

All-in-One PC for POS applications

The Shuttle POS X506 is a valued All-in-One POS Terminal PC boasting a 15.6-inch touchscreen. It is equipped with Intel Celeron® ULV Processor, 60 GB SSD and 4 GB RAM. This system is suitable for small and medium retailers to serve customers effectively. It offers numerous connectors for typical POS peripherals - two COM ports are also available. In addition, the HDMI and VGA ports can be used to drive two more displays with basic digital signage applications. Thanks to its passive cooling, the system is virtually noiseless, maintenance-free and is approved for 24/7 nonstop operation. Particularly suitable for POS 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. POS X506 offers a high level of reliability and is a lower priced alternative to conventional POS systems.

XPC all-in-one System
POS X506 Black



Feature Highlights

All-in-One Design	<ul style="list-style-type: none"> • XPC all-in-one with touchscreen • Small: 391 x 327 x 42 mm (WHL) • Stand can also be used as a handle • 100 mm VESA mount capable • IP54 compliant front panel • Approved for 24/7 nonstop operation
Display & Graphics	<ul style="list-style-type: none"> • 39.6 cm (15.6") resistive touchscreen with a 1366 x 768 resolution • Integrated Intel HD 610 graphics • HDMI 1.4 + D-Sub/VGA Video output
CPU & Cooling	<ul style="list-style-type: none"> • Intel Celeron 3865U, 1.8 GHz, 15 W TDP • Fanless heatpipe cooling system
Storage	<ul style="list-style-type: none"> • 4 GB DDR4-2133 SO-DIMM • 60 GB 2.5" SATA SSD • Supports one M.2-2280 SSD (SATA / PCIe) • Supports internal USB stick (USB 2.0, type A)
Operating System	<ul style="list-style-type: none"> • Operating system is not included • Supports Windows 10 (64-bit) & Linux (64-bit)
Connectivity	<ul style="list-style-type: none"> • HDMI 1.4, D-Sub/VGA • 2x USB 3.0, 4x USB 2.0, internal: 2x USB 2.0 • Microphone input, headphones output • Gigabit LAN, Wireless LAN 802.11n • 2x COM Ports (RS232), 1x LPT
Built-in	<ul style="list-style-type: none"> • SD card reader • 2.0 Megapixel HD webcam • 2x 2 W speakers • Electret Condenser Microphone
Power Supply	<ul style="list-style-type: none"> • External fanless power adapter, 65 W
Warranty	<ul style="list-style-type: none"> • 24 months Bring-in Service

Images for illustration purposes only.



15.6" Touchscreen



Nonstop operating



Fanless cooling



Front protected: dust & water



Two COM ports



Supports Windows 10 & Linux (64-bit)



Wireless and Wired Network



2x USB 3.0
4x USB 2.0



Watchdog Hardware



Shuttle XPC all-in-one POS X506 – Overview



- | | | |
|---------------------------|---------------------------|--|
| 1 Touchscreen LCD display | 10 SD Card Reader | 19 Optional: 4x COM, LPT, RJ11 (POS01) |
| 2 Webcam | 11 2x USB 2.0 | 20 Perforation for TV antenna (9 mm) |
| 3 Microphone | 12 Clear CMOS Button | 21 DC-input for Power Adapter |
| 4 Power on LED | 13 Stand (handle) | 22 2x USB 2.0 |
| 5 Hard disk LED | 14 Cooling Vents | 23 RJ45 Gigabit LAN |
| 6 Stereo speakers | 15 Kensington lock | 24 2x USB 3.0 |
| 7 Power-on button | 16 D-Sub/VGA Video Output | 25 HDMI Video Output |
| 8 Stylus with holder | 17 Vesa Mount 100x100mm | 26 Audio Line-out (headphones) |
| 9 Power Button | 18 2x COM + LTP (PCL71) | 27 Microphone Input |

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Shuttle XPC all-in-one POS X506 – Special Features



All applications at your fingertips

The innovative touchscreen technology delivers the simplest operation possible and makes the screen the centre of action. Its high-quality design lets you control the whole range of multimedia - music, movies, video playback and web browsers start by just touching the screen.



Great connectivity

Equipped with six USB ports and two COM ports it offers sufficient connectivity for typical POS peripherals like receipt printer, customer display, barcode scanner, cash drawer, keyboard, mouse and more.



All-in-One PC

Your complete PC system with many components already built in comes in just one single device! This includes the webcam, microphone, mainboard, display, touchscreen input interface, wireless LAN module and speakers. It helps you save space, looks simply stylish and reduces cable clutter.

24/7 nonstop operation

The Shuttle XPC all-in-one X50V6 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 - 35 °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 POS X506 uses a passive thermal module with heatpipes to lead heat out of the case quickly and evenly. The unique fanless design makes it perfect to be used in noise-sensitive environments such as living rooms, hospitals, libraries etc. 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.



Connects to two external Full HD displays

The Shuttle XPC all-in-one POS X506 features two video outputs: One analog D-Sub/VGA connector and one HDMI connector. Two external Full HD displays can be connected in extended mode. Now add the built-in display of the POS X506 and there are three displays showing different content.



Protection Class IP54

The front panel of the Shuttle XPC all-in-one POS X506 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.



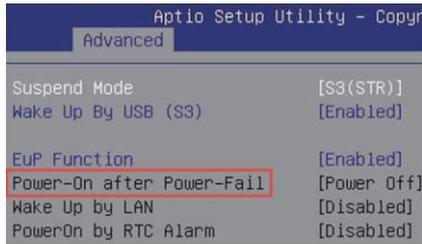
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Optional COM, LPT, DIO ports

The Shuttle XPC all-in-one POS X506 features two serial COM ports (RS232) and one parallel LPT port. COM ports are still commonly used for applications such as industrial automation systems, scientific analysis, POS systems and other industrial applications.



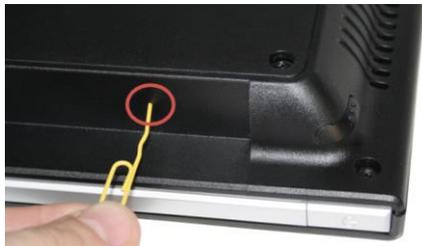
Power on after Power fail

The BIOS setup provides a "Power-On after Power Fail" function that can be found under "Power Management Configuration" where the PC's behaviour after power failure can be determined.



Always Power-on Jumper

The Shuttle XPC all-in-one POS X506 also comes with a hardware-based solution. By removing Jumper 7, the system will start unconditionally once power is applied.



Hidden Power Button

The power button can be deactivated to prevent unauthorized use. Still it can be used with a straightened paper clip as shown on the left.



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.



Stylus for the touchscreen

The Shuttle XPC all-in-one POS X506 is equipped with a 5-wire resistive touchscreen for simple operation by finger (even with gloves) or stylus. The stylus comes supplied as standard and sits in an opening located at the top of the chassis. Using the stylus results in a smoother and more precise input than just using a finger.



Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. (Lock and cable not included.)



Carrying handle

The practical stand can be pulled upwards to also serve as a handle making the Shuttle XPC all-in-one POS X506 easy to carry. Clever!

Shuttle XPC all-in-one POS X506 – Specifications

<i>Fanless and silent</i>	<p>Passive heatpipe cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free</p>
<i>IP54 protected</i>	<p>The front panel is dust-protected and protected from splashing of water according to protection class IP54.</p>
<i>Chassis</i>	<p>Colour: black Dimensions: 391 x 327 x 42 mm (W x H x D) 100mm VESA mount capable Mounting hole for Kensington lock Weight: 3.6 kg net, 4.8 kg gross</p>
<i>Operation System</i>	<p>This system comes without operating system. It is compatible with: - Windows 10 (64-bit) - Linux (64-bit)</p>
<i>Touchscreen</i>	<p>Touchscreen function supports fingertip input Resistive 5-wire single-touch technology Stylus for the touchscreen included</p>
<i>15.6" Display</i>	<p>39.6 cm / 15.6" LCD display, ratio: 16:9 widescreen panel Resolution: 1366 x 768 = 1.05 Megapixel Backlight unit: High power LED, Luminance: 220 cd/sqm Glass thickness: 0.5 mm</p>
<i>Processor</i>	<p>Model: Intel Celeron 3865U (ULV) System-on-a-chip architecture (SoC): no chipset required BGA1356 package - directly soldered onto the mainboard Code name: Kaby Lake-U (7th Generation Intel Core) Cores / Threads: 2 / 2, Clock rate: 1.8 GHz L1/L2/L3 Cache: 128 kB / 512 kB / 2048 kB Memory controller: DDR4-2133 Dual Channel (1.2 V) TDP wattage: 15 W maximum Manufacturing process: 14 nm Maximum Tjunction Temperature: 100 °C Supports 64-bit, VT-x (EPT), VT-d, Enhanced SpeedStep, NX bit, AES-NI, SSE 4.1/4.2 Integrated graphics engine</p>
<i>Integrated Graphics</i>	<p>Intel HD Graphics 610 GPU clock frequency: 300~900 MHz Execution Units (EUs): 12 Supports DirectX 12 Supports full H264, H265 8/10 bit, VP8/9, VC-1, AVC hardware decoding Supports Quick Sync Video and Clear Video HD technology</p>

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<i>Up to three displays</i>	<p>Two video ports support two additional independent screens:</p> <ol style="list-style-type: none"> 1) HDMI 1.4 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>Special conditions for operation in Multi-Monitoring mode:</p> <ol style="list-style-type: none"> 1) Clone mode: all displays show the same content at 1366 x 768 resolution 2) Extended mode: all displays show different content
<i>BIOS</i>	<p>AMI BIOS in 8 MByte EEPROM with SPI interface</p> <p>Supports Power fail resume / always on</p> <p>Supports Wake-on-LAN (WOL) from S3, S4, S5 ACPI states</p> <p>Supports hardware monitoring and watch dog functionality</p> <p>Supports Firmware TPM v2.0 functionality</p>
<i>Memory</i>	<p>4 GB DDR4-2133 (PC4-17000) SDRAM at 1.2 V, SO-DIMM memory with 260 pins</p> <p>Supports a maximum of 16 GB per DIMM, maximum total size: 32 GB</p>
<i>Storage</i>	<p>60 GB SSD with SATA III interface in 6.35 cm / 2.5" format</p>
<i>M.2-2280 Slot</i>	<p>The M.2 2280 BM slot provides the following interfaces:</p> <ul style="list-style-type: none"> - PCI-Express Gen. 3.0 X4 with up to 32 Gbps Data Transfer Speed - SATA v3.0 (max. 6 Gbps) <p>It supports M.2 cards with a width of 22 mm and a length of 42, 60 or 80 mm (type 2242, 2260, 2280).</p> <p>Supports M.2 SATA SSDs (with B+M key) and M.2 PCIe SSDs (with M key)</p>
<i>Card Reader</i>	<p>Integrated card reader supports SD, SDHC and SDXC memory flash cards</p>
<i>Webcam</i>	<p>Integrated 2.0 Megapixel (1600 x 1200) HD webcam</p>
<i>Microphone Speakers</i>	<p>Front panel with integrated Electret Condenser Microphone and 2x 2W speakers</p>
<i>Audio</i>	<p>Realtek ALC269 Audio Codec</p> <p>Two analog audio connectors (3.5 mm) on the bottom side:</p> <ol style="list-style-type: none"> 1) Line-out (headphones) 2) Microphone input <p>Digital Audio is supported via HDMI.</p>
<i>Wired Network</i>	<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>
<i>Wireless Network</i>	<p>WLAN chip: Realtek 8188EE</p> <p>Supports IEEE 802.11b/g/n for 2.4 GHz band</p> <p>Speed: max. 150Mbps up-/downstream</p> <p>Security: WPA/WPA2, WEP</p> <p>M.2-2230AE card with internal antenna</p>

<i>Front LEDs</i>	Power LED (blue) Hard disk LED (orange)
<i>Connectors left side</i>	Power button 2x USB 2.0 SD card reader Hole with power button Hole with Clear CMOS button
<i>Connectors bottom side</i>	HDMI 1.4 (supports digital video and digital audio) 2x USB 3.0 2x USB 2.0 Gigabit Network (LAN, RJ45) Audio Line-out / headphones (3.5 mm jack) Microphone input (3.5 mm jack) DC input for external power adapter (5.5 / 2.5 mm) Perforation for optional TV/3G antenna (diameter: 9 mm)
<i>Connectors rear side</i>	VGA connector (D-Sub 15 pol., analog video) 2x COM/serial (D-Sub), 1x LPT/parallel
<i>Connectors onboard</i>	Internal USB 2.0 type A connector for a USB stick 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
<i>Power Adapter</i>	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 Connector: 5.5 / 2.5 mm (outer/inner diameter) Note: The POS X506 also supports a 60 W power adapter with 12 V DC output voltage
<i>DC Input</i>	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%.
<i>Included Accessories</i>	Quick Guide Driver DVD External Power Adapter (65W / 19V) with Power cord
<i>Environmental criteria</i>	Operating temperature: 0~40 °C Humidity: 10~90 %
<i>Certification and Compliance</i>	EMI: CE, FCC, BSMI Safety: CB, BSMI, ETL Other compliances: RoHS, ErP Lot6, Energy Star v5.0

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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) 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),
- (4) 1999/5/EC related to Radio and Telecommunications Terminal Equipment (R&TTE)

Shuttle XPC all-in-one POS X506 Series – Product Comparison

Model	X50V6	X 5060XA	POS X506	X 5060TA
Type	Barebone	System without Operation System	System without Operation System with COM ports	System with Operation System
EAN Black	887993000701	4046047103249	4046047103263	4046047103232
EAN White	887993001227	4046047103256	4046047103270	not available
RAM	---	4 GB	4 GB	4 GB
Hard Disk	---	500 GB	60 GB SSD	500 GB
COM-Ports	---	---	PCL71-Expansion	---
Operation System	---	---	---	Windows 10 Home (64-bit)



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