Fanless 1-litre slim PC with ATI graphics, X5 3531MA V3 **DVD drive and Windows 7**

XS 3531MA V3 is a fully configured slim PC with 2 GB RAM, 500 GB hard disk, DVD-R/W drive and Windows 7 Home Premium operating system. The powerful AMD Radeon $^{\text{\tiny{TM}}}$ HD 7410M graphics card makes fluent video playback on full-HD displays a reality. The Atom D2550 processor clocked at 2x 1.86 GHz offers sufficient computing power for a wide range of possible applications and the system barely consumes about 19~27 Watts. This PC comes totally fanless making it perfect to be used in noise-sensitive environments, XS 3531MA V3 features WLAN and card reader, and sports an array of connectors too which include HDMI, D-Sub (VGA), 5x USB, VGA, Gigabit-LAN and 2x audio ports. It's a slim and stylish PC targeted for daily home or office applications and is capable of playing Full HD 1080p video and 3D contents.

	Feature Highlights						
Chassis	 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	Windows 7 Home Premium						
CPU	Intel Atom D2550 Dual Core (1.86GHz)						
Chipset	Intel NM10 Express Chipset						
Graphics	 AMD Radeon HD 7410M, 512MB DDR3 DirectX 11, Shader Model 5.0 						
Memory	2 GB DDR3-1333 SO-DIMM memory						
Storage	 Slim-line DVD-R/W drive 500 GB 2.5" Serial ATA hard disk SD card reader 						
Connectors and WLAN	 HDMI v1.4a D-Sub VGA 5x USB 2.0 (1x front, 4x rear) 2x Audio (mic, head phone) 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.



Shuttle order no: PET-XS353MA1

Page 1 | 9 January 2013



Slim PC





Shuttle Barebone XS 3531MA V3 - 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 XS 3531MA V3 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 memory controller

Shuttle XS 3531MA V3 is equipped with Intels Atom processor D2550 (1.86GHz, 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.

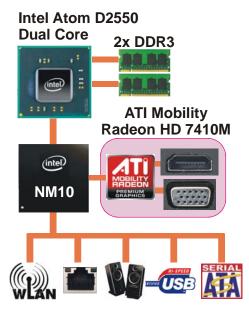
Dual Core. Do more.

Shuttle always uses the dual-core variant of Intel's Atom processors and thus integrates the Atom D2550. This boosts the system performance significantly with particular regards to multi-threaded applications.

AMD Radeon HD 7410M graphics

Even with the small size, the Shuttle Barebone XS 3531MA V3 is equipped with AMD Radeon HD 7410M graphics for a power-packing slim PC that's unmatchable in size and performance – and is made for more than just entertainment. Key benefits are:

- Better Performance for 3D rendering and video playback
- Digital 7.1 channel audio output over HDMI
- Supports DirectX 11 and Shader Model 5.0
- Ready to take on games





Highly energy-saving

The XS 3531MA V3 barely consumes, depending on system load, about $19{\sim}27$ 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 12 Euros on the power bill (20 Euro ct/kWh) - way less than a conventional desktop PC draws.



Two monitor support with HDMI (DVI) and D-Sub/VGA

The integrated graphics supports multiple display support on up to two separate monitors via HDMI (DVI through optional adapter) 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.



XS 3531MA V3 supports Full HD 1080p video

The XS 3531MA V3 with AMD Radeon HD 7410M graphics offers a plus in performance - experience movies at full-HD 1080p quality. The Shuttle Barebone XS 3531MA V3 even takes on games. Benefit from an increase in performance when playing and converting videos, editing images and working with different applications at once. With AMD Radeon HD 7410M you get the maximum out of Windows 7.



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 XS 3531MA V3 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.)



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: $89.5 \times 37 \times 26.5 \text{ mm (LWH)} = 88 \text{ml}$



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.



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.

XS35V3 Series Overview

Name	Order number	Graphics	Operating system	Memory	Hard disk	Optical drive	Bar code
XS35 V3	PEB-XS35U301	Intel GMA 3650	-	-	-	-	811686003786
XS35GTA V3	PEB-XS35A301	AMD Rad. HD 7410M	-	-	-	-	811686003717
XS35-703 V3	PEC-XS35U301	Intel GMA 3650	-	2 GB	320 GB	-	4046047102440
XS35GTA-803 V3	PEC-XS35A311	AMD Rad. HD 7410M	-	2 GB	320 GB	-	4046047102457
XS35GTA-804 V3	PEC-XS35A301	AMD Rad. HD 7410M	-	2 GB	500 GB	DVD R/W	4046047102464
XS 3500BA V3	PET-XS353BA1	Intel GMA 3650	Win 7 Professional 32 bit	2 GB	320 GB	-	4046047102396
XS 3531MA V3	PET-XS353MA2	AMD Rad. HD 7410M	Win 7 Home Prem. 32 bit	2 GB	500 GB	DVD R/W	4046047102402

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	Shuttle Barebone XS 3531MA V3 Specifications
Fanless and silent	Passive cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free
Chassis	Dimensions without Stand: 25.2 x 16.2 x 3.85 cm (DxHxW) Hole for the Kensington Lock at the back panel Optional accessory: 75mm and 100mm VESA mounting kit (PV01)
Operation System	Windows 7 Home Premium
Processor	Intel Dual Core Atom processor D2550 (Codename: Cedarview) Intel Hyper-Threading technology: 2-threads per core 32 nm manufacturing process, Micro-FCBGA11 package Intel 64 architecture, Core clock: 1.86 GHz, L2 Cache: 1024kB, TDP: max. 10W Supports SSE2, SSE3, SSSE3, Execute Disable Bit Integrated North Bridge with controller for memory and graphics
Cooling	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.
Chipset	Intel® NM10 Express Chipset (south bridge) Platform Controller Hub (PCH) Code name: Tiger Point
BIOS	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)
Memory	2 GB DDR3-1333 SO-DIMM memory (at DDR3-1066 speed) Supported maximum capacity: 4 GB
Hard disk	500 GB 2.5" Serial ATA hard disk
DVD drive	Slim-line DVD-R/W drive Serial ATA interface, 12.7 height, slim-line SATA connector

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Integrated Graphics	AMD Radeon™ HD 7410M graphics processor (Dedicated 3D graphics card) VRAM: 512MB DDR3, 800MHz, 64 bit, 160 Stream Processing Units, 40nm technology Supports DirectX 11, Shader Model 5.0, OpenGL 4.1 Unified Video Decoder (UVD 3) dedicated video playback accelerator Supports full HD decode (1080i/p) Support for up to 2 simultaneous displays: 1) Digital HDMI™ 1.4a, max. resolution: 1920x1200 2) Analog D-Sub VGA, max. resolution: 2048x1536 Supports Extended Desktop Mode and Clone Mode Integrated HD audio controller for 7.1 Surround Sound via HDMI. Supports AC-3, AAC, Dolby TrueHD and DTS Master Audio formats.
Integrated Audio	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.
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. Network controller Realtek RTL8411 Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states
Wireless Network	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
Connectors	HDMI v1.4a digital video and audio 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 DC input for the external power adapter
LEDs and buttons	Power button Power LED (white) Hard disk LED (blue)
Power supply	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)
Optional accessories	- VESA mount made of metal (PV01) - Adapter for second 2.5" drive instead of optical drive (PHD2)



Environmen-	Operating temperature range: $0\sim35^{\circ}\text{C}$
tal spec	Relative humidity range: $10\sim90\%$ (non-condensing)
Certification and Compliance	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/EWG electromagnetic tolerance - LVD-guideline 73/23/EWG use of electric devices within certain voltage-limits

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Shuttle Barebone XS 3531MA V3 - Connectors

- 1 Power button
- 2 Power LED
- 3 Hard disk LED
- 4 SD card reader
- 5 USB connector
- 6 Bay for the optical slimline drive *)
- 7 Vertical stand

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



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.

Shuttle XS Series Product Comparison

Comparison: Shuttle Slim-PC XS35V3L Series (Barebone/System)

Model	Туре	Graphics	OS	RAM	HDD	DVD	Order no	Barcode
XS35V3L	Barebone	Intel GMA3650	-	-	-	-	PEB-XS35U3L01	811686004288
XS35GSV3L	Barebone	ATI HD 7410M	-	-	-	-	PEB-XS35S3L11	811686004295
XS35-703 V3L	System w/o OS	Intel GMA3650	-	2 GB	320 GB	-	PEC-XS35U3L01	4046047102600
XS35GS-803 V3L	System w/o OS	ATI HD 7410M	-	2 GB	320 GB	-	PEC-XS35S3L21	4046047102648
XS35GS-804 V3L	System w/o OS	ATI HD 7410M	-	2 GB	500 GB	Yes	PEC-XS35S3L11	4046047102655
XS 3501BA V3	System with OS	Intel GMA3650	Win 7 Pro	2 GB	320 GB	-	PET-XS353BA2	4046047102624
XS 3531MA V3	System with OS	ATI HD 7410M	Win 7 HP 32	2 GB	500 GB	Yes	PET-XS353MA1	4046047102662

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		Max. 2GB	
XS35GT	NVIDIA ION2	Yes	-	Yes	-	-	Yes	D510 (1.66 GHz)	DDR2-800 [6] 1x SO-DIMM	100
XS35V2	Intel GMA3150	-	-	Yes	-	-	Yes			
XS35GT V2	NVIDIA ION2	Yes	-	Yes	-	-	Yes		Max. 4GB DDR3-800 [6] 1x SO-DIMM	
XS35GTA V2	ATI Mobility Rad. HD 5430	Yes	-	Yes	-	-	Yes	D525 (1.80 GHz)		Giga
XS35GS V2	ATI Radeon HD 7410M	Yes	-	Yes	-	-	Yes		TX 30-DIIVIIVI	
XS35V3(L)	Intel GMA3650 [2]	Yes	-	Yes	-	Yes [3]	Yes	Without "L":	Max. 4GB	
XS35GTA V3 [1]	ATI Radeon	Yes		V		V 101	V	D2700 (2.13 GHz)	DDR3-1066	C:
XS35GS V3L	HD 7410M	res	-	Yes	-	Yes [3]	Yes	<u>"L"-version:</u> [5]	[6]	Giga
XS36V(L)	Intel GMA3650 [2]	Yes	Yes	Yes	2x	Yes [3]	-	D2550 (1.86 GHz)	2x SO-DIMM	

- [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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