

Item no.: 401187

DH770 - Barebone XPC slim LGA1700 2xSODIMM 2xM.2 2xHDMI 2xDP

from **393,44 EUR**

Item no.: 401187
shipping weight: 2.70 kg
Manufacturer: Shuttle



 Product Description

The Shuttle XPC slim Barebone DH770 with H770 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 four Ultra HD displays via 2x HDMI and 2x DisplayPort. Dual Intel 2.5G network, four USB 3.2 Gen 2 and COM ports are also available. Its flat metal housing with VESA mount, versatile connection options and reliable operation at ambient temperatures of up to 50 °C make the DH770 ideal for professional applications such as digital signage, POS, POI, gaming machines, offices, healthcare and industry. 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 openings 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 cleverleaf 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 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"- Gen 14 "Raptor Lake-S Refresh"- in "Intel 7" process technology (formerly: Intel 10 nm Enhanced SuperFin)- Supports only processors with integrated graphics function [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. Processor cooling- Heatpipe processor cooling with two 70 mm fans on the top of the case. Mainboard / Chipset- Mainboard in Shuttle format - special design for XPC Barebone DH770- Chipset/Southbridge: Intel® H770- Passive chipset cooling with heat sink- The Northbridge is integrated in the processor.- 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 [9]- 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 262 pins- Supports DDR5-5600 (PC5-44800) SDRAM with 1,1 V- Supports dual-channel mode- Supports a maximum of 32 GB per slot- Maximum total capacity 64 GB- Note: In combination with an Intel Core Gen 13/14 "Raptor Lake" processor two 48 GB RAM modules are also supported.- 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 four video outputs that support 1080p/60 and 2160p/60: 2x HDMI v2.0b, 2x DisplayPort v1.4- Supports 4K displays with 3840 x 2160 Ultra HD resolution- Supports four independent displays via the integrated graphics function- DisplayPort and HDMI support multi-channel digital audio via the same cable.- Optional analogue D-Sub/Video output via HDMI. Optional analogue D-Sub/VGA video output [4] 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 connection- 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. 4.0 X4 supports NVMe- SATA v3.0 (max. 6 Gbit/s)- M.2 plug-in cards used must be 22 mm wide and 80 mm long (type 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- M.2-2230E slot for WLAN cards used plug-in cards used must be 22 mm wide and 30 mm long (type 2230)- Supports WLAN expansion cards (optional Shuttle accessory: WLN-M1) Sound function- Audio Realtek® ALC888S High-Definition Audio- Two analogue 3.5 mm audio connections on the front: 1) 2-channel line-out (headphones) 2) Microphone input- Digital multi-channel audio output via HDMI and DisplayPort Dual 2.5G network controller- Two RJ45 network ports, each with two status LEDs- Network chips used: 2x Intel i226LM Ethernet Controller (MAC+PHY) PCIe interface Supports Windows 10/11 desktop and Windows Server operating system Supports 100 / 1,000 / 2,500 Mbit/s data transfer rate Supports WAKE ON LAN (WOL) Supports booting from the network via Preboot eXecution Environment (PXE) Front connectors- Microphone input- Audio line-out (headphones)- 2x USB 3.2 Gen 2 Type A (Red)- 1x USB 3.2 Gen 1 Type A (Blue)- 1x USB 3.2 Gen 1 Type C- On/Off button- Power indicator LED (blue)- Hard drive LED (yellow) Rear connections- 2x HDMI 2.0b connection [1]- 2x DisplayPort 1.4 connection (DP) [2]- Optional: 1x D-Sub VGA connection (accessory PVG01 [4])- 2x USB 3.2 Gen 2 Type A (red)- 2x USB 3.2 Gen 1 Type A (Blue)- 2x 2.5G LAN (RJ45, Intel i225)- 2x RS232 serial port, 9-pin. D-Sub (5/12V, 1x RS422/RS485) [3]- 1x DC input for external power supply (supports 19V±5%) - 1x 4-pin connector (2.54 mm pitch) supports:- external power button- Clear CMOS function- 5V DC voltage for external components- 2x perforation for optional wireless LAN antennas- 2x opening for Kensington Lock- Additional 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] 2x serial interface (COM) assigned for backpanel connections 1x USB 2.0 (4 pins) for optional accessories WWN03 (LTE kit) 1x fan connection (4 pins) occupied by the cooling system 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 attaching two M.2-cards)- Heat sink for M.2-2280 SSD card with four screws and three thermal pads- Driver DVD (Windows 64 bit)- Serial ATA cable for 2.5" drive with power connector- External 120W power supply unit with power cable- Protective cap for the CPU socket (do not use if heatpipe or cooler are installed)- Thermal paste Optional accessories- PVG01: Optional D-Sub VGA video output [4]- WLN-M1: WLAN module in M.2-2230-format with two external antennas supports WLAN-ax 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 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, ETL- Other: RoHS, Energy Star, ErP Conformity This 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] HDMI output supports DVI with optional adapter [2] Convert DisplayPort to HDMI/DVI The 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, 20P) to HDMI-D (male, 24P) 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] Serial interfaces This 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 JP2 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 output The 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 temperature SSD 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-Fail The 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 DH770 also has a pure hardware solution. If you remove jumper JP1 (on the mainboard next to the power button), the PC will start as soon as the power supply is restored. [8] Optional accessories 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. [9] TPM function This product already has a firmware TPM (fTPM) v2.0. It is also prepared for a hardware TPM chip so that it can be fitted in the factory on special order.

Specifications

Scan this QR code to view the product
All details, up-to-date prices and availability

