

## BAREBONE XPC cube SB860R8

### 14-LITRE CUBE FOR SERVER AND WORKSTATION APPLICATIONS

This well-cooled 14-litre barebone PC in cube format houses the performance of Intel's Core Ultra 200 series processors (Socket LGA1851 "Arrow Lake-S") with Integrated Neural Processing Unit (NPU) for demanding AI workloads. It accommodates four large 3.5" hard disks, four RAM moduls, two M.2 SSD cards and a dual-slot graphics card. There are also a wide range of connection options: four UHD-compatible graphics outputs, ten USB ports, two network connections, and five audio ports. Such impressive performance and range of features in an aluminum chassis with a volume of only 14 liters makes SB860R8 the ideal platform for demanding mini-server and workstation PCs with top reliability even under heavy load.



INTEL LGA1851  
CPU SUPPORT



HEAT-PIPE  
COOLING



4x 48 GB  
SUPPORT



2x HDMI  
(2.1 + 2.0b)



2x DISPLAY-  
PORT 1.4a



SUPPORTS  
GRAPHICS CARDS



2x M.2 SSD  
SUPPORT



4x 3.5" HDD  
SUPPORT



DUAL 2.5G LAN  
(INTEL)



WLAN  
OPTIONAL



Max.  
40 °C



24/7  
SUPPORT

### CUBE DESIGN

- Black aluminium chassis
- Dimensions: 33.2 x 21.5 x 19 cm (LWH), ca. 13.6-litre
- Operating temperature: 0~40 °C (non-condensing)

### OPERATING SYSTEM

- An operating system is not included
- Supports Windows 11 and Linux (64-bit)

### PROCESSOR SUPPORT

- Socket LGA1851 supports Intel Core Ultra i9/i7/i5 "Arrow Lake-S"
- TDP max. 125W
- Includes heatpipe cooling system

### CHIPSET & GRAPHICS

- Intel B860 Chipset
- Integrated Intel Iris Xe Graphics with triple 4K display support (features depend on processor, "F"-series CPUs lack the integrated graphics)

### MEMORY SUPPORT (RAM)

- Four 288-pin DIMM slots
- Supports max. 4x 48 GB DDR5-5600
- Supports up to 192 GB capacity in total

### PCI-EXPRESS SLOTS

- 1x PCIe X16 Gen5 slot supports dual-slot graphics cards up to ca. 28 x 12 x 4 cm (LWH), with 6-pin and 8-pin power connector
- 1x PCIe X4 v4 slot (not usable with dual-slot graphics card)

### STORAGE - SATA / M.2

- Bays: 4x 3.5" (internal), onboard: 4x SATA ports (supports RAID)
- 2x M.2-2280M slot supports PCIe x4 (1x Gen5 and 1x Gen4)
- 1x M.2-2230E for optional WLAN (accessory: WLN-M1)

### CONNECTORS

- HDMI 2.1 (supports 8K)
- HDMI 2.0b
- 2x DisplayPort 1.4a
- 4x USB 3.2 Gen2 (10 Gbps)
- 2x USB 3.2 Gen1 (1x Type-C)
- 4x USB 2.0
- 1x internal USB 2.0
- 2x Intel 2.5G LAN (Intel i226LM)
- 5x Audio I/O (2x front, 3x rear)
- Connector for external power button (4-pin)

### POWER SUPPLY

- Internal 500W power supply, 80Plus Gold, Flex ATX form factor

### OPTIONAL ACCESSORIES

- WLAN Kit (WLN-M1)
- RS232 COM Port (H-RS232)
- Adapter for two 2.5" drives (PHD3)
- Cable for external power button (CXP01)



## REQUIRED COMPONENTS

The following components need to be added to make it a fully-configured Mini PC

### Shuttle XPC Cube Barebone SB860R8



Photo without chassis cover,  
drive rack and heat-pipe cooling



#### LGA1851 Processor

Supports Intel Core Ultra 2xx "Arrow Lake-S"  
TDP max. 125 W



#### Memory Modules

Up to four 288-pin DIMM memory modules  
max. 4x 48 GB DDR5-5600 (max. 192 GB in total)



#### 2x M.2 SSD Card

Supports two M.2-2280 SSD cards with PCIe/NVMe interface  
(SATA is not supported)

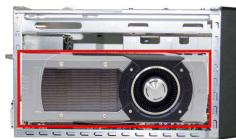


#### SATA Storage Drives

The drive rack supports four 3.5" hard disk drives  
which can operate in RAID 0/1/5/10 or JBOD mode.

One slot is also prepared for a 2.5" drive (SSD or HDD)  
The mainboard features four SATA ports.

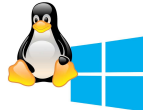
Note: use accessory PHD3 to install two additional 2.5" drives  
(Hard disks or SSDs) in a 3.5" bay.



#### PCI-EXPRESS CARDS (optional)

- 1) PCI-E X16 slot (e.g. Single-Slot graphics card)
- 2) PCI-E X4 slot (e.g. Dual 10 Gb network card)

The power consumption of the graphics card must not exceed  
300 watts. Max. length is 280 mm. If a dual-slot (double-width)  
graphics cards is used the second PCI-Express slot will be occu-  
pied.



#### Operating System

Windows 11 or Linux (64-bit only)

## OPTIONAL ACCESSORIES FROM SHUTTLE



#### WLAN-Accessory

**WLN-M1** (802.11ax / Wifi 6)  
M.2-2230 card supports  
WLAN and Bluetooth.  
Including 2 antennas.



#### Adapter for 2.5" drives **PHD3**

The PHD3 allows for installa-  
tion of one or two 63.5 mm  
(2.5") hard drives or SSDs into  
a larger 89 mm (3.5") drive  
bay.



#### COM Port Adapter

##### **H-RS232**

The H-RS232 allows for instal-  
lation of one serial COM port  
(RS232) in the back panel.



#### Cable **CXP01**

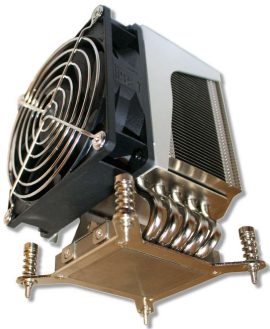
Cable for external push button  
switch (without button)

## PRODUCT FEATURES



### The R8 chassis design: stylish and sophisticated

The R8 is the case design of choice when it comes to flexible storage solutions thanks to its four-hard-drive support. At the same time it provides an incredible amount of space for large state-of-the-art graphics cards. The R8 case uses light aluminium as its stylish base material and the brushed surfaces are truly eye-catching.



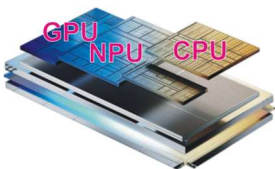
### Integrated Cooling Engine

In order to ensure proper airflow inside such a small case, more advanced cooling technologies have been developed and implemented in the Shuttle XPC. Shuttle's industry-leading I.C.E. heatpipe technology delivers efficient cooling and is exceptionally quiet.



### What is a Barebone?

The SB860R8 consists of a stylish case with pre-installed mainboard, power supply unit (PSU), cooling system and cables. Despite its small form factor, it offers outstanding connectivity, functionality and performance. For a full PC system, a processor, memory, mass storage, graphics card and operating system need to be added. Shuttle XPC cube Barebones are completely customisable meaning users can pick certain components on their own to ideally match their individual needs.



**Supports Socket LGA1851 Intel® Core™ Ultra processors**  
"Arrow Lake-S" is the codename for Intel's Core Ultra 200 series Generation of Intel® Core™ Ultra Desktop Processors for socket LGA1851 introduced along with the 800-Series chipsets. These processors feature up to 24 cores (8 Performance-cores and 16 Efficient-cores), up to 4 Intel Xe graphics cores and integrates a Neural Processing Unit (NPU).



### Quad Display support and 8K

Connect up to four UHD/4K displays at once and keep every project, app, and tool visible without constant window switching. The SB860R8 even features one HDMI 2.1 port which supports 8K UHD resolution at 60Hz refresh rate - in this case, two additional 4K displays can be connected.



### Ample space for demanding dual-slot graphics cards

Despite the small housing, the SB860R8 is capable of running dual-slot (double-height) high-performance PCI Express graphics cards. The system provides additional 6-pin and 8-pin power connectors for more power-hungry graphics cards. The maximum size acceptable for graphics cards is 280 mm x 120 mm x 38 mm. Please refer to the support list for detailed support information at [global.shuttle.com](http://global.shuttle.com).



### Supports four 3.5-inch hard drives in RAID mode

The drive rack supports flexibility to accommodate up to four 3.5-inch SATA hard disk drives. To ensure a safe, sturdy operating environment for installed HDDs, it features a built-in 80mm ball bearing fan to enhance hard drive cooling. Thanks to the Intel® Rapid Storage Technology (RST) it supports JBOD and RAID modes 0, 1, 5, 10 to provide a versatile and flexible storage solution.



### External power button by separate remote line

If, because of space constraints (e.g. in case of fixed installation), the machine cannot be switched on by pressing the front power button, it can be powered on by a separate remote line. You will find an appropriate four-pin connector at the back panel of the SB860R8 (pitch 2.54 mm). Furthermore, this connector provides a Clear CMOS function and +5V DC voltage supply for external devices.



Optional Accessory CXP01:  
Cable for external push button switch (without button)

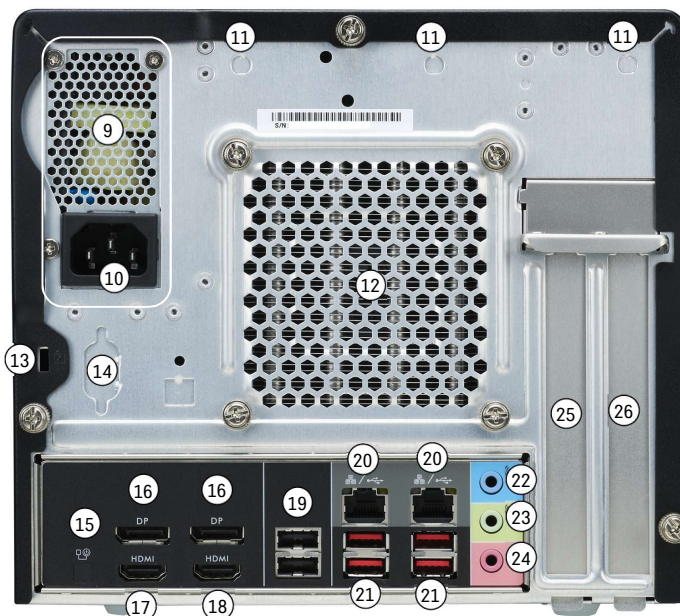
## Front and Back Panel

Front panel



1. Hard disk LED indicator
2. Power LED indicator
3. Power button
4. 2x USB 2.0 Type-A
5. USB 3.2 Gen 1 Type-A port (5 Gbps)
6. Microphone input
7. Headphones output
8. USB 3.2 Gen 1 Type-C port (5 Gbps)

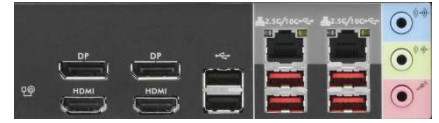
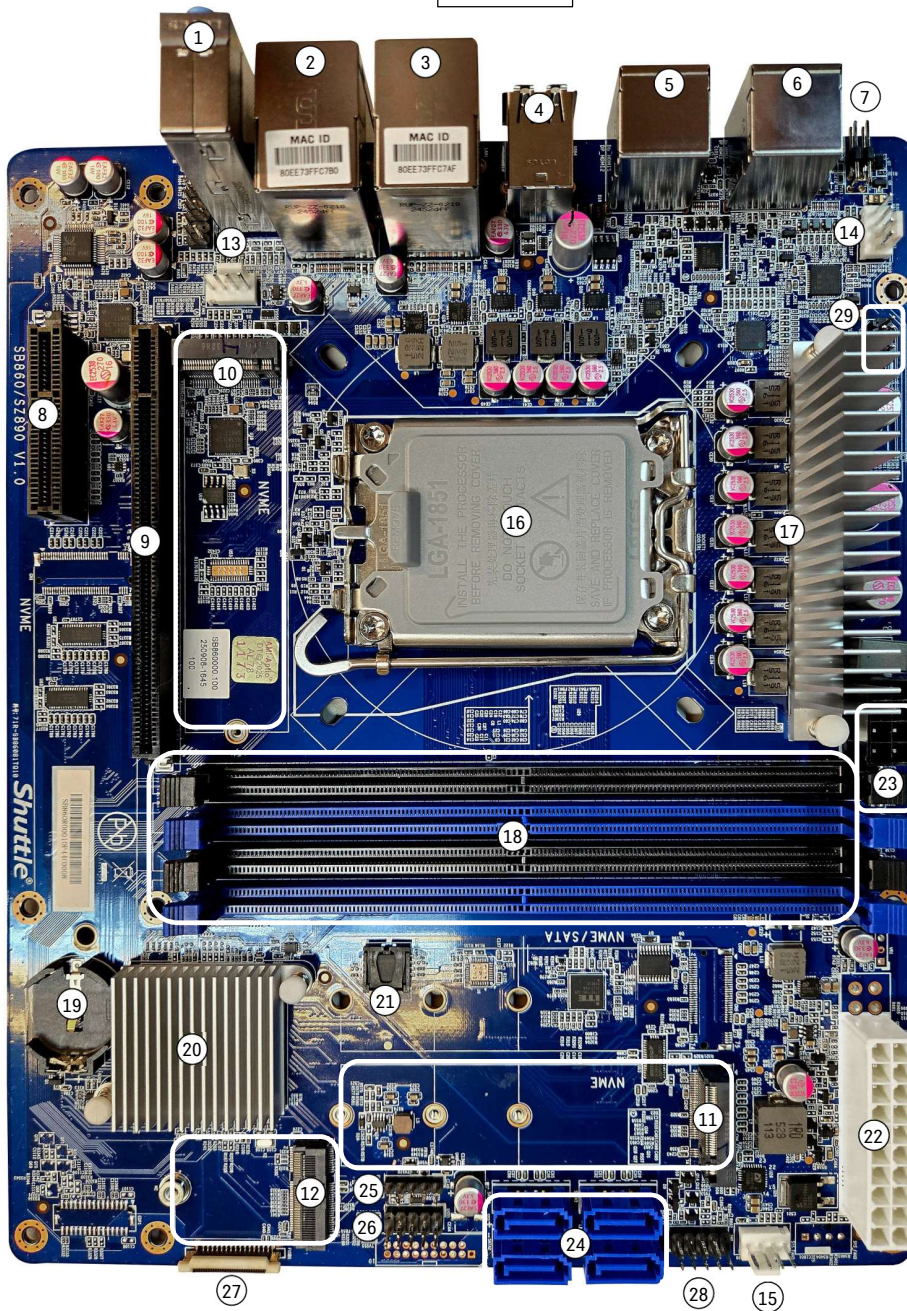
Back panel



9. Internal power supply unit (PSU)
10. AC power connector
11. 3x perforation for optional WLAN antenna
12. Heat-pipe cooling system
13. Hole for Kensington Lock
14. Perforation for optional COM port
15. 4-pin connector (2.54 mm pitch) for external power button, Clear CMOS button and 5V DC voltage
16. 2x DisplayPort 1.4a
17. 1x HDMI 2.1 (supports 8K/60Hz)
18. 1x HDMI 2.0b
19. 2x USB 2.0 port
20. 2x RJ45 2.5G LAN port (Intel 226)
21. 4x USB 3.2 Gen 2 Type-A port (10 Gbps)
22. Audio Line-in
23. Audio Line-out
24. Microphone input
25. PCI-Express X16 expansion slot (Gen 5)
26. PCI-Express X4 expansion slot (Gen 4)

## Mainboard

Back panel



### Back Panel Ports

1. Analog audio ports
2. USB 3.2 and 2.5G LAN ports
3. USB 3.2 and 2.5G LAN ports
4. USB 2.0 ports
5. DisplayPort and HDMI 2.0b
6. DisplayPort and HDMI 2.1
7. 4-pin connector (2.54 mm pitch) for external power button, Clear CMOS button and 5V DC voltage

### PCI-Express Expansion Slots

8. PCIe X4 Gen4 (open ended)
9. PCIe X16 Gen5

### M.2 Slots

10. M.2-2280 M-key supports PCIe Gen5 X4 with NVMe supports 80 mm length, only
11. M.2-2280 M-key supports PCIe Gen4 X4 with NVMe supports 42, 60 and 80 mm length
12. M.2-2230 E-key supports PCIe Gen4 X1 and USB 2.0

### Cooling fan connectors

13. for the CPU fan
14. for the rear chassis fan
15. for the front chassis fan

### Other items

16. Processor socket (LGA 1851)
17. CPU voltage regulator
18. Four DIMM sockets for DDR5 RAM
19. CMOS battery
20. Intel B860 chipset
21. Flash EPROM for the BIOS
22. ATX power connector (20-pin)
23. ATX-12V power connector (8-pin)
24. Four SATA ports for hard disks
25. USB 2.0 header (5-pin, 2.54 mm)
26. USB 2.0 front panel connectors
27. USB 3.2 front panel connectors
28. Power button & LED connectors
29. RS232 COM header (2x5-pin, 2 mm)

## SHUTTLE XPC CUBE BAREBONE SB860R8 — SPECIFICATIONS

<b>CHASSIS</b>	<p>Black aluminium chassis</p> <p>Front panel: brushed aluminium</p> <p>Front door for I/O ports (USB and Audio)</p> <p>Kensington Security Slot at the backpanel (also called K-Slot or Kensington lock) as a part of an anti-theft system</p> <p>Dimensions: 33.2 x 21,5 x 19.0 cm (LWH without feet) = 13.6 litre</p> <p>Height with rubber feet: 19.7 cm</p> <p>Weight: 3.9 kg net / 5.0 kg gross</p>
<b>MAINBOARD / CHIPSET</b>	<p>Mainboard with Shuttle form factor 195 x 244 mm, proprietary design for XPC SB860R8</p> <p>Chipset/Southbridge: Intel® B860</p> <p>Passive chipset cooling with heat sink</p> <p>The Northbridge is integrated in the processor.</p> <p>Solid Capacitors for sensitive areas provide excellent heat resistance for enhanced system durability</p>
<b>BIOS</b>	<p>AMI BIOS, SPI Interface, 32 MB Flash-EEPROM</p> <p>Supports Hardware Monitoring, Watch Dog</p> <p>Supports Power Fail Resume</p> <p>Supports boot up from external USB flash memory</p> <p>Supports Unified Extensible Firmware Interface (UEFI)</p> <p>Supports Firmware-TPM (fTPM) v2.0 [4]</p>
<b>POWER SUPPLY</b>	<p>Built-in 500 Watt Flex-ATX switching power supply [3]</p> <p>AC input voltage: 100~240V, 50~60 Hz</p> <p>80 PLUS Gold compliant, Active PFC circuit (Power Factor Correction)</p> <p>ATX main power connectors: 2x 10-pin and 2x 4-pin</p> <p>Graphics power connector: 6-pin and 8-pin (6+2)</p> <p>Other connectors: 4x SATA, 2x Molex</p>
<b>OPERATING SYSTEM</b>	<p>This system comes without operating system.</p> <p>It is compatible with Windows 11 (64-bit) and Linux (64-bit)</p>
<b>PROCESSOR SUPPORT</b>	<p>Processor Socket LGA1851</p> <p>Supports Intel Core Ultra 200 series 9/7/5 processors</p> <p>Code name "Arrow Lake-S"</p> <p>Maximum supported processor power consumption (Base TDP) = 125 W</p> <p>Does not support the unlock-function of Intel K-Series processors.</p> <p>Up to 24 cores (8 Performance-cores and 16 Efficient-cores)</p> <p>Neural Processing Unit (NPU) with 13 TOPS AI-Performance</p> <p>Note: processors with "F" identifier do not support integrated graphics [2]</p> <p>Please refer to the support list for detailed processor support information at <a href="https://global.shuttle.com">global.shuttle.com</a>.</p>
<b>HEAT-PIPE COOLING AND FANS</b>	<p>Shuttle I.C.E. (Integrated Cooling Engine) with heat pipe cooling technology (10 heat pipes)</p> <p>Optimized airflow thanks to three large fans with 4-pin connectors:</p> <ol style="list-style-type: none"> <li>1) Front (blows air into the case): 80 x 80 x 15 mm</li> <li>2) Rear (blows air out of the case): 92 x 92 x 25 mm</li> <li>3) Heat pipe (CPU fan blows toward CPU voltage regulator): 92 x 92 x 25 mm</li> </ol>
<b>MEMORY SUPPORT</b>	<p>4x 288-pin slot (UDIMM = Unbuffered DIMM)</p> <p>Supports DDR5-5600 (PC5-44800) SDRAM at 1.1 V</p> <p>Supports Dual Channel mode</p> <p>Supports a maximum of 48 GB per DIMM, maximum total size: 192 GB</p> <p>Note: Supports up to four unbuffered DIMM modules (no ECC or registered)</p>
<b>INTEGRATED GRAPHICS [2]</b>	<p>The features of the integrated Intel graphics function with Xe cores depend on the processor type used.</p> <p>Note: Certain processor models do not support integrated graphics [2]</p> <p>The PC features these graphics outputs:</p> <ul style="list-style-type: none"> <li>- 1x HDMI 2.1 supports 8K UHD with max. 7680x4320 Pixel at 60 Hz (4320p60)</li> <li>- 1x HDMI 2.0b supports 4K UHD with max. 4096x2160 Pixel at 60 Hz (2160p60)</li> <li>- 2x DisplayPort supports 4K UHD with max. 4096x2160 Pixel at 60 Hz (2160p60)</li> </ul> <p>Supports up to four independent displays with the integrated graphics function</p> <p>If an 8K display is used, only two additional 4K displays are supported.</p> <p>Supports more displays in combination with a discrete graphics card.</p> <p>DisplayPort and HDMI support multi-channel digital audio over the display cable.</p>

<b>PCI-E EXPANSION SLOTS</b>	<p>1x PCI-Express x16 Gen 5 slot            1x PCI-Express x4 Gen 4 slot, open-ended            Supports dual-slot (double-width) graphics cards (occupies the second PCI-Express slot)            The maximum size acceptable for display cards is 280 x 120 x 40 mm.            Graphics power connector: 6-pin and 8-pin (6+2) [3]            Please refer to the support list for detailed support information at <a href="http://global.shuttle.com">global.shuttle.com</a>.</p>
<b>DRIVE BAYS</b>	<p>Storage bays: 4x 3.5" (internal)            Using the optional accessory PHD3 two 2.5" drives can be installed into one 3.5" bay.</p>
<b>SATA CONNECTORS</b>	<p>4x Serial ATA 6G connector onboard (rev. 3.0, max. 6 Gbit/s)            Supports Intel Rapid Storage Technology (RST) with RAID 0/1/5/10, JBOD)</p>
<b>TWO M.2-2280M SSD SLOTS</b>	<p>Provides two internal M.2 2280 M slots for M.2 SSD cards.            Supports SSD cards with a width of 22 mm and PCIe interface (not SATA).  <u>Slot 1:</u>            - interface: PCIe Gen. 5.0 X4 with NVMe            - supported length: 80 mm (type 2280)            - location: next to the graphics card slot  <u>Slot 2:</u>            - interface: PCIe Gen. 4.0 X4 with NVMe            - supported length: 42, 60 or 80 mm (type 2242, 2260, 2280)            - location: next to the SATA connectors</p>
<b>M.2-2230E SLOT FOR WLAN CARDS</b>	<p>Interfaces: PCI-Express Gen. 4 X1 und USB 2.0            Supports M.2 cards with a width of 22 mm and a length of 30 mm (type 2230)            Supports WLAN extension cards (optional Shuttle accessory: WLN-M1)</p>
<b>HD AUDIO</b>	<p>Audio Codec: Realtek ALC888, 5.1 channel            Three analog audio connectors (3.5 mm) on the backpanel:            Line-in (blue), line-out (green) and microphone input (pink)            shared with 5.1 channel line-out (front, rear, center/bass)            Front panel: microphone input and head phone output (line-out)            DisplayPort and HDMI support multi-channel digital audio over the display cable.</p>
<b>DUAL 2.5G LAN</b>	<p>Two RJ45 connectors with 2 status LEDs each            Intel i226-LM Ethernet Controller supports 100/1000/2500 Mbit/s data transfer rate            Supports WAKE ON LAN (WOL) from S3/S4/S5 mode            Supports network boot by Preboot eXecution Environment (PXE)</p>
<b>FRONT PANEL CONNECTORS</b>	<p>Microphone input (3.5 mm)            Headphones output (3.5 mm)            1x USB 3.2 Gen 1 (5 Gbps), Type C            1x USB 3.2 Gen 1 (5 Gbps), Type A, blue            1x USB 2.0, Type A, black            Power button            Power indicator (Blue LED)            Hard disk drive indicator (Yellow LED)</p>
<b>BACK PANEL CONNECTORS</b>	<p>1x HDMI 2.1 (left side, supports 8K/60Hz)            1x HDMI 2.0b (right side)            2x DisplayPort 1.4 [1]            4x USB 3.2 Gen 2 (10 Gbps), Type A, red            4x USB 2.0 (Type A, black)            2x 2.5G LAN (RJ45)            3x Audio Ports (3.5 mm): Line-output, Line-input, Microphone-input            1x 4-pin connector (2.54 mm pitch) supports:            - external power on button            - Clear CMOS function            - +5V DC voltage for external components            1x perforation for optional serial RS232 port (COM Accessory: "H-RS232")            3x perforation for optional WLAN antennas (WLAN Accessory: "WLN-M1")</p>
<b>OTHER ONBOARD CONNECTORS</b>	<p>Occupied front panel connectors for USB, audio, buttons, LEDs            1x RS232 serial interface (2x5 pin header, 2.0 mm pitch)            3x fan connectors (4-pin header, all occupied)            1x USB 2.0 (5-pin header, 2.54 mm pitch)</p>

<b>SUPPLIED ACCESSORIES</b>	<p>Multi-language XPC Installation Guide (EN, DE, FR, ES, JP, KR, SC, TC)</p> <p>Windows 64-bit driver disk</p> <p>4x Serial ATA cables</p> <p>16x Screws 6-32 UNC for four 3.5" hard disks and 2x cable ties</p> <p>4x Screws M3x4 (black) for one 2.5" SSD</p> <p>3x Screws M3x5 (silver) for M.2 card</p> <p>AC Power Cord (with protective-earth contacts)</p> <p>Heatsink Compound</p> <p>Protector cap for the CPU socket (do not use if heatpipe cooling system is mounted)</p> <p>Tool: Phillips screwdriver</p>
<b>OPTIONAL ACCESSORIES</b>	<p><b>H-RS232:</b> Back panel adapter for serial RS232 port</p> <p><b>WLN-M1:</b> WLAN kit supports WLAN and Bluetooth with two external antennas</p> <p><b>PHD3:</b> Adapter for 2.5" drives such as SSDs</p> <p><b>CXP01:</b> Adapter cable for external power button</p>
<b>ENVIRONMENTAL SPECIFICATIONS</b>	<p>Permissible ambient temperature during operation: 0~40 °C</p> <p>Relative humidity: 10~90 % (non-condensing)</p>
<b>CERTIFICATIONS / COMPLIANCE</b>	<p>EMI: FCC, CE, BSMI, C-Tick</p> <p>Safety: ETL, CB, BSMI</p> <p>Other: RoHS, Energy Star 5.0, ErP</p> <p>This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office.</p> <p>The CE-mark approves the conformity by the EU directives:</p> <p>(1) 2014/30/EU relating to electromagnetic compatibility (EMC),</p> <p>(2) 2014/35/EU relating to Electrical Equipment designed for use within certain voltage limits (LVD),</p> <p>(3) 2009/125/EC relating to ecodesign requirements for energy-related products (ErP).</p>

#### [1] How to convert DisplayPort to HDMI/DVI

The DisplayPort output 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).

However, a monitor with a DisplayPort connector cannot be connected to the HDMI port with a simple, passive adapter.

#### [2] Integrated graphics is optional

Processors with model numbers ending with "F" (z.B. Intel Core Ultra 7 265F) do not support integrated graphics, so that the graphics outputs of the Shuttle XPC have no function. In this case, an additional discrete PCIe graphics card is mandatory.

#### [3] Online Power Calculator

The PCI Express x16 slot provides a maximum of 75 Watts to the graphics card, plus 75 Watts and 150 Watts from the 6-pin and 8-pin connector of the power supply - so the power consumption of the graphics card must not exceed 300 watts. The processor may have a maximum TDP of 125 Watts. If powerful PC components are used, then check with the "Power Supply Calculator" whether the built-in 500 Watt power supply supports this configuration, see: <http://global.shuttle.com/support/power>. Please also refer to the support list for detailed processor and graphics cards support information at <http://global.shuttle.com>.

#### [4] TPM Function

This product features Firmware-TPM (fTPM) v2.0. Besides this, it is prepared for a hardware TPM chip which can be fitted by factory on request if required.

## INTEL CORE ULTRA GEN. 2 DESKTOP PROCESSOR FAMILY

Socket LGA1851, Code Name "Arrow Lake-S" processor overview (Date: May 2025)

Each processor containing an NPU capable of upto 13 TOPS

PROCESSOR	MODEL	P-CORES/ THREADS	P-CORES Base/Turbo2.0	E- CORES	E-CORES Base/Turbo2.0	SMART CACHE	BASE TDP	MEMORY SUPPORT	Intel® Graphics Xe Cores / Clock Rate
Core Ultra 9	<b>285K</b>	8 / 8	3.7 – 5.5 GHz	16	3.2 – 4.6 GHz	36 MB	125 W	DDR5-5600/6400	4 Cores, max. 2.00 GHz
	<b>285</b>	8 / 8	3.7 – 5.4 GHz	16	1.9 – 4.6 GHz	36 MB	65 W	DDR5-5600/6400	4 Cores, max. 2.00 GHz
	<b>285T</b>	8 / 8	1.4 – 5.3 GHz	16	1.2 – 4.6 GHz	36 MB	35 W	DDR5-5600/6400	4 Cores, max. 2.00 GHz
Core Ultra 7	<b>265K</b>	8 / 8	3.9 – 5.4 GHz	8	3.3 – 4.6 GHz	30 MB	125 W	DDR5-5600/6400	4 Cores, max. 2.00 GHz
	<b>265KF</b>	8 / 8	3.9 – 5.4 GHz	8	3.3 – 4.6 GHz	30 MB	125 W	DDR5-5600/6400	<b>None</b>
	<b>265</b>	8 / 8	2.4 – 5.2 GHz	8	1.8 – 4.6 GHz	30 MB	65 W	DDR5-5600/6400	4 Cores, max. 1.95 GHz
	<b>265F</b>	8 / 8	2.4 – 5.2 GHz	8	1.8 – 4.6 GHz	30 MB	65 W	DDR5-5600/6400	<b>None</b>
	<b>265T</b>	8 / 8	1.5 – 5.2 GHz	8	1.2 – 4.6 GHz	30 MB	35 W	DDR5-5600/6400	4 Cores, max. 1.95 GHz
Core Ultra 5	<b>245K</b>	6 / 6	4.2 – 5.2 GHz	8	3.6 – 4.6 GHz	24 MB	125 W	DDR5-5600/6400	4 Cores, max. 1.90 GHz
	<b>245KF</b>	6 / 6	4.2 – 5.2 GHz	8	3.6 – 4.6 GHz	24 MB	125 W	DDR5-5600/6400	<b>None</b>
	<b>245</b>	6 / 6	3.5 – 5.1 GHz	8	3.0 – 4.5 GHz	24 MB	65 W	DDR5-5600/6400	4 Cores, max. 1.90 GHz
	<b>245T</b>	6 / 6	2.5 – 5.1 GHz	8	1.9 – 4.5 GHz	24 MB	35 W	DDR5-5600/6400	4 Cores, max. 1.90 GHz
	<b>235</b>	6 / 6	3.4 – 5.0 GHz	8	2.9 – 4.4 GHz	24 MB	65 W	DDR5-5600/6400	3 Cores, max. 2.00 GHz
	<b>235T</b>	6 / 6	2.2 – 5.0 GHz	8	1.6 – 4.4 GHz	24 MB	35 W	DDR5-5600/6400	3 Cores, max. 2.00 GHz
	<b>225</b>	4 / 4	3.3 – 4.9 GHz	4	1.8 – 4.4 GHz	20 MB	65 W	DDR5-5600/6400	2 Cores, max. 1.80 GHz
	<b>225F</b>	4 / 4	3.3 – 4.9 GHz	4	2.7 – 4.4 GHz	20 MB	65 W	DDR5-5600/6400	<b>None</b>
	<b>225T</b>	4 / 4	2.5 – 4.9 GHz	4	2.7 – 4.4 GHz	20 MB	35 W	DDR5-5600/6400	2 Cores, max. 1.80 GHz

**K** = unlocked, **T** = Power optimized lifestyle, **F** = without integrated graphics, **Base TDP** = Base Thermal Design Power (max. Base Power Consumption).

Note: The Shuttle XPC cube Barebone **SB860R8** does not support the Unlock-function of Intel **K-Series** processors.

**P-Cores:** Performance-Cores (without Hyper-Threading/SMT support), **E-Cores:** Efficient-Cores

**Core Clock:** the listed core frequency ranges from Base Frequency to Turbo Boost 2.0 Frequency (Turbo Boost 3.0/TVB Frequency is not mentioned here)

**Base TDP:** Processor Base Power dissipation that the processor is validated to not exceed at Base Frequency (Max. Turbo Power is not mentioned here)

Please refer to the support list for detailed processor support information at [global.shuttle.com](https://global.shuttle.com).