Whisper-quiet Mini PC platform with an Intel Atom dual-core processor

To put it in a nutshell, the Shuttle XS35V2 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. The XS35V2 has an Intel Atom D525 dual-core processor (2x 1.8 GHz) beating at its heart while also using integrated GMA 3150 graphics. Because of its completely fanless case layout, it is virtually maintenance-free and noiseless. The 38mm thin case of the XS35V2 provides room for one slim-line optical drive and one 2.5in hard disk (a second hard drive can be fitted, if the optical drive is left out). WLAN (n) and a card reader are already built in. It sports an array of connectors too which include 5x USB, VGA, Gigabit LAN and audio ports.

Barebone *XS 35 V2*
Slim PC

Fanless

Feature Highlights

Chassis	• Slim 1.5 litre chassis • Dimensions: 25.2 x 16.2 x 3.84 cm • Hole for the Kensington Lock • Optional: VESA75/100 mounting kit PV01
Operating system	• Without operating system (compatible with Windows 7, Windows XP and Linux)
CPU	• Intel ATOM 525 Dual Core (2x 1.8GHz)
Chipset	• Intel NM10 Express Chipset
Graphics	• Integrated Intel GMA3150 Graphics
Memory	• 1x SO-DIMM socket (204 pins) • Supports max. 4GB DDR3-667/800
Storage	• Supports one slimline DVD drive • Supports 2.5" SATA hard disk or SSD • SD card reader
Connectors and WLAN	• D-Sub VGA • 5x USB 2.0 (1x front, 4x rear) • Microphone input • Headphones output (Line-out) • Gigabit-LAN • WLAN 802.11 b/g/n
Power supply	• External 40W fanless power supply
Applications	• Basic and Home-Media

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

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Shuttle Order Number: PEB-XS35U211
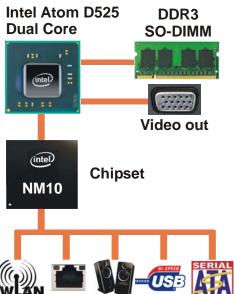
Shuttle Barebone XS35V2 - Product Features

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 display 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 Barebone XS35V2 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.

Intel Atom D525 Dual Core

DDR3 SO-DIMM

Video out

Chipset

NM10

The Atom processor integrates the graphics controller

Shuttle XS35V2 is equipped with Intels new Atom D525 processor (1,8GHz, codenamed Pineview). 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 D525. This boosts the system performance significantly with particular regards to multi-threaded applications.

Highly energy-saving

The XS35V2 barely consumes, depending on system load, about 16~20 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 2GB of memory, 160GB hard disk and Windows 7

What does "Barebone" mean?

Shuttle's barebones line such as the XS35V2 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 6.35cm/2.5" Serial ATA hard disk or Solid State Disk (SSD)
- One DDR3-667/800 SO-DIMM memory module (204 pins)
- USB keyboard and USB mouse
- Optional Slim-line DVD writer with 12.7mm height
- Operating system (Windows 7, Windows XP or Linux)

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 XS35V2 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 tieing it to a solid object.
(The lock-and-cable apparatus is not included.)

Optional second hard disk (Accessory PHD2N)

The optional accessory PHD2N supports a second 2.5" hard disk. Please note, that the bay for the optical drive will be occupied then.

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

Easy installation

Remove just one screw to unmount the two chassis covers.

Optional VESA mount (Accessory PV01)

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.
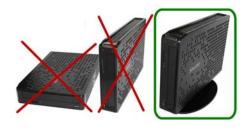
24/7 nonstop operation

Shuttle XS35V2 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. Ventilation holes must not be blocked to ensure sufficient cooling.

Shuttle Barebone XS35V2 Specifications

Chassis	Dimensions without stand: 25.2 x 16.2 x 3.85 cm (DxHxW) = 1,57 litre Dimensions with stand: 25.2 x 18.5 x 10.04 cm (DxHxW) Weight: 2.1 kg net, 2.8 kg gross Hole for the Kensington Lock at the back panel Optional accessory: 75mm and 100mm VESA mounting kit (PV01) 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.
Operation System	This system comes without operating system. It is compatible with Windows 7, Windows XP and Linux
Processor	Intel Dual-Core Atom processor D525 (Codename: Pineview-D) 45nm manufacturing process, FCBGA559 Intel Hyper-Threading technology: 2-threads per core Intel 64 architecture, Core clock: 2x 1.8GHz, L2 Cache: 1024kB , TDP: max. 13W Integrated North Bridge with controller for memory and graphics
Cooling	Passive, completely fanless cooling
Chipset	Intel® NM10 Express Chipset Platform Controller Hub (PCH), Code name: Tiger Point
BIOS	AMI BIOS in a 2Mbit Flash ROM supports PnP, ACPI 3.0 Supports external USB flash memory card boot up Supports power on after power fail ("Restore on AC Power Loss") Supports power on by time ("Resume On RTC Alarm") Supports Preboot eXecution Environment (PXE) to boot via network
Memory	Supports one module DDR3-667/800 (PC3-5300/6400), max. 4GB SO-DIMM slot with 204 pins Memory modules that are designed for higher frequencies can also be used. The installed modules then run at an actual frequency of 800 MHz.
Optical drive (opt.)	Optionally supports an optical DVD drive in slim line format Serial ATA interface, 12.7mm height, Slimline SATA connector
Hard disk drive	Supports one SATA hard disk or one SATA SSD drive in 6.35cm/2.5" format, max. 5400 RPM 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) The optional accessory PHD2N supports a second 2.5" hard disk (the bay for the optical drive will be occupied then)

Integrated Graphics	The Graphics Processing Unit (GPU) is integrated into the processor Intel GMA 3150, 400MHz render clock frequency Intel Dynamic Vidieo Memory Technology 4.0 (DVMT 4.0) Share system memory max. 256MB Supports DirectX 9 and 2D/3D instruction set, Pixel Shader 2.0 MPEG2 hardware acceleration, Intel Clear Video / ProcAmp technology allows user adjustment of hue, saturation, brightness and contrast Analog VGA: supports up to 2048x1536, 60Hz resolution
Integrated Audio	IDT92HD81 Audio Codec with Azalia support Two analog audio connectors (3.5mm): 1) Line out (head phone) 2) microphone input
Card Reader	Integrated card reader supports SD, SDHC and SDXC memory flash cards
Wired Network	RJ45 connector supports Gigabit LAN at 10/100/1000 Mbit/sec. Supports Deep Sleep Mode (DSM)
Wireless Network	Supports IEEE 802.11b/g/n (Realtek RTL8188CE) Half size Mini-PCIe-Card
Connectors	VGA Analog Video (D-Sub 15 pol., analog) 5x USB 2.0 (1x front, 4x rear) Network (LAN, RJ45) Audio Line-out (head phone) Microphone input DC input for power adapter
LEDs and Buttons	Power button Power LED (white), Hard disk LED (blue)
Power supply	External 40W AC/DC power adapter (fanless) AC Input: 100~240V AC, 50~60Hz Dimensions: 89.5 x 37 x 26.5 mm (LWH)
Certification and Compliance	EMI: CE, FCC, BSMI, C-Tick Safety: CB, BSMI, ETL Other compliances: RoHS, Eup Lot6

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

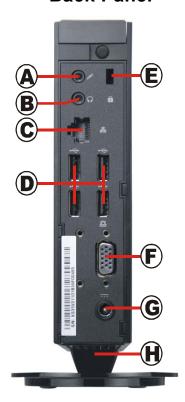| Model	Graphics	HDMI	DVI	D-Sub	RS232	WOL	ODD [4]	Atom Processor	Memory	LAN
XS35	Intel GMA3150	-	-	Yes	-	-	Yes	D510 (1.66 GHz)	Max. 2GB DDR2-800 [6] 1x SO-DIMM	100
XS35GT	NVIDIA ION2	Yes	-	Yes	-	-	Yes			
XS35V2	Intel GMA3150	-	-	Yes	-	-	Yes	D525 (1.80 GHz)	Max. 4GB DDR3-800 [6] 1x SO-DIMM	Giga
XS35GT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

[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.

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Shuttle Barebone XS35V2 – Connectors

Front Panel   Back Panel

1	SD card reader
2	USB connector
3	Power button with power and hard disk LED
4	Bay for optical slim drive *)
5	Stand

A	Microphone input
B	Head phone output (line out)
C	Network connector (RJ45)
D	4x USB connectors
E	Hole for the Kensington lock
F	VGA connector
G	Connector for power adapter
H	Stand

*) Note: The optical drive is not included.

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.

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