

## Fanless 1-litre PC with Quad Core processor and Windows OS

The XS 3500BB V4 is a fanless Slim PC System with an energy-efficient Intel Celeron J1900 Quad Core processor and Windows 8.1 with Bing operating system. It 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 XS 3500BB V4 comes completely fanless which helps cut down on operating noise and expensive servicing, as there are no moving parts in the machine.

## XS 3500BB V4

Slim PC, Windows 8.1 with Bing



### Feature Highlights

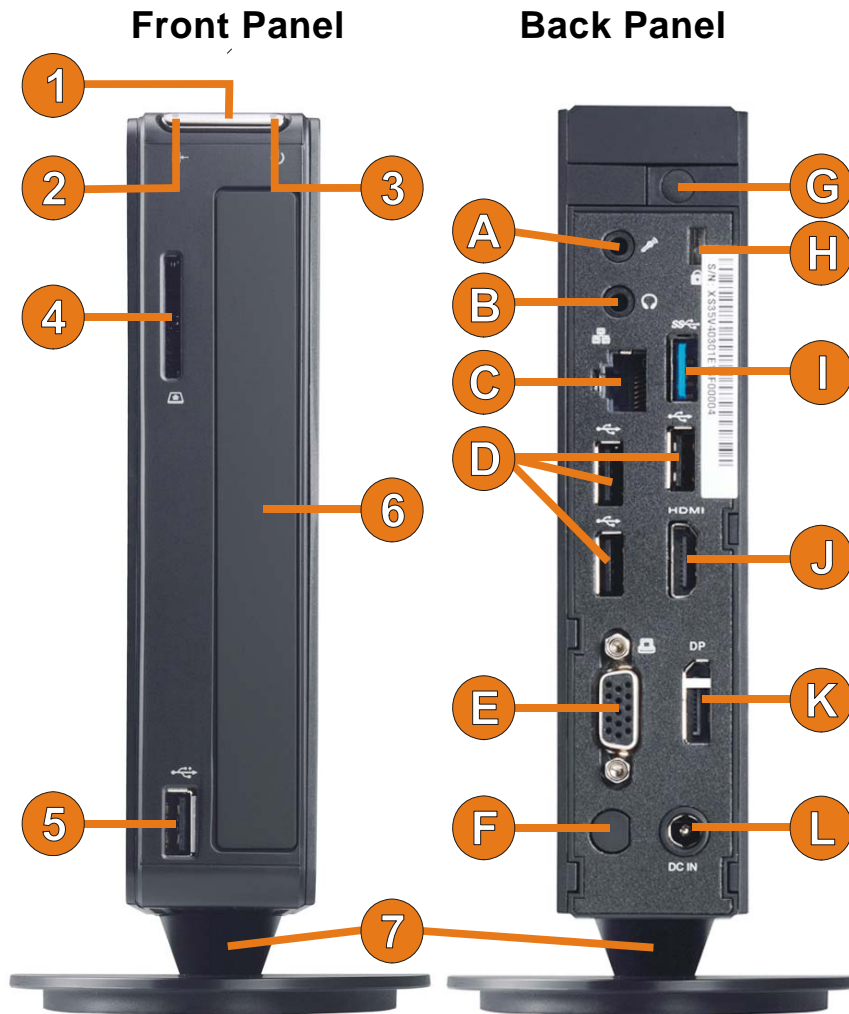
<b>Chassis</b>	<ul style="list-style-type: none"> <li>• Slim 1.5 litre chassis</li> <li>• Fanless, approved for 24/7 operation</li> <li>• Dimensions: 25 x 16 x 3.75 cm</li> <li>• Hole for the Kensington Lock</li> <li>• Optional: VESA75/100 mounting kit PV01</li> </ul>
<b>Operating System</b>	<ul style="list-style-type: none"> <li>• Windows 8.1 with Bing (64-Bit, OEM)</li> <li>• Free upgrade to „Windows 10“</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>• Intel Celeron J1900, Quad Core (2 GHz)</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>• Integrated Intel HD Graphics (7th gen)</li> <li>• Supports DX11 and 1080p Full-HD Video</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• 2 GB DDR3L SO-DIMM memory</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>• 32 GB SATA SSD storage drive</li> <li>• Expandable with another 6.35cm/2.5" SATA storage drive (SSD or hard disk)</li> <li>• Without optical slimline drive</li> <li>• With SD card reader (SD/SDHC/SDXC)</li> </ul>
<b>Connectors and WLAN</b>	<ul style="list-style-type: none"> <li>• 3 video ports: HDMI, DisplayPort, D-Sub</li> <li>• 1x USB 3.0, 3x USB 2.0, internal: USB 2.0</li> <li>• 2x Audio (mic, head phone)</li> <li>• Gigabit-LAN, WLAN 802.11 b/g/n</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>• External 40 W fanless power adapter</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Office, Home Media, Digital Signage...</li> </ul>

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Shuttle Slim PC System XS 3500BB 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 Empty 2.5" bay for another SATA drive | F Perforation for optional connector |                                  |
| 7 Vertical stand                        | G One screw to open the chassis      |                                  |
|   | H Hole for the Kensington-Lock       |                                  |



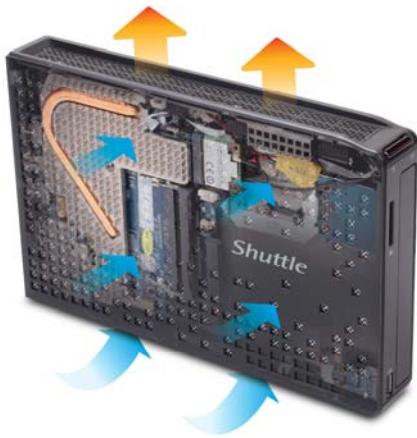
**Notice:**  
Please make sure the system is always operated in upright position using either its stand or the optional VESA mount. Ventilation holes must not be blocked to ensure sufficient cooling.

## Shuttle Slim PC System XS 3500BB V4 - Product Features



### Slim and stylish

Designed as a space-saver, this sleek 1.5 litre nettop PC only measures approx. 3.8 cm 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 XS 3500BB 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.

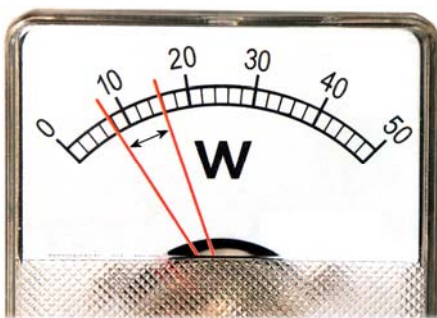


### 24/7 nonstop operation

The Shuttle Slim PC Barebone XS35V4 is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passively cooling, this PC runs highly reliably 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: 10-90% (not condensing)
- Free circulation of air amongst the PC must be guaranteed
- Ventilation holes must be clear
- If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.



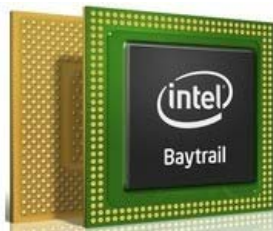
### Highly energy-saving

The Shuttle Slim PC System XS 3500BB 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.



#### 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 XS 3500BB 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 (7<sup>th</sup> 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 XS 3500BB 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 XS 3500BB 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 XS 3500BB V4 with ease.



### Empty 2.5" bay for an additional drive

The Shuttle Slim PC System XS 3500BB V4 provides an empty 6.35cm/2.5" bay which can be used for an extra SSD or hard disk drive with Serial ATA interface. This is a handy addition to the built-in 32 GB SSD drive, if a large volume of data needs to be permanently accessible.



### Internal USB connector

The Shuttle Slim PC System XS 3500BB 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 XS 3500BB V4 Specifications

<p><i>Fanless and silent</i></p>	<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>
<p><i>Low Power Consumption</i></p>	<p>Power consumption: ca. 7.5 W (idle mode) and ca. 15.4 W (full load)</p>
<p><i>Chassis</i></p>	<p>Dimensions without stand: 25 x 16 x 3.75 cm (DxHxW) = 1.5 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>
<p><i>Operation System</i></p>	<p>Windows 8.1 with Bing 64 Bit (OEM)                  Languages: German, English, French, Spanish, Italian, Dutch, Swedish, Danish                  The operating system on this PC is qualified for a free "Windows 10" upgrade within one year of the launch of Windows 10.</p>
<p><i>Processor</i></p>	<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>
<p><i>Memory</i></p>	<p>2 GB DDR3L SO-DIMM memory                  Maximum capacity: 8 GB</p>
<p><i>SSD storage</i></p>	<p>32 GB SSD storage drive                  Serial ATA interface, 6.35cm/2.5" format</p>
<p><i>Empty 2.5" bay</i></p>	<p>Supports an additional SSD or hard disk drive with 6.35cm/2.5" form factor and Serial ATA interface</p>

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<p><i>Integrated Graphics</i></p>	<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>
<p><i>UEFI Firmware</i></p>	<p>8Mbit Flash ROM with AMI's Aptio UEFI BIOS Firmware                  Based on the Unified Extensible Firmware Interface (UEFI)                  Supports Power fail resume / AC power on state / always on / always off                  Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states                  Supports boot up from external flash memory cards</p>
<p><i>Integrated Audio</i></p>	<p>Realtek ALC269 Audio Codec with Azalia and D3 mode support                  Two analog audio connectors (3.5mm):                  1) Line out (head phone)                  2) Microphone input</p>
<p><i>Card Reader</i></p>	<p>Integrated card reader supports SD, SDHC and SDXC memory flash cards</p>
<p><i>Wired Network</i></p>	<p>RJ45 connector supports Gigabit-LAN at 10/100/1000 Mbit/sec.                  Network controller Realtek RTL8411                  Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states                  Supports network boot by Preboot eXecution Environment (PXE)</p>
<p><i>Wireless Network</i></p>	<p>Half-size Mini PCIe card with RTL8188EE chip                  Supports IEEE 802.11b/g/n, max. 150Mbps up-/downstream                  Security: WPA/WPA2(-PSK), WEP 64/128bit, IEEE 802.11x/i</p>
<p><i>LEDs &amp; Buttons</i></p>	<p>Power button                  Power LED (blue)</p>
<p><i>Front Panel Connectors</i></p>	<p>1x USB 2.0                  SD card reader</p>
<p><i>Back Panel Connectors</i></p>	<p>HDMI, digital video and audio output                  DisplayPort, digital video and audio output                  D-Sub/ VGA, analog video output (15 pin)                  1x USB 3.0, 3x USB 2.0                  Gigabit network (LAN, RJ45)                  Audio Line-out (head phone)                  Microphone input                  DC input for the external power adapter                  Perforation for TV antenna (diameter: 9 mm)</p>

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<i>Internal USB Connector</i>	Internal USB 2.0 Type-A connector for USB dongle (for e.g. memory stick, 3G stick, DVB-T stick, etc.) Supports booting from an internal USB memory stick.
<i>Power Supply</i>	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)
<i>Optional Accessory</i>	VESA mount made of metal (PV01)
<i>Environmental spec.</i>	Operating temperature range: 0~35°C Relative humidity range: 10~90% (non-condensing)
<i>Certification and Compliance</i>	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)

**[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.

**SKUs of the XS35V4 series:**

Name	Type	UPC / EAN code	Operation System	Storage	RAM
<b>XS35V4</b>	Barebone	811686006497	-	-	-
<b>XS35-703 V4</b>	System w/o OS	4046047102839	-	500 GB HDD	4 GB
<b>XS 3500BA V4</b>	System with Windows	4046047102822	Windows 8.1 64 Bit	500 GB HDD	4 GB
<b>XS 3500BB V4</b>	System with Windows	887993600284	Windows 8.1 with Bing, 64 Bit	32 GB SSD	2 GB