All-in-One PC for POS, POI, Kiosk Applications

The Shuttle XPC all-in-one X5073XA is a fully configured All-in-One system with Intel's Core i3-8145U processor, but without operating system. The modern Whiskey Lake-U processor architecture helps improve on power consumption and computing power. Thanks to its passive cooling, the system is virtually noiseless, maintenance-free and approved for 24/7 nonstop operation. 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.

Feature Highlights XPC all-in-one with touchscreen Small: 391 x 327 x 42 mm (WHL) • Stand can also be used as a handle All-in-One Design • 100 mm VESA mount capable IP54 compliant front panel Approved for 24/7 nonstop operation • 39.6 cm (15.6") resistive touchscreen with a 1366 x 768 resolution Display & **Graphics** Integrated Intel UHD 620 graphics • HDMI 1.4a + D-Sub/VGA Video output CPU & Intel Core i3-8145U, 2.1 GHz, 15 W TDP Cooling • Fanless heatpipe cooling system 8 GB DDR4-2400 SO-DIMM memor • 120 GB M.2-2280 SSD card (NVMe) Storage • Supports one 2.5" SATA hard disk / SSD Supports internal USB stick (USB 2.0, type A) Operating Operating system is not included System • Supports Windows 10 (64-bit) & Linux (64-bit) HDMI 1.4a, D-Sub/VGA 4x USB 3.2 Gen 1 (5 Gbps), 2x USB 2.0, internal: 1x USB 2.0 Type A Connectivity Microphone input, headphones output Gigabit LAN, Wireless LAN 802.11ac, BT 4.2 Optional: 4x RS232, 1x LPT, 1x RJ11

XPC all-in-one System X5073XA Black





Images for illustration purposes only.







Nonstop operating



Fanless cooling







Wireless and Wired Network



Supports Windows 10 & Linux (64-bit)

Product	Туре	Colour	Processor	RAM	M.2 SSD	os
X50V7U3	Barebone	Black	Core i3-8145U	_	_	_
X5073XA	System	Black	Core i3-8145U	8 GB	120 GB	_
X5073TA	System	Black	Core i3-8145U	8 GB	120 GB	Windows 10 Pro

• External fanless power adapter, 65 W

• SD card reader, 2x 2 W speakers

2.0 Megapixel HD webcamElectret Condenser Microphone

• 24 months Bring-in Service



Built-in

Power Supply

Warranty

Shuttle XPC all-in-one X5073XA - Overview



- 1 Touchscreen LCD display
- 2 Webcam
- 3 Microphone
- 4 Power on LED
- 5 Hard disk LED
- 6 Stereo speakers
- 7 Stylus with holder8 Power-on button
- 9 2x Perforation for optional WLAN/LTE antenna
- 10 Hole with Power Button
- 11 SD Card Reader
- 12 2x USB 3.2 Gen 1
- 13 Clear CMOS Button
- 14 Stand (handle)
- 15 Ventilation holes
- 16 Kensington lock
- 17 D-Sub/VGA Video Output18 Vesa Mount 100x100mm
- 19 DC-input for Power Adapter
- 20 2x USB 2.0
- 21 RJ45 Gigabit LAN
- 22 2x USB 3.2 Gen 1
- 23 HDMI Video Output
- 24 Audio Line-out (headphones)
- 25 Microphone Input

Shuttle XPC all-in-one X5073XA – 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.



24/7 nonstop-operation

The Shuttle XPC all-in-one X5073XA is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passive cooling, this PC runs highly reliably making it perfectly suitable for digital signage and POI/POS applications.

Conditions for permanent use:

- Free circulation of air amongst the PC must be guaranteed
- Ventilation holes must be kept clear



Fanless and quiet

The Shuttle XPC all-in-one X5073XA 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 XPC all-in-one X5073XA 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 X5073XA and there are three displays showing different content

Tel. +49 (0) 4121-47 68 60 Fax +49 (0) 4121-47 69 00 E-Mail: sales@shuttle.eu



Protection Class IP54

The front panel of the Shuttle XPC all-in-one X5073XA 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 now located on 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: the card reader and two USB ports.



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.





Hidden Power Button

<u>Left photo:</u> The power button can be deactivated to prevent unauthorised use. Just disconnect the appropriate cable from its header inside the chassis (see red circle).

<u>Right photo:</u> The power button can still be pressed using a straightened paper clip.



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 XPC all-in-one X5073XA 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 on the top of the chassis. Using the stylus results in a smoother and more precise input than just using a 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 so that it can also be used as a handle making the Shuttle XPC all-in-one X5073XA easy to carry.

Shuttle XPC all-in-one X5073XA — Range of Applications

Digital SignageVisual advertising,
Info Terminal



Call System
e.g. for nurses (hospital)
or security personnel



Device Control
e.g. for health services or
fitness equipment



On a boat
e.g. for navigation and
entertainment



POS Checkout system in Retail Stores, Restaurants, Hotels



Smart Home Control Surveillance, Home Automation



Communication Device e.g. for the elderly



Data Collector
e.g. Recording of
working hours



POS Radio
Playing advertising
and music



Device Control e.g. for copy machines



Visualisation
e.g. for industrial production
machines



Entertainment e.g. at the dentist or in the waiting room





Shuttle XPC all-in-one X5073XA – Specifications			
Fanless and silent	Passive heatpipe cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free		
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 kept clear If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.		
IP54 protected	The front panel is dust-protected and protected from splashing of water according to protection class IP54.		
Chassis	Colour: black Dimensions: 391 x 327 x 42 mm (W x H x D) 100mm VESA mount capable Mounting hole for Kensington lock Weight: 3.6 kg net, 4.8 kg gross		
Operating System	This system comes without operating system. It is compatible with: - Windows 10 (64-bit) - Linux (64-bit)		
Touchscreen	Touchscreen function supports fingertip input Resistive 5-wire single-touch technology Stylus for the built-in touchscreen		
15.6" Display	39.6 cm / 15.6" LCD display, ratio: 16:9 widescreen panel Resolution: 1366 x 768 = 1.05 Megapixel Backlight unit: High power LED, Luminance: 220 cd/sqm Glass thickness: 0.5 mm		
Processor	Model: Intel Core i3-8145U (ULV) System-on-a-chip architecture (SoC) with integrated memory and graphics controller: no chipset required FCBGA1528 package - directly soldered onto the mainboard Code name: Whiskey Lake U (8th Generation Intel Core) Cores / Threads: 2 / 4 Clock rate: 1.8 GHz, max. Turbo Frequency: 3.9 GHz L1/L2/L3 Cache: 128 kB / 512 kB / 4 MB TDP wattage: 15 W maximum Manufacturing process: 3rd-generation enhanced 14nm++ Maximum Tjunction Temperature: 100 °C Supports 64-bit, VT-x (EPT), VT-d, Enhanced SpeedStep, NX bit, AES-NI, SSE 4.1/4.2		



Integrated Graphics	Intel UHD Graphics 620 GPU clock frequency: 300~1000 MHz Execution Units (EUs): 24 Supports DirectX 12 Supports full H264, H265 8/10 bit, VP8/9, VC-1, AVC hardware decoding Supports Quick Sync Video and Clear Video HD technology
Up to three displays	Two video ports support two additional independent screens: 1) HDMI 1.4a supports 1920 x 1080 @ 60 Hz or 3840 x 2160 @ 30 Hz 2) VGA / D-Sub analog video supports 1920 x 1080 @ 60 Hz Special conditions for operation in Multi-Monitor mode: 1) Clone mode: all displays show the same content at 1366 x 768 resolution 2) Extended mode: all displays show different content
BIOS	AMI BIOS in 8 MByte EEPROM with SPI interface Supports Power fail resume / always on Supports Wake-on-LAN (WOL) from S3, S4, S5 ACPI states Supports hardware monitoring and watch dog functionality Supports Firmware TPM v2.0 functionality
Memory	8 GB DDR4-2400 (PC4-19200) SDRAM at 1.2 V SO-DIMM format with 260 pins Supports a maximum of 32 GB per DIMM Maximum total size: 64 GB
M.2 SSD	120 GB SSD card in M.2-2280 format (M key) PCIe interface, supports NVMe
Optional Storage	Supports one SATA hard disk or one SATA SSD drive in 6.35 cm /2.5" format The SATA 3.0 interface supports up to 600 MB/s data transfer speed (6 Gbit/s). Supports one drive with up to 12.5 mm in height
Card Reader	Integrated card reader supports SD, SDHC and SDXC memory flash cards
Webcam	Integrated 2.0 Megapixel (1600 x 1200) HD webcam
	Front panel with integrated Electret Condenser Microphone and 2x 2W speakers
Audio	Realtek ALC269 Audio Codec Two analog audio connectors (3.5 mm) on the bottom side: 1) Line-out (headphones) 2) Microphone input Digital Audio is supported via HDMI.



Wired Network	Intel i211 Ethernet Controller with MAC, PHY and PCIe interface Supports 10 / 100 / 1.000 MBit/s operation Supports WAKE ON LAN (WOL) from \$3, \$4 modes Supports network boot by Preboot eXecution Environment (PXE)
Wireless Network	Built-in M.2-2230-A/E WLAN card with connectors for two external antennas WLAN Controller Realtek RTL8821AE Supports WiFi IEEE 802.11b/g/n/ac on the 2.4 / 5 GHz band, 1T1R Supports 20 / 40 / 80 MHz channel bandwidth Security: supports WPA(-PSK), WPA2(-PSK), WEP 64/128 bit, IEEE 802.11x, IEEE 802.11i Supports Bluetooth 4.0 on the 2.4 GHz band
Front LEDs	Power LED (blue) Hard disk LED (orange)
Connectors left side	Power button 2x USB 3.2 Gen 1 (5 Gbps) SD card reader Hole with power button Hole with Clear CMOS button Perforation for optional WLAN/LTE antenna (diameter: 6.5 mm)
Connectors bottom side	HDMI 1.4a (supports digital video and digital audio) 2x USB 3.2 Gen 1 (5 Gbps) 2x USB 2.0 Gigabit Network (LAN, RJ45) Audio Line-out / headphones (3.5 mm jack) Microphone input (3.5 mm jack) DC input for external power adapter (5.5 / 2.5 mm) Perforation for optional WLAN/LTE antenna (diameter: 6.5 mm) Optional: 2x COM/serial (RJ45), DIO (RJ11) for cash drawer (accessory POS01)
Connectors rear side	VGA connector (D-Sub 15 pol., analog video) Optional: 2x COM/serial (D-Sub), 1x LPT/parallel (accessory: PCL71 or POS01)
Connectors onboard	Internal USB 2.0 type A connector for a USB stick Serial ATA (6 Gbps) Serial ATA power connector 3x USB 2.0 header (all occupied) eDP connector (Embedded DisplayPort) - occupied by the display Connector for optional COM/LPT adapter POS01 or PCL71
Power Adapter	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) Note: The X5073XA also supports a 60 W power adapter with 12 V DC output voltage



DC Input	DC Input Connector: $5.5 / 2.5$ mm (outer/inner diameter) The DC-input of the computer supports an external power source with either $12V\pm5\%$ or $19V\pm5\%$.
Included Accessories	Quick Guide Driver DVD External Power Adapter (65W / 19V) with Power cord Serial ATA cable for the 2.5" drive Screws
Optional Accessories	PCL71: COM / LPT adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V POS01: 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 PF55: Carrying bag
Environ- mental criteria	Operating temperature: $0\sim40~^{\circ}\text{C}$ Humidity: $10\sim90~\%$, non-condensing
Certification and Compliance	EMI: CE, FCC, BSMI Safety: CB, BSMI, ETL 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 directives: (1) 2014/30/EU relating to electromagnetic compatibility (EMC), (2) 2014/35/EU relating to Electrical Equipment designed for use within certain voltage limits (LVD), (3) 2009/125/EC relating to ecodesign requirements for energy-related products (ErP), (4) 2014/53/EU Radio Equipment Directive (RED)