

15.6" All-in-One PC with Ubuntu-Linux

The Shuttle All-in-One PC X 5040VA is powered by Intel's Celeron 2957U processor with 22nm Haswell architecture, which helps improve on power consumption and computing power. Thanks to its passive cooling, the system is very quiet and virtually maintenance-free. Particularly suitable for vertical applications is the arrangement of connectors at the bottom and the IP54 compliant front panel which is dust-protected and protected from splashing of water. This system is equipped with 4 GB RAM, 60 GB SSD and Ubuntu-Linux.

Feature Highlights

All-in-One Design	<ul style="list-style-type: none"> All-in-One PC Barebone with touchscreen Small: 391 x 327 x 42 mm (WHL) Stand can also be used as a handle 100mm VESA mount capable IP54 dust and water resistant (front panel)
Display & Graphics	<ul style="list-style-type: none"> 39.6cm (15.6") resistive touchscreen with 1366x768 resolution Integrated Intel HD graphics HDMI 1.4 + D-Sub/VGA Video output
CPU & Cooling	<ul style="list-style-type: none"> Intel Celeron 2957U, 1.4 GHz, 15W TDP Fanless heatpipe cooling system
Storage	<ul style="list-style-type: none"> 4 GB DDR3L-1600 SO-DIMM 60 GB 2.5" SATA SSD storage Supports mSATA SSD drive
Operating System	<ul style="list-style-type: none"> Ubuntu Linux 14.04.2 LTS (or higher) 64 Bit, multi-language support via internet
Connectivity	<ul style="list-style-type: none"> HDMI 1.4, D-Sub/VGA 2x USB 3.0, 4x USB 2.0, internal: 2x USB 2.0 Microphone input, head phone output Gigabit LAN, Wireless LAN 802.11n Optional: 4x RS232, 1x LPT, 1x RJ11
Built-in	<ul style="list-style-type: none"> SD card reader 2.0 Megapixel HD webcam 2x 2W speakers Electret Condenser Microphone
Power Supply	<ul style="list-style-type: none"> External fanless power adapter, 65W
Warranty	<ul style="list-style-type: none"> 24 months Bring-in Service

Shuttle All-in-One Linux PC System **X5040VA White**



Images for illustration purposes only.



15.6" Touchscreen



Fanless cooling



Ubuntu Linux 64 Bit



Front protected: dust & water



COM ports optional



Energy-efficient



Wireless and Wired Network



2x USB 3.0
4x USB 2.0



Watchdog Hardware



Shuttle All-in-One PC System X 5040VA – Overview



- | | | |
|---------------------------|--------------------------------------|--------------------------------|
| 1 Touchscreen LCD display | 10 SD Card Reader | 19 DC-input for Power Adapter |
| 2 Webcam | 11 2x USB 2.0 | 20 2x USB 2.0 |
| 3 Microphone | 12 Clear CMOS Button | 21 RJ45 Gigabit LAN |
| 4 Power on LED | 13 Stand (handle) | 22 2x USB 3.0 |
| 5 Hard disk LED | 14 Cooling Vents | 23 HDMI Video Output |
| 6 Stereo speakers | 15 Kensington lock | 24 Audio Line-out (Head Phone) |
| 7 Power-on button | 16 D-Sub/VGA Video Output | 25 Microphone Input |
| 8 Stylus with holder | 17 Vesa Mount 100x100mm | |
| 9 Power Button | 18 Perforation for TV antenna (9 mm) | |

Shuttle All-in-One PC System X 5040VA – Special 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.



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. It helps you save space, looks simply stylish and reduces cable clutter.



Highly energy-saving

The Shuttle All-in-One PC System X 5040VA barely consumes, depending on system load, about 11 ~ 22.5 Watts. Running the device*) 5 days a week for eight hours a day, the annual consumption would amount to approx. 23~47 kWh which would mean just 6~12 Euros on the power bill (25 Euro ct/kWh) - way less than a conventional desktop PC draws.



Fanless and quiet

The Shuttle All-in-One PC System X 5040VA uses a passive thermal module with heatpipes to lead heat out of the case 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 virtually maintenance-free.



Connects to two external Full HD displays

The Shuttle All-in-One PC System X 5040VA features two video outputs: One analog D-Sub/VGA connector and one HDMI connector. Two external Full HD displays can be connected in extended mode. Now add the built-in display of the X50V4 and there are three displays showing different content.



Protection Class IP54

The front panel of the Shuttle All-in-One PC System X 5040VA is dust-protected and protected from splashing of water according to IP protection class 54. Consequently, this All-in-One PC can be used for those indoor applications, where the touchscreen may be exposed to humidity and occasional splashing of water. This is particularly welcome in restaurants, laboratories, production or other places.



Optimised Cable Management

Most of the connectors are located at the back panel facing down. This leads to an effective cable management making for a clean, tidy appearance on the desk.

On the left side sit those connectors which need to be accessed from the front side: card reader and two USB ports.



Optional COM, LPT, DIO ports

Shuttle offers two optional accessories in order to add legacy ports to the Shuttle All-in-One PC System X 5040VA. While the Shuttle Accessory **PCL71** adds two serial COM ports and one parallel LPT port, the **POS01** adds two more COM ports (with RJ45 connector) and one Digital I/O 12V/24V (RJ11) for a cash drawer for example. COM ports are still commonly used for applications such as industrial automation systems, scientific analysis, POS systems and other industrial applications.



Power on after Power fail

The BIOS setup provides a "Power-On after Power Fail" function that can be found under "Power Management Configuration" where the PC's behaviour after power failure can be determined.



Always Power-on Jumper

The Shuttle All-in-One PC System X 5040VA also comes with a hardware-based solution. By removing Jumper 7 (see picture), the system will start unconditionally once power is applied.



Hidden Power Button

The power button can be deactivated to prevent unauthorized usage. Still it can be used with a straightened paper clip as shown on the left.



Internal USB Slot and perforation for external antenna

The Shuttle All-in-One PC System X 5040VA features an internal USB 2.0 connector (type A) for an USB stick of max. 9 cm in length and a 9 mm perforation for an optional antenna. The internal USB connector for expansion sticks (such as flash memory, DVB-T, SAT, 3G) or other USB devices like a radio module for home automation or RFID. Furthermore, there is a free USB header available on the mainboard.



VESA mount

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.



Stylus for the touchscreen

The Shuttle All-in-One PC System X 5040VA is equipped with a 5-wire resistive touchscreen for simple operation by finger (even with gloves) or stylus. The stylus comes supplied as standard and sits in an opening located at the top of the chassis. Using the stylus results in a smoother and more precise input than just using the finger.



Kensington Lock

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



Carrying handle

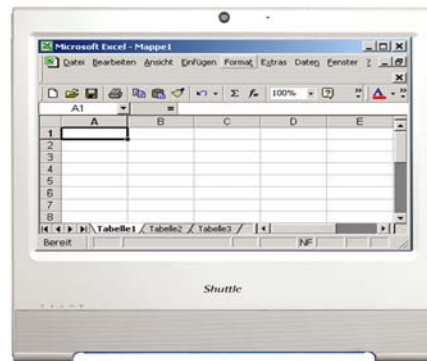
The practical stand can be pulled upwards to also serve as a handle making the Shuttle All-in-One PC System X 5040VA easy to carry. Clever!

Shuttle All-In-One PC System X 5040VA – Range of Applications



Entertainment
Music, Movies,
Photo gallery, TV*

*) TV tuner USB stick
required



Office Work
Word and spreadsheet
processing, email, internet



P.O.S.
Point of sales



Control
Surveillance,
Home Automation,
Control device



Communication
Email, VoIP, Messenger,
Blog, Video Conferencing



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

Shuttle All-in-One PC System X 5040VA – Specifications

<i>Fanless and silent</i>	<p>Passive heatpipe cooling, no fan noise at all</p> <p>Perfect to be used in noise-sensitive environments</p> <p>Fanless, dust-free and thus virtually maintenance-free</p>
<i>IP54 protected</i>	<p>The front panel is dust-protected and protected from splashing of water according to protection class IP54.</p>
<i>Low power consumption</i>	<p>Power consumption: ca. 11 W (idle mode) and ca. 22.5 W (full load)</p> <p>When switched off: 0.25W (S5 mode with EUP=on)</p> <p>(Configuration: 4 GB RAM, 60 GB SSD and Windows 7)</p>
<i>Chassis</i>	<p>Colour: white</p> <p>Dimensions: 391 x 327 x 42 mm (WxHxL)</p> <p>100mm VESA mount capable</p> <p>Mounting hole for Kensington lock</p>
<i>Operation System</i>	<p>Ubuntu Linux Version 14.04.2 LTS (or higher) 64 Bit</p> <p>More than 70 languages can be added via internet</p>
<i>Touchscreen</i>	<p>Touchscreen function supports fingertip input</p> <p>Resistive 5-wire single-touch technology</p> <p>Including stylus for the touchscreen</p>
<i>15.6" Display</i>	<p>39.6cm / 15.6" LCD display, ratio: 16:9 widescreen panel</p> <p>Resolution: 1366x768 = 1.05 Megapixel</p> <p>Backlight unit: High power LED, Luminance: 220 cd/sqm</p> <p>Glass thickness: 0.5 mm</p>
<i>Processor</i>	<p>Intel® Celeron® Processor 2957U (ultra low voltage)</p> <p>SOC with integrated chipset including controller for memory and graphics</p> <p>22 nm manufacturing process, FCBGA1168 package</p> <p>4th Generation Intel® Core™ Processor (Codename "Haswell")</p> <p>Dual Core (two threads),</p> <p>Core frequency: 1.4 GHz</p> <p>L1/L2/L3 Cache size: 128 kB, 512 kB, 2 MB</p> <p>Max. Thermal Design Power (TDP): 15 W</p> <p>Supports 64-bit instructions, Execute Disable Bit</p> <p>Intel® Virtualization Technology (VT-x) with Extended Page Tables (EPT)</p> <p>Enhanced Intel SpeedStep® Technology</p> <p>Thermal Monitoring Technologies</p> <p>Passive cooling without any fan</p>

Integrated Graphics	<p>The Graphics Processing Unit (GPU) is integrated in the processor</p> <p>Intel® HD Graphics core</p> <p>10 Execution Units (EUs) clocked at 200 - 1000 MHz</p> <p>Supports Intel® Quick-Sync-Video and Intel® Clear-Video</p> <p>Supports DirectX 11.1, OpenCL 1.2 and OpenGL 4.0, Shader 5.0</p> <p>Shared Memory technology</p>
Up to three displays	<p>Two video outputs: HDMI v1.4 and D-Sub (VGA)</p> <p>Supports triple display: the integrated display plus two external displays</p> <p>1) Clone mode: all displays show the same content at 1366x768 resolution</p> <p>2) Extended mode: all displays show different content, while the external displays run at Full HD resolution (1920x1080) maximum.</p>
BIOS	<p>AMI BIOS in 8 MByte EEPROM with SPI interface</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 hardware monitoring and watch dog functionality</p>
Memory	<p>4 GB DDR3L-1600 SO-DIMM memory (maximum capacity: 8 GB)</p> <p><u>Caution:</u> This mainboard does only support 1.35V DDR3L memory modules.</p> <p>Note: DDR3L has a lower operation voltage compared to DDR3</p>
Storage	<p>60 GB SATA SSD drive in 6.35cm/2.5" format</p>
Mini-Slots	<p>This device comes with two mini expansion slots:</p> <p>1) the half-size slot is occupied with a WLAN module</p> <p>2) the full-size slot supports a mSATA flash memory card (max. 6 Gbit/s)</p>
Card Reader	<p>Integrated card reader supports SD, SDHC and SDXC memory flash cards</p>
Webcam	<p>Integrated 2.0 Megapixel (1600x1200) HD webcam</p>
Microphone Speakers	<p>Front panel with integrated Electret Condenser Microphone and 2x 2W speakers</p>
Audio	<p>Realtek ALC269 Audio Codec</p> <p>Two analog audio connectors (3.5mm):</p> <p>1) Line-out (head phone) 2) Microphone input</p> <p>Digital Audio is supported via HDMI.</p>
Wired Network	<p>RJ45 connector supports Gigabit LAN at 10/100/1000 Mbit/sec.</p> <p>Network controller Realtek 8111G</p> <p>Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states</p>
Wireless Network	<p>WLAN chip: Realtek 8188EE</p> <p>Supports IEEE 802.11b/g/n, max. 150Mbps up-/downstream</p> <p>Security: WPA/WPA2, WEP</p> <p>Half-size Mini-PCIe-Card</p>

<i>Front LEDs</i>	Power LED (blue) Hard disk LED (orange)
<i>Connectors left side</i>	Power button 2x USB 2.0 SD card reader Hole with power button Hole with Clear CMOS button
<i>Connectors bottom side</i>	HDMI 1.4 digital audio/video 2x USB 3.0 2x USB 2.0 Gigabit Network (RJ45, 8 pins) Audio Line-out /head phone (3.5 mm jack socket) Microphone input (3.5 mm jack socket) DC input for external power adapter (5.5 / 2.5 mm) Perforation for optional TV/3G antenna (diameter: 9 mm)
<i>Connectors back side</i>	VGA analog video (D-Sub, 15 pin)
<i>Connectors onboard</i>	Serial ATA (6 Gbps) Serial ATA power connector 4x USB 2.0 header (three occupied, one free) Fan connector (4-pin) LVDS header (Low Voltage Differential Signaling) LPC header (Low Pin Count)
<i>Power Adapter</i>	External 65 W power adapter (fanless) Input: 100~240 V AC, 50/60 Hz, max. 1.6 A Output: 19 V DC, max. 3.42 A, max. 65 W DC Connector: 5.5 / 2.5 mm (outer/inner diameter)
<i>Included Accessories</i>	Quick Guide Driver DVD External Power Adapter (65W) Power cord Serial ATA cable for the 2.5" drive Screws
<i>Optional Accessories</i>	<u>PCL71</u> : COM / LPT adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V <u>POS01</u> : COM / LPT adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V - 2x Serial RS232 (8p RJ45) - 1x DIO/RJ11 connector for cash drawer supports 12 / 24V <u>PF55</u> : Carrying bag

Environmental criteria	Operating temperature: 0~35°C Humidity: 10~90%
Certification and Compliance	EMI: CE, FCC, BSMI, C-Tick Safety: CB, BSMI, ETL, CCC Other compliances: RoHS, ErP Lot6, Energy Star v5.0
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/EEG electromagnetic tolerance - LVD-guideline 73/23/EEG use of electric devices within certain voltage limits

Product Comparison

	X50V4	POS X504	X 5040XA	X 5040TA	X 5040VA
Type	Barebone	System	System	System	System
Platform	X50V4	X50V4	X50V4	X50V4	X50V4
Processor	Celeron 2957U	Celeron 2957U	Celeron 2957U	Celeron 2957U	Celeron 2957U
Memory	–	4 GB DDR3L	4 GB DDR3L	4 GB DDR3L	4 GB DDR3L
Storage	–	60 GB SSD	500 GB hard disk	500 GB hard disk	60 GB SSD
Operating System	–	–	–	Windows 8.1 64 Bit	Ubuntu Linux 64 Bit
Legacy Ports	–	2x COM (D-Sub) 2x COM (RJ45) 1x LPC (D-Sub) 1x DIO (RJ11)	–	–	–
Bar code	White: 811686006893 Black: 811686006909	White: 4046047102884 Black: 4046047102891	White: 4046047102907 Black: 4046047102914	White: 4046047102921 Black: 4046047102938	White: 4046047102969 Black: 4046047102976