

**First Shuttle XPC slim with HDMI 2.0**

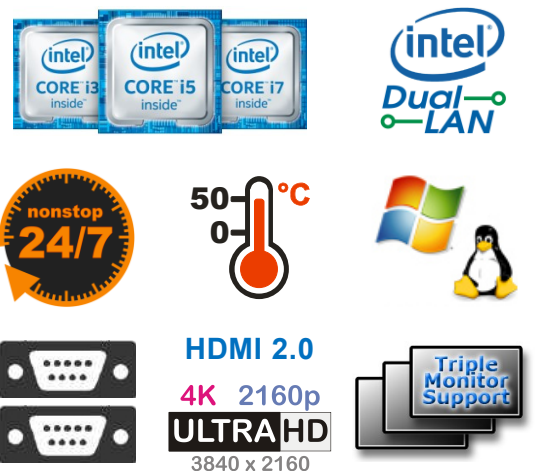
The Shuttle XPC slim Barebone DH270 is a robust 1.3l Barebone PC with H270 chipset for Intel LGA1151 desktop processors, codenamed "Skylake" and "Kaby Lake". Three HDMI ports allow for three independent displays to be operated at the same time. One HDMI 2.0 port supports Ultra HD at 60 Hz frame rate. The DH270 also offers Dual Intel LAN, two COM ports and one USB port type C. Its slim metal chassis comes with a VESA mount included, provides versatile connectivity and reliable operation in environments with ambient temperatures of up to 50 °C. This platform is targeted at professional applications such as Digital Signage, POS, POI, gambling machines, office, healthcare and industry.

**XPC slim Barebone  
DH270**



Images for illustration only. Processor, memory, storage and operating system not included.

Feature Highlights	
<b>Slim Design</b>	<ul style="list-style-type: none"> <li>• Slim 1.3-litre metal chassis, black</li> <li>• 190 x 165 x 43 mm (LWH)</li> <li>• Operating temperature: 0~50 °C</li> <li>• Including VESA mount (75/100 mm)</li> </ul>
<b>Operating System</b>	<ul style="list-style-type: none"> <li>• The operating system is not included</li> <li>• Supports Windows 10 and Linux (64-bit)</li> <li>• Windows 7 with Skylake CPUs only</li> </ul>
<b>Processor &amp; Graphics</b>	<ul style="list-style-type: none"> <li>• Supports LGA 1151 Skylake or Kaby Lake processors up to a max. TDP of 65 W</li> <li>• Supports Core i7 / i5 / i3, Pentium, Celeron</li> <li>• Heatpipe cooling system with two fans</li> <li>• Integrated Intel HD graphics supports 4K and can operate three independent displays simultaneously</li> </ul>
<b>Chipset</b>	<ul style="list-style-type: none"> <li>• Intel H270 Chipset, Triple Monitor Support</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• 2x 260-pin SO-DIMM slots</li> <li>• Supports DDR4-2133/2400, max. 2x 16 GB</li> </ul>
<b>Storage Bays/Slots</b>	<ul style="list-style-type: none"> <li>• 1x 2.5" bay for SATA hard disk or SSD</li> <li>• Two Mini expansion slots: 1x M.2 2280BM, supports PCIe x4 &amp; SATA 1x M.2-2230AE for optional WLAN [WLN-M]</li> </ul>
<b>I/O Connectors</b>	<ul style="list-style-type: none"> <li>• 1x HDMI 2.0, 2x HDMI 1.4b, optional VGA</li> <li>• SD card reader, 2x audio (line out, mic)</li> <li>• 3x USB 3.0 (1x Type C), 4x USB 2.0</li> <li>• 2x Intel Gigabit LAN (RJ45), supports WOL</li> <li>• 2x COM port (RS232 + RS232/RS422/RS485)</li> <li>• Connector for external power button</li> <li>• "Always on" Jumper onboard</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>• External 90 W fanless power adapter</li> </ul>



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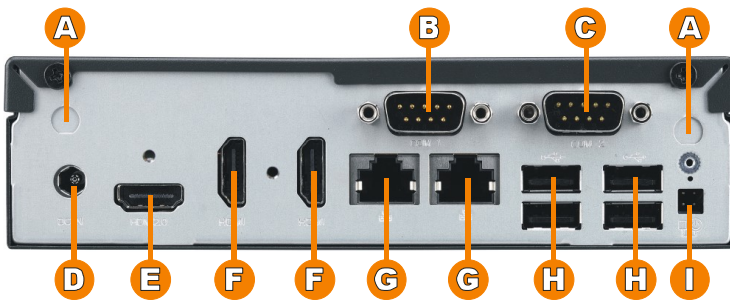
Shuttle XPC slim Barebone DH270 – Front and Back Panel

Front view



- 1 Microphone input
- 2 Headphones output
- 3 Power LED
- 4 Hard disk LED
- 5 Power Button
- 6 SD Card Reader
- 7 1x USB 3.0 Type C
- 8 2x USB 3.0 Type A

Rear view

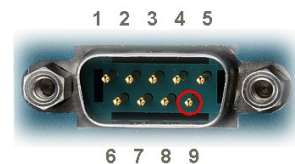


- A 2x WLAN perforation
- B COM1 supports RS232 (or optional VGA port for analog displays [5])
- C COM2 supports RS232/RS422/RS485
- D DC power input
- E HDMI 2.0 video output
- F HDMI 1.4b video outputs
- G 2x RJ45 Gigabit LAN
- H 4x USB 2.0
- I Connector for external power button, Clear CMOS and 5 V DC voltage (4 pins, 2.54 mm pitch)
- J 2x hole for Kensington Lock
- K VESA mount (two parts)

Right side



Left side

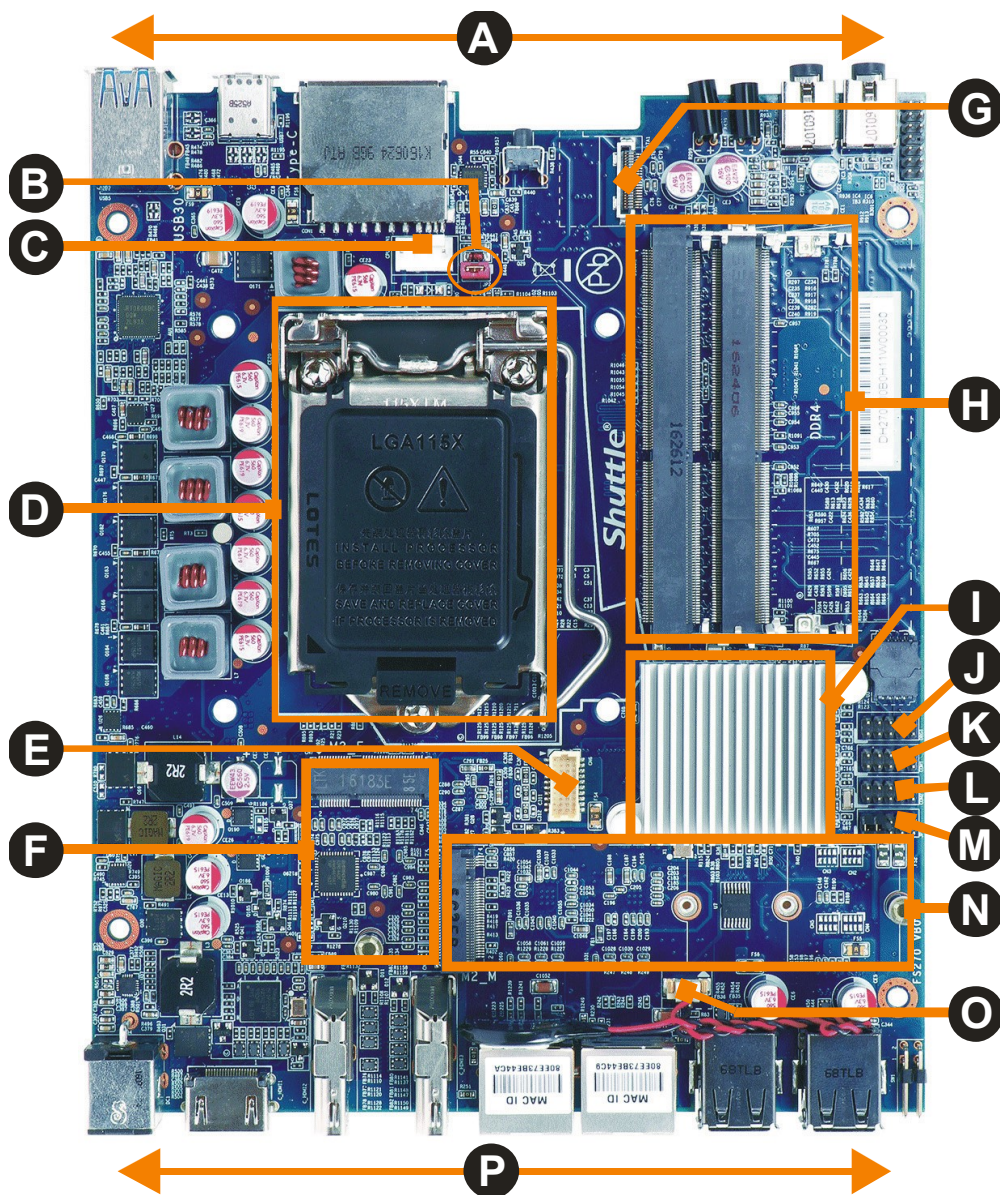


**COM port Pin 9 Configuration**  
 Pin 9 is a multi-functional signal. Based on jumper JP1 configuration on the mainboard, it can be configured as Ring Indicator (RI) or external power supply with either 5 V or 12 V voltage level (each COM port separately).





Shuttle XPC slim Barebone DH270 – Mainboard



<b>A</b>	Front Panel
<b>B</b>	Always Power-On Jumper
<b>C</b>	Fan Connector
<b>D</b>	LGA 1151 Processor Socket
<b>E</b>	VGA Connector
<b>F</b>	M.2 2230 Slot (for optional WLAN)
<b>G</b>	SATA 3.0 (6 Gbps) Connector
<b>H</b>	SO-DIMM Socket for DDR4 Memory

<b>I</b>	Intel H270 Chipset
<b>J</b>	Debug Interface
<b>K</b>	COM1 serial Port (RS232,RS422,RS485)
<b>L</b>	COM2 serial Port (RS232)
<b>M</b>	COM1/COM2 Pin 9 Configuration
<b>N</b>	M.2 2280 Slot
<b>O</b>	Battery Connector
<b>P</b>	Back Panel

### Required Components

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

**LGA 1151 processor**  
 “Skylake” or “Kaby Lake”  
 TDP max. 65 W  
 Core i7 / i5 / i3, Pentium  
 or Celeron



**2.5” SATA hard disk  
 or Solid State Disk (SSD)**  
 (max. height: 12.5 mm)

**Windows 10 / Linux  
 Operating System**



**M.2 2280/2260/2242  
 SSD storage**



**Up to two DDR4-2133/2400  
 SO-DIMM memory modules**  
 max. 16 GB each



### Optional Accessories

**VGA port Accessory PVG01**  
 Installing PVG01 means  
 one serial port (COM) less  
 can be used at the backpanel.



**WLAN-Accessory WLN-M**  
 M.2-2230 card supports  
 IEEE 802.11 b/g/n/ac  
 including 2 antennas



**Vertical Stand PS02**  
 for vertical operation



**DIN-Rail Mounting Kit DIR01**  
 allows the installation on a  
 standard 35 mm DIN-Rail



**Rack Mount Kit PRM01**  
 2U front plate to install two 1.3L  
 Shuttle XPCs in a 19" cabinet.



**Cable for external push  
 button switch CXP01**  
 (without button)





## Shuttle Slim-PC Barebone DH270 – Product Features

1.3 L



### Robust, stylish and particularly small

You should have held it in your own hands to see how small it actually is. Barely measuring a volume of 1.35 litre, its steel chassis gives it the appropriate stability required for professional applications in digital signage. Despite its dimensions of 19 x 16.5 x 4.3 cm (LWH), the overall system performance is very high thanks to support of Intel Core desktop processors. The interior of the DH270 is very tidy too so that it won't take long to set it up. Its sleek and stylish looks lets it easily find a place in both home and office environments.



### Low noise thanks to heatpipe cooling system

An active dual-fan heatpipe cooling system ensures whisper-quiet operation and system stability.



### Extended temperature range and reliability

The DH270 is outstandingly robust thanks to its rugged chassis. With an ambient temperature range from 0-50 °C it is suitable for use in the most demanding environments. Solely designed with all solid capacitors, DH270 is guaranteed to deliver maximum stability, reliability and longer system lifetime for long-term applications like digital signage.

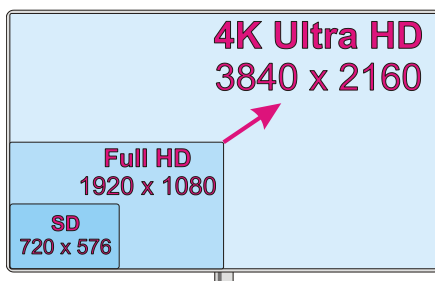
**Caution:** for high ambient temperatures over 40°C we strongly recommend to use SSDs (supporting at least 70°C).



### Triple Display with 3x HDMI (optional VGA)

DH270 features three HDMI digital video outputs. This multi-monitoring technology offers multiple display support on up to three separate monitors. This helps improve on productivity by allowing for spreading multiple windows across three monitors while working with them simultaneously.

Furthermore, the DH270 supports an optional D-Sub/VGA port.



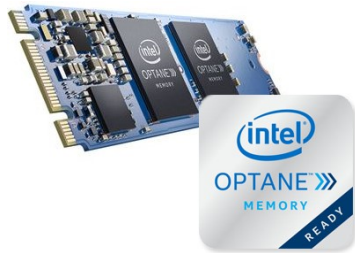
### Supports 4K Ultra HD at 60Hz

The DH270 supports displays running at 4K (3840 x 2160 / 2160p) high resolution at 60Hz frames per second when connected to its HDMI 2.0 video output. Being the successor to the Full HD standard, Ultra HD delivers a four times higher resolution with a wider colour space and colour depth.



**One M.2-2280-Slot for SSD card**

The M.2-2280 BM slot supports one M.2 SSD storage card with SATA or with the more advanced PCIe interface. Type 2280 means, it supports the usual M.2 cards with a width of 22mm and a length of 80mm, but also 2242 and 2260 standard cards are supported. The DH270 is prepared for the Intel® Optane™ Technology.



**Intel® Optane™ Ready**

With a 7th Gen Intel® Core™ "Kaby Lake" processor, the DH270 supports the latest Intel® Optane™ memory technology which is able to accelerate your system to deliver amazing speed.



**VESA mount**

The supplied 75/100mm VESA mount allows for installation on to walls or monitors which is particularly interesting for the industry segment, company buildings and public institutions. Other than this, the chassis bears numerous threaded holes (M3) enabling it to be fitted almost anywhere.



**Kensington Lock**

This is a small, metal-reinforced hole as part of an anti-theft system. The DH270 provides an appropriate hole on both side of its chassis. The lock and cable are not included.

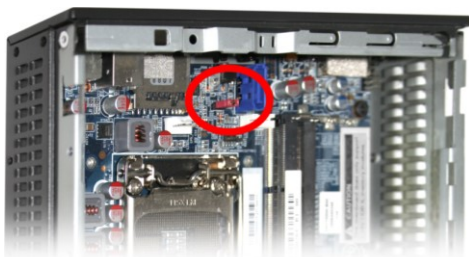


**External power button by separate remote line**

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 DH270 (pitch 2.54 mm). Furthermore, this connector provides a Clear CMOS function and +5V DC voltage supply for external devices.



- Front Panel -



**Power on after Power fail**

The BIOS setup provides a "Power-On after Power Fail" function that can be found under "Power Management Configuration". As the name indicates, this function determines the PC's behaviour after power failure: (1) unconditional power on, (2) restore former status (3) keep system turned off (4) Power-On by LAN or (5) Power-On by Real-Time-Clock. As a matter of the nature of this function, it may fail after short power failures. This is why the DH270 also comes with a hardware-based solution. By removing Jumper JP2 (see image) the system will start unconditionally once power is applied.

## Product Comparison

	DH110SE	DH110	DH170	DQ170	DH270
<b>Availability</b>	Nov 2016	Jan 2016	Oct 2015	Oct 2016	Q3 2017
<b>Processor Support</b>	Socket LGA 1151 supports Intel Core i7 / i5 / i3, Pentium, Celeron 6 <sup>th</sup> gen. "Skylake" or 7 <sup>th</sup> gen. "Kaby Lake", TDP max. 65 W				
<b>OS Support</b>	Windows 7, 10 and Linux (64-bit only) Note: Windows 7 is not supported in connection with Kaby Lake processors.				
<b>Chipset</b>	H110	H110	H170	Q170	H270
<b>TPM-Support</b>	Firmware	Firmware	Firmware	Hardware	Firmware
<b>Multi-Display</b>	2 Displays	2 Displays	3 Displays	3 Displays	3 Displays
<b>Memory</b>	2x SO-DIMM max. 2x 16GB DDR4-2133	2x SO-DIMM max. 2x 16GB DDR3L-1600	2x SO-DIMM max. 2x 16GB DDR3L-1600	2x SO-DIMM max. 2x 16GB DDR3L-1600	2x SO-DIMM max. 2x 16GB <b>DDR4-2133/2400</b>
<b>2.5" drive bay</b>	1x SATA v3.0	1x SATA v3.0	1x SATA v3.0	1x SATA v3.0	1x SATA v3.0
<b>M.2 SSD slot</b>	M.2-2260 SATA	M.2-2260 SATA/PCIe	M.2-2260 SATA/PCIe NVMe-Support	M.2-2260 SATA/PCIe NVMe-Support	<b>M.2-2280</b> SATA/PCIe NVMe-Support
<b>Network</b>	Single LAN RTL8111G	Dual LAN Intel i211/i219LM	Dual LAN Intel i211/i219LM	Dual LAN Intel i211/i219LM	Dual LAN 2x Intel i211
<b>Front Panel</b>	2x Audio 2x USB 3.0 2x USB 2.0 Card reader	2x Audio 2x USB 3.0 2x USB 2.0 Card reader	2x Audio 2x USB 3.0 2x USB 2.0 Card reader	2x Audio 2x USB 3.0 2x USB 2.0 Card reader	2x Audio 3x USB 3.0 (1x Type C) Card reader
<b>Back Panel</b>	HDMI 1.4b DP 1.2 4x USB 2.0 1x LAN	HDMI 1.4b DP 1.2 2x USB 3.0 1x USB/eSATA 2x LAN 2x COM	HDMI 1.4b 2x DP 1.2 2x USB 3.0 2x USB 2.0 2x LAN 2x COM	HDMI 1.4b 2x DP 1.2 2x USB 3.0 2x USB 2.0 2x LAN 2x COM	<b>1x HDMI 2.0</b> 2x HDMI 1.4b 4x USB 2.0 2x LAN 2x COM
<b>Power Adapter</b>	90 W / 19 W	90 W / 19 W *)	90 W / 19 W	90 W / 19 W	90 W / 19 W *)
<b>VESA mount</b>	Optional	Yes	Yes	Yes	Yes
<b>Optional WLAN</b>	WLN-M	WLN-M	WLN-P	WLN-P	WLN-M
<b>Optional VGA</b>	-	PVG01	PVG01	PVG01	PVG01
<b>Opt. DIN-Rail Mounting Kit</b>	DIR01	DIR01	DIR01	DIR01	DIR01

\*) DH110 and DH270 support 84 W / 12 V power adapters as well

## Shuttle XPC slim Barebone DH270 - Specifications

<p><i>Chassis</i></p>	<p>Black chassis made of steel  Dimensions: 190 x 165 x 43 mm (LWH) = 1.35-litre  Weight: 1.3 kg net and 2.04 kg gross  Two holes for Kensington Locks and numerous threaded holes (M3) at both sides of the chassis</p>
<p><i>Operation System</i></p>	<p>This system comes without operating system.  It is compatible with Windows 10 and Linux (64-bit).  Note: Windows 7 is only supported in combination with 6th generation Intel Core processors "Skylake".  For an additional note on Windows 7, please see [1]</p>
<p><i>Mainboard, Chipset, BIOS</i></p>	<p>Chipset: Intel® H270 Chipset (code name "Union Point")  Platform Controller Hub (PCH) as Single-Chip-Solution  AMI BIOS in 8 Mbit EEPROM with SPI interface  All capacitors are high quality solid capacitors  Supports hardware monitoring and watch dog functionality  Supports Unified Extensible Firmware Interface (UEFI)  Supports power on after power failure [4]  Supports Firmware-TPM (fTPM) Version 2.0</p>
<p><i>Power Adapter</i></p>	<p>External 90 W power adapter (fanless)  Input: 100~240 V AC, 50/60 Hz  Output: 19 V DC, 4.74 A, max. 90 W  DC Connector: 5.5/2.5 mm (outer/inner diameter)  Remark: The DC-input of the computer supports an external power source with either 12V±5% or 19V±5%.</p>
<p><i>Processor Support</i></p>	<p>Socket LGA 1151 (H4) supports  Intel Core i7 / i5 / i3, Pentium and Celeron processors  - 6th generation, code name "Skylake"  - 7th generation, code name "Kaby Lake"  Maximum supported processor power consumption (TDP) = 65 W  14 nm process technology, up to 8 MB of L3 cache  Not compatible with Intel Xeon E3 V5 processors for socket LGA 1151 and processors with the older Socket LGA 1150.  Does not support the unlock-function of Intel K-Series processors.  The processor integrates PCI-Express, memory controller and the graphics engine on the same die (performance features depending on processor type)  Please refer to the support list for detailed processor support information at <a href="http://global.shuttle.com">global.shuttle.com</a>.</p>
<p><i>Processor Cooling</i></p>	<p>Heatpipe processor cooling with two 60 mm fans on the upper side of the chassis</p>



<p><i>Memory Support</i></p>	<p>2x SO-DIMM slot with 260 pins                  Supports DDR4-2133/2400 (PC4-17066/19200) SDRAM at 1.2 V                  Supports maximum total size of 32 GB (max. 16 GB per module)                  Supports Dual Channel mode                  Supports two unbuffered DIMM modules (no ECC)</p>
<p><i>Integrated Graphics</i></p>	<p>The features of the integrated graphics function depend on the processor type used.                  Three digital video outputs: 1x HDMI 2.0 und 2x HDMI 1.4b                  - supports up to three independent displays simultaneously                  - HDMI 1.4b supports 4K UHD resolution at 30 Hz (2160p/30)                  - HDMI 2.0 supports 4K UHD resolution at 60 Hz (2160p/60)                  - supports Blu-ray (BD) playback with HDCP                  - supports HD video plus multi-channel digital audio via a single cable                  Optional analog D-Sub/VGA video output [3]</p>
<p><i>2.5" Storage Bay</i></p>	<p>1x 6.35 cm / 2.5" storage bay supports one hard disk or SSD drive                  Device height: 12.5 mm (max.)                  1x Serial-ATA III connector, max. 6 Gb/s (600 MB/s) bandwidth                  With Serial-ATA power connector (onboard)</p>
<p><i>Two M.2 Slot</i></p>	<p>This XPC features two M.2 expansion slots:                  (1) M.2 2280 BM slot                  - Interfaces: PCI-Express Gen. 2.0 X4 (max. 16 Gbit/s) and SATA v3.0 (max. 6 Gbit/s)                  - supports M.2 cards with a width of 22 mm and a length of 42, 60 or 80 mm (type 2242, 2260, 2280)                  - supports SATA SSDs (BM-Key) or PCIe SSDs (M-Key)                  (2) M.2 2230 AE slot                  - Interfaces: PCI-Express Gen. 2.0 X1 und USB 2.0                  - supports M.2 cards with a width of 22 mm and a length of 30 mm (type 2230)                  - supports an optional WLAN card (accessory WLN-M [4])</p>
<p><i>Audio</i></p>	<p>Audio Realtek® ALC 662 5.1 channel High-Definition Audio                  Two analog audio connectors (3.5 mm) at the front panel:                  1) 2-channel line out (headphones)                  2) microphone input                  Digital multi-channel audio output: by HDMI.</p>
<p><i>Dual Gigabit LAN Controller</i></p>	<p>Dual network with two RJ45 ports                  Used network chips:                  2x Intel i211 Ethernet Controller with MAC, PHY and PCIe interface                  Supports 10 / 100 / 1.000 MBit/s operation                  Supports WAKE ON LAN (WOL)                  Supports network boot by Preboot eXecution Environment (PXE)                  Supports Teaming mode [5]</p>
<p><i>Card Reader</i></p>	<p>Integrated card reader                  Supports SD, SDHC and SDXC memory flash cards                  Supports boot up from SD card</p>

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<p><i>Front Panel Connectors</i></p>	<p>Microphone input          Audio Line-out (headphones)          2x USB 3.0 type A          1x USB 3.0 type C          SD card reader          Power button          Power LED (blue)          HDD LED (yellow)</p>
<p><i>Back Panel Connectors</i></p>	<p>1x HDMI 2.0 (supports UltraHD resolution at 60 Hz)          2x HDMI 1.4b          (with two screw holes for HDMI connector with locking screws)          Optional 1x D-Sub VGA connector (Accessory PVG01 [3])          4x USB 2.0          2x Gigabit LAN (RJ45)          2x RS232 serial port, 9-pin D-Sub (5/12 V, 1x RS422/RS485) [6]          DC-input connector for external power adapter          4-pin connector (2.54 mm pitch) supports          - external power on button          - Clear CMOS function          - 5 V DC voltage for external components          2x perforation for optional Wireless LAN antennas          2x hole for Kensington Locks (at the side)</p>
<p><i>Other Onboard Connectors</i></p>	<p>1x jumper JP2 – power-on-after-power-fail (hardware solution) [4]          1x analog VGA graphics output CN6 (2x 10-pin, 1 mm pitch) [3]          2x serial interface (COM) occupied by back panel connectors          1x fan connector (4-pin) occupied by cooling system          1x connector for CMOS battery (occupied)          1x audio connector (line-out/microphone, 2x 7-pin)</p>
<p><i>Supplied Accessories</i></p>	<p>Multi-language user guide (EN, DE, FR, ES, JP, KR, SC, TC)          VESA mount for 75/100mm standard (two metal brackets)          Four thumbscrews M3 x 5 mm (screws together VESA mount and PC)          Four screws M4 x 10 mm (to affix VESA mount on the PC)          Four screws M3 x 4 mm (to mount a 2.5" drive into the bay)          Driver DVD (Windows 10 64-bit)          Serial ATA cable for 2.5" drive including power cable          External 90 W power adapter with power cord          Protection cap for CPU socket (do not use, if heatpipe or fan is mounted)          Heatsink compound</p>
<p><i>Optional Accessory</i></p>	<p><b>(1) WLN-M:</b> Wireless LAN kit consisting of a M.2-2230 WLAN card, two antennas and appropriate cables. Supports IEEE 802.11b/g/n/ac in the 2.4 / 5 GHz band and Bluetooth 4.0. [7]  <b>(2) PVG01:</b> optional D-Sub VGA video output [3]  <b>(3) CXP01:</b> adapter cable for external power button  <b>(4) PRM01:</b> 2U rack mount front plate for two Shuttle XPC slim PCs  <b>(5) DIR01:</b> DIN-Rail mounting kit</p>

<b>Environmental Specifications</b>	<p>Operating temperature range: 0~50 °C [8] Relative humidity, non-condensing: 10~90 %</p>
<b>Conformity Certifications</b>	<p>EMI: FCC, CE, BSMI, C-Tick Safety: ETL, CB, BSMI Other: RoHS, Energy Star, 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. The CE-mark approves the conformity by the EU directives:</p> <p>(1) 2004/108/EC relating to electromagnetic compatibility (EMC), (2) 2006/95/EC relating to Electrical Equipment designed for use within certain voltage limits (LVD), (3) 2009/125/EC relating to ecodesign requirements for energy-related products (ErP)</p>

**Footnotes:****[1] Installation of Windows 7**

The Intel® 100/200 chipset series does no longer support the Enhanced Host Controller Interface (EHCI) which is the driver software for USB 2.0. The new chipset only supports the updated Extensible Host Controller Interface (xHCI for USB 3.0) which is not supported by the original Windows 7 installation disk. This means, that peripheral devices connected by USB (like keyboard, mouse and external optical drive) will not work during the Windows 7 Installation. As a solution, please add the required USB 3.0 drivers to the Windows 7 installation files - this procedure is explained in the Shuttle FAQ section at <http://go.shuttle.eu/skylakewin7en>.

Note: Windows 7 is only supported with processors of the 6th generation (Skylake), not with processors of the 7th generation (Kaby Lake).

**[2] HDMI output** supports DVI-D with optional adapter

**[3] Optional D-Sub/VGA connector**

The mainboard features one analog graphics port CN6 on the mainboard. This signal can be lead to the outside as a 15-pin D-Sub VGA connector at the backpanel by using an optional adapter PVG01. However doing so means one serial port (COM) less can be used at the backpanel.

**[4] Power-on-after-power-fail**

The BIOS setup provides a "Power-on-after-power-fail" function that can be found under "Power Management Configuration". As the name indicates, this function determines the PC's behaviour after power failure: (1) unconditional power on, (2) restore former status or (3) keep system turned off. As a matter of the nature of this function, it may fail after short power failures. This is why the DH270 also comes with a hardware-based solution. By removing Jumper JP2 (on the mainboard behind the power button), the system will start unconditionally once power is supplied.

**[5] Teaming Mode**

The teaming function allows you to group both available network adapters together to function as one single adapter. The benefit of this approach is that it enables load balancing and failover.

Driver download: <https://downloadcenter.intel.com/download/21642>

**[6] Serial Ports**

This PC features two serial RS232 ports with 9-pin D-Sub connectors at the back panel. The left COM port (COM1) can also be configured as RS422 and RS485 in the BIOS setup. The COM ports are protected by black plastic caps. Pin 9 of the D-Sub COM-Port is a multi-functional signal. Based on the Jumper JP1 configuration on the mainboard, it can be configured as Ring Indicator (RI) or external power supply with a voltage level of either 5 V or 12 V. Each COM port can be configured separately. The maximum current is 500 mA per connector.

**[7] Optional Wireless LAN module**

This Shuttle XPC slim Barebone supports the optional Shuttle XPC Accessory WLN-M which consists of a M.2-2230 card with IEEE 802.11ac and BT4.0 functionality and two external antennas with appropriate antenna cables.

**[8] Notice - operating temperature**

For ambient temperatures over 40 °C we strongly recommend to use SSDs (supporting at least 70 °C) and rugged SO-DIMM memory modules with a temperature range of up to 95 °C.



## 6<sup>th</sup> Generation Intel Core Desktop Processor Family

Socket LGA 1151 14 nm "Skylake-S" processor overview  
Processors with a TDP > 65 W are **not** supported (marked in red)

Name	Model	Cores/Threads	CPU Clock	Turbo Clock	Cache	TDP	Graphics Engine	Graphics Clock
Core i7	6700K	4 / 8	4.0 GHz	4.2 GHz	8 MB	91 W	HD 530	350~1150 MHz
	6700	4 / 8	3.4 GHz	4.0 GHz	8 MB	65 W	HD 530	350~1150 MHz
	6700T	4 / 8	2.8 GHz	3.6 GHz	8 MB	35 W	HD 530	350~1100 MHz
Core i5	6600K	4 / 4	3.5 GHz	3.9 GHz	6 MB	91 W	HD 530	350~1150 MHz
	6600	4 / 4	3.3 GHz	3.9 GHz	6 MB	65 W	HD 530	350~1150 MHz
	6600T	4 / 4	2.7 GHz	3.5 GHz	6 MB	35 W	HD 530	350~1100 MHz
	6500	4 / 4	3.2 GHz	3.6 GHz	6 MB	65 W	HD 530	350~1150 MHz
	6500T	4 / 4	2.5 GHz	3.1 GHz	6 MB	35 W	HD 530	350~1100 MHz
	6400	4 / 4	2.7 GHz	3.3 GHz	6 MB	65 W	HD 530	350~1150 MHz
	6400T	4 / 4	2.2 GHz	2.8 GHz	6 MB	35 W	HD 530	350~1100 MHz
Core i3	6320	2 / 4	3.9 GHz	-	4 MB	65 W	HD 530	350~1150 MHz
	6300	2 / 4	3.8 GHz	-	4 MB	65 W	HD 530	350~1150 MHz
	6300T	2 / 4	3.3 GHz	-	4 MB	35 W	HD 530	350~1100 MHz
	6100	2 / 4	3.7 GHz	-	4 MB	65 W	HD 530	350~1150 MHz
	6100T	2 / 4	3.2 GHz	-	4 MB	35 W	HD 530	350~1100 MHz
Pentium	G4520	2 / 2	3.6 GHz	-	3 MB	51 W	HD 530	350~1150 MHz
	G4500	2 / 2	3.5 GHz	-	3 MB	51 W	HD 530	350~1150 MHz
	G4500T	2 / 2	3.0 GHz	-	3 MB	35 W	HD 530	350~1100 MHz
	G4400	2 / 2	3.3 GHz	-	3 MB	51 W	HD 530	350~1150 MHz
	G4400T	2 / 2	2.9 GHz	-	3 MB	35 W	HD 530	350~1100 MHz
Celeron	G3920	2 / 2	2.9 GHz	-	2 MB	51 W	HD 530	350~1050 MHz
	G3900	2 / 2	2.8 GHz	-	2 MB	51 W	HD 530	350~1050 MHz
	G3900T	2 / 2	2.6 GHz	-	2 MB	35 W	HD 530	350~950 MHz

K = unlocked clock multiplier, T = Power optimized lifestyle, TDP = Thermal Design Power (max. power consumption)  
Note: The Shuttle XPC slim Barebone DH270 does not support the unlock-function of Intel K-Series processors.  
Please refer to the support list for detailed processor support information at [global.shuttle.com](http://global.shuttle.com).

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## 7<sup>th</sup> Generation Intel Core Desktop Processor Family

Socket LGA 1151 14 nm "Kaby Lake-S" processor overview  
Processors with a TDP > 65 W are **not** supported (marked in red)

Name	Model	Cores/ Threads	CPU Clock	Turbo Clock	Cache	TDP	Graphics Engine	Graphics Clock
Core i7	7700K	4 / 8	4.2 GHz	4.5 GHz	8 MB	91 W	HD 630	350~1150 MHz
	7700	4 / 8	3.6 GHz	4.2 GHz	8 MB	65 W	HD 630	350~1150 MHz
	7700T	4 / 8	2.9 GHz	3.8 GHz	8 MB	35 W	HD 630	350~1150 MHz
Core i5	7600K	4 / 4	3.8 GHz	4.2 GHz	6 MB	91 W	HD 630	350~1150 MHz
	7600	4 / 4	3.5 GHz	4.1 GHz	6 MB	65 W	HD 630	350~1150 MHz
	7600T	4 / 4	2.8 GHz	3.7 GHz	6 MB	35 W	HD 630	350~1100 MHz
	7500	4 / 4	3.4 GHz	3.8 GHz	6 MB	65 W	HD 630	350~1100 MHz
	7500T	4 / 4	2.7 GHz	3.3 GHz	6 MB	35 W	HD 630	350~1100 MHz
	7400	4 / 4	3.0 GHz	3.5 GHz	6 MB	65 W	HD 630	350~1000 MHz
	7400T	4 / 4	2.4 GHz	3.0 GHz	6 MB	35 W	HD 630	350~1000 MHz
Core i3	7350K	2 / 4	4.2 GHz	-	4 MB	60 W	HD 630	350~1050 MHz
	7320	2 / 4	4.1 GHz	-	4 MB	51 W	HD 630	350~1050 MHz
	7300	2 / 4	4.0 GHz	-	4 MB	51 W	HD 630	350~1050 MHz
	7300T	2 / 4	3.5 GHz	-	4 MB	35 W	HD 630	350~1100 MHz
	7101E	2 / 4	3.9 GHz	-	3 MB	54 W	HD 610	350~1100 MHz
	7101TE	2 / 4	3.4 GHz	-	3 MB	35 W	HD 610	350~1100 MHz
	7100	2 / 4	3.9 GHz	-	3 MB	51 W	HD 630	350~1100 MHz
	7100T	2 / 4	3.4 GHz	-	3 MB	35 W	HD 630	350~1100 MHz
Pentium	G4620	2 / 4	3.7 GHz	-	3 MB	51 W	HD 630	350~1100 MHz
	G4600	2 / 4	3.6 GHz	-	3 MB	51 W	HD 630	350~1100 MHz
	G4600T	2 / 4	3.0 GHz	-	3 MB	35 W	HD 630	350~1050 MHz
	G4560	2 / 4	3.5 GHz	-	3 MB	54 W	HD 610	350~1050 MHz
	G4560T	2 / 4	2.9 GHz	-	3 MB	35 W	HD 610	350~1050 MHz
Celeron	G3950	2 / 2	3.0 GHz	-	2 MB	51 W	HD 610	350~1050 MHz
	G3930	2 / 2	2.9 GHz	-	2 MB	51 W	HD 610	350~1050 MHz
	G3930T	2 / 2	2.7 GHz	-	2 MB	35 W	HD 610	350~1000 MHz

K = unlocked clock multiplier, T = Power optimized lifestyle, TDP = Thermal Design Power (max. power consumption)

Note: The Shuttle XPC slim Barebone DH270 does not support the unlock-function of Intel K-Series processors.

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