

BAREBONE XPC all-in-one P92U White

19.5" ALL-IN-ONE PC FOR POS, POI AND KIOSK APPLICATIONS

The Shuttle XPC all-in-one P92U is a All-in-One PC with capacitive touchscreen in 19.5 inch format. An Intel "Comet Lake-U" Ultra-Low-Voltage processor makes for high computing power while it keeps energy consumption at a low level. Thanks to its passive cooling, the system is virtually noiseless, maintenance-free and approved for 24/7 nonstop operation. Particularly suitable for vertical applications is the arrangement of connectors at the bottom and the IP54 compliant front panel which is dust-protected and protected from splashing of water.



CAPACITIVE
MULTI TOUCH



2x 32 GB
SUPPORT



HDMI
VGA



Full HD
WEBCAM



NVMe SSD
SUPPORT



2.5" BAY



INTEL LAN



Wi-Fi 5
BT 4.2



VESA MOUNT



IP54



Max.
40 °C



24/7
SUPPORT

COMMON FEATURES

- IP54 compliant front panel ■ Dimensions: 487 x 321 x 44 mm (WHD)
- Supports 24/7 Nonstop Operation ■ 100 mm VESA mount capable
- Operating temperature: 0~40 °C ■ Fanless heatpipe cooling system

DISPLAY & GRAPHICS

- 49.5 cm (19.5") LC Display, 1600 x 900 pixel ■ Capacitive 10-point multi-touch ■ Integrated Intel UHD 610 graphics ■ HDMI 1.4 & VGA

OPERATING SYSTEM

- An operating system is not included
- Supports Windows 10/11 (64-bit) and Linux (64-bit)

PROCESSOR

- Intel Celeron 5205U "Comet Lake-U" Dual Core, TDP: 15W

STORAGE (not included)

- Supports max. 2x 32 GB DDR4-2400 SO-DIMM ■ Supports one 2.5" SATA hard disk / SSD ■ Supports one M.2-2280 SSD (SATA or PCIe X4/ NVMe) ■ Supports internal USB stick (USB 2.0, type A)

CONNECTIVITY

- HDMI 1.4 ■ D-Sub/VGA ■ 4x USB 3.2 Gen 1 ■ 2x USB 2.0 ■ internal: 1x USB 2.0 (Type A) ■ 2x Audio (Mic & headphones) ■ Gigabit LAN (Intel)

BUILT-IN

- SD card reader ■ 2.0 Megapixel FHD webcam ■ 2x 2 W speakers
- Electret Condenser Microphone ■ Wireless LAN 802.11ac, BT 4.2

POWER SUPPLY

- External 65W / 19V power adapter

OPTIONAL ACCESSORIES

- PCL71: 2x COM, 1x LPT
- POS01: 4x COM (2x D-Sub, 2x RJ45), LPT, RJ11
- PNFC03: NFC module (only on request)

P92U White – UPC bar codes:

887993003764, 887993004501, 887993005256 or 887993005683

MODELS OF THE P92U SERIES

Product	Available Colors	Intel ULV CPU	Cores	Threads	Clock/Turbo	Cache	Max. RAM support
P92U	Black or White	Celeron 5205U	2	2	1.9 / -- GHz	2 MB	2x 32 GB DDR4-2400
P92U3	Black or White	Core i3-10110U	2	4	2.1 / 4.1 GHz	4 MB	2x 32 GB DDR4-2666
P92U5	Black	Core i5-10210U	4	8	1.6 / 4.2 GHz	6 MB	2x 32 GB DDR4-2666

PRODUCT FEATURES



All applications at your fingertips - 10-point multi-touch

The innovative touchscreen technology delivers the simplest operation possible and makes the screen the centre of action. Its high-quality design gives you access to all capabilities of the PC - by just touching the screen.



24/7 nonstop operation

The Shuttle XPC all-in-one P92U is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passive cooling, this PC runs highly reliable making it perfectly suitable for digital signage and POI/POS applications.

Conditions for permanent use:

- Ambient temperature while under load: 5 - 40 °C
- Air humidity while under load: 10 - 80 % (not condensing)
- Free circulation of air amongst the PC must be guaranteed
- Ventilation holes must be kept clear
- If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.



Fanless and quiet

The Shuttle XPC all-in-one P92U uses a passive thermal module to lead heat out of the case quickly and evenly. The unique fanless design makes it perfect to be used in noise-sensitive environments. As an additional benefit, fanless cases rarely gather dust on the inside and stay cleaner than others. So it's not only quiet and low in energy use, but also virtually maintenance-free.



Protection Class IP54

The front panel of the Shuttle XPC all-in-one P92U is dust-protected and protected from splashing of water according to IP protection class 54. Consequently, this All-in-One PC can be used for those indoor applications, where the touchscreen may be exposed to humidity and occasional splashing of water. This is particularly welcome in restaurants, laboratories, production or other places.



Optimised Cable Management

Most of the connectors are now located at the back panel facing down. This leads to an effective cable management making for a clean, tidy appearance on the desk. On the left side sit those connectors which need to be accessed from the front: the card reader and two USB ports.



Connects to two external Full HD displays

The Shuttle XPC all-in-one P92U features two video outputs: One analog D-Sub/VGA connector and one HDMI connector. Two separate Full HD displays can be connected in extended mode. Now add the built-in display of the P92U and there are three displays showing different content.



Hidden Power Button

The power button can be deactivated to prevent unauthorised use. To do so, disconnect the appropriate connection (SW2302) inside the chassis. Still, it can be used with a straightened paper clip as shown on the left (see photo).



VESA mount *)

The stand on the rear can easily be removed to unveil four VESA mounting screw holes that can be used for mounting arms and other mounting devices from a variety of manufacturers.

*) VESA mount is not included



Black and White versions available

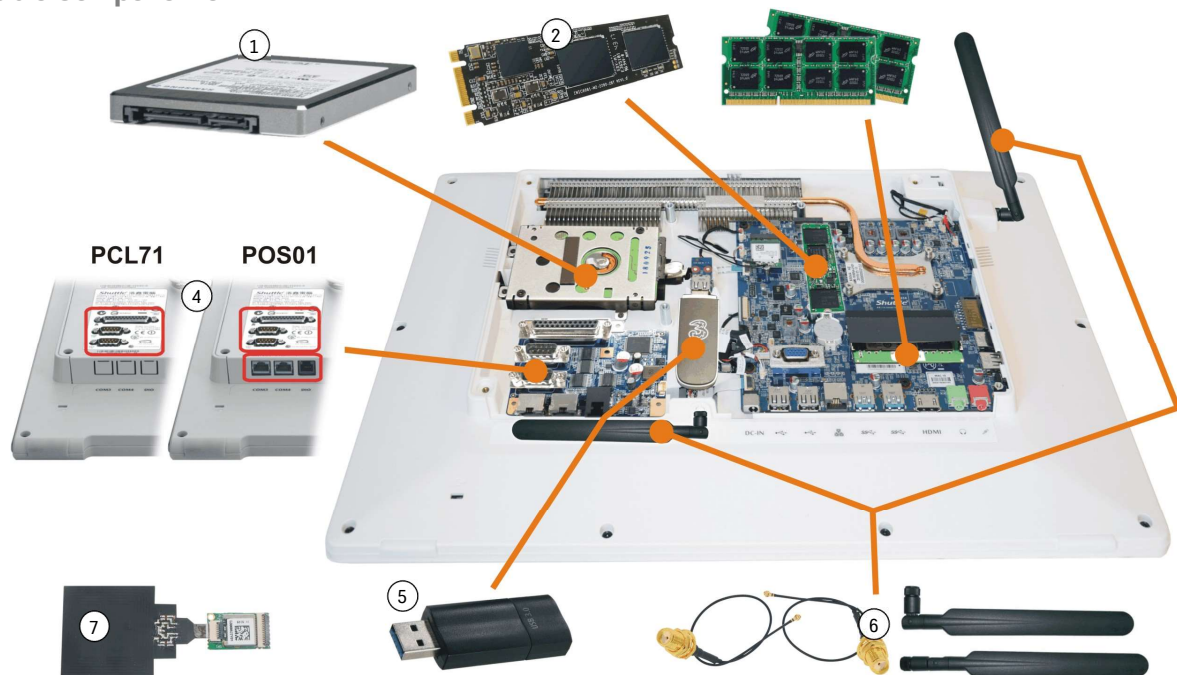
Choose the right colour for your application. As a rule, black is preferred for use in the office, as a POS system in retail or as a control unit in manufacturing. The white version is often used in the health sector, in the kitchen area or as a POS system in the cosmetics/massage studio.

Front and Back Panel



- | | | |
|---|----------------------------------|-------------------------------------|
| 1. Stand
(a) Stand mounting plate
(b) VESA cover
(c) 100 x 100 mm VESA mount | 8. SD card reader | 18. 2x RJ45 COM port (optional) |
| 2. Full HD Webcam | 9. 4x USB 3.2 Gen 1 (5 Gbps) | 19. RJ11 for cash drawer (optional) |
| 3. Microphone | 10. Power LED | 20. DC-input for power adapter |
| 4. Touchscreen LCD display | 11. Hard disk LED | 21. 2x USB 2.0 |
| 5. Power button | 12. 2x speakers (stereo) | 22. RJ45 Gigabit LAN port |
| 6. 2x Perforation for external antenna | 13. Name plate (rating label) | 23. HDMI video output |
| 7. Hole for hidden power button | 14. Hole for Kensington lock | 24. Audio Line-out (headphones) |
| | 15. D-Sub/VGA video output | 25. Microphone input |
| | 16. LPT Parallel Port (optional) | 26. Openings for ventilation |
| | 17. 2x D-Sub COM port (optional) | |

Installable Components







1. **2.5" SATA Drive**
Hard disk or SSD, max. 12.5 mm in height
2. **M.2-2280 SSD Card**
SATA or PCIe interface
3. **DDR4 SO-DIMM memory**
max. 2x 32 GB DDR4-2400/2666
4. **Optional COM-, LPT- and DIO ports**
While the Shuttle Accessory **PCL71** adds two serial COM ports and one parallel LPT port, the **POS01** adds two more COM ports (with RJ45 connector) and one Digital I/O 12 V / 24 V (RJ11) for a cash drawer.
5. **Internal USB Port**
Internal USB 2.0 Type A connector for expansion sticks (such as flash memory or LTE). Max. length = 100 mm overall.
6. **Optional Antennas**
The chassis features two perforated 7 mm holes for optional antennas mounted with an (RP-)SMA connector.
7. **Optional NFC Module PNFC03**
13.56 MHz NFC-module for internal installation. Supports Windows 10. Not certified for payment applications.
Note: this Shuttle accessory is available on request only.

Shuttle Product Comparison: P92U versus predecessor P90U

MODEL	P92U Series	P90U Series
Processor	Intel Core Gen 10, TDP=15W Code name: "Comet Lake-U" P92U: Celeron 5205U P92U3: Core i3-10110U P92U5: Core i5-10210U	Intel Core Gen 7, TDP=15W Code name: "Kaby Lake-U" P90U: Celeron 3865U P90U3: Core i3-7100U P90U5: Core i5-7200U
Operation System Support	Windows 11 – 64-bit Windows 10 – 64-bit Linux – 64-bit	Windows 10 – 64-bit Linux – 64-bit
RAM memory (max.)	Max. 2x 32 GB DDR4-2666 SO-DIMM (Celeron version: DDR4-2400)	Max. 2x 16 GB DDR4-2133 SO-DIMM
LAN	Intel i211 Gigabit LAN	Intel i211 Gigabit LAN
WLAN	Realtek RTL8821CE-CG (WLAN-ac and BT 4.2)	Realtek RTL8821AE (WLAN-ac and BT 4.1)
Audio	C-Media CM6542 (USB) oder Realtek ALC269 (HD-Audio)	Realtek ALC269 (HD-Audio)
Connectors left	Power Button 2x USB 3.2 Gen 1 SD Card Reader Perforation (7 mm)	Power Button 2x USB 2.0 SD Card Reader Perforation (7 mm)
Connectors bottom	HDMI 1.4b 2x USB 3.2 Gen 1 2x USB 2.0 Gigabit LAN (i211) Audio Line-out Microphone input DC input Perforation (7 mm) Optional 2x COM (RJ45), 1x DIO (RJ11)	HDMI 1.4b 2x USB 3.2 Gen 1 2x USB 2.0 Gigabit LAN (i211) Audio Line-out Microphone input DC input Perforation (7 mm) Optional 2x COM (RJ45), 1x DIO (RJ11)
Connectors rear	VGA Port Optional 2x COM (D-Sub), 1x LPT	VGA Port Optional 2x COM (D-Sub), 1x LPT
Optional Shuttle Accessories	PCL71 (2x COM, 1x LPT) POS01 (4x COM, 1x LPT, 1x DIO) PNFC03 (NFC module, on request only)	PCL71 (2x COM, 1x LPT) POS01 (4x COM, 1x LPT, 1x DIO) PNFC02 (NFC module, on request only)

Product Comparison: Shuttle XPC All-in-One Models

Chassis	Display Size / Pixel / Type	Processor Type	Product Name by Intel processor-generations			Chassis Colour
			Gen. 7	Gen. 8	Gen. 10	
	11.6" 1366 x 768 Capacitive Multitouch	Celeron	P20U	—	P22U	Black
	15.6" 1366 x 768 Resistive Singletouch	Celeron	X50V6	X50V7 <small>X50V7L *)</small>	X50V8	Black, White
		Core i3	X50V6U3	X50V7U3 <small>X50V7U3L *)</small>	X50V8U3	Black, White
	15.6" 1920 x 1080 Capacitive Multitouch	Celeron	—	P51U	P52U	Black
		Core i3	—	P51U3	P52U3	Black
	19.5" 1600 x 900 Capacitive Multitouch	Celeron	P90U	—	P92U	Black, White
		Core i3	P90U3	—	P92U3	Black, White
		Core i5	P90U5	—	P92U5	Black

X50V7L and **X50V7U3L** are model variants without WLAN module

SHUTTLE XPC all-in-one BAREBONE P92U – SPECIFICATIONS

FANLESS AND SILENT	<p>Passive heatpipe cooling, absolutely no fan noise</p> <p>Perfect for noise-sensitive environments</p> <p>Fanless, dust-free and thus virtually maintenance-free</p>
24/7 NONSTOP OPERATION	<p>This device is approved for 24/7 permanent operation. Requirements:</p> <ul style="list-style-type: none"> - Free circulation of air amongst the PC must be guaranteed. - Ventilation holes must be kept clear. - If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.
IP54 PROTECTED	<p>The front panel is dust-protected and protected from splashing of water according to protection class IP54.</p>
CHASSIS	<p>Colour: white</p> <p>Dimensions: 487 x 321 x 44 mm (W x H x D)</p> <p>100 mm VESA mountable</p> <p>Hole for Kensington lock</p> <p>Weight: 4.29 kg net, 5.62 kg gross</p>
OPERATING SYSTEM	<p>This system comes without operating system.</p> <p>It is compatible with:</p> <ul style="list-style-type: none"> - Windows 11 - 64-bit - Windows 10 - 64-bit - Linux - 64-bit
TOUCHSCREEN	<p>Touchscreen function supports fingertip input</p> <p>Capacitive Touch Panel with 10-point multi-touch</p> <p>Supports input with gloves (PVC, cotton, cotton/linen)</p> <p>Stylus pen not supported</p>
19.5" DISPLAY	<p>49.5 cm / 19.5" LCD display</p> <p>Ratio: 16:9 wide-screen panel</p> <p>Resolution: 1600 x 900 = 1.44 Megapixel (WSXGA/HD+)</p>
PROCESSOR	<p>Model: Intel Celeron 5205U (ULV)</p> <p>System-on-a-chip architecture (SoC): no chipset required</p> <p>FCBGA1528 package - directly soldered onto the mainboard</p> <p>Code name: Comet Lake-U (10th Generation Intel Core)</p> <p>Cores / Threads: 2 / 2</p> <p>Clock rate: 1.9 GHz</p> <p>L1/L2/L3 Cache: 256 kB / 1 MB / 2 MB</p> <p>Memory controller: DDR4-2400 Dual Channel (1.2 V)</p> <p>TDP wattage: 15 W maximum</p> <p>Manufacturing process: 14 nm</p> <p>Maximum Tjunction Temperature: 100 °C</p> <p>Supports 64-bit, VT-x (EPT), VT-d, Enhanced SpeedStep, NX bit, AES-NI, SSE 4.1/4.2</p>
INTEGRATED GRAPHICS	<p>Intel UHD Graphics 610</p> <p>GPU clock frequency: 300~900 MHz</p> <p>Execution Units (EUs): 12</p> <p>Supports DirectX 12</p> <p>Supports full H264, H265 8/10 bit, VP8/9, VC-1, AVC hardware decoding</p> <p>Supports Quick Sync Video and Clear Video HD technology</p>
SUPPORTS TRIPLE DISPLAY	<p>Two video ports support two additional independent screens:</p> <ol style="list-style-type: none"> 1) HDMI 1.4b supports 1920 x 1080 @ 60 Hz or 3840 x 2160 @ 30 Hz 2) VGA / D-Sub analog video supports 1920 x 1080 @ 60 Hz <p>Multi-Monitoring modes as follow:</p> <p>Clone mode: All displays show the same content at 1600 x 900.</p> <p>Extended mode: all displays show different content.</p>
BIOS	<p>AMI BIOS in 8 MByte EEPROM with SPI interface</p> <p>Supports Power-on-after-power-fail / always on</p> <p>Supports Wake-on-LAN (WOL) from S3, S4, S5 ACPI states</p> <p>Supports hardware monitoring and Watchdog function</p> <p>Supports Firmware TPM v2.0 function</p>

MEMORY SUPPORT	<p>2x SO-DIMM slot with 260 pins</p> <p>Supports DDR4-2400 (PC4-19200) SDRAM at 1.2 V</p> <p>Supports Dual Channel mode</p> <p>Supports a maximum of 32 GB per DIMM, maximum total size: 64 GB</p> <p>Supports two unbuffered DIMM modules (no ECC or registered)</p>
2.5" BAY FOR HDD/SSD	<p>Supports one SATA hard disk or one SATA SSD drive in 6.35 cm / 2.5" format</p> <p>The SATA 3.0 interface supports up to 600 MB/s of data transfer speed (6 Gbit/s)</p> <p>Supports one drive with up to 12.5 mm in height</p> <p>SATA cable pre-installed</p>
M.2-2280M SSD SLOT	<p>M.2-2280 Slot</p> <p>The M.2 2280 BM slot provides the following interfaces:</p> <ul style="list-style-type: none"> - PCI-Express Gen. 2.0 X4 - SATA v3.0 (max. 6 Gbps) <p>It supports M.2 cards with a width of 22 mm and a length of 80 mm (= type 2280).</p> <p>Supports M.2 SATA SSDs (with B+M key) and M.2 PCIe SSDs (with M key)</p>
CARD READER	Integrated card reader supports SD, SDHC and SDXC memory flash cards
WEBCAM	Integrated Full HD webcam (1920 x 1080 pixels)
MICROPHONE AND SPEAKERS	Front panel with integrated Electret Condenser Microphone and 2x 2 W speakers
INTEGRATED AUDIO	<p>C-Media CM6542 (USB) or Realtek ALC269 (HD Audio)</p> <p>Two analog audio connectors (3.5 mm) on the bottom side:</p> <ol style="list-style-type: none"> 1) Line-out (head-phones) 2) Microphone input <p>Digital Audio is supported via HDMI.</p>
WIRED NETWORK	<p>Intel i211 Ethernet Controller with MAC, PHY and PCIe interface</p> <p>Supports 10 / 100 / 1.000 MBit/s operation</p> <p>Supports WAKE ON LAN (WOL) from S3, S4 modes</p> <p>Supports network boot by Preboot eXecution Environment (PXE)</p>
WIRELESS NETWORK (WLAN)	<p>Chipset: Realtek RTL8821CE-CG</p> <p>M.2-2230 (NGFF) extension card</p> <p>Connected with two internal antennas (via IPEX4)</p> <p>Supports WiFi IEEE 802.11b/g/n/ac in the 2.4/5 GHz band, 1T1R</p> <p>Max. 72.2 / 150 Mbps using 20 / 40 MHz bandwidth in n-mode</p> <p>Max. 433.3 Mbps using 80 MHz bandwidth in ac-mode</p> <p>Supports Bluetooth 4.2 in the 2.4 GHz band</p>
FRONT LEDs	<p>Power LED (blue)</p> <p>Hard disk LED (orange)</p>
CONNECTORS LEFT SIDE	<p>Power button</p> <p>2x USB 3.2 Gen 1 (max. 5 Gbps)</p> <p>SD card reader</p> <p>Hole with power button</p> <p>Perforation for optional WLAN/LTE antenna (diameter: 7 mm)</p>
CONNECTORS BOTTOM SIDE	<p>HDMI 1.4b (supports digital video and digital audio)</p> <p>2x USB 3.2 Gen 1 (max. 5 Gbps)</p> <p>2x USB 2.0</p> <p>Gigabit Network (LAN, RJ45)</p> <p>Audio Line-out / head-phones (3.5 mm jack)</p> <p>Microphone input (3.5 mm jack)</p> <p>DC input for external power adapter (5.5 / 2.5 mm)</p> <p>Perforation for optional WLAN/LTE antenna (diameter: 7 mm)</p> <p>Optional: 2x COM/serial (RJ45), DIO (RJ11) for cash drawer (accessory POS01)</p>
CONNECTORS REAR SIDE	<p>VGA connector (D-Sub 15 pol., analog video)</p> <p>Optional: 2x COM/serial (D-Sub), 1x LPT/parallel (accessory: PCL71 or POS01)</p>

CONNECTORS ONBOARD	Internal USB 2.0 type A connector for a USB stick (Overall length of the USB stick: 100 mm) Serial ATA (6 Gbps) Serial ATA power connector 3x USB 2.0 header (all occupied) eDP connector (Embedded DisplayPort) - occupied by the display Connector for optional COM/LPT adapter POS01 or PCL71
OPTIONAL ANTENNAS	The chassis features two perforated 7 mm holes for optional antennas mounted with an (RP-)SMA connector for wireless network such as WLAN or WWAN (e.g. LTE)
POWER ADAPTER	External 65 W power adapter (fanless) Input: 100~240 V AC, 50/60 Hz, max. 1.6 A Output: 19 V DC, max. 3.42 A, max. 65 W
DC INPUT CONNECTOR	DC Input Connector: 5.5 / 2.5 mm (outer/inner diameter) The DC-input of the computer supports an external power source with either 12V ±5 % or 19V ± 5%.
SUPPLIED ACCESSORIES	Quick Guide Driver DVD External Power Adapter (65W / 19V) Power cord Screws
OPTIONAL ACCESSORIES	PCL71: COM / LPT / RJ11 adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V POS01: COM / LPT / RJ11 adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V - 2x Serial RS232 (8p RJ45) - 1x DIO/RJ11 connector for cash drawer supports 12 / 24V PNFC03: NFC module (supports Windows 10 only, no Linux and transaction support) - Note: PNFC03 is only available on request
ENVIRONMENTAL SPECIFICATIONS	Operating temperature: 0~40 °C Humidity: 10~90 %
CERTIFICATIONS / COMPLIANCE	EMI: CE, RED, FCC, RCM, VCCI Safety: CB, ETL Other compliances: RoHS, ErP Lot3, Energy Star v7.0
CONFORMITY	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: (1) 2014/30/EU relating to electromagnetic compatibility (EMC), (2) 2014/35/EU relating to Electrical Equipment designed for use within certain voltage limits (LVD), (3) 2009/125/EU relating to ecodesign requirements for energy-related products (ErP), (4) 2014/53/EU related to Radio and Telecommunications Terminal Equipment (RED)