

### Fanless slim PC platform with Intel Atom "Cedar View" Dual Core processor

The Shuttle XS36V is an extremely slim and ergonomic Mini PC that works highly energy-efficiently. With a power consumption that is barely worth mentioning, its noise level is close to zero. This PC platform is powered by an Intel Atom D2700 dual-core processor (2x 2.13 GHz) with integrated GMA 3650 graphics. Because of its completely fanless case layout, it is virtually maintenance-free and noiseless. The 36 mm thin case of the XS36V provides room for one 2.5in hard disk or SSD. WLAN (n) and a card reader are already built in. It sports an array of connectors too which include HDMI 1.3, DVI-D, D-Sub (VGA), 5x USB, Gigabit-LAN, audio ports and two RS232 COM ports for business and vertical Markets.

### Barebone **XS36V** Slim PC



#### Feature Highlights

<b>Chassis</b>	<ul style="list-style-type: none"> <li>• Slim 1.1 litre chassis</li> <li>• Dimensions: 20 x 16 x 3.6 cm</li> <li>• Hole for the Kensington Lock</li> <li>• Optional VESA mount (PV03)</li> </ul>
<b>Operating system</b>	<ul style="list-style-type: none"> <li>• Without operating system</li> <li>• Compatible with Windows 7 (32 bit)</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>• Intel Atom D2700 Dual Core (2.13GHz)</li> </ul>
<b>Chipset</b>	<ul style="list-style-type: none"> <li>• Intel NM10 Express Chipset</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>• Integrated Intel GMA3650 Graphics</li> <li>• Shared Memory: max. 384MB DVMT</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• 2x SO-DIMM socket (204 pins)</li> <li>• Supports max. 4GB DDR3-1066</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>• Supports one 2.5" SATA hard disk or SSD</li> <li>• Built in SD card reader</li> </ul>
<b>Connectors and WLAN</b>	<ul style="list-style-type: none"> <li>• HDMI v1.3 (supports digital audio)</li> <li>• DVI-D</li> <li>• D-Sub VGA</li> <li>• 5x USB 2.0 (1x front, 4x rear)</li> <li>• Microphone input</li> <li>• Headphones output (Line-out)</li> <li>• Gigabit-LAN</li> <li>• 2x RS232 COM-Ports</li> <li>• WLAN 802.11 b/g/n</li> </ul>
<b>Power supply</b>	<ul style="list-style-type: none"> <li>• External 40W fanless power supply</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Basic and Home-Media</li> </ul>

Images are only for illustration purposes.  
The optical drive is not included.



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Shuttle Order Number: PEB-XS36V001



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## Shuttle Barebone XS36V - Product Features



Point of sales with Shuttle XS36V

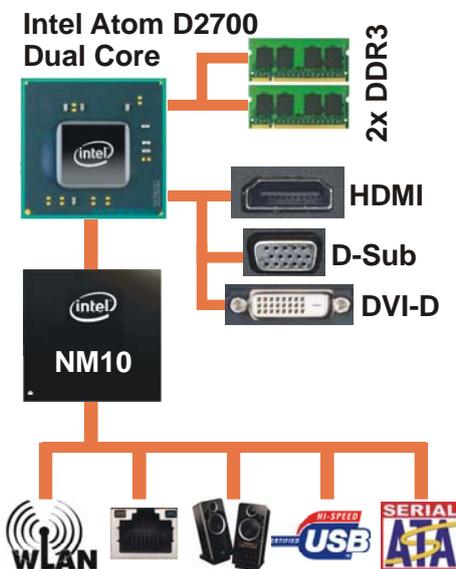


### Ideal for professional applications

Designed as a space-saver, this sleek 1.3 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 you can connect appropriate POS displays, cash register drawer or digital sensors. It is also possible to add an internal USB stick as a low cost storage device.

### Fanless and quiet

The Shuttle Barebone XS36V comes totally fanless 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.



### The Atom processor integrates the graphics controller

Shuttle XS36V is equipped with Intels Atom D2700 processor (2,13GHz, codenamed Cedarview). It comes with both the memory controller and graphics core on-die which helps to keep heat dissipation and memory latency low. The CPU is connected to the Southbridge NM10, codenamed Tiger Point.

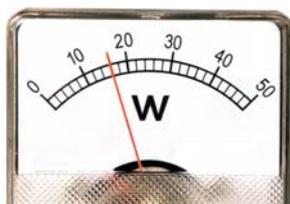
### Dual Core. Do more.

Shuttle always uses the dual-core variant of Intel's Atom processors and thus integrates the Atom D2700. This boosts the system performance significantly with particular regards to multi-threaded applications.

### Highly energy-saving

The XS36V barely consumes, depending on system load, about 16~25 Watts. Running the device\*) 5 days a week for eight hours a day, the annual consumption would amount to less than 40kWh which would mean just 8 Euros on the power bill (20 Euro ct/kWh) - way less than a conventional desktop PC draws.

\*) Based on a configuration with 4GB of memory, 500GB hard disk and Windows 7 32 bit.





### What does "Barebone" mean?

Shuttle's barebones line such as the XS36V is targeted at experienced users seeking to build a complete system to meet their individual requirements. The bulk of components is yet built in, simply the following hardware is to be installed upon purchase in this case:

- One 6.35 cm/2.5" Serial ATA hard disk or Solid State Disk (SSD)
- One or two DDR3 SO-DIMM memory modules (204 pins), max. 4 GB
- USB keyboard and USB mouse
- Operating system: Windows 7, 32 bit



### Supports two displays

The integrated graphics supports multiple display support on up to two separate monitors via HDMI, DVI-D and D-Sub/VGA. This improves the capabilities and productivity of the user by allowing them to spread multiple windows over two monitors and view them simultaneously.



### SD card reader

The built-in SD card reader at the front side makes it easy to transfer files from your camera so you can share videos and photos on your XS36V with ease.



### Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. As known from notebooks, this Mini-PC can also be safely locked by tying it to a solid object.

(The lock-and-cable apparatus is 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



**Two serial RS-232 ports (COM)**

XS36V features two serial RS232 COM ports in the front panel. Today, many consumer PCs do no longer have this legacy port, since that interface has been superseded by USB. Still, they are commonly used for applications of industrial automation systems, scientific analysis, and POS systems.



**Optional VESA mount (Accessory PV03)**

Its optional VESA75/100 wallmount 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.



**24/7 nonstop operation**

Shuttle XS36V is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passively 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: 10-90% (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 (max. one hard disk)



**Note on operating position**

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

## Shuttle Barebone XS36V Specifications

<i>Fanless and silent</i>	<p>Passive cooling, no fan noise at all                  Perfect to be used in noise-sensitive environments                  Fanless, dust-free and thus virtually maintenance-free</p>
<i>Low current</i>	<p>Power consumption: ca. 16W (idle mode) and ca. 25W (full load)</p>
<i>Chassis</i>	<p>Dimensions without Stand: 20 x 16 x 3.6 cm (DxHxW) = 1.15 litres                  Weight: 1.6 kg net, 2.3 kg gross                  Hole for the Kensington Lock at the back panel                  Optional accessory: 75mm and 100mm VESA mounting kit (PV03)</p>
<i>Operation System</i>	<p>This system comes without operating system.                  It is compatible with Windows 7 (32 bit)</p>
<i>Processor</i>	<p>Intel Dual Core Atom processor D2700 (Codename: Cedarview)                  Intel Hyper-Threading technology: 2-threads per core                  32 nm manufacturing process, FCBGA559 package                  Intel 64 architecture, Core clock: 2.13 GHz                  L2 Cache: 1024kB , TDP: max. 10W                  Supports SSE2, SSE3, SSSE3, Execute Disable Bit                  Integrated North Bridge with controller for memory and graphics</p>
<i>Cooling</i>	<p>Passive, completely fanless cooling through convective heat transfer                  Warning: Please make sure the system is always placed upright using either its stand or the optional VESA mount.                  Ventilation holes must not be blocked to ensure sufficient cooling.</p>
<i>Chipset</i>	<p>Intel® NM10 Express Chipset (south bridge)                  Platform Controller Hub (PCH)                  Code name: Tiger Point</p>
<i>BIOS</i>	<p>AMI BIOS in a 8Mbit Flash ROM supports PnP, ACPI 2.0                  Supports external USB flash memory card boot up                  Supports Power fail resume / AC power on state / always on / always off                  Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states                  Supports Unified Extensible Firmware Interface (UEFI)</p>
<i>Memory</i>	<p>2x SO-DIMM slots with 204 pins                  Supports two modules DDR3-1066 (PC3-8500)                  DDR3-1333 is supported at DDR3-1066 clock rate                  Supported maximum capacity: 4 GB</p>

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<p><i>Hard disk drive or SSD</i></p>	<p>Supports one Serial ATA hard disk (max. 5400 rpm) or one SATA SSD drive in 6.35cm/2.5" format The SATA 2.0 interface supports up to 300MB/s data transfer speed Supports a drive with 9.5mm height (12.5mm is not supported) Supports Unified Extensible Firmware Interface (UEFI)</p>
<p><i>Integrated Graphics</i></p>	<p>The Graphics Processing Unit (GPU) is integrated into the processor Intel GMA 3650, Graphics Base Frequency: 640 MHz Supports DirectX 9 Maximum shared memory: 8MB pre-allocated plus 384MB Video Memory Technology (DVMT) Three video outputs: HDMI v1.3, DVI-D and D-Sub (VGA) Two outputs can be used at the same time. Supports dual display in clone or extended mode. HDMI and DVI support the Intel HDCP function (High bandwidth Digital Content Protection) HDMI/DVI display resolution up to 1920x1200.</p>
<p><i>Integrated Audio</i></p>	<p>Integrated Audio IDT92HD81 Audio Codec with Azalia support Two analog audio connectors (3.5mm): 1) Line out (head phone) 2) microphone input Supports digital 7.1 HD audio via the HDMI port.</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 JMC 251 Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states</p>
<p><i>Wireless Network</i></p>	<p>Supports IEEE 802.11b/g/n, max. 150Mbps up-/downstream Security: WPA/WPA2(-PSK), WEP 64/128bit, IEEE 802.11x/i Half size Mini-PCIe-Card</p>
<p><i>Connectors</i></p>	<p>HDMI v1.3 digital video and audio output DVI-D digital video output D-Sub/VGA analog video (15 pin) 5x USB 2.0 (1x front, 4x rear) Gigabit network (LAN, RJ45) Audio Line-out (head phone) Microphone input 2x RS232 COM ports (front panel) DC input for the external power adapter</p>
<p><i>Internal USB connector</i></p>	<p>The front USB connector can be converted to an internal port. This can e.g. be used for an internal USB memory stick as a cost-saving alternative to a hard disk as storage for the operation system.</p>

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<b>LEDs and buttons</b>	Power button Power LED (white), Hard disk LED (blue)
<b>Power supply</b>	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)
<b>24/7 nonstop operation</b>	This device is approved for 24/7 permanent operation. Requirements: - 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 (max. one hard disk)
<b>Environmental</b>	Operating temperature range: 0~35°C Relative humidity range: 10~90% (non-condensing)
<b>Certification and Compliance</b>	EMI: CE, FCC, BSMI, C-Tick, CCC Safety: CB, BSMI, ETL Other compliances: RoHS, Eup Lot6 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-guidelines: - EMV-guideline 89/336/EEG electromagnetic tolerance - LVD-guideline 73/23/EEG use of electric devices within certain voltage-limits

## Comparison: Shuttle Slim-PC Barebone PC XS35/XS36 Series

Model	Graphics	HDMI	DVI	D-Sub	RS232	WOL	ODD [4]	Atom Processor	Memory	LAN
<b>XS35</b>	Intel GMA3150	-	-	Yes	-	-	Yes	D510 (1.66 GHz)	Max. 2GB	100
<b>XS35GT</b>	NVIDIA ION2	Yes	-	Yes	-	-	Yes		DDR2-800 [6] 1x SO-DIMM	
<b>XS35V2</b>	Intel GMA3150	-	-	Yes	-	-	Yes	D525 (1.80 GHz)	Max. 4GB DDR3-800 [6] 1x SO-DIMM	Giga
<b>XS35GT V2</b>	NVIDIA ION2	Yes	-	Yes	-	-	Yes			
<b>XS35GTA V2</b>	ATI Mobility Rad. HD 5430	Yes	-	Yes	-	-	Yes			
<b>XS35GS V2</b>	ATI Radeon HD 7410M	Yes	-	Yes	-	-	Yes			
<b>XS35V3(L)</b>	Intel GMA3650 [2]	Yes	-	Yes	-	Yes [3]	Yes	Without "L": D2700 (2.13 GHz)	Max. 4GB DDR3-1066 [6] 2x SO-DIMM	Giga
<b>XS35GTA V3 [1]</b>	ATI Radeon	Yes	-	Yes	-	Yes [3]	Yes	"L"-version: [5]		
<b>XS35GS V3L</b>	HD 7410M									
<b>XS36V(L)</b>	Intel GMA3650 [2]	Yes	Yes	Yes	2x	Yes [3]	-	D2550 (1.86 GHz)		

[1] XS35GTAV3 is also called XS35GS V3 outside EU.

[2] Intel offers sophisticated graphics driver for the integrated Intel GMA3650 graphics only for Windows 7 32 bit. Linux can be used in standard mode without video and 3D acceleration. (date Oct. 2012)

[3] Supports Wake-on-LAN (WOL), Power fail resume (always on/off) and Resume by RTC Alarm

[4] "ODD" means 5.25" bay for an optical drive in slim-line format

[5] In 2012, Intel phased out the Atom D2700 processor and introduced the D2550 as its successor. This new model comes with a slightly reduced clock rate, while any other features are maintained.

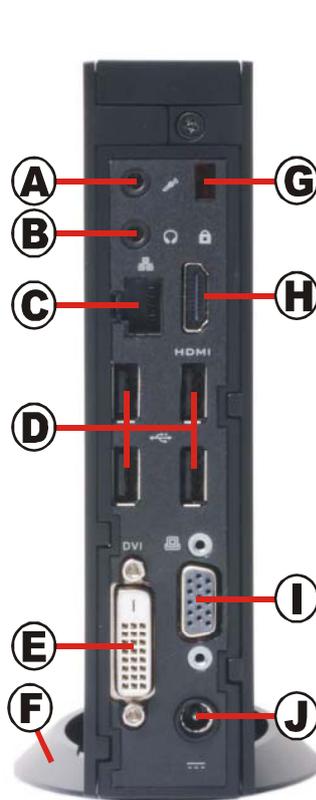
[6] DDR3-1333 is supported at DDR3-1066 or DDR3-800 clock rate, respectively.

Shuttle Barebone XS36V – Connectors

Front Panel



Back Panel



- 1 Power button
- 2 Power LED
- 3 Hard disk LED
- 4 2x RS232 COM ports
- 5 SD card reader
- 6 Vertical stand
- 7 USB 2.0 connector

- A Microphone input
- B Head phone output (Line out)
- C Gigabit LAN connector (RJ45)
- D 4x USB 2.0 connectors
- E DVI-D connector
- F Vertical stand
- G Hole for the Kensington-Lock
- H HDMI connector
- I D-Sub/VGA connector
- J Connector for the power adapter



**Warning:**

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