# **Shuttle**®



# Shuttle Worldwide Office Locations



#### Taiwan

#### Shuttle Headquarters

No. 30, Lane 76, Rui-Guang Rd., Nei-Hu Dist., Taipei City, Taiwan TEL: +886-2-8792-6168 FAX: +886-2-8792-6268 http://global.shuttle.com Sales E-mail: sales@tw.shuttle.com

Media Contact: shuttlepr@tw.shuttle.com

#### Japan

Japan Shuttle Co., Ltd
7F, Koto Building Aioisonpo, 2-8-11
Sumiyoshi Koto-ku Tokyo 135-0002, Japan
TEL: +81-3-5625-1670

FAX: +81-3-5625-1673 http://jp.shuttle.com sales@shuttle-japan.jp

#### USA

Shuttle Computer Group INC.

17068 Evergreen Place, City of Industry, CA 91745 TEL: +1-626-820-9000

FAX: +1-626-820-5060 http://us.shuttle.com sales@us.shuttle.com

#### Germany

Germany

**Shuttle Computer Handels GES. M.B.H.**Fritz-Strassmann Str. 5, D-25337 Elmshorn,

TEL: +49-4121-476860 FAX: +49-4121-476900 http://eu.shuttle.com sales@shuttle.eu

#### China

 ${\tt ShenZhen\ Shuttle\ Co.,\ Ltd}$ 

2B1, Block AB, Tianjing Building, Tian an Digital Mall, Shennan Boulevard, Futian District, ShenZhen, China

TEL: +86-755-3322-2966 FAX: +86-755-3322-2968 http://cn.shuttle.com salescn@cn.shuttle.com Shanghai Office Room 635, 6F, No. 789, Junyao International Plaza, Zhaojiabang Rd., Xuhui District, Shanghai, China TEL: +86-21-6125-6835 FAX: +86-21-6125-6899

www.shuttle.com

**Shuttle**® www.shuttle.com













# CONTENTS

02	About Shuttle	20	AIO Series
03	Applications	21	AIO Series Specification
05	XH170V & XH97V	23	XPC Series
07	XH81 Series	25	XPC Series -SH97R8
09	DQ170, DH170, & DS81	27	XPC Series Specification
11	DS57U Series	28	XPC Accessories
13	XS35V5 Series & XS36V5	29	XPC nano Series
15	XS35V4 & XS36V4	31	XPC nano Series Specification
17	Slim Series Specification	32	Solutions

# **About Shuttle**

Established in 1983, Shuttle Inc. is based in Taiwan with an extensive worldwide network of subsidiaries, resellers, partners and suppliers. With over 30 years in desktop relative design, manufacturing and work with Intel, AMD, and NVIDIA, Shuttle has the affirmed superior quality of products and services. Keeping "Innovation, Quality, Integrity and Service" in mind, Shuttle produces the best quality products at a competitive cost to meet its customer's needs. Shuttle has received numerous international awards due to its advanced



thermal technology and mechanical design and has passed ISO 9001 and ISO 14001 certifications.

Since the creation of the world's first-ever mini-PC in 2001, Shuttle Inc. has been recognized as an industry leading designer and manufacturer of small form factor (SFF) computers and accessories for consumer and commercial sectors. Experienced in small form factors and thermal technology, Shuttle XPCs are now applied to Digital Signage, Point-Of-Sale, Kiosk, and Access control vertical solutions. Shuttle offers its vertical customers the most cost effective and customizable hardware solution options. Shuttle's product profile includes a range of entry level to high performance Slim PCs, Mini PCs, All-in-One PCs, and Biometric solutions. All Shuttle products use the highest quality materials and parts, with excellent cooling technology and low-power consumption.

Whether your business operates in hospitality, retail, banking, transportation, government, healthcare, education, or security, Shuttle can provide the solution you're looking for to increase your competitiveness in business.



















EDUPAL



# Target, engage, and inform with Shuttle solutions



**Shuttle**® XH170V & XH97V www.shuttle.com





#### Support for Intel® Core™ i series Processors

The XH170V supports Intel® 6th generation LGA 1151 (Skylake-S), built-in DirectX 12 compatible with Intel® HD Graphics; the XH97V supports Intel® 4th generation LGA 1150 (Haswell and Haswell Refresh) Core™ i3/i5/i7, Pentium®, Celeron® 65W processors.



#### 24/7 Certified in 0-50°C environments

Built with industrial capacitors, the rugged design allows for 24/7 stable operation over long periods of time in 0-50°C environments.



# Advanced heat pipe cooling

Made with Shuttle's exclusive heat pipe technology and smart fan design, waste heat is quickly removed from the systems for stable and long-term operation.



#### Compact and VESA mountable

With accessory PV02, VESA mountable XH series is designed for easy integration into commercial applications with limited space and gives users the option for a slim ODD or addtional 3.5" HDD with Shuttle accessory PHD4.



#### Support 4K high-performance applications

Deliver four times the resolution of Full HD with support for 4Kx2K (3840x2160) Ultra HD crystal clear imaging.



#### M.2 & Mini PCIe expansion slots

The XH170V provides one M.2 and one half-size Mini PCle slots support for M.2 SSD and a WiFi card; the XH97V features one full-size and one half-size Mini PCIe slots support for mSATA SSD, WiFi module, and other compatible modules.



# Support three independent

The XH170V and XH97V provide multiple video output configurations, offering a combination of HDMI and DisplayPort, able to support three screens independently.



#### Multiple I/O ports for great connectivity

The XH170V and XH97V feature increased USB connectivity with four USB3.0 and four USB 2.0 ports as well as one RS232 ports designed for application in a variety of industries.

#### XH170V Front Panel

# F3. Mic-in

F4. Headphone F5. HDD LED

F1. USB 3.0 Port

F2. USB 2.0 Port

F6. Power Switch / Power LED F7. Slim ODD Bay

#### XH170V Back Panel



B4. Clear CMOS B5. USB 3.0 Port

B1. DC-in B2. RS232

B6. ESATA B7. Mic-in

B3. HDMI Port

B8. Line-out B9. Kensington Lock

B10. DisplayPort

B11. LAN Port

B12. USB 2.0 Port

B13. Antenna hole B14. Line-in

#### XH97V Front Panel

F1 F2 F3 F4 F2 F5 F6

F1 F2 F3 F4 F2 F5 F6

# F1. USB 3.0 Port

F2. USB 2.0 Port F3. Mic-in

F4. Headphone F5. HDD LED

F6. Power Switch / Power LED F7. Slim ODD Bay

XH97V Back Panel

B9 B10 B11 B12 B13 B14 B1 B2 B3 B4 B5 B6 B7 B8

#### B1. DC-in

B2. RS232

B3. HDMI Port **B4. Clear CMOS** 

B5. USB 3.0 Port B6. ESATA

B7. Mic-in

B8. Line-out

B9. Kensington Lock

B10. DisplayPort B11. LAN Port

B12. USB 2.0 Port

B13. Antenna hole

B14. Line-in

#### **Application Fields**







Digital Whiteboard

05 XH170V & XH97V

**Shuttle**® XH81 Series www.shuttle.com



# High Performance Slim PCs to power Kiosks and Vending Machines — XH81Series

Shuttle's XH81 series includes XH81 and XH81V powerful 3-liter slim PCs made to drive high-performance Intel® Core™ i processors and deliver dynamic computing where POS, Vending Machines, and Kiosks are running. The series offers multiple video outputs and can drive dual independent screens, with support for 4K/Ultra HD graphics. With optional configurations of up to five COM Ports, the devices boast strong connectivity for peripherals. Thanks to its advanced heat pipe and smart fan design, the series is 24/7 certified and runs reliably cool in 0-50°C temperatures, meeting the demands of most commercial environments.





#### Support for Intel® Core™ i series Processors

The XH81 series supports Intel® 4th generation (Haswell/Haswell Refresh) Core™ i3/i5/i7, Pentium®, Celeron® 65W processors and supports dual-channel DDR3 1600 with up to 16GB memory (8GBx2).



#### Advanced heat pipe cooling system

Made with Shuttle's exclusive heat pipe technology and smart fan design, waste heat is quickly removed from the systems for stable and long-term operation.



#### Strong ability to connect peripherals

The series has a robust I/O interface including multiple USB2.0 and 3.0 ports and up to 5 COM ports (XH81 only) to power interactive, peripheral-heavy self-service machines.



#### 24/7 Certified in 0-50°C Environments

Built with industrial capacitors, the rugged design allows for 24/7 stable operation over long periods of time in 0-50°C environments.



#### Support 4K high-performance applications

Deliver four times the resolution of Full HD with support for 4Kx2K (3840x2160) Ultra HD crystal clear imaging.



#### **Dual Gigabit LAN Network**

Dual LAN ports support Wake-on-LAN and Teaming Mode for a faster, more stable internet connection with built-in 10Mb/s, 100 Mb/s, 1000 Mb/s.



#### Support dual-screen display outputs

The XH81 series provides multiple video output configurations, offering a combination of HDMI, DisplayPort, and D-sub port (optional), and able to support for dual screens independently.



#### Compact and VESA mountable

With accessory PV02, VESA mountable XH81 series is designed for easy integration into commercial applications with limited space and gives users the option for a slim ODD or addtional 3.5" HDD with Shuttle accessory PHD4

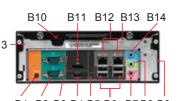
#### XH81V Front Panel

#### F1. USB 3.0 Port F2. USB 2.0 Port F3. Mic-in F4. Headphone



F1 F2 F3 F4 F2 F5 F6

#### XH81V Back Panel



F6. Power Switch / Power LED

B5. Clear CMOS B6. USB 2.0 Port B7. Mic-in B8. Line-out B1 B2 B3 B4 B5 B6 B7 B8 B9

B9. D-Sub (VGA) Port (Optional) B10. Kensington Lock

B2. RS232/RS422/RS485

B11. DisplayPort

B12. LAN Port B13. Antenna hole

B2. RS232/RS422/RS485

B14. Line-in

B1. DC-in

B3. RS232

B1. DC-in

B3. RS232

B4. HDMI Port

## XH81 Front Panel

F7 (Optional)



# F1. USB 3.0 Port

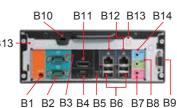
F2. USB 2.0 Port F3. Mic-in

F4. Headphone F5. Power Switch / Power LED

F6. HDD LED

F7. COM Port (Optional) (RS232/RS422/RS485)

#### XH81 Back Panel



B5. Clear CMOS

B6. USB 2.0 Port

B4. HDMI Port

B7. Mic-in

B8. Line-out B9. D-Sub (VGA) Port (Optional)

B10. Kensington Lock

B11. DisplayPort

B12. LAN Port

B13. Antenna hole

B14. Line-in

#### **Application Fields**







Vending Machine





Digital Whiteboard

**Shuttle**® DQ170, DH170, & DS81 www.shuttle.com





#### Support Intel® high-performance Core<sup>™</sup> i series processors

The DQ170 and DH170 support Intel® 6th generation LGA 1151 (Skylake-S); DS81 supports Intel® 4th generation LGA 1150 (Haswell /Haswell Refresh) Core™ i3/i5/i7, Pentium®, Celeron® 65W processors.



#### Support 4K ultra HD

Deliver four times the resolution of Full HD, the series supports 4Kx2K (3840x2160) Ultra HD for crystal clear imaging.



#### Support Intel® AMT Technology (DQ170 only)

Equipped with Intel® Core ™ vPro™ processor, the DQ170 can support Intel® Active Management Technology (Intel® AMT), which can remotely manage the devices via a wire or wireless network (across different network segments) from anywhere.



#### Support up to three independent screens

The DQ170 and DH170 provide HDMI, Display-Port, and D-sub interface (optional) to support up to three screens independently; the DS81 is able to support dual-screen displays via HDMI, DisplayPort, and D-sub interface (optional).



#### Support TPM data encryption (DQ170 only)

The DQ170 supports TPM function (Trusted Platform Module), which provides a set of random keys to protect data security. TPM ensures that unauthorized users do not have permission to access data.



#### M.2 and Mini PCle slots

The DQ170 and DH170 provide one M.2 and one half-size Mini PCle slots support for M.2 SSD and a Wifi card; the DS81 features one full-size and one half-size Mini PCle slots support for mSATA SSD, WiFi module, and other compatible modules.



#### Multiple I/O for great connectivity

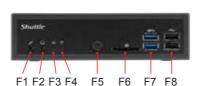
Built-in six USB 2.0, two USB3.0, and two COM ports (one RS232 and one RS232/422/485. support 0V/5V/12V), the series can easily connect to peripherals such as thermal printers, label printers, barcode scanners, etc.



#### **Dual Gigabit LAN Network**

Use dual LAN ports and support wake-on LAN and Teamina Mode with built-in 10/100/1000 Mbps. Teaming mode with load balancing and failover function makes a faster, more stable LAN connection.

#### DQ170 & DH170 Front Panel



- F1. Mic-in
- F2. Headphone F3. Power LED
- F4. HDD LED
- F5. Power Button
- F6. SD Card Reader
- F7. USB 3.0 Port
- F8. USB 2.0 Port

#### DQ170 & DH170 Back Panel

B10

B4

B5 B6 B7

- B1. DC-in B2. HDMI Port
- B3. DisplayPort
- B4. LAN Port
- B5. USB 3.0 Port
- B6. USB 2.0 Port
- B7. Clear CMOS & External Power on header
- B8. Antenna hole
- B9. RS232
- B10. RS232/RS422/RS485

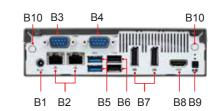
#### **DS81** Front Panel



- F1. Mic-in
- F2. Headphone
- F3. Power LED F4. HDD LED
- F5. Power Button
- F6. SD Card Reader
- F7. USB 2.0 Port

#### DS81 Back Panel

B1 B2 B3



- B1. DC-in B2. LAN Port
- B3. RS232/RS422/RS485
- B4. RS232
- B5. USB 3.0 Port
- B6. USB 2.0 Port B7. DisplayPort
- B8. HDMI Port
- B9. Clear CMOS &
- External Power on header

#### B10. Antenna hole

#### **Application Fields**









Office

4K Digital Signage Digital Whiteboard

09 DQ170, DH170, & DS81 DQ170, DH170, & DS81 10



# Full-feature Fanless signage player - DS57U Series

Shuttle's new DS57U series is using the latest Intel® Broadwell U platform to offer a variety of CPU options, including Celeron® 3205U and Core™ i3/i5/i7 processors. This series supports for 1.35V DDR3L 1333/1600 low-voltage memory modules, reducing thermal energy production and energy consumption. The DS57U series is fanless design. Even the Core™ i7 model, has been approved for 24/7 nonstop operation within 0-40°C application environments and tested to ensure stability and silent operation. Less than 40mm thick and VESA mountable, the series is easily integrated into commercial applications. DS57U series provides multiple I/O ports for peripheral connectivity.





#### Intel® Broadwell U Platform **Technology**

The DS57U series supports the latest Intel® Broadwell U platform technology. With 14nm process, the maximum TDP is only 15W and support for DDR3L-1333/1600 memory module. The series runs on a mere 65W adapter in full use and keeps stable for long-term operation.



#### 24/7 certified for wide operating temperature range

Made with quality materials, the series allows for 24/7 stable operation over long periods of time in 0-40°C environments.



#### Fanless design

The series features fanless design and uses a thermal heat sink plus smart vent design to transmit heat throughout the device quickly and evenly.



#### Multiple I/O for great connectivity

With built-in USB2.0x4, USB3.0 x2 and two COM ports (one RS232, one RS232/422/485, both support 0V/5V/12V), the series is fit for a range of vertical applications and can easily connect to peripherals such as thermal printers, label printers, barcode scanners and more.



#### Support 4K ultra HD

Deliver four times the resolution of full HD, the DS57U3/U5/U7 (optional) supports 4Kx2K (3840x2160) Ultra HD for crystal clear imaging.



#### Support Intel® Dual Gigabit LAN

The series is built-in Intel® i211 and i218 Dual Gigabit LAN with a better compatibility for business network environments as well as support for Wake On LAN. With a built-in IEEE802.11b/g/n wireless network card, transmission rates reach up to 300 Mbps.



#### Support dual-screen display output

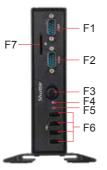
The series provides HDMI and DisplayPort video outputs to support dual-screen displays. Use an adaptor to cover HDMI/DisplayPort to DVI or analog video interface (D-sub).



#### Built-in 2x Mini PCIe slots

The DS57U series features strong expandability with one full size and one half size Mini PCle slots. This compact system can support mSATA SSD and WiFi modules, among other compatible modules.

#### DS57U Front Panel



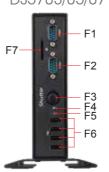
F1. RS232

F2. RS232/RS422/RS485 F3. Power Button F4. HDD LED

F5. Power LED

F6. USB 2.0 Port F7. SD Card Reader

#### DS57U3/U5/U7 Front Panel



F1. RS232

F2. RS232/RS422/RS485

F3. Power Button F4. HDD LED F5. Power LED

F6. USB 2.0 Port F7. SD Card Reader

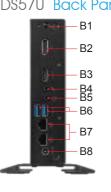


Digital Signage



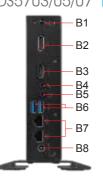


#### DS57U Back Panel



- B1. Clear CMOS & External Power on header
- B2. DisplayPort B3. HDMI Port
- B4 Mic-in
- B5. Headphone B6. USB 3.0 Port
- B7. LAN Port B8. DC-in

#### DS57U3/U5/U7 Back Panel



B1. Clear CMOS &

- External Power on header
- B2. DisplayPort B3. HDMI Port
- B4. Mic-in
- B5. Headphone B6. USB 3.0 Port
- B7. LAN Port B8. DC-in

#### **Application Fields**





Self-service Kiosk





Small Office

DS57U Series DS57U Series 12 **Shuttle**® XS35V5 Series & XS36V5 www.shuttle.com





#### The new generation Braswell processor platform

The series supports Intel® Braswell platform technology, equipped with 14nm Intel® Celeron® N3050 dual core processor as well as support for DDR3L 1600 low-voltage memory module with a maximum capacity up to 8GB.



#### 24/7 certified for wide operating temperature range

Made with quality materials, the series allows for 24/7 stable operation over long periods of time in 0-40°C environments.



#### Support multiple Full HD video formats

The V5 series built-in processors have integrated the 8th generation Intel® HD Graphics. With suitable playback software and decoders, it can support FLV1, AVC1, H264, XVID, MPV4, VC1, and more encoding formats of Full HD video.



#### Support three independent displays





#### Fanless design

The V5 series features fanless design and uses a thermal heat sink plus smart vent design to transmit heat throughout the device quickly and evenly.



COM x2

\*\*\*\*

#### Connectivity with two COM ports (XS36V5 only)

The XS36V5 has built-in one RS232 and one RS232/422/485 (both support 0V/5V/12V) as well as multiple USB ports for easy connection to peripherals like thermal printers, label printers, and barcode scanners.



#### Internal USB port (XS35V5 series only)

Ensure theft protection of USB connected devices with the XS35V5 series internal type A USB 2.0 port and protect USB TV tuners, USB 3G modules, or other USB expanders.



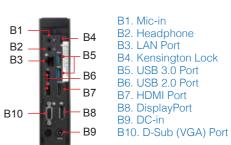
#### Support wire and wireless high-speed networks

The V5 series has a built-in Intel® 10/100/1000 Mbps LAN interface and supports Wake On LAN function. With a built-in IEEE802.11b/g/n wireless network card, transmission rates reach up to 300 Mbps.

#### XS35V5 series Front Panel



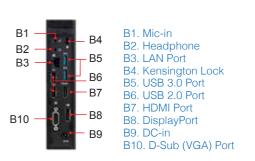
#### XS35V5 series Back Panel



#### XS36V5 Front Panel



#### XS36V5 Back Panel



#### **Application Fields**



Full HD Digital Signage



Thin client







(XS36V5 only)

Queuing System

13 XS35V5 Series & XS36V5 XS35V5 Series & XS36V5 14



High Value Full HD Digital Signage Players — XS35V4 & XS36V4

Shuttle's XS35V4 and XS36V4 signage players are capable of playing Full HD video flawlessly, designed for POS, POI, queuing machine and digital signage applications. Both are equipped with an Intel® Bay Trail processor for lower-power consumption and energy saving. The XS35V4 and XS36V4 feature a respective body thickness of only 38.5mm and 36mm and a fanless cooling design to ensure long-term stable and silent operation. With multiple I/O interfaces, both support great peripheral connectivity for vertical applications.





#### Energy-efficient Bay Trail CPU

Save costs with the energy-efficient 22 nm Intel® Celeron® J1900 quad-core processor and support for up to 8GB DDR3L low-voltage memory.





#### Support multiple Full HD video formats

The V4 series built-in processors have integrated Intel® HD Graphics. With suitable playback software and decoders, it can support FLV1, AVC1, H264, XVID, MPV4, VC1, and more encoding formats of Full HD video.



COM x2

#### Connectivity with two COM ports (XS36V4 only)

24/7 certified for wide operating

Made with quality materials, the series allows for

24/7 stable operation over long periods of time

temperature range

in 0-40°C environments.

The XS36V4 has built-in one RS232 and one RS232/422/485 (both support 0V/5V/12V) as well as multiple USB ports for easy connection to peripherals like thermal printers, label printers, and barcode scanners.



#### Support dual-screen display output

The series provides HDMI, DisplayPort, and D-sub video outputs to support dual-screen displays, using the following configurations: D-Sub + HDMI, D-Sub + DisplayPort, and HDMI + DisplayPort



#### Internal USB port (XS35V4 only)

Ensure theft protection of USB connected devices with the XS35V4's internal type A USB 2.0 port and protect USB TV tuners, USB 3G modules, or other USB expanders,



#### Fanless design

The series is fanless and uses a thermal heat sink plus smart vent design to transmit heat throughout the device quickly and evenly.



#### Support wire and wireless high-speed networks

The V4 series has a built-in 10/100/1000 Mbps LAN interface and supports Wake On LAN function. With a built-in IEEE802.11b/g/n wireless network card, transmission rates reach up to 300 Mbps.

#### XS35V4 Front Panel



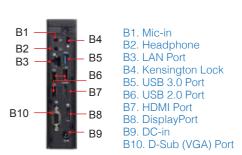
#### XS35V4 Back Panel



#### XS36V4 Front Panel



#### XS36V4 Back Panel



#### **Application Fields**











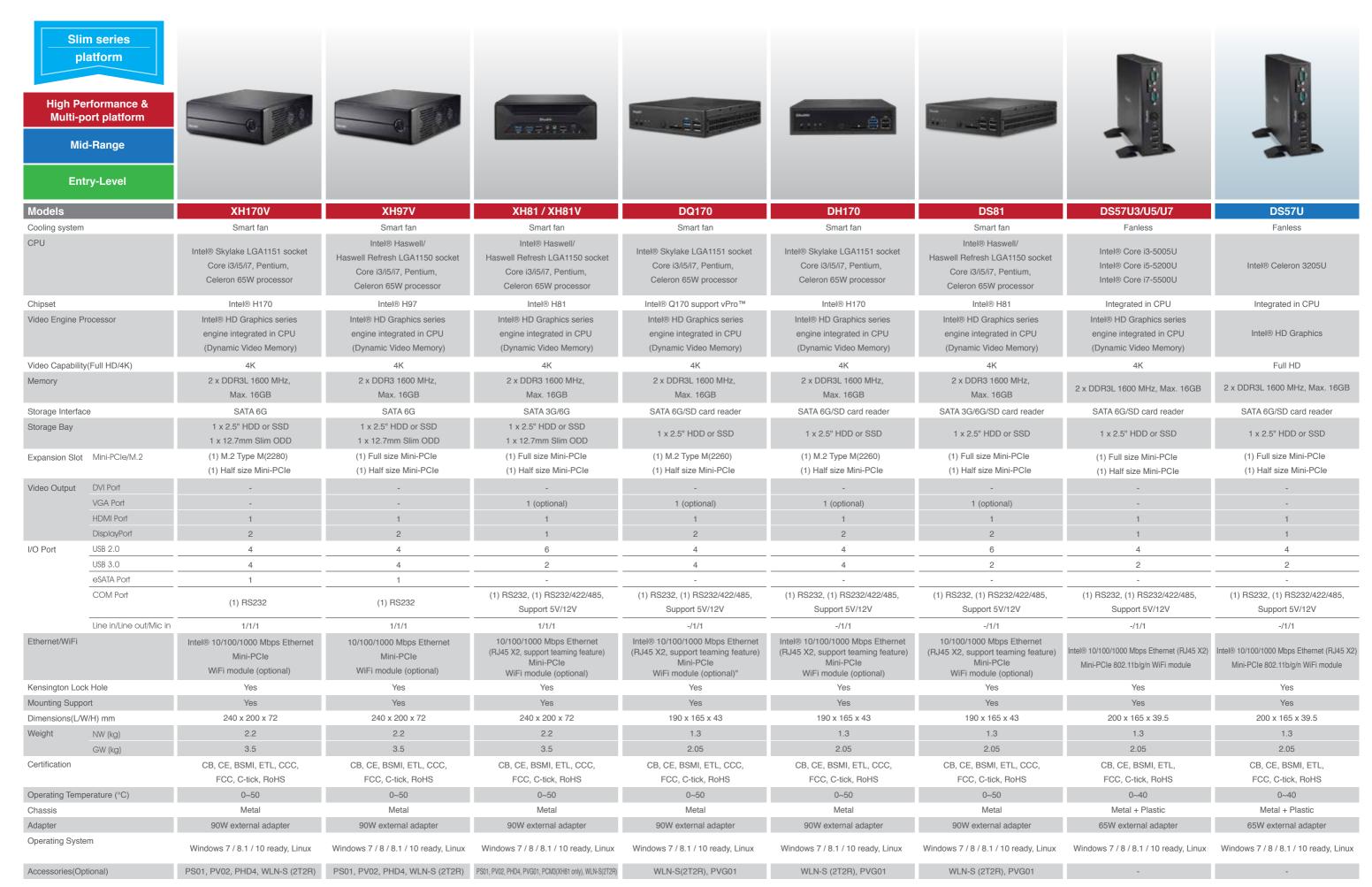
(XS36V4 only)

Queuing System

Full HD Digital Signage

XS35V4 & XS36V4 16 15 XS35V4 & XS36V4









## AIO: All-in-One Touchscreen PCs for Business Solutions

The 15.6" X50 series All-in-one PC is made to drive KIOSK, POS, POI, and queuing systems. Whether needed to engage with customers or manage POS systems, Shuttle's stylishly thin AIO is VESA mountable and is easily mounted on the wall or propped up with a stand. The series is designed to enhance digital solutions with reliable performance and a full I/O interface to connect with multiple peripheral devices. For continuous use over long-periods of time, the series is 24/7 certified and runs cool with advanced heat pipe technology.

#### X50 series Front/ Back/ Side Port







- 01. Stand / Handle
- 02. Microphone
- 03. Webcam
- 04. LCD Display (X50V2 PL non-touch )
- 05. Hard Disk Drive LED
- 06. Power LED
- 07. Stereo Speaker
- 08. Power Switch

- 09. Stylus Pen
- 10. SD Card Reader
- 11. USB 2.0 Port
- 12. Printer Port (Optional)
- 13. COM Port (Optional)
- 14. RJ45 Type COM Port (Optional)
- 15. DIO Port (Optional)
- 16. Kensington Lock

17. DC-in

18. USB 2.0 Port

19. Lan Port

20. USB 3.0 Port

21. HDMI Port

22. VGA Port

23. Headphone

24. MIC-in

19 Slim PC Series Specification

X50V5

#### X50 series Front/ Back/ Side Port



- 01. Stand / Handle
- 02. Microphone
- 03. Webcam
- 04. LCD Display (X50V2 PL non-touch)
- 05. Hard Disk Drive LED
- 06. Power LED
- 07. Stereo Speaker
- 08. Power Switch



- 09. Stylus Pen
- 10. SD Card Reader
- 11. USB 2.0 Port
- 12. Printer Port (Optional)
- 13. COM Port (Optional)
- 14. RJ45 Type COM Port (Optional)
- 15. DIO Port (Optional)
- 16. Kensington Lock

17. DC-in

12

13

14

15

16

- 18. USB 2.0 Port
- 19. Lan Port
- 20. USB 3.0 Port

17 18 19 20 21

23

Models

Panel

Color

Accessories(Optional)

X50V2 Plus

Black/White

PCL68

- 21. HDMI Port
- 22. VGA Port
- 23. Headphone
- 24. MIC-in



#### **Interactive Touch Display**

The 16:9 15.6" single touch screen without a mouse and keyboard provides users interactive convenient digital experience, making it particularly suitable for interactive kiosk and point-of-sale applications.



### IP54 Design(X50V4/X50V5 only)

The X50V4 and X50V5 front panel are designed according to IP54 dust-proof and spill-resistant certification standards. Both can be used for those indoor applications, where the touch screen may be exposed to humidity and occasional splashing of water.





#### Flexible CPU options

Meet computing demands in a variety of environments, Shuttle offers CPU-equipped fanless systems to drive Intel® Core™(by project, X50V4/V5 only), Celeron®, and Atom™ technology.



#### Connect with peripheral devices

Shuttle's AIO series offers a diverse I/O interface in adition to an optional LPT/COM/-Cash drawer accessory for customers who need added contectivity with peripherals.



#### Advanced heat pipe cooling design

Made with Shuttle's exclusive heat pipe technology, the fanless X50 series is designed for remarkably cool and quiet operation.



#### Support wire and wireless high-speed networks

Built-in 10/100/1000 Mbps LAN interface and supports Wake On LAN function. Transmission rates reach up to 300Mbps with built-in IEEE802.11b/g/n wireless network card.



#### 24/7 Certified

Made with high quality materials, the series is approved for 24/7 nonstop operation to meet the demands of industrial applications.



#### Easy Installation: VESA Mountable

Shuttle's AIO series are VESA mountable. No need for integration into kiosk or casing, simply mount on the wall or prop up with a built-in stand.



#### **Application Fields**













#### 15.6" 16:9 Touch Panel, 15.6" 16:9 Touch Panel, 15.6" 16:9 Touch Panel. 15.6" 16:9 Touch Panel 1366 x 768 pixels 1366 x 768 pixels 1366 x 768 pixels 1366 x 768 pixels CPU Intel® Atom D525 Intel® Atom D2550 Intel® Celeron 2957U Intel® Skylake U Celeron 3855U Intel® NM10 Intel® NM10 Integrated in CPU Integrated in CPU Chipset Video Engine Processor Intel® GMA 3150 Intel® GMA 3650 Intel® HD Graphics engine Intel® HD Graphics engine 2 x DDR3 800 MHz, 2 x DDR3 1066 MHz, 1 x DDR3L 1333 MHz, 1 x DDR3L 1333/1600 MHz, Memory Max 4GB Max 8GB Max 4GB Max 8GB SATA 3G / SD card reader SATA 3G / SD card reader SATA 6G / SD card reader SATA 6G / SD card reader Storage Expansion Slot Mini-PCle/M.2 (1) M.2 2280 type B+M (1) Half size Mini-PCle (1) Half size Mini-PCle (1) Half size Mini-PCle (1) Full size Mini-PCle (1) M.2 2230 type A+M Video Output VGA Port HDMI Port I/O Port optional COM Port optional optional ontional 4 4 4 4 USB 2.0 USB 3.0 HD 2 channel, HD 2 channel, HD 2 channel, HD 2 channel, Audio 2 x 2W internal speaker Ethernet/WiFi 10/100/1000 Mbps Ethernet 10/100/1000 Mbps Ethernet 10/100/1000 Mbps Ethernet 10/100/1000 Mbps Ethernet 802.11 b/g/n WLAN 802.11 b/g/n WLAN 802.11 b/g/n WLAN 802.11 ac/b/g/n WLAN Webcam Yes Yes Yes Yes Microphone Yes Yes Yes Yes Dimensions(L/W/H) mm 391.3 x 327 x 42 Weight NW (kg) 2.92 2.92 2.92 2.92 GW (kg) 4.2 4.2 4.2 4.2 Certification CB,CE,BSMI,ETL,CCC, CB,CE,BSMI,ETL,CCC, CB,CE,BSMI,ETL, CCC CB, CE, BSMI, R&TTE, ETL, FCC,C-tick,RoHS FCC,C-tick,RoHS FCC,C-tick,RoHS FCC, C-tick, RoHS Operating Temperature (°C) 0~40 0~40 0~40 0~40 40W 40W 65W 65W Adapter Windows 7 32bit Windows XP / 7 / 10 ready, Linux Windows 7 / 8 / 10 ready, Linux Windows 7 / 8.1 / 10 ready, Linux Operating System Black/White

Black/White

PCL69

PCL71/POS01

Black / White

PCL71 / POS01

**Shuttle**® XPC Series www.shuttle.com





#### Support Intel® new generation Core™ processor

The SZ170R6 and SH170R6 support Intel® the latest Skylake-S LGA 1151 processor; the SH97R6 and SH81R4 support Haswell/Haswell Refresh LGA 1150 Core™ i3/i5/i7 as well as Pentium® and Celeron® Processors.



#### Strong Expandability

Connect with multiple peripheral devices (i.e. thermal printers, barcode scanners, etc.) with USB2.0/3.0 and optional RS232/LPT ports.



#### Integrated Cooling Engine 2 (I.C.E. 2) Heat pipe Technology

Shuttle's I.C.E.2™ thermal module uses convection cooling to dissipate heat away from the CPU. The copper tubes, coated in nickel for enhanced tube hardness and rust-proof protection, are filled with distilled water to effectively channel heat.



#### Support wire and wireless high-speed networks

Support Wake On LAN function with built-in 10/100/1000 Mbps single LAN or dual LAN interface options. The XPC series also provides Mini PCle interface for wireless network cards to enhance data transfer speed



#### Support up to three independent screens

The XPC R6 series has one HDMI and two DisplayPorts built-in to support three independent screens; the SH81R4 provides one HDMI and one DVI-I interface to support dual-screen displays.



#### M.2 & Mini PCIe Slots

The XPC series features strong expandability with M.2 and Mini PCle slots support for M.2 SSD or mSATA SSD, WiFi module, and other compatible modules.



#### Support high-end graphic applications

The XPC series features one PCI-E x16 designed to power video walls and 3D graphics applications with support for dual slot graphic cards.



#### 80 Plus certified Power supply

The XPC series is highly energy-efficient, equipped with energy-saving 80 Plus Silver certified and 80 plus Bronze certified power supply configurations.

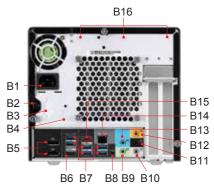
#### XPC Series Front Panel



F1. 5.25" Bay F2. 3.5" Bay F3. Eject Button F4. 3.5"Bay Open Button F5. Power Switch & Power LED

F7. USB 2.0 Port F8. USB 3.0 Port F9. Mic-in F10. Headphone

#### XPC Series Back Panel



**B1.** AC Power Socket B2. Kensington Lock

B3. Serial Port (Optional)

B4. S/PDIF Out Port B5. DisplayPort

B6. HDMI Port B7. USB 3.0 Port B8. Clear CMOS Button B9. Front Speaker Out (L/R) Port B10. Real Speaker Out (L/R) Port

B11. Side Speaker Out (L/R) Port B12. Center/Subwoofer

Speaker Out Port B13. Line-in Port

B14. LAN Port

B15. eSATA Port B16. Wireless LAN Perforation (Optional)

#### Application Fields

F6. HDD LED













**Shuttle**® XPC Series - SH97R8 www.shuttle.com



# The new cost efficient storage mini-server — XPC SH97R8

To response the trend of storage market, Shuttle's XPC series launches the new SH97R8. It is only 1/3 size of a traditional tower PC but can install up to four 3.5" HDDs. Able to support Intel® Rapid Storage Technology (Intel® RST), proving a variety of RAID mode selection. Equipped with Intel® H97 chipset, the SH97R8 supports Intel® Haswell/ Haswell Refresh or the new Broadwell 95W high-performance processors. The SH97R8 features with one PCI-E x16 and one PCI-E x4 slots and can install dual-slot high-end graphics card or surveillance cards. With Shuttle's I.C.E 2™ heat pipe technology, the SH97R8 is high stability for long-term operation to meet the need of video wall, network video recorder, storage applications, and more.





#### Support Intel® high-performance **Processor**

Equipped with Intel® H97 chipset, the SH97R8 supports Intel® 5th generation (Broadwell) and 4th generation (Haswell and Haswell Refresh) Core™ i3/i5/i7, Pentium®, and Celeron® processors, able to support dual-channel DDR3-1600 32GB (8GBx4)memory.



#### Install up to four 3.5" HDDs

By tiny change mechanism design, the new SH97R8 maintains the same volume of 13-liter XPC cube but it can install up to four 3.5" HDDs, which have the same storage capacity with cheaper price than SSD or 2.5" HDD.



#### Integrated Cooling Engine 2 (I.C.E. 2) Heat pipe Technology

Shuttle's I.C.E.2™ thermal module uses convection cooling to dissipate heat away from the CPU. The copper tubes, coated in nickel for enhanced tube hardness and rust-proof protection, are filled with distilled water to effectively channel heat.



#### Support for multiple RAID modes

Equipped with Intel® H97 chipset, SH97R8 supports Intel® Rapid Storage Technology (Intel® RST), which provides a variety of RAID modes to choose, including RAID 0, 1, 5, 10 to avoid hard disk failure caused data loss (except for RAID 0).



# Support three independent

The SH97R8 has one HDMI and two DisplayPorts built-in to support three independent screens.



#### Support wire and wireless high-speed networks

Support Wake-on-LAN function with built-in 10/100/1000 Mbps LAN interface. The SH97R8 also provides Mini PCIe interface for wireless network cards to enhance data transfer speed.



#### Support multiple graphics card applications

The SH97R8 provides one PCI-E x16 and one PCI-E x4 slots to install dual-slot high-end graphics card or surveillance cards, able to drive video wall, network video recorder applications, and more.



#### 80 Plus silver certified Power supply

The XPC series is highly energy-efficient, configured energy-saving 80 Plus certified. The SH97R8 is equipped with 500W 80Plus Silver power supply, which reduces energy consumption and provides a stable and sufficient power.

#### XPC SH97R8 Front Panel



- F1. HDD LED F2 Power LFD
- F3. Power Button F4. USB 2.0 Port F5. Mic-in
- F6. Headphone F7. USB 2.0 Port

#### XPC SH97R8 Back Panel



- **B1.** AC Power Socket
- B2. Kensington Lock B3. Serial Port (Optional)
- B4. S/PDIF Out Port
- B5. DisplayPort B6. HDMI Port
- B7. eSATA Port
- B8. USB 3.0 Port B9. Clear CMOS Button
- B10. Front Speaker Out (L/R) Port
- B11. Center/Subwoofer Speaker Out Port
- B12. Real Speaker Out (L/R) Port
- B13. Side Speaker Out (L/R) Port
- B14. Line-in Port
- B15. LAN Port
- B16. USB 2.0 Port
- B17. Wireless LAN Perforation (Optional)

#### **Application Fields**













25 XPC Series - SH97R8 XPC Series - SH97R8 26







SZ170R6

Intel® Skylake-S Core

Celeron LGA 1151 95W CPU

0~40

Aluminum

Windows 7 / 8.1 / 10 ready,

WLN-C, PHD3, J-RS232

i3/i5/i7, Pentium,









	TARE TO SERVICE
	194
-	. 8
31.	

		ı
		н
		ı
- 1		ı

SH170R6	SH97R8	SH97R6	SH81R4
Intel® Skylake-S Core i3/i5/i7, Pentium, Celeron LGA 1151 95W CPU	Intel® Broadwell/ Haswell/ Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 95W CPU	Intel® Haswell/ Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 95W CPU	Intel® Haswell/ Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 95W CPU

Chipset	Intel® Z170	Intel® H170	Intel® H97	Intel® H97	Intel® H81
Video Engine Processor	Intel® HD Graphics integrated in CPU (Dynamic video memory)	Intel® HD Graphics integrated in CPU (Dynamic video memory)	Intel® HD Graphics integrated in CPU (Dynamic video memory)	Intel® HD Graphics integrated in CPU (Dynamic video memory)	Intel® HD Graphics integrated in CPU (Dynamic video memory)
Memory	4 x DDR4 2133 MHz, Max. 64GB	4 x DDR4 2133 MHz, Max. 64GB	4 x DDR3 1600 MHz, Max. 32GB	4 x DDR3 1600 MHz, Max. 32GB	2 x DDR3 1600 MHz, Max. 16GB
Storage	SATA 6G	SATA 6G	SATA 6G	SATA 6G	SATA 3G/ SATA 6G
Storage Bay	2 x 3.5" HDD 1 x 5.25" ODD bay	2 x 3.5" HDD 1 x 5.25" ODD bay	4 x 3.5" HDD bay	2 x 3.5" HDD 1 x 5.25" ODD bay	2 x 3.5" HDD 1 x 5.25" ODD bay
Audio	HD 7.1 channel	HD 7.1 channel	HD 7.1 channel	HD 7.1 channel	HD 5.1 channel
Ethernet	Intel® 10/100/1000 Mbps	Intel® 10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps

		(RJ45 x 1)	(RJ45 x 1)	(RJ45 x 1)	(RJ45 X1)	(RJ45 x 1)
Expansion S	Slot PCI Express Slots	(1) PCI-E x 16, (1) PCI-E x 4	(1) PCI-E x 16, (1) PCI-E x 1			
	Mini-PCle/M.2	(1) M.2 2280 type M	(1) M.2 2280 type M	(1) Full size Mini-PCle	(1) Full size Mini-PCle	(1) Full size Mini-PCle
		(1) Half size Mini-PCle	(1) Half size Mini-PCIe	(1) Half size Mini-PCle	(1) Half size Mini-PCIe	(1) Half size Mini-PCIe
Video outpu	t DVI-I Port	-	-		-	1
	HDMI Port	1	1	1	1	1
	DisplayPort	2	2	2	2	-
I/O Port US	SB 2.0	2	2	6	6	8
USB 3.0		8	8	2	4	2
es	SATA	1	1	1	1	-
Fro	ont Headphone/Mic in	1/1	1/1	1/1	1/1	1/1
S/	PDIF Out	-	-	-	-	-
Power Supp	ly	500W 80 Plus	300W 80 Plus	500W 80 Plus	300W 80 Plus	300W 80 Plus
Dimensions(L/W/H) mm		332 x 216 x 198	325 x 215 x 190			
Weight	NW (kg)	3.5	3.5	3.5	3.5	3.5
	GW (kg)	5	5	5	5	5
Certification		CB,CE,BSMI,ETL,FCC,	CB,CE,BSMI,ETL,FCC,	CB,CE,BSMI,ETL,FCC,	CB,CE,BSMI,ETL,CCC,	CB,CE,BSMI,ETL,CCC,
		C-tick,RoHS	C-tick,RoHS	C-tick,RoHS	FCC,C-tick,RoHS	FCC,C-tick,RoHS

0~40

Aluminum

Linux

0~40

Aluminum

Linux

Windows 7 / 8.1 / 10 ready, Windows 7 / 8 / 8.1 / 10 ready, Windows 7 / 8 / 8.1 / 10 ready, Windows 7 / 8 / 8.1 / 10 ready,

WLN-C, PHD3, J-RS232 WLN-C, PHD3, J-RS232 WLN-C, PHD3, J-RS232

0~35

Aluminum

0~40

Aluminum

Linux

XPC Slim Series

All-in-One

XPC Cube Series

PVG01

#### **PV01**



VESA mount accessory for all XS35 series models

#### PHD2



Accessory for XS35 series to support a second hard disk drive

**PV03** 

VESA mount accessory for XS36 series

VGA port accessory for XH81 series, DH170, DQ170, and DS81

#### **PS01**



Vertical stand accessory for 3-liter Slim PCs

**PV02** 



VESA mount accessory for 3-liter Slim PCs

PHD4



3.5" hard drive rack for 3-liter Slim PCs

PCM3



Triple RS232 daughter board for XH81 only

#### WLN-S



802.11b/g/n WLAN kit for XPC Slim series

PCL68



RS232/LPT daughter board for X50V2 series

PCL69



RS232/LPT daughter board for X50V3 series

PCL71



COM/LPT daughter board for X50V4 and X50V5

#### POS01



COM/LPT/Cash drawer daughter board for X50V4 and X50V5

#### WLN-C



802.11b/g/n WLAN kit for XPC cube series

#### PHD3



3.5" to 2.5" HDD rack for XPC cube series

#### J-RS232



RS232 daughter board for XPC cube series

Chassis

Operating System

Accessories(Optional)

27 XPC Series Specification

Operating Temperature (°C)





# Equipped with Intel® Broadwell U series processors

There are a variety of CPU options of XPC nano, including Celeron® 3205U and Core ™ i3/i5/i7 processors. The series supports DDR3L 1600 low-voltage memory with maximum capacity up to 16GB (8GBx2).



#### Support 4K ultra HD

The NC01U3/U5/U7 are equipped with Intel® Core™ i3/i5/i7 processors and deliver four times the resolution of Full HD, support 4Kx2K (3840x2160) Ultra HD for crystal clear imaging.



#### Ultra-small and colorful appearance

With brand new 0.5-liter stylish design, it redefines the SFF (small form factor). With fashionable, elegant, and colorful appearance, makes XPC nano easy to fit anywhere at home or office. (Macaron colorful outlook for project only)



#### Support dual-screen display output

XPC nano provides HDMI and mini DisplayPort video outputs to support dual-screen displays. Use an adaptor to cover HDMI/mini DisplayPort to DVI or analog video interface (D-sub).



# Wire and Wireless High-speed Networks

The XPC nano has built-in Intel®10/100/1000 Mbps LAN interface and supports Wake On LAN function. Equipped with the newest 802.11 b/g/n/ac dual band WiFi and Bluetooth 4.0 combo, can enhance data transfer speed.



#### High-speed storage interface

This new 0.5-liter XPC nano supports the SATA 6Gbps storage interface for 2.5" HDD/SSD (7mm ultra slim) and built-in one M.2 slot for high-speed M.2 SSD, proving the best data transfer efficiency.



#### A variety of I/O for great connectivity

XPC nano has all the functions you need from SFF (small form factor). Equipped with multiple I/O ports of HDMI, mini DisplayPort, R\$232, USB2.0 and USB3.0 as well as SD card reader, both USB3.0 ports also provides 2A current for fast charge.



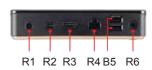
#### **VESA** mount ready

Designed to fit seamlessly into your lifestyle, the XPC nano is capable of mounting to the rear of LCD monitor or a TV. This space saving capability makes it easy to blends into anywhere, including home, any offices, and commercial environments.

#### NC01U series Front Panel



#### NC01U series Back Panel



#### NC01U series Bottom



F1. USB 3.0 Port F2. Power LED F3. SD Card Reader

B1. Extension slot

R1. DC-in R2. Mini DisplayPort R3. HDMI Port R4. LAN Port R5. USB 2.0 Port R6. Headphone + MIC

#### **Application Fields**









4K Digital Signage Thin client

HTPC



Adapter

Operating System







CORE	CORE"i5 CORE"i7						
Models		NC01U	NC01U3	NC01U5	NC01U7		
CPU		Smart fan	Smart fan	Smart fan	Smart fan		
Chipset		Intel® Celeron 3205U	Intel® Core i3-5005U	Intel® Core i5-5200U	Intel® Core i7-5500U		
Video Engine	e Processor	Intel® HD Graphics	Intel® HD Graphics 5500 Intel® HD Graphics 5500		Intel® HD Graphics 5500		
Video Capab	ility(Full HD or 4K)	integrated in CPU	integrated in CPU	integrated in CPU	integrated in CPU		
		Full HD	Full HD 4K 4K		4K		
Memory		2 x DDR3L 1600 MHz,	2 x DDR3L 1600 MHz,	2 x DDR3L 1600 MHz,	2 x DDR3L 1600 MHz,		
		Max. 16GB	Max. 16GB	Max. 16GB	Max. 16GB		
Storage Inter	face	SATA 6G	SATA 6G	SATA 6G	SATA 6G		
Storage Bay		1 x 2.5" HDD or SSD	1 x 2.5" HDD or SSD	1 x 2.5" HDD or SSD	1 x 2.5" HDD or SSD		
		(7mm ultra slim)	(7mm ultra slim)	(7mm ultra slim)	(7mm ultra slim)		
		1 x M.2 SSD	D 1 x M.2 SSD 1 x M.2 SSD		1 x M.2 SSD		
Expansion Slot		M.2 2230 AE and	M.2 2230 AE and	M.2 2230 AE and	M.2 2230 AE and		
		M.2 2242 BM key	M.2 2242 BM key	M.2 2242 BM key	M.2 2242 BM key		
Video Output	t	HDMI x 1,	HDMI x 1,	HDMI x 1,	HDMI x 1,		
		mini DisplayPort x 1	mini DisplayPort x 1	mini DisplayPort x 1	mini DisplayPort x 1		
I/O Port		2 x USB 3.0 ports (front) w/2A charging @power on/off					
		2 x USB 2.0 (back)					
		SD card reader					
		Combo jack 3.5mm for headphone + mic x 1					
		1 x RS232					
		DC in					
Ethernet		Intel® 10/100/1000 Mbps Ethernet	Intel® 10/100/1000 Mbps Ethernet	Intel® 10/100/1000 Mbps Ethernet	Intel® 10/100/1000 Mbps Etherne		
Wireless LAN		M.2 802.11 b/g/n/ac and	M.2 802.11 b/g/n/ac and	M.2 802.11 b/g/n/ac and	M.2 802.11 b/g/n/ac and		
		Bluetooth combo	Bluetooth combo	Bluetooth combo	Bluetooth combo		
Kensington Lock Hole		Yes	Yes	Yes	Yes		
Mounting Support		Yes	Yes	Yes	Yes		
Dimensions(L/W/H) mm		141 x 141 x 29 (0.57L)	141 x 141 x 29 (0.57L)	141 x 141 x 29 (0.57L)	141 x 141 x 29 (0.57L)		
Weight	NW (kg) 0.36		0.36 0.36		0.36		
	GW (kg)	1.26	1.26	1.26	1.26		
Certification		CB, CE, BSMI, ETL, FCC,	CB, CE, BSMI, ETL, FCC,	CB, CE, BSMI, ETL, FCC,	CB, CE, BSMI, ETL, FCC,		
		Ctick RoHS	Ctick RoHS	Ctick RoHS	Ctick RoHS		
Chassis		Plastic	Plastic	Plastic	Plastic		

65W

Windows 7 32/64 bits,

8.1 32/64 bits, 10 ready,

Linux

65W

Windows 7 32/64 bits,

8.1 32/64 bits, 10 ready,

Linux

65W

Windows 7 32/64 bits.

8.1 32/64 bits, 10 ready,

Linux

# Find the business solution you're looking for with Shuttle

Shuttle's mini PC, Slim PC, and All-in-One hardware solutions are designed for diverse commercial application, including Digital Signage, Kiosk, Menu Board, Video Wall, and POS. Whether your business is in retail, hospitality, banking, corporate office, transportation, healthcare, security, or education, Shuttle has the right solution to help your business succeed.

#### **Home Medicare**

AIO applied in nursing homes to support communications systems and increase patient health and safety.



#### Point-Of-Sale

A cost effective POS system designed to handle the various daily operations throughout hospitality and retail markets.



#### **Digital Signage**

#### Retail:

Display rich interactive media content to engage customers and drive sales. Decrease perceived wait time and improve customer experience.



#### Hotel:

Manage and communicate information about customer service, hotel events, and room rates from a central location.



#### Bank:

Provide instant financial information relating to the stock market, global exchange rates, and internal bank programs.



#### Public Transportation:

Display important flight information, power multi-touch way finding kiosks, or generate revenue from ad space.



#### Contact Us

No.30, Lane 76, Rui-Guang Rd, Nei-Hu Dist., Taipei, Taiwan TEL: +886-2-8792-6168 FAX: +886-2-8792-6268 http://global.shuttle.com

#### **E-mail Contacts**

Sales: sales@tw.shuttle.com Media Contact: shuttlepr@tw.shuttle.com

31 XPC nano Series Specification

65W

Windows 7 32/64 bits,

8.1 32/64 bits, 10 ready,

Linux