All-in-one Touchscreen Barebone PC

The Shuttle X50V3 Barebone is an all-in-one PC boasting a 39.6cm (15.6-inch) LCD touchscreen powered by Intel's dual core Atom processor D2700. Intended for use in the home environment, the Shuttle X50V3 Barebone is targeted at hardware experts seeking to build a complete system according to their individual requirements. Most of the hardware is yet built in, just three components need to be installed: memory, hard disk (or SSD) and operating system. Equipped with Intel's integrated graphics, it provides generous performance for daily computing with internet and office applications. An external display can be connected via HDMI or D-Sub. A 2.0MP webcam, builtin speakers, card reader, WLAN and other features leave nothing you could ask for. Have any applications start up quickly by just touching the screen for working most swiftly and conveniently. With the optional accessory PCL69 you can upgrade the device with additional ports: 2x RS232 (serial) and 1x LPT (parallel).

Feature Highlights

All-in-one Design	 All-in-One PC Barebone platform with resisitive touchscreen Small: 391 x 327 x 42 mm (WHL) Stand can also be used as a handle 100mm VESA mount capable External, fanless power supply (40W) 			
Display & Graphics	 39.6cm (15.6") resistive touchscreen with 1366x768 resolution Integrated graphics (GMA3650, DX9) HDMI + D-Sub/VGA Video output 			
CPU & Chipset	 CPU: Intel ATOM D2700 Dual Core 2.13 GHz Chipset: NM10 (Platform Controller Hub) 			
Storage (not included)	 Supports DDR3-800/1066 (or higher) 2x 204 pin SO-DIMM slots, total max. 4GB Supports 1x 6,35cm/2,5" SATA hard disk / SSD 			
Operating System	 Operating system not included Compatible with Windows 7, 32 Bit 			
Connectivity	 HDMI, D-Sub, 4x USB, Microphone-in, Line-ou Gigabit LAN, Wireless LAN (n) Optional: 2x RS232, 1x LPT (PCL69) 			
 SD card reader 2.0 Megapixel webcam 2x 2W speakers Electret Condenser Microphone 				
Power Supply	• 40W, fanless, Energy Star 5 compliant			
Warranty	• 24 months Bring-in Service			



Shuttle order number: PAB-X50V312

Shuttle All-in-One PC X50v3 Black Barebone







Touchscreen

Dual Core

Fanless





Images for illustration purposes only.

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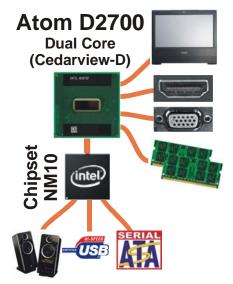
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Shuttle X50V3 Barebone - Product Features



All applications at your fingertips

The innovative touchscreen technology delivers the simplest operation possible and makes the screen the centre of action. Its high-quality design lets you control the whole range of multimedia - music, movies, video playback and web browsers start by just touching the screen.

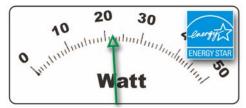


Atom D2700 processor integrates the graphics core

Shuttle X50V3 is equipped with Intel's Atom processor D2700, codenamed Cedarview. It brings both the graphics core with HDMI and D-Sub ports and the memory controller on-die which helps reduce the thermal output and memory latency. The CPU is connected to the Southbridge NM10.

Dual Core. Do more.

Shuttle's all-in-one PC banks on the embedded Intel Atom D2700 Dual Core processor which boosts system productivity, particularly with regards to multi-threaded applications.



Power saving

The new X50V3 version is equipped with an Intel Atom D2700 Dual Core processor and eco-friendly ENERGY STAR 5.0 qualified power adapter that consumes about 20~27 Watt (with 4GB RAM, 500GB hard disk) only.





What does "Barebone" mean?

The Shuttle X50V3 Barebone is targeted at hardware experts seeking to build a complete system according to their individual requirements. Most of the components is yet built in, just the following hardware is required to be installed by the purchaser in this case:

- One 6.35cm/2.5" Serial ATA hard disk or SSD
- One or two DDR3 SO-DIMM memory modules (204 pins)
- Optional: USB keyboard and USB mouse
- Windows 7 (32 Bit) Operating system: Home Premium or Professional

All-in-one PC

Your complete PC system with many components already built in comes in just one single device! This includes the webcam, microphone, mainboard, display, touchscreen input interface, wireless LAN module and speakers. Helps you save on space, looks simply stylish, reduces cable clutter.

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HDMI and D-Sub/VGA Port

The digital HDMI port or the analog D-Sub/VGA port can be used to connect a secondary external LCD display or a beamer to the PC. The integrated graphics unit supports both clone mode and extended mode.

Built-In Webcam and Microphone

The built-in 2.0 mega pixel webcam and microphone makes it easy to take pictures or stream live images from across the internet – and connect in real-time with friends, family, and colleagues.



Slim and chic

Designed as space-savers, this 15.6 inch all-in-one desktop PC only measures 3.6cm in depth.



Fanless - as quiet as 22dBA

The Shuttle X50V3 features a cooling system that combines an integrated heatsink with thermal pads - and removes the fan. As an additional benefit, it's not only quiet but also dust-free.



Carrying handle

Cleverly, the stand can be pulled upwards to serve as a handle making the X50V3 easy to move and carry around.



Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. (The lock and cable are is not included.)

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VESA mounting

The stand on the rear can easily be removed to unveil four VESA mounting screw holes that can be used for mounting arms and other mounting devices from a variety of manufacturers.

4 Point Touch Screen Calibration

The X50V3 features a precise touchscreen input device. This can easily be calibrated with the eGalax touch software by just pointing on each corner of the screen using the stylus pen. With this four-point calibration, you can use demanding graphical user interfaces (GUI) that require precise cursor control to properly activate small icons, buttons, scroll bars, etc.



Optional serial and parallel legacy ports

Legacy ports are widely popular among industrial applications. Thus, the X50V3 optionally provides one parallel and two serial ports on the back panel (Accessory PLC69).



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 ml



24/7 nonstop operation

The Shuttle All-in-One PC X50V3 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: 10-80% (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.

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Shuttle X50V3 Barebone Overview (Connectors, buttons, etc.)





- 1 Touchscreen LCD display
- 2 Webcam
- 3 Microphone
- 4 Power on LED
- 5 Hard disk LED
- 6 Wireless LAN LED (Wifi)
- 7 Stereo speakers
- 8 HDMI video output
- 9 4x USB 2.0 connectors
- 10 D-Sub VGA video output
- 11 DC-input for power adapter
- 12 Stand (handle)
- 13 Power on button
- 14 Stylus pen with holder
- 15 Card reader
- 16 Microphone input
- 17 Audio line out (head phone)
- 18 RJ45 Gigabit LAN connector
- 19 Kensington lock hole
- 20 Vesa mount
- 21 2x COM, 1x Par. Ports (optional accessory PCL69)





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Shuttle X50V3 Barebone – Range of Applications



Entertainment Music, Movies, Photo gallery, TV* *) TV tuner USB stick required



Work Banking, Shopping, Office, Stock trading



Control Surveillance, Home Automation, Control device



P.O.S. Point of sales



Education In schools, at home, for children and adults



Communication Email, VoIP, Messenger, Blog, Video Conferencing



Digital Signage Visual advertising, entertainment, displaying information in public areas

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Shuttle X50V3 Barebone Black – Specifications

Passive cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free
Colour: black, matt / non-glossy Dimensions: 391.3 x 327 x 42 mm (WxHxL) 100mm VESA mount capable Mounting hole for Kensington lock Weight: 2.93 kg net, 4.2 kg gross
This system comes without operating system. It is compatible with Windows 7 32 bit version
Touchscreen function support fingertip input Resistance and single touch technology Including stylus pen for the touchscreen
39.6cm/15.6" LCD display, ratio: 16:9 wide screen panel Resolution: 1366x768 = 1.05 Megapixels Backlight unit: High power LED
Intel Dual Core Atom processor D2700 (Codename: Cedarview) Intel Hyper-Threading technology: 2-threads per core 32 nm manufacturing process, Micro-FCBGA11 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 Passive cooling without any fan
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) Two video outputs: HDMI v1.3 and D-Sub (VGA) Supports dual display in clone or extended model
Intel® NM10 Express Chipset Platform Controller Hub (PCH), Code name: Tiger Point
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) [1]

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Memory	2x SO-DIMM slots with 204 pins, Single-Channel Supports memory modules with up to 4 GB. Total maximum memory capacity supported: 4 GB (1x 4GB or 2x 2GB) Only unbuffered non-ECC SODIMMs are supported Supports DDR3-800 (PC3-6400) and DDR3-1066 (PC3-8500) Chip name Module name Memory clock I/O clock Effective clock DDR3-800 PC3-6400 100 MHz 400 MHz 800 MHz DDR3-1066 PC3-8500 133 MHz 533 MHz 1066 MHz DDR3-1333 PC3-10667 166 MHz 667 MHz 1333 MHz *) DDR3-1600 PC3-12800 200 MHz 800 MHz 1600 MHz *) *) Memory modules that are designed for higher frequencies can also be used. DDR3- 1333/1600 memory modules then run at an actual effective frequency of 1066 MHz.
Hard disk or SSD	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 up to 12.5 mm height Supports Unified Extensible Firmware Interface (UEFI) [1]
Card reader	Integrated card reader supports SD, SDHC and SDXC memory flash cards
Webcam	Integrated Webcam module with 2.0 Megapixel (1600x1200) resolution
Microphone Speakers	Front panel with integrated Electret Condenser Microphone and 2x 2W speakers
Integrated Audio	IDT92HD81 Audio Codec with Azalia support Two analog audio connectors (3.5mm): 1) Line out (head phone) 2) microphone input Digital Audio is supported via the HDMI port.
Wired Network	RJ45 connector supports Gigabit LAN at 10/100/1000 Mbit/sec. Network controller JMC 251 Supports Wake-on-LAN (WOL) from \$3, \$3, \$5 ACPI states
Wireless LAN (Wifi)	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 1.3 (supports digital video and digital audio) VGA connector (D-Sub 15 pol., analog) 4x USB 2.0 (2x left side, 2x right side) Network (LAN, RJ45) Audio Line-out (head phone) Microphone input DC input for external power adapter optional: 2x COM, 1xLPT (Accessory: PCL69)

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LEDs and buttons	Power button Power LED (blue) Hard disk LED (orange) Wireless-LAN / Wifi LED (green)
Power adapter	External 40W AC/DC power adapter (fanless) Energy Star 5 compliant AC Input: 100~240V AC, 50~60Hz DC Output: 19V DC, max. 2.1A Dimensions: 27 x 37 x 90 mm DC Connector: 5.5/2.5mm (outer/inner diameter)
Included Accessories	Quick Guide Driver DVD 40W Power Adapter Power cord
Optional Accessories	COM/LPT adapter module PCL69: 1x parallel and 2x serial (RS-232) Carrying bag PF55
24/7 nonstop operation	 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)
Certifi- cations	EMI: CE, FCC, BSMI, C-Tick, CCC Safety: CB, BSMI, ETL Other compliances: RoHS, Eup Lotó
Environment	Operating temperature: 0~35°C Humidity: 10~90%
Conformity	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 X 50 Barebone Series – Product Comparison

Model ->	X50	X50V2	X50V2 Plus	X50V3
Lifetime	05/2009 ~ 03/2010	01/2010 ~ 05/2011	04/2011 ~ Q4/2012	Q2/2012 ~ n.a.
	Atom 330	Atom D510	Atom D525	Atom D2700
Atom Processor	1.6 GHz	1.66 GHz	1.8 GHz	2.13 GHz
	TDP=8W	TDP=15W	TDP=13W	TDP=10W
BIOS Version	Award	AMI	AMI	AMI
Integr. Graphics	GMA950, DX9	GMA3150, DX9	GMA3150, DX9	GMA3650, DX9
Cooling	With fan	Passive	Passive	Passive
North Bridge	Intel 945GC (22W)	-	-	-
South Bridge	Intel ICH7 (3.3W)	Intel NM10 (2.5W)	Intel NM10 (2.5W)	Intel NM10 (2.5W)
	Max. 2x2GB	Max. 2x2GB	Max. 2x2GB	Max. 2x2 or 1x4GB
Memory	DDR2-667/533	DDR2-800/667	DDR3-800/667	DDR3-1066/800
-	200 pin SO-DIMMs	200 pin SO-DIMMs	204 pin SO-DIMMs	204 pin SO-DIMMs
Webcam	1.3 MP	1.3 MP	2.0 MP	2.0 MP
Display Backlight	CCFL	LED	LED	LED
	D-Sub VGA	D-Sub VGA	D-Sub VGA	HDMI 1.3
	5x USB 2.0	4x USB 2.0	4x USB 2.0	D-Sub VGA
	RJ45 (Gigabit)	RJ45 (10/100)	RJ45 (10/100)	4x USB 2.0
Connectors	3x Audio	2x Audio	2x Audio	RJ45 (Gigabit)
	Card reader	Card reader	Card reader	2x Audio
		2x RS232		Card reader
		1x LPT (parallel)		
COM/LPT port	Not available	Included	Optional (PCL68)	Optional (PCL69)
Power consumption	39~52W	19~22W	19~22W	20~27W
(Idle/Full)	55~5211	19~22 00	19~2200	20~21 W
Power Adapter	65W	40W	40W	40W
Hardware control	Two buttons	Control AP Software	Control AP Software	BIOS setting
Webcam, WLAN…		Control AF Software		DIOS Setting
Chassis /	Glossy surface	Glossy surface	Glossy surface	Non-Glossy surface
Dimensions	39.13 x 32.7 x 3.6 cm	39.13 x 32.7 x 3.6 cm	39.13 x 32.7 x 3.6 cm	39.13 x 32.7 x 4.2 cm
Back cover with				
embossed	Yes	Yes	Yes	No
Shuttle-Logo?				
Light bar	Yes	Yes	Yes	Νο
at the bottom	1 53	100	100	
		COM/LPT enclosed:		
UPC Barcode		White: 811686003076	White: 811686003434	
	White: 811686007593 Black: 811686002925	Black: 811686003083		White: 811686003885
		COM/LPT built-in:	Black: 811686003441 Black: 811686003	Black: 811686003878
		White: 811686003113		
		Black: 811686003090		
		Diack. 011000003090		

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