Item no.: 375283
DH610S - XPC slim

from **289,99 EUR**

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shipping weight: 2.40 kg
Manufacturer: Shuttle

📄 Product Description

The Shuttle XPC slim Barebone DH610S with H610 chipset brings the performance of Intel's 12th/13th and 14th generation*) Core desktop processors (codenamed "Alder Lake-S" and "Raptor Lake-S [Refresh]") with socket LGA1700 into a compact 1.3-litre format. It supports the simultaneous operation of two Ultra HD displays via HDMI and DisplayPort. There is also an Intel LAN function, eight USB ports and audio ports. Its flat metal housing, versatile connection options and reliable operation at ambient temperatures of up to 50 °C make the DH610S ideal for professional applications such as digital signage, POS, POI, gaming machines, offices, healthcare and industry.*) for Intel Core Gen13 and Gen14 a BIOS update may be necessary (to be performed with a compatible processor)Housing- 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 holes on both sides of the housing.Power supply unit- External 120 W power supply unit (fanless)- Input: 100-240 V AC, 50/60 Hz- Output: 19 V DC, 6.32 A, max. 120 W- DC plug: 5.5/2.5 mm (outer/inner diameter)- Note: The DC input of the computer supports an external power supply with 19V±5%- 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 socketOperating 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 support- Processor socket LGA1700- Supports Intel Core i9 / i7 / i5 / i3, Pentium Gold and Celeron processors- Supports the following generations of Intel Core processors:- Gen 12 "Alder Lake-S"- Gen 13 "Raptor Lake-S" since BIOS version 201 available since March'23 *)- Gen 14 "Raptor Lake-S Refresh" since BIOS version 210 available since Jan'24 *)- in "Intel 7" process technology (formerly: Intel 10 nm Enhanced SuperFin)- Supports only processors with integrated graphics [5]- Maximum supported processor power dissipation (TDP) = 65 W.-Does not support the unlock function of Intel K-series processors.- The processor integrates the controllers for PCI Express and memory and the graphics function on the same semiconductor chip*) Attention: if a BIOS update is necessary, the PC must first be started with a compatible processor.Download website: https://global.shuttle.com/support/downloadProcessor cooling- Heatpipe processor cooling with two 60 mm fans on the top of the caseMainboard / chipset- Mainboard in Shuttle format - special design for XPC Barebone DH610S- Chipset/Southbridge: Intel® H610- Passive chipset cooling with heat sink- The Northbridge is integrated in the processor.- With solid electrolytic capacitors. With solid electrolytic capacitors (solid capacitors) - these capacitors are more heat-resistant and durable.BIOS- AMI BIOS, SPI interface, 16 MB flash EPROM device- Supports hardware monitoring and watchdog function- Supports firmware TPM (fTPM) v2.0 [3]- 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 DDR4-3200/2933/2666/2400/2133 (PC4-25600/23466/21300/19200/17000) SDRAM with 1,2 V- Supports dual-channel mode- Supports a maximum of 32 GB per slot- Maximum total capacity 64 GB- Supports unbuffered DIMM modules (no ECC or registered)Integrated graphics function- The properties of the integrated Intel UHD graphics function depend on the processor type used. [5]- The PC offers two digital video outputs that support 1080p/60 and 2160p/60:- 1x HDMI v2.0b- 1x DisplayPort v1.4- Supports 4K displays with 3840 x 2160 Ultra HD resolution- DisplayPort and HDMI support multi-channel digital audio via the same cable.- Optional analogue D-sub/Video output. Optional analogue D-Sub/VGA video output [4]- Supports two independent displays via the integrated graphics function (with the optional VGA output even three displays)Drive bay- 1x 6.35 cm / 2.5" drive bay for a hard disk or SSD drive with SATA connection- Drive height 12.5mm (max.) SATA connection- Drive height 12.5 mm (max.))SATA connector- 1x Serial-ATA III, 6 Gb/s (600 MB/s) data transfer rate- With Serial-ATA power connector (onboard)- M.2-2280M SSD slot- The M.2 2280M slot offers the following interfaces:- PCI-Express Gen. 3.0 X4 supports NVMe- SATA v3.0 (max. 6 Gbit/s- The M.2 2280M slot used must be 22 mm wide and have the following interfacesplug-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 / WLN-M1)Sound functionAudio chip: Realtek® ALC 897/662/888S 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 DisplayPortNetwork controller- RJ45 network connection with two status LEDs- Intel 219V/LM LAN controller supports 10 / 100 / 1.000 MBit/s data transfer rate- PCIe interface- Supports WAKE ON LAN (WOL)- Supports booting from the network via Preboot eXecution Environment (PXE)Front panel connections- Microphone input- Audio line-out (headphones)1- x USB 3.2 Gen 1 Type A (blue)- 1x USB 3.2 Gen 1 Type C- 2x USB 2.0 Type A (black)- On/Off button- Power indicator LED (blue)- Hard drive LED (yellow)Rear connections- 1x HDMI 2.0b connection [1]- 1x DisplayPort 1.4 connector (DP) [2]- Optional: 1x D-Sub VGA connector (accessory PVG01 [4])- 2x USB 3.2 Gen 1 Type A (Blue)- 2x USB 2.0 type A (black)- 1x RJ45 Gigabit LAN port- 1x DC input for external power supply (supports 19V±5%)- 1x 4-pin connector (2.54 mm pitch) supported:- external power button- Clear CMOS function- 5V DC voltage for external components- 2x perforation for optional wireless LAN antennas- 2x opening for Kensington LockFurther onboard connections- 1x jumper for power-on-after-power-fail (hardware solution) [7]- 1x analogue VGA graphics output CN6 (2x10 pins, 1 mm pitch) [4]- 1x USB 2.0 (4 pins) for optional accessories WWN03 (LTE kit)- 1x fan connector (4 pins) occupied by the cooling system- 1x connector for CMOS battery (occupied)Scope of delivery- Multilingual installation manual (DE, EN, FR, ES, JP, KR, SC, TC)- Four M3 x 4 mm screws (for mounting a 2.5" drive)- Two M3 x 5 mm screws (silver-coloured, for mounting two M.2cards)- Driver DVD (Windows 64 Bit)- Serial ATA cable for 2.5" drive with power connection- External 120W power supply unit with power connection cable- Protective cap for the CPU socket (do not use if heatpipe or cooler are installed)- Thermal pasteOptional accessories- PVG01: Optional D-Sub VGA video output [4]- WLN-M(802.11ac, Wifi 5) or WLN-M1(802.11ax, Wifi 6): WLAN module in M.2-2230 formatformat with two external antennas supports WLAN and Bluetooth- WWN03: LTE adapter kit with antennas, but without LTE card [8]- 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- PV04: VESA mount-Environmental parametersPermissible operating temperature range: 0-50 °C [6]Relative humidity, non-condensing: 10-90 %- Certificates / conformity:EMI: FCC, CE, BSMI, RCM, VCCISafety: CB, BSMI, ETLOther: RoHS, Energy Star, ErPConformityThis device is classified as a 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]HDMI output supportsDVI with optional adapter[2] Convert DisplayPort to HDMI/DVIThe DisplayPort output can be converted to HDMI or DVI with 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.[3] 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 fitted at the factory on special order.[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. The integrated graphics supports a maximum of four displays simultaneously.[5] Intel processors without integrated graphics function, recognisable by the letter "F" in the processor designation, e.g. Core i7-12700F,are not compatible.[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 from 40 °C.[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 DH670 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.[8] Optional accessories WWN03 (LTE kit)The Shuttle XPC accessory WWN03 accessory kit allows you to 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.

📄 Specifications