

Fanless 1-litre PC with Quad Core processor

The XS3500BA V4 is a fanless Slim PC System with an energy-efficient Intel Celeron J1900 Quad Core processor and is suitable as a reliable office PC or stylish home theatre PC. The integrated graphics is based on Intel's powerful HD Graphics (7th gen) supporting hardware acceleration for Full HD video encoding/decoding. The XS3500BA V4 comes completely fanless which helps cut down on operating noise and expensive servicing, as there are no moving parts in the machine.

XS3500BA V4

Slim PC System with OS



Fanless



Feature Highlights

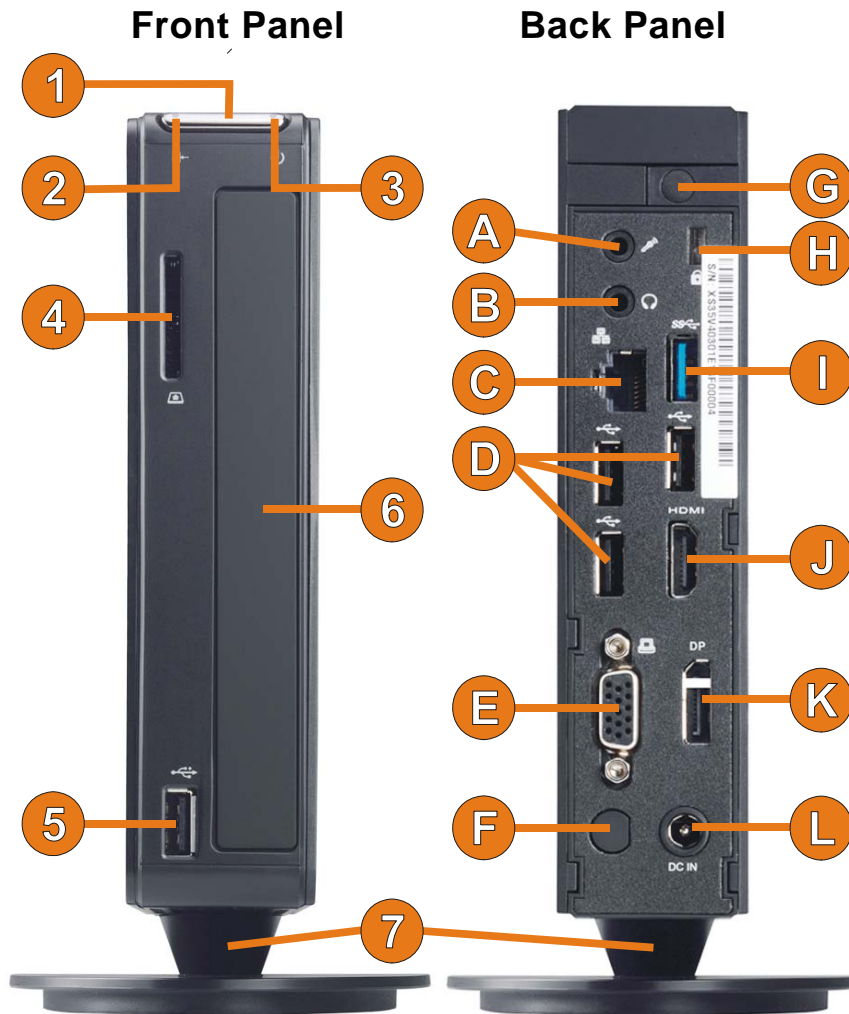
Chassis	<ul style="list-style-type: none"> • Slim 1.5 litre chassis • Dimensions: 25.2 x 16.2 x 3.85 cm • Hole for the Kensington Lock • Optional: VESA75/100 mounting kit PV01
Operating System	<ul style="list-style-type: none"> • Windows 8.1 (64-Bit)
CPU	<ul style="list-style-type: none"> • Intel Celeron J1900, Quad Core (2 GHz)
Graphics	<ul style="list-style-type: none"> • Integrated Intel HD Graphics (7th gen) • Supports DX11 and 1080p Full-HD Video
Memory	<ul style="list-style-type: none"> • 4 GB DDR3L SO-DIMM memory
Storage	<ul style="list-style-type: none"> • 500 GB SATA hard disk, 6.35cm/2.5" • Without optical slimline drive • With SD card reader (SD/SDHC/SDXC)
Connectors and WLAN	<ul style="list-style-type: none"> • 3 video ports: HDMI, DisplayPort, D-Sub • 1x USB 3.0, 3x USB 2.0, internal: USB 2.0 • 2x Audio (mic, head phone) • Gigabit-LAN, WLAN 802.11 b/g/n
Power Supply	<ul style="list-style-type: none"> • External 40 W fanless power adapter
Applications	<ul style="list-style-type: none"> • Office, Home Media, Digital Signage...

Images are for illustration purposes only.
 Shuttle Order-No. PET-XS354BA1
 EAN bar code: 4046047102822



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Shuttle Slim PC System XS3500BA V4 – Connectors



- | | | |
|---|--------------------------------------|----------------------------------|
| 1 Power button | A Microphone input | I USB 3.0 connector |
| 2 Power LED | B Head phone output (Line out) | J HDMI connector |
| 3 Hard disk LED | C Gigabit LAN connector (RJ45) | K DisplayPort connector |
| 4 SD card reader | D 3x USB 2.0 connectors | L DC input for the power adapter |
| 5 USB 2.0 connector | E D-Sub/VGA connector | |
| 6 Bay for the optical slimline drive *) | F Perforation for optional connector | |
| 7 Vertical stand | G One screw to open the chassis | |
| | H Hole for the Kensington-Lock | |

*) Note: The optical drive is not included.



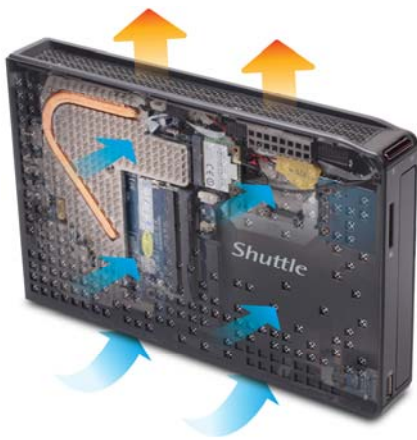
Notice:
Please make sure the system is always operated in upright position using either its stand or the optional VESA mount. Ventilation holes must not be blocked to ensure sufficient cooling.

Shuttle Slim PC System XS3500BA V4 - Product Features



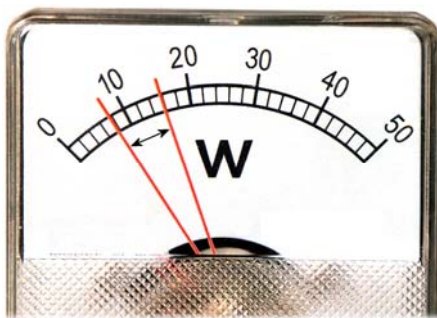
Slim and stylish

Designed as a space-saver, this sleek 1.5 litre nettop PC only measures 3.8cm in width. It maximizes space whether it is placed upright using its stylish stand or affixed to the back of a monitor with the optional VESA mounting kit (PV01). Due to its small size and flexible design, this practical nettop offers exceptional functionality and is well-suited for home users, small offices, reception areas, classrooms, libraries, showrooms, call centres, public institutions and more.



Fanless and quiet

The Shuttle Slim PC System XS3500BA V4 uses a passive thermal module with heat pipes to transmit heat throughout the system quickly and evenly. The unique fanless design making 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 dust-free and virtually maintenance free.



Highly energy-saving

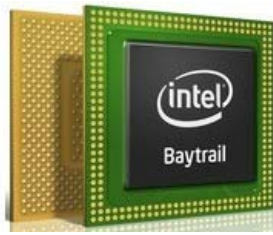
The Shuttle Slim PC System XS3500BA V4 barely consumes, depending on system load, about 7.5~15.4 Watts. Running the device*) 5 days a week for eight hours a day, the annual consumption would amount to approx. 16~32 kWh which would mean just 4~8 Euros on the power bill (25 Euro ct/kWh) - way less than a conventional desktop PC draws.

*) Based on a configuration with 4 GB of memory, 120 GB SSD and Windows 8.1 64 bit.



Optional VESA mount (Accessory PV01)

Its optional VESA75/100 mount allows it to be installed on to walls or just affixed on the rear side of a monitor which is particularly interesting for the industry segment, company buildings and public institutions.



Celeron J1900 - energy efficient Quad Core CPU

The Shuttle Slim PC System XS3500BA V4 is equipped with Intel's Celeron J1900 processor which is a power efficient System-on-a-Chip (SoC) from the Bay Trail-D family of the Silvermont processor microarchitecture. Thanks to the optimized 22 nanometer process, four x86-64 CPU cores and a clock speed of 2.0-2.42 GHz (Burst), energy efficiency and performance have been significantly improved compared to its predecessors, e.g. the Intel Atom D2550.



Supports smooth Full HD playback

The integrated graphics chip is based on the Intel HD Graphics (7th gen) architecture which supports DirectX 11 and is also found in the Ivy Bridge series (e.g. HD Graphics 4000). It offers generous performance for most home, office and digital signage applications. It features a wide variety of multimedia features such as H.264 hardware decoding, support for 1080p full HD video, Blu-ray playback (with external drive) and 8-channel HD Audio through HDMI and DisplayPort (DP).



Two monitor support with HDMI, DisplayPort and VGA

The Shuttle Slim PC System XS3500BA V4 supports multiple displays connected through HDMI (DVI through optional adapter), DisplayPort (DP) and D-Sub/VGA. This improves the user's capability and productivity by allowing for spreading multiple windows across two monitors and view them simultaneously.



USB 3.0 SuperSpeed connector

The Shuttle Slim PC System XS3500BA V4 has one built-in USB 3.0 port at the rear panel. USB 3.0 "SuperSpeed" provides a significant performance increase over previous USB generations making it the ideal interface solution for demanding, external peripherals. USB 3.0 supports up to 5Gb/s full duplex which means up to 10 times greater performance over USB 2.0. It also provides higher power and is backwards compatible with USB 2.0.



SD card reader

The built-in SD card reader at the front makes it easy to transfer files from your camera so you can share videos and photos on your Shuttle Slim PC System XS3500BA V4 with ease.



Internal USB connector

The Shuttle Slim PC System XS3500BA V4 features an internal USB 2.0 Type-A connector supporting a variety of USB sticks such as flash memory, 3G function, DVB-T TV tuner and others.

The chassis also provides a perforation (9mm hole) for an external antenna or additional connector.

In the picture you can see a conventional USB stick as an internal boot device.



Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. As known from notebooks, this Slim PC can also be safely locked by tying it to a solid object.
(The lock-and-cable not included.)



Tiny power adapter

The external 40W power adapter is virtually noiseless and can easily be hidden behind the desk thanks to its tiny dimensions.
Dimensions: 89.5 x 37 x 26.5 mm (LWH) = 88ml



Watchdog – protecting system security

The built-in Watchdog Timer provides excellent security protection for systems that need to operate continuously for a long period of time. Use Shuttle's Watch Dog utility to maintain normal operation and stability of the system at all times. If, due to a hardware failure or program error, this utility fails to restart the watchdog, the timer will elapse and generate a hardware reset and reboot the system.

Shuttle Slim PC System XS3500BA V4 Specifications

<i>Fanless and silent</i>	<p>Completely fanless, no fan noise at all Passive cooling through convective heat transfer Perfect to be used in noise-sensitive environments Fanless means less dust and thus virtually no maintenance required <u>Notice:</u> Please make sure the system is always operated in upright position using either its stand or the optional VESA mount. Ventilation holes must not be blocked to ensure sufficient cooling.</p>
<i>Low Power Consumption</i>	<p>Power consumption: ca. 7.5 W (idle mode) and ca. 15.4 W (full load) (Configuration: 4 GB RAM, 120 GB SSD and Windows 8.1)</p>
<i>Chassis</i>	<p>Dimensions without stand: 25.2 x 16.2 x 3.85 cm (DxHxW) = 1.57 L Weight: 2.1 kg net, 2.8 kg gross Hole for Kensington Lock at the back panel Optional accessory: 75mm and 100mm VESA mounting kit (PV01)</p>
<i>Operation System</i>	<p>Windows 8.1 64 Bit</p>
<i>Processor</i>	<p>Intel Celeron J1900, Quad Core CPU clock frequency: 2.00 GHz, max. Turbo frequency: 2.42 GHz Silvermont architecture, Bay Trail-D platform, 22nm structure CPU cores/Threads: 4/4 Cache: 2 MB Thermal Design Power (TDP): 10W SOC design with integrated graphics processor</p>
<i>Memory</i>	<p>4 GB DDR3L SO-DIMM memory Maximum capacity: 8 GB</p>
<i>Hard disk drive</i>	<p>500 GB hard disk drive Serial ATA interface, 6.35cm/2.5" format</p>
<i>Integrated Graphics</i>	<p>The Graphics Processing Unit (GPU) is integrated into the processor Intel HD Graphics (7th gen), graphics frequency: 688~854 MHz Supports DirectX 11.0, OpenGL 4.0, OpenCL 1.2, HDCP 1.3 (Blu-ray) Execution Units (EU): 4 Three video outputs: - HDMI: max. 1920x1200 resolution @ 60Hz - DisplayPort: max. 2560x1600 resolution @ 60Hz - D-Sub (VGA): max. 1920x1200 resolution @ 60Hz Dual display: supports max. two independent displays Full hardware acceleration: - for decode: H.264, MPEG2, MVC, VC-1, VP8, MJPEG - for encode: H.264, MPEG2, MVC</p>

<i>UEFI Firmware</i>	<p>8Mbit Flash ROM with AMI's Aptio UEFI BIOS Firmware</p> <p>Based on the Unified Extensible Firmware Interface (UEFI)</p> <p>Supports Power fail resume / AC power on state / always on / always off</p> <p>Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states</p> <p>Supports boot up from external flash memory cards</p>
<i>Slimline bay</i>	<p>One 5.25" slimline bay (not occupied)</p> <p>supports an optical DVD or Blu-ray slim-line drive</p> <p>Serial ATA interface, 12.7 mm height, Slimline SATA connector</p>
<i>Integrated Audio</i>	<p>Realtek ALC269 Audio Codec with Azalia and D3 mode support</p> <p>Two analog audio connectors (3.5mm):</p> <ol style="list-style-type: none"> 1) Line out (head phone) 2) Microphone input
<i>Card Reader</i>	<p>Integrated card reader supports SD, SDHC and SDXC memory flash cards</p>
<i>Wired Network</i>	<p>RJ45 connector supports Gigabit-LAN at 10/100/1000 Mbit/sec.</p> <p>Network controller Realtek RTL8411</p> <p>Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states</p> <p>Supports network boot by Preboot eXecution Environment (PXE)</p>
<i>Wireless Network</i>	<p>Half-size Mini PCIe card with RTL8188EE chip</p> <p>Supports IEEE 802.11b/g/n, max. 150Mbps up-/downstream</p> <p>Security: WPA/WPA2(-PSK), WEP 64/128bit, IEEE 802.11x/i</p>
<i>LEDs and Buttons</i>	<p>Power button</p> <p>Power LED (blue)</p>
<i>Front Panel Connectors</i>	<p>1x USB 2.0</p> <p>SD card reader</p>
<i>Back Panel Connectors</i>	<p>HDMI, digital video and audio output</p> <p>DisplayPort, digital video and audio output</p> <p>D-Sub/ VGA, analog video output (15 pin)</p> <p>1x USB 3.0</p> <p>3x USB 2.0</p> <p>Gigabit network (LAN, RJ45)</p> <p>Audio Line-out (head phone)</p> <p>Microphone input</p> <p>DC input for the external power adapter</p> <p>Perforation for TV antenna (diameter: 9 mm)</p>
<i>Internal USB Connector</i>	<p>Internal USB 2.0 Type-A connector for USB dongle (for e.g. memory stick, 3G stick, DVB-T stick, etc.)</p> <p>Supports booting from an internal USB memory stick.</p>

Power Supply	<p>External 40W AC/DC power adapter (fanless), 19V / 2.1A AC Input: 100~240V AC, 50~60Hz Automatic voltage adjust Dimensions: 89.5 x 37 x 26.5 mm (LWH) DC Connector: 5.5/2.5mm (outer/inner diameter)</p>
Optional Accessories	<p>Optional Accessories - VESA mount made of metal (PV01) - Adapter for second 2.5" drive instead of optical drive (PHD2N)</p>
Environmental spec.	<p>Operating temperature range: 0~35°C Relative humidity range: 10~90% (non-condensing)</p>
Certification and Compliance	<p>EMI: FCC, CE, BSMI, C-Tick Safety: ETL, CB, BSMI Other: RoHS, Energy Star, ErP 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)</p>

[1] UEFI-Firmware (versus BIOS)

Just as many modern PCs, this PC does away completely with a BIOS, but uses a pure *) UEFI firmware instead. The terms UEFI firmware and BIOS are widely used synonymously, but hardware initialising is now performed by the UEFI. Users might not even notice, but the operating system must be installed and executed in UEFI mode. UEFI creates a GUID Partition Table (GPT) on the system partition instead of a Master Boot Record (MBR). On a PC running a pure UEFI firmware alone, must be a 64-bit operating system installed.

*) Notice: In transition period from BIOS to UEFI mainboard manufacturers still used to employ a traditional BIOS for compatibility reasons. Thanks to the integrated "Compatibility Support Module" (CSM), older Windows versions could boot from mainboards with a UEFI firmware.

[2] **Windows 7 64-bit** is supported since BIOS version XS35V400.110. If a BIOS update is required, the built-in UEFI shell must be used. Please refer to the FAQ section on the Shuttle website for more information on this matter. Prior to the installation of Windows 7, the BIOS must be entered and "Windows 7" must be selected as the operating system under "Boot", "OS-Selection".

SKUs of the XS35V4 series:

	Type	UPC / EAN code	Order No.	Operation System	HDD	RAM
XS35V4	Barebone	811686006497	PEB-XS35U401	-	-	-
XS35-703 V4	System w/o OS	4046047102839	PEC-XS35U401	-	500 GB	4 GB
XS3500BA V4	System with OS	4046047102822	PET-XS354BA1	Windows 8.1 64 Bit	500 GB	4 GB