethernet, WLAN optional- 4× USB 3.2 Gen 2 (10 Gbit), 4× USB 3.2 Gen 1 (5 Gbit), 2× COM- 1× NVMe, 1× SATA 2.5", card reader- Prepared for LTE reception- Remote power-on connection, always-on jumper- Wall/VESA mounting option- Optional top-hat rail/19" mountHousing- Slim PC with black metal housing- Dimensions: 19 x 16.5 x 4.3 cm (LWH) = 1.35 litres- Weight: 1.3 kg net and 2.1 kg gross- Two openings for Kensington Lock and numerous- M3 threaded openings on both sides of the housing. Power supply unit- External 90 W power supply unit (fanless)- Input: 100-240 V AC, 50/60 Hz- Output: 19 V DC, 4.74 A, max. 90 W- DC plug: 5.5/2.5 mm (outer/inner diameter)- AC cable: 3-pin, approx. 1.7 m long, with C5/C6 cloverleaf plug connection to the power supply unit and CEE-7/7 plug with earthing contact (type E+F) for connection to the socket Operating system- This system is supplied without an operating system.- It is compatible with Windows 10/11. It is compatible with Windows 10/11 and Linux (64 bit). Processor- Model: Intel Pentium Gold 7505 (ULV)- System-on-a-chip architecture (SoC) with integrated memory and graphics controller - no additional chipset required- FCBGA1449 package - soldered directly onto the mainboard- Codename: Tiger-Lake-U (11th generation Intel Core processors)- Cores / Threads: 2 / 4- Base clock speed: 2.0 GHz- Max. turbo frequency: 3.5 GHz. Turbo frequency: 3.5 GHz- Intel Smart Cache: 4 MB- Power dissipation (TDP): max. 15 W- Manufacturing process: 10 nm SuperFin- Maximum junction temperature: 100 °C Integrated graphics- Intel UHD graphics function- Max. Graphics clock frequency: 1.25 GHz- Execution units (EUs): 48- Supports DirectX 12.1, OpenCL 2.0- Supports up to four independent displays via HDMI 2.0b with 4096x2304@60Hz Processor cooling- Heat sink with 50 mm fan (temperature-controlled speed) Mainboard- Mainboard in Shuttle format - special design for XPC Barebone DH32Ux- With solid electrolytic capacitors (solid capacitors) - these capacitors are more heat-resistant and durable. BIOS- AMI BIOS, SPI interface, 32 MB Flash EPROM device- Supports hardware monitoring and watchdog function- Supports firmware TPM (fTPM) v2.0 [2]- Supports booting from external flash memory via USB- Supports the Unified Extensible Firmware Interface (UEFI)- Supports reboot after power failure (Power-On-after-Power-Fail) [7]Memory support- 2x SO-DIMM slot with 260 pins- Supports DDR4-3200 (PC4-25600) SDRAM with 1,2 V- Supports dual-channel mode- Supports maximum 32 GB per slot- Maximum total capacity 64 GB Drive bay- 1x 6.35 cm / 2.5" drive bay for one hard disk or one SSD drive with SATA connection- Drive height 12.5 mm (max.)) SATA connector- 1x Serial-ATA III, data transfer rate max. 6 Gb/s (600 MB/s)- With Serial-ATA power connector (onboard) M.2-2280M SSD slot- The M.2-2280M slot offers the following interfaces:PCI-Express Gen. 4.0 X4 supports NVMeSATA v3.0 (max. 6 Gb/s)- The M.2-2280M slot used must be 22 mm wide and have a data transfer rate of max. 6 Gb/s (600 MB/s).plug-in cards used must be 22 mm wide and can have a length of 42, 60 or 80 mm (type 2242, 2260, 2280).- Supports M.2 SSDs with SATA or PCI Express interface M.2-2230E slot for WLAN cards- Interfaces: PCI-Express Gen. 2.0 X1 and USB 2.0- Used M.2-2230-plug-in cards used must be 22 mm wide and 30 mm long (type 2230)- Supports WLAN expansion cards (optional Shuttle accessory: WLN-M/M1) Sound function- Audio Realtek® ALC662/ALC888S High-Definition Audio- Two analogue 3.5mm audio connections on the front:1) 2-channel line-out (headphones)2) Microphone input- Digital multi-channel audio output via HDMI Dual Gigabit network controller- Two RJ45 network connections, each with two status LEDs- Network chips used:2x Intel i211 Ethernet Controller (MAC+PHY) with PCIe interfaceSupports 100 / 1.000 MBit/s data transfer rateSupports WAKE ON LAN (WOL)Supports booting from the network via Preboot eXecution Environment (PXE)Supports teaming mode [5] Card reader- Integrated card reader for reading and writing SD, SDHC and SDXC flash memory cards Front panel connections- Microphone input- Audio line-out (headphones)- 4x USB 3.2 Gen 2, max. 10 Gbit/s (red)- SD card reader- On/Off button- Power indicator LED (blue)- Hard drive LED (yellow) Rear connections- 4x HDMI 2.0b connection- Optional: 1x D-Sub VGA connection (accessory PVG01 [4])- 4x USB 3.2 Gen 1, max. 5 Gbit/s (blue)- 2x Gigabit LAN (RJ45)- 2x RS232 serial port, 9-pin. D-Sub (5/12V, 1x RS422/RS485) [3]- 1x DC input for external power supply- 1x 4-pin connector (2.54 mm pitch) supported:external power buttonClear CMOS function5V DC voltage for external components- 2x perforation for optional wireless LAN antennas- 2x opening for Kensington Lock (on the side) Further onboard connections- 1x jumper JP2 for power-on-after-power-fail (hardware solution) [7]- 1x analogue VGA graphics output CN6 (2x10 pins, 1 mm pitch)[4]- 2x serial interface (COM) used for back panel connections- 1x USB 2.0 (4 pins) for optional accessories WWN03 (LTE kit)[1]- 1x fan connection (4 pins) occupied by the CPU fan- 1x connection for CMOS battery (occupied) Scope of delivery- Multilingual installation instructions (DE, EN, FR, ES, JP, KR, SC, TC)- VESA bracket for 75/100mm standard (two metal brackets)- Four M3 x 5 mm screws (connects VESA bracket to PC)- Four M4 x 10 mm screws (connects VESA bracket to external mounting)- Four M3 x 4 mm screws (for mounting a 2.5" drive)- Two M3 x 5 mm screws (silver-coloured, for mounting two M.2-cards)- Driver DVD (Windows 64 Bit)- Serial ATA cable for 2.5" drive with power connection- External 90W power supply unit with power connection cable Optional accessories- PVG01:Optional D-Sub VGA video output[4]- WLN-M / WLN-M1:WLAN module in M.2-2230 format with two external antennas supports WLANformat with two external antennas supports WLAN and Bluetooth- WWN03:LTE adapter kit with antennas, but without LTE card[1]- PS02:Feet for vertical operation- CXP01:Adapter cable for an external power button- PRM01:2U rack panel for two Shuttle XPC slim PCs- DIR01:DIN rail mounting kit Environmental parameters- Permissible operating temperature range: 0-50 °C [6]- Relative humidity, non-condensing: 10-90 % Certificates / Conformity:- EMI: FCC, CE, BSMI, RCM, VCCI- Safety: CB, BSMI, cTUVus- Other: RoHS, Energy Star, ErP ConformityThis 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)Footnotes:[1] Optional accessory WWN03 (LTE kit)With the Shuttle XPC accessory WWN03 accessory kit, you can equip this PC with an LTE/4G function for mobile networks. The 2.5" slot is used for the installation of the LTE card, so that an SSD in M.2 format is required as mass storage. An LTE module in M.2-3042 format and a nano SIM card are still required and are not included in the scope of delivery.[2] TPM functionThis product already has a firmware TPM (fTPM) v2.0. It is also prepared for a hardware TPM chip so that it can be equipped at the factory on special order.[3] Serial interfacesThis PC has two serial RS232 interfaces with 9-pin D-Sub connectors on the rear. The left COM port (COM1) can also be switched to RS422 and RS485 mode in the BIOS setup.Pin 9 of the D-Sub COM port connections is a multifunctional connection. The mainboard jumper JP1 can be used to configure whether pin 9 is switched as a "Ring Indicator" (RI) or provides an external power supply of 5V or 12V. Each COM port can be configured individually. The maximum current is 500 mA per connection.[4] Optional D-Sub/VGA outputThe mainboard has an analogue graphics output CN6 on the mainboard. This can be routed to the outside via an optional adapter (PVG01) as a 15-pin D-Sub connection. This replaces a serial interface (COM port) in the back panel.[5] Teaming modeWith the teaming function, both network interfaces can be combined to form a logical network adapter, which allows redundancy. The advantage of this is that it enables load balancing and failover.[6] Operating temperatureSSD drives (up to 70 °C) and SO-DIMM memory with an extended temperature range (up to 95 °C) are recommended for high ambient temperatures of 40 °C and above.[7] Power-On-after-Power-FailThe BIOS setup under "Power Management Configuration" contains the "Power-On-after-Power-Fail" function, which defines how the PC reacts after a power failure: (1) switch on unconditionally, (2) restore status before the power failure or (3) leave switched off. In principle, however, this function can fail in the event of very short power failures, so that the DH32Ux also has a pure hardware solution. If you remove jumper JP2 (on the mainboard behind the power button), the PC will start as soon as the power supply is restored.EXPANSIONS BY M.2 MODULETwo M.2 slots enable expansion with data carriers and additional modules, such as for WLAN or mobile communications. Thanks to the PCI Express connection, large amounts of data can be transported quickly via the M.2 slot. M.2-2280 for an NVMe SSDM.2-2230 for a WLAN moduleFOUR IDENTICAL 4K CONVENIENT MONITOR PORTSFour HDMI 2.0 ports enable breathtaking digital signage installations or high-resolution multi-monitor workstations and thus the display of large amounts of information that can be captured at a glance.UP TO 64 GB RAMModern professional applications are particularly memory-hungry. With two slots and therefore a total of 64 GB RAM, this Mini PC meets even the highest demands.SPACE FOR A 2.5" DRIVEAs a supplement to an NVMe SSD, this model also provides a home for classic data storage devices in 2.5" format*. Hard drives and SSDs in this design offer many terabytes of storage space.(*up to a height of 12.5 mm)AUTOMATIC SWITCH-ON FUNCTIONThe Power-On-After-Power-Fail function ensures that the PC switches on automatically as soon as it is (re)connected to a power source. The function is activated or deactivated via a jumper.READING AND WRITING MEMORY CARDSDiscreetly hidden in the front panel is an SD card reader that allows convenient handling of memory cards, such as those often found in smartphones, cameras, microcomputers or drones.SERIAL INTERFACEThe classic interface. COM ports are still required for professional applications, for example in POS systems and for products in the fields of science and industry.THEFT PROTECTIONThe Kensington security slot on the side of the housing (also known as the K-Slot or Kensington Lock) is used to prevent theft. Suitable security solutions in various designs are available in stores.TWO NETWORK CONNECTORSThis feature is particularly interesting for important network applications - two Gigabit Ethernet connections enable physically separate networks, offer failover and load balancing.REMOTE START BY WIREThis model has a remote power-on connection. Pins on the rear can be used to connect your own buttons with any two-pole cable, which can then be used for remote start.RELIABLE COOLING SYSTEMAn actively speed-controlled 50 mm fan ensures the greatest possible stability in any load situation and even at high ambient temperatures.

🖹 Specifications