

Fanless 1-litre PC with high reliability

The XS3600BA V4 is a Slim PC system with Windows 8.1 Pro based on the Shuttle Barebone XS36V4. The device has thickness of only 36 mm and completely fanless - this ensures extreme silence and reliability. The energy-efficient Intel Celeron J1900 Quad Core processor with powerful graphics engine is suitable for a wide range of software applications including FullHD video encoding/decoding. Three monitor ports (HDMI, DisplayPort, D-Sub/ VGA) allow a flexible choice of up to two display. In addition to USB 3.0, card reader, Gigabit-LAN, Wifi it also offers two RS-232 interfaces for professional applications (e.g. device control or POS). Thanks to its multi-functional features It is an ideal platform for professional applications like digital signage, POS, automation, office PC or media PC.

XS3600BA V4

Slim PC System with OS



Fanless



Feature Highlights

| | |
|----------------------------|--|
| Chassis | <ul style="list-style-type: none"> • Slim 1.15 litre chassis • Dimensions: 20 x 16 x 3.6 cm • Hole for the Kensington Lock • Optional VESA mount (PV03) |
| Operating System | <ul style="list-style-type: none"> • Windows 8.1 Pro (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" • 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, 4x USB 2.0 • 2x Audio (mic, head phone) • Gigabit-LAN, WLAN 802.11 b/g/n • 2x serial ports (RS232) |
| Power Supply | <ul style="list-style-type: none"> • External 40 W fanless power adapter |
| Applications | <ul style="list-style-type: none"> • Office, POS, automation, digital signage |

Images are for illustration purposes only.

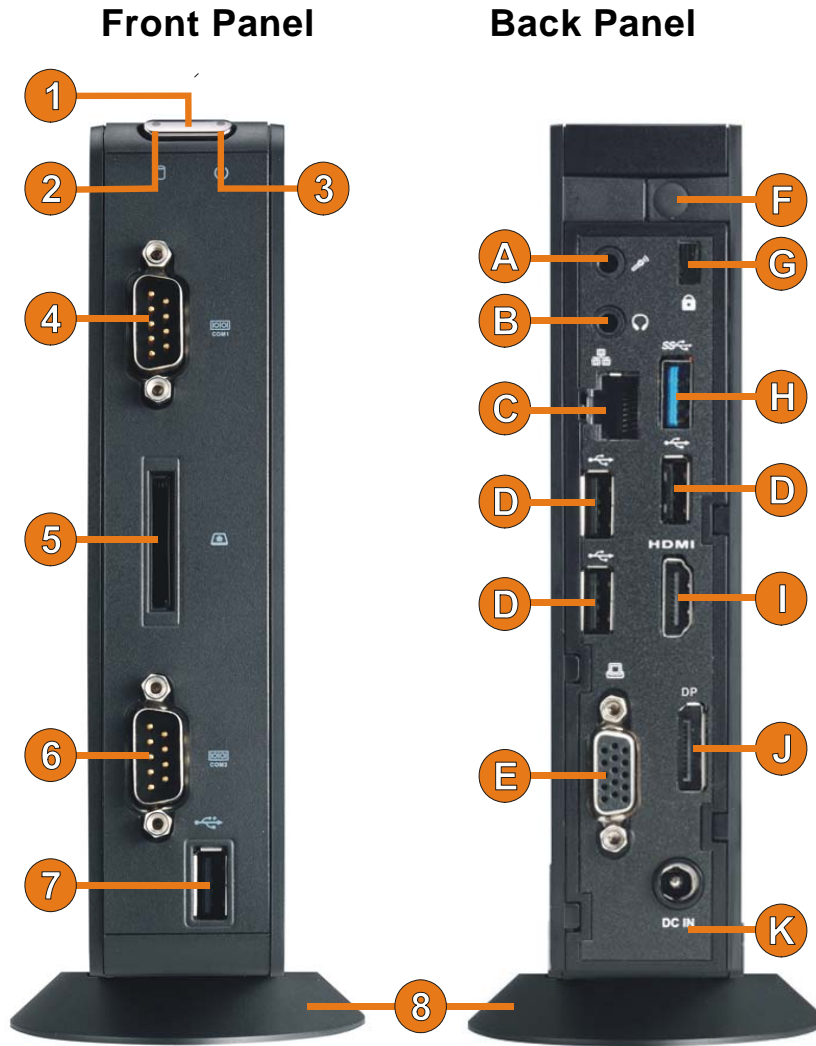
Shuttle Order-No. PET-XS364BA1

EAN bar code: 4046047102846



© 2014 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Slim PC System XS3600BA V4 – Connectors



- 1 Power button
- 2 Power LED
- 3 Hard disk LED
- 4 Serial Port 1 (RS232/422/485)
- 5 SD card reader
- 6 Serial Port 2 (RS232)
- 7 USB 2.0 connector
- 8 Vertical stand

- A Microphone input
- B Head phone output (Line out)
- C Gigabit LAN connector (RJ45)
- D 3x USB connectors
- E D-Sub/VGA connector
- F One screw to open the chassis
- G Hole for the Kensington-Loc
- H USB 3.0 connector

- I HDMI connector
- J DisplayPort connector
- K DC input for the power adapter



Notice:
Please make sure the system is always operated in upright position using either its stand or the optional VESA mount (PV03). Ventilation holes must not be blocked to ensure sufficient cooling.

© 2014 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

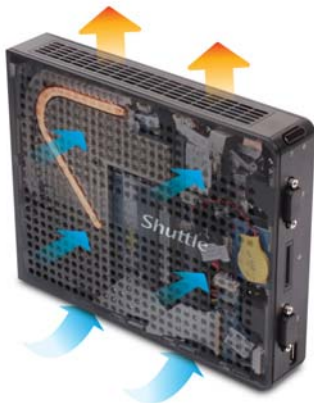
Shuttle Slim PC System XS3600BA V4 - Product Features



POS system with a Shuttle XS36-703 V4

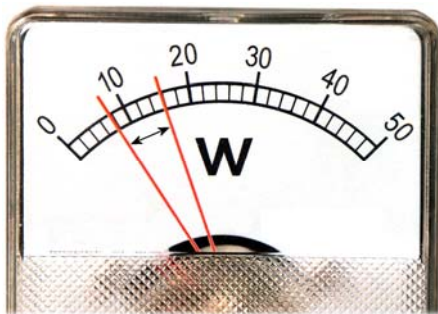
Ideal for professional applications

Designed as a space-saver, this sleek 1.15 litre nettop PC only measures 3.3 cm in width. It maximizes space whether it is placed upright using its stand or affixed to the back of a display with the optional VESA mounting kit. Due to its small size and flexible design, this practical nettop offers exceptional functionality. It is well-suited for professional applications like digital signage, POS system, POI terminals, control PC or office PC (e.g. thin client). Thanks to the serial ports it connects to appropriate POS displays, cash registers or digital sensors.



Fanless and quiet

The Shuttle Slim PC System XS3600BA V4 uses a passive thermal module with heatpipes to lead heat to the outside 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 dust-free and virtually maintenance-free.



Highly energy-saving

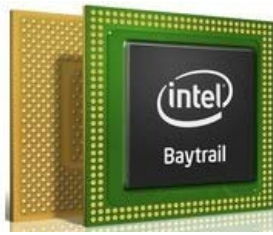
The XS3600BA V4 barely consumes, depending on system load, about 8.7-16.3 Watts. Running the device*) 5 days a week for eight hours a day, the annual consumption would amount to approx. 18~34 kWh which would mean just 4.50 – 8.50 Euros on the power bill (25 Euro ct/kWh).

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



Optional VESA mount (Accessory PV03)

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 XS3600BA 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 XS3600BA 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 to view them simultaneously.



USB 3.0 SuperSpeed connector

The Shuttle Slim PC System XS3600BA 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 an 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 XS3600BA V4 with ease.



Two serial RS-232 ports (COM)

The Shuttle Slim PC System XS3600BA V4 features two serial RS232 COM ports in the front panel. Both ports support 5V/12V auxiliary voltage and the upper port is switchable to RS422 or RS485 mode. Today, many consumer PCs do no longer have this legacy port, since this interface has been superseded by USB. Still, they are commonly used for applications of industrial automation systems, scientific analysis and POS systems.



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. (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 of the system.

© 2014 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Slim PC System XS3600BA 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. 8.7 W (idle mode) and ca. 16.3 W (full load) (Configuration: 4 GB RAM, 120 GB SSD and Windows 8.1 64-bit)</p> |
| <p><i>Chassis</i></p> | <p>Dimensions without stand: 20 x 16 x 3.6 cm (DxHxW) = 1.15 litres Hole for Kensington Lock at the back panel Optional accessory: 75mm and 100mm VESA mounting kit (PV03)</p> |
| <p><i>Operation System</i></p> | <p>Window 8.1 Pro 64-Bit</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>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 decoding: H.264, MPEG2, MVC, VC-1, VP8, MJPEG - for encoding: H.264, MPEG2, MVC</p> |
| <p><i>Memory</i></p> | <p>4 GB DDR3L SO-DIMM memory Maximum capacity: 8 GB</p> |
| <p><i>Storage (2.5")</i></p> | <p>500 GB hard disk drive Serial ATA interface, 6.35cm/2.5" format</p> |

© 2014 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

| | |
|-------------------------------|---|
| UEFI Firmware | <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> |
| Integrated Audio | <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 |
| Card Reader | <p>Integrated card reader supports SD, SDHC and SDXC memory flash cards</p> |
| Wired Network | <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> |
| Wireless Network | <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> |
| LEDs and Buttons | <p>Power button</p> <p>Power LED (blue)</p> |
| Front Panel Connectors | <p>2x RS232 serial port (supports 5V/12V auxiliary voltage, the upper port is switchable to RS422 / RS485)</p> <p>1x USB 2.0</p> <p>SD card reader</p> |
| Back Panel Connectors | <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> |
| Power Supply | <p>External 40W AC/DC power adapter (fanless), 19V / 2.1A</p> <p>AC Input: 100~240V AC, 50~60Hz</p> <p>Automatic voltage adjust</p> <p>Dimensions: 89.5 x 37 x 26.5 mm (LWH)</p> <p>DC Connector: 5.5/2.5mm (outer/inner diameter)</p> |
| Optional Accessories | <p>VESA mount made of metal (PV03)</p> |

| | |
|-------------------------------------|---|
| <i>Environmental spec.</i> | <p>Operating temperature range: 0~35°C Relative humidity range: 10~90% (non-condensing)</p> |
| <i>Certification and Compliance</i> | <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), (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.

SKUs of the XS36V4 series:

| | Type | UPC / EAN code | Order No. | Operation System | HDD | RAM |
|--------------------|----------------|----------------|--------------|---------------------------|--------|------|
| XS36V4 | Barebone | 811686006503 | PEB-XS36V401 | - | - | - |
| XS36-703 V4 | System w/o OS | 4046047102853 | PEC-XS36V401 | - | 500 GB | 4 GB |
| XS3600BA V4 | System with OS | 4046047102846 | PET-XS364BA1 | Windows 8.1 Pro 64 Bit | 500 GB | 4 GB |

© 2014 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.