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2014 Product Guide

Superb for Home, Work,
Business and Industrial
applications

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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, Biometric solutions, and Network Attached Storage platforms. 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.



Notebook Tablet XPC Signage Players All-in-One Face Recognition OMNINAS EDUPAL

Flight Information Display System (FIDS):

Inform travelers of arrival/departure statuses in real-time and around the clock at airport, train, and bus terminals with fanless, 24/7 certified media players.



Video Walls:

Captivate your target audience. Shuttle's high-performance XPC series is designed to power video walls with crystal clear video content.



Kiosk:

Interact with customers using multi-touch responsive kiosks with media players that are built to support multiple peripherals.



Target, engage, and inform with Shuttle solutions

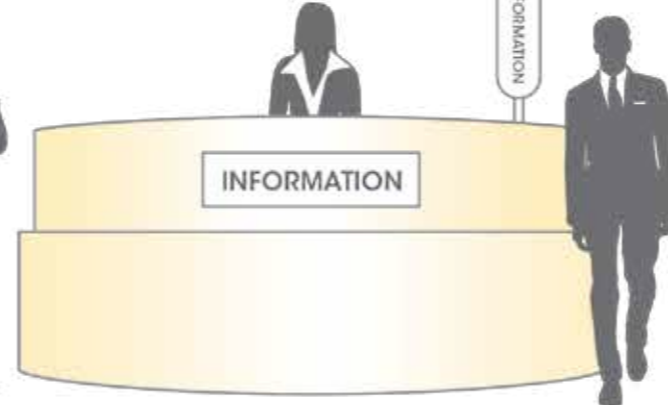
Facial Recognition:

Protect access points in places where security matters most with Shuttle's biometrics solution using facial recognition, fingerprint, and RFID scan.



Out-of-Home Advertising:

Engage viewers with rich media content using Shuttle's Full HD and Ultra HD 4k signage players.



Digital Menu Boards:

Target restaurant customers with visually appealing menu options using fanless media players built to withstand harsh environments.



POS:

Drive fast and efficient Point-of-Sale systems with touch-screen All-in-One PCs, made to connect with barcode scanners, receipt printers, and more.



High Performance Slim PCs to power Kiosks and Vending Machines, The XH Series

Shuttle's XH series includes four powerful 3-liter barebone PCs made to drive high-performance Intel® Core processors and deliver dynamic computing where POS, Vending Machines, and Kiosks are running. The series offers multiple video outputs and can drive up to three independent screens (XH97V only), with support for 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 Processors



The XH97V, and XH81/81V, supports Intel® Haswell/Haswell refresh 65W processors; the XH61V supports Intel 2nd and 3rd generation Core 65W processors.

Strong ability to connect peripherals



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

Support 4K high-performance applications



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

Support up to three independent screens



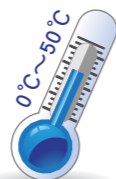
The XH series provides multiple video output configurations, offering a combination of HDMI, DVI-I, and DisplayPort interface, and able to support up to three screens independently (XH97V only).

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.

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.

Compact and VESA mountable



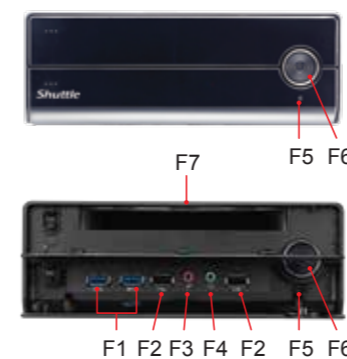
The 3-liter, VESA mountable XH series is designed for easy integration into commercial applications with limited space and gives users the option for a slim ODD or additional HDD.

Dual Gigabit LAN Network



Dual LAN ports (except XH97V) 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.

XH97V Front Panel



- F1. USB3.0 Port
- F2. USB2.0 Port
- F3. Mic-in
- F4. Headphone
- F5. HDD LED
- F6. Power Switch / Power LED
- F7. Slim ODD Bay

XH97V Back Panel



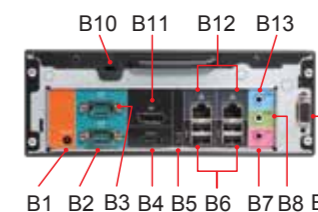
- B1. DC-in
- B2. RS232
- B3. HDMI Port
- B4. Clear CMOS
- B5. USB3.0 Port
- B6. ESATA
- B7. Mic-in
- B8. Line-out
- B9. Kensington Lock
- B10. Display Port
- B11. LAN Port
- B12. USB2.0 Port
- B13. Line-in

XH81 Front Panel



- F1. USB3.0 Port
- F2. USB2.0 Port
- F3. Mic-in
- F4. Headphone
- F5. Power Switch / Power LED
- F6. HDD LED
- F7. COM Port (Optional) (RS232/RS422/RS485)

XH81 Back Panel



- B1. DC-in
- B2. RS232/RS422/RS485
- B3. RS232
- B4. HDMI Port
- B5. C-CMOS
- B6. USB2.0 Port
- B7. Mic-in
- B8. Line-out
- B9. D-Sub (VGA) Port (Optional)
- B10. Kensington Lock
- B11. Display Port
- B12. LAN Port
- B13. Line-in

Application Fields



4K Digital Signage



Self-service Kiosk



Vending Machine (XH81 only)



Digital Whiteboard



Office



4K & Full HD High-performance Digital Signage Player DS81 & DS61 series

Compact, the powerful DS81 and DS61 were created to support the latest software and trends in digital signage. Able to support Intel® 2nd, 3rd and 4th gen CPUs, the systems allow system integrators to push the limits of customer engagement with increased interactivity, connectivity, and graphics resolution. Seamlessly play 4K video content and power complex computer processes with the DS81. 24/7 certified, VESA mountable, and operable in 0-50°C temperatures, the DS81 and DS61 are fit for a variety of commercial applications.



Support high-performance Intel® Core Processor



The series offers a variety of CPU options for diverse applications. The DS81 supports Intel® Haswell/Haswell refresh 65W processors; the DS61 series supports Intel 2nd and 3rd generation Core 65W processors—a variety of CPU options for diverse applications.

Support 4K ultra HD (DS81 only)



Deliver four times the resolution of Full HD, the DS81 supports 4Kx2K (3840x2160) Ultra HD for crystal clear imaging.

Support dual-screen display output



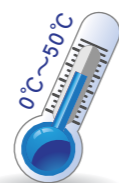
The DS81 has one built-in HDMI and two DisplayPorts; DS61 series has built-in one HDMI and one DVI-I interface; both support dual-screen display function. The DS81 displays imaging to two screens using the following configurations: HDMI+ DisplayPort or DisplayPort+ DisplayPort

Heat pipe cooling technology



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

24/7 and wide operating temperature range



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

Slim design and Easy assembly



The compact, 43mm DS81 features easy assembly as well as enhanced thermal efficiency and system stability due to less internal cables and no daughter board.

Multiple I/O for great connectivity



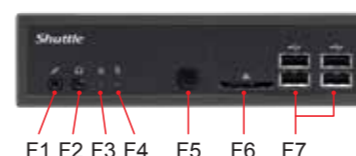
With six built-in USB 2.0, two USB3.0, and two COM ports, the series can easily connect to peripherals such as thermal printers, label printers, barcode scanners, etc., and is designed for a wide range of vertical applications.

Dual Gigabit LAN Network



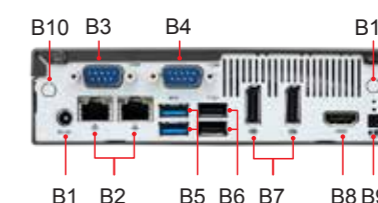
Use dual LAN ports and support wake-on-LAN and teaming mode for a faster, more stable LAN connection.

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



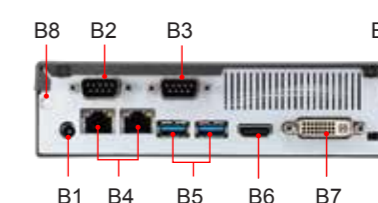
- B1. DC-in
- B2. LAN Port
- B3. RS232/RS422/RS485
- B4. RS232
- B5. USB 3.0 Port
- B6. USB 2.0 Port
- B7. Display Port
- B8. HDMI Port
- B9. Clear CMOS & External Power on header
- B10. Antenna hole

DS61 V1.1 Front Panel



- F1. Power Button
- F2. USB2.0 Port
- F3. Power LED
- F4. HDD LED
- F5. Mic-in
- F6. Headphone
- F7. SD Card Reader

DS61 V1.1 Back Panel



- B1. DC-in
- B2. RS232/RS422/RS485
- B3. RS232
- B4. LAN Port
- B5. USB3.0 Port
- B6. HDMI Port
- B7. DVI-I Port
- B8. Antenna hole

Application Fields



4K Digital Signage (DS81 only)



Self-service Kiosk



Digital Whiteboard



Office



DS437 series

Full HD & Fanless Digital signage Player

The DS437 series is an ultra-slim signage player with fanless design. It 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 with limited space. The DS437 series is equipped with an Intel® Celeron dual-core processor with built-in Intel® HD Graphics to play Full HD/1080P. It provides multiple I/O ports for peripheral connectivity. The DS437T supports Trusted Platform Module (TPM) to secure highly sensitive data and protect it from theft.

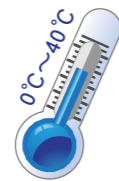


DS437T

The new generation Intel® Celeron processor



Equipped with a high-performance Intel® Celeron 1037 U 1.8 GHz dual-core processor, the maximum TDP is only 17W. The series runs on a mere 65W adapter in full use and keeps stable for long-term operation.



24/7 and wide operating temperature range

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

Fanless design



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



Multiple I/O for great connectivity

With up to 8 built-in USB ports and two COM ports (DS437 only), 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 multiple Full HD video formats



The DS437 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.



Support wire and wireless high-speed networks

The series has a built-in 10/100/1000 Mbps LAN interface (DS437 has Dual Gigabit LAN) and supports Wake On LAN function. With a built-in IEEE802.11b/g/n wireless network card, transmission rates reach up to 300 Mbps.

Support dual-screen display output



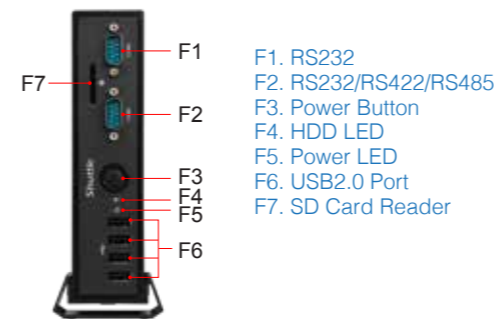
The series provides HDMI and DVI-I video outputs to support dual-screen display. Use an adaptor to convert HDMI into DVI interface and DVI-I port into D-Sub interface to diversify signal selection and provide dual monitor and standalone display options.



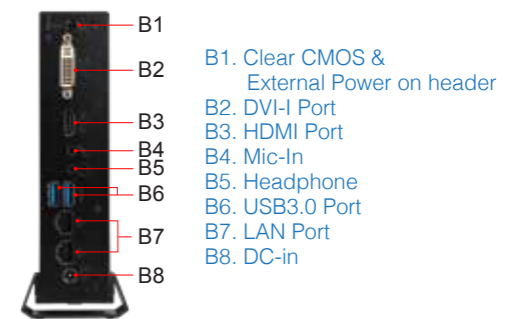
TPM expansion slot (DS437T only)

The DS437T can be equipped with an optional Trusted Platform Module (TPM) which provides a set of random keys to protect data security from unauthorized users.

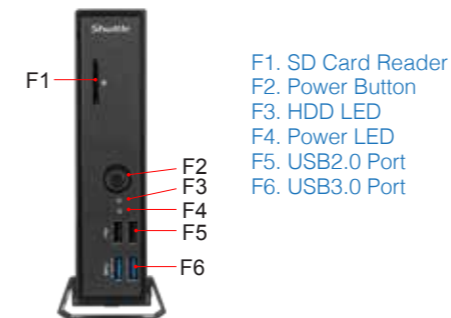
DS437 Front Panel



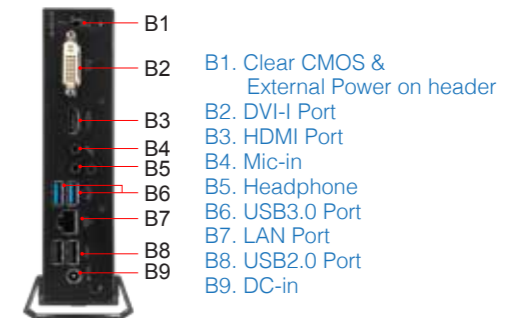
DS437 Back Panel



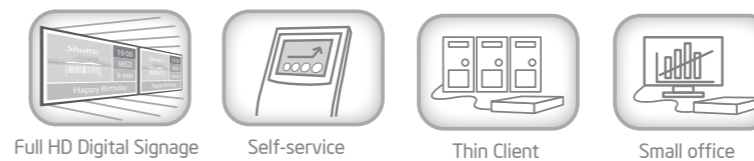
DS437T Front Panel



DS437T Back Panel



Application Fields





High Value Full HD Digital Signage Players XS35V4 & XS36V4

Shuttle's new 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.



XS35V4 XS36V4

Energy-efficient Bay Trail CPU



Save costs with the newest 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



Both 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.

Support dual-screen display output



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

Fanless design and 24/7



Both devices are fanless and use a thermal heat pipe designed to transmit heat throughout the device quickly and evenly. Approved for 24/7 operation, both ensure stable operation for long periods of time.

Connectivity with two COM ports (XS36V4 only)



The XS36V4 has two built-in COM ports as well as multiple USB ports for easy connection to peripherals like thermal printers, label printers, and barcode scanners.

Internal USB port (XS35V4 only)



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

Support wire and wireless high-speed networks



Both devices have a built-in 10/100/1000 Mbps LAN interface and support Wake On LAN function. With a built-in IEEE802.11b/g/n wireless network card, transmission rates reach up to 300 Mbps.

Energy Saving & Extremely quiet



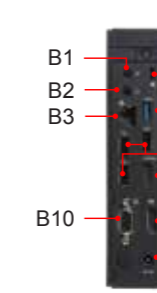
With exclusive low-power consumption and fanless design, a mere 40 watt power adapter is sufficient for normal system operation. Use solid-state disks for completely noise-free operation.

XS35V4 Front Panel



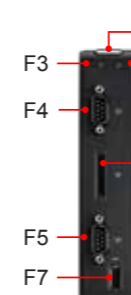
- F1. Power Button
- F2. Power LED
- F3. HDD LED
- F4. SD Card Reader
- F5. ODD/ Second HDD (Optional)
- F6. USB 2.0 Port

XS35V4 Back Panel



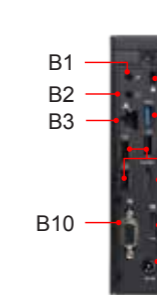
- B1. Mic-in
- B2. Headphone
- B3. LAN Port
- B4. Kensington Lock
- B5. USB 3.0 Port
- B6. USB 2.0 Port
- B7. HDMI Port
- B8. Display Port
- B9. DC-in
- B10. D-Sub (VGA) Port

XS36V4 Front Panel



- F1. Power Button
- F2. Power LED
- F3. HDD LED
- F4. RS232/RS422/RS485
- F5. RS232
- F6. SD Card Reader
- F7. USB 2.0 Port

XS36V4 Back Panel



- B1. Mic-in
- B2. Headphone
- B3. LAN Port
- B4. Kensington Lock
- B5. USB 3.0 Port
- B6. USB 2.0 Port
- B7. HDMI Port
- B8. Display Port
- B9. DC-in
- B10. D-Sub (VGA) Port

Application Fields



Full HD Digital Signage



Thin Client



Office



POS
(XS36V4 only)



Queuing System



Cost effective Digital Signage Player XS35 & XS36 series

Shuttle's slim media player XS35 and XS36 series is equipped with Intel® Cedar Trail-D platform technology with an integrated energy-saving Intel® Atom™ dual-core processor. The fanless 1-liter series uses a thermal heat pipe module to ensure passive cooling and silent operation. The combination of VESA mount capability and multiple I/O interface makes it easy to fit diverse vertical applications.



Intel® Cedar Trail-D platform technology



Equipped with a 32nm Intel® Atom™ dual-core processor, ensuring energy-saving and stable operation within commercial applications

Support dual-screen display output



The XS35 series (except XS35V2) provides HDMI and D-Sub; the XS36VL has built-in HDMI, DVI-D and D-sub video outputs to support dual-screen display.

Fanless design and 24/7



Approved for 24/7 operation, the series is fanless and uses a thermal heat pipe module designed to transmit heat throughout the device quickly and evenly.

Compact and VESA Mountable



The 1 liter series are VESA mountable and made for easy configuration into hardware systems.

Two RS232 ports (XS36VL only)



The XS36VL has built-in two RS232 ports as well as multiple USB ports for easy connection to thermal printers, label printers, barcode scanners and more.

Flexible configuration of ODD (XS35 series only)



The compact XS35 series can be configured with either a slim ODD or an additional hard drive for more storage. Users can also choose the optional accessory PHD2 to support a second hard drive.

Support wire and wireless high-speed networks



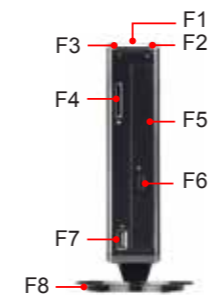
The series has a built-in 10/100/1000 Mbps LAN interface and supports Wake On LAN function. With a built-in IEEE802.11b/g/n wireless network card, transmission rates reach up to 300 Mbps.

Energy Saving & Extremely quiet



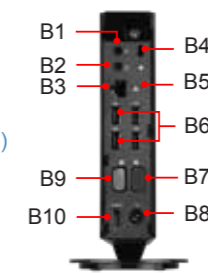
With exclusive low-power consumption and fanless design, a mere 40 watt power adapter is sufficient for normal system operation. Use solid-state disks for completely noise-free operation.

XS35 series Front Panel



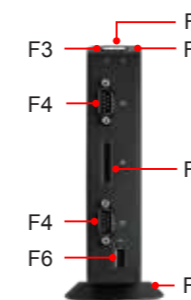
- F1. Power Button
- F2. Power LED
- F3. HDD LED
- F4. SD Card Reader
- F5. ODD/ Second HDD (Optional)
- F6. ODD Eject Button
- F7. USB 2.0 Port
- F8. Vertical Stand

XS35 series Back Panel



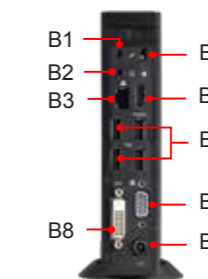
- B1. Mic-in
- B2. Headphone
- B3. LAN Port
- B4. Kensington Lock
- B5. HDMI Port (XS35V3L only)
- B6. USB 2.0 Port
- B7. D-Sub (VGA) Port (XS35V2/XS35V3L only)
- B8. DC-in
- B9. D-Sub (VGA) Port (XS35GS V2/XS35GS V3L only)
- B10. HDMI Port (XS35GS V2/XS35GS V3L only)

XS36VL Front Panel



- F1. Power Button
- F2. Power LED
- F3. HDD LED
- F4. RS232
- F5. SD Card Reader
- F6. USB 2.0 Port
- F7. Vertical Stand

XS36VL Back Panel



- B1. Mic-in
- B2. Headphone
- B3. LAN Port
- B4. Kensington Lock
- B5. HDMI Port
- B6. USB 2.0 Port
- B7. D-Sub (VGA) Port
- B8. DVI-D Port
- B9. DC-in

Application Fields



Full HD Digital Signage



Thin Client



Office



POS
(XS36VL only)



Queuing System



Affordable ARM-based Digital Signage Player DSA2LS & DSA2LV

Shuttle's latest ARM-based series is a cost-effective platform for digital menu board and digital signage applications. The series includes the DSA2LS signage player and the DSA2LV motherboard, both made to deliver quality media content with a Freescale i.MX6DL 1GHz dual-core processor and Full HD/1080p playback capability. The devices have plenty of I/O to drive peripheral-hungry digital signage systems, including USB, Mini USB, RS232, SD card, and Audio out. The DSA2LS is tailored for commercial applications and has an ultra-slim, VESA mountable design.

Support Full HD/1080P



Deliver 2D, 3D, and Full HD media content. Equipped with a Freescale i.MX6DL 1 GHz dual-core processor, the ARM-based series supports encoding formats in MPEG2, H.264, MPEG4, and more.



Support wire and wireless high-speed networks

The 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, transmission rates reach up to 300 Mbps.

Support dual-screen display



Shuttle's DSA2LS drives content on two screens simultaneously through one HDMI and one D-Sub/VGA port; DSA2LV provides one HDMI and one LVDS port.



24/7 high stability

Made with high-quality materials, the rugged design ensures 24/7 stable operation over long periods of time in 0-45°C environments.

Rapid development of Android APK



Equipped with a Cortex™ - A9 based processor, the series supports Android operating systems. Use Android API to more quickly and easily develop Android APK for a variety of applications in a short time.



Internal power supply & VESA Mount capability

The internal power supply and 75/100mm VESA mount make the series easily configured into hardware systems.

Fanless design



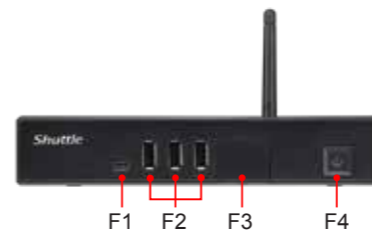
Made with Shuttle's energy-saving heat sink and airflow technology, the fanless platform runs quiet and cool. Ideal for noise-sensitive environments.



Auto power-on & power failure recovery

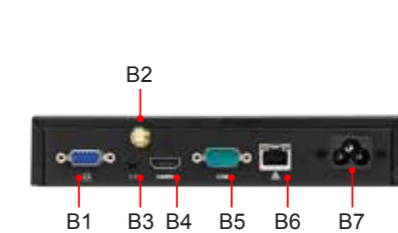
Auto power-on function allows the system to be turned on and off via third-party software; with power failure recovery, the system will automatically reboot in the event of a power supply interruption.

DSA2LS Front Panel



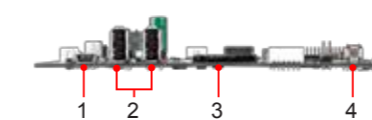
- F1. Mini USB 2.0
- F2. USB 2.0 x 3
- F3. SD Card slot with theft protection cover
- F4. Power Button

DSA2LS Back Panel

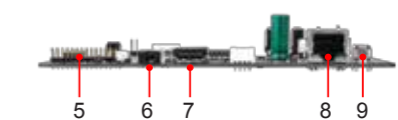


- B1. VGA port
- B2. W-LAN Antenna
- B3. Audio line out
- B4. HDMI (Audio/Video)
- B5. COM port
- B6. RJ-45 Gigabit LAN
- B7. 3-pin AC power

DSA2LV I/O Port



- 1. mini USB 2.0 port
- 2. USB 2.0 port
- 3. SD card reader
- 4. External Power Button



- 5. LVDS interface
- 6. Audio out
- 7. HDMI port
- 8. RJ-45 Gigabit LAN
- 9. Recovery Button

Application Fields



Slim series platform

High Performance & Multi-port platform

Mid-Range

Entry-Level



Models	XH97V	XH81 / XH81V	XH61V	DS81	DS61 V1.1	DS437	DS437T	XS36V4	XS35V4
Cooling system	Smart fan	Smart fan	Smart fan	Smart fan	Smart fan	Fanless	Fanless	Fanless	Fanless
CPU	Intel® Haswell/ Haswell Refresh LGA1150 socket Core i3/i5/i7, Pentium, Celeron 65W processor	Intel® Haswell/ Haswell Refresh LGA1150 socket Core i3/i5/i7, Pentium, Celeron 65W processor	Intel® 2nd/3rd Generation LGA1155 socket Core i3/i5/i7, Pentium, Celeron 65W processor	Intel® Haswell/ Haswell Refresh LGA1150 socket Core i3/i5/i7, Pentium, Celeron 65W processor	Intel® 2nd/3rd Generation LGA1155 socket Core i3/i5/i7, Pentium, Celeron 65W processor	Intel Celeron 1037U	Intel Celeron 1037U	Intel Celeron J1900	Intel Celeron J1900
Chipset	Intel H97	Intel H81	Intel H61	Intel H81	Intel H61	Intel NM70	Intel NM70	Integrated in CPU	Integrated in CPU
Video Engine Processor	Intel HD Graphic series engine integrated in CPU (Dynamic Video Memory)	Intel HD Graphic series engine integrated in CPU (Dynamic Video Memory)	Intel HD Graphic series engine integrated in CPU (Dynamic Video Memory)	Intel® HD Graphic series engine integrated in CPU (Dynamic Video Memory)	Intel HD Graphic series engine integrated in CPU (Dynamic Video Memory)	Intel HD Graphic engine integrated in CPU	Intel HD Graphic engine integrated in CPU	Intel HD Graphic engine integrated in CPU	Intel HD Graphic engine integrated in CPU
Video Capability(Full HD or 4K)	4K	4K	Full HD	4K	Full HD	Full HD	Full HD	Full HD	Full HD
Memory	2 X DDR3 1600 MHz, Max. 16GB	2 X DDR3 1600 MHz, Max. 16GB	2 X DDR3 1333 MHz, Max 16GB	2 X DDR3 1600 MHz, Max. 16GB	2 X DDR3 1333 MHz, Max 16GB	2 X DDR3 1333 MHz, Max 16GB	2 X DDR3 1333 MHz, Max 16GB	1 X DDR3L 1333 MHz, Max. 8GB	1 X DDR3L 1333 MHz, Max. 8GB
Storage Interface	SATA 6G	SATA 3G/6G	SATA 3G	SATA3G/6G / SD card reader	SATA 3G / SD card reader	SATA 6G / SD card reader	SATA 6G / SD card reader	SATA 3G / SD card reader	SATA 3G / SD card reader
Storage Bay	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD	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	1 X 2.5" HDD or SSD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD
Expansion Slot	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe
	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E
Video Output	DVI Port	-	1	-	1	1	1	-	-
	VGA Port	-	-	1 (optional)	-	-	-	1	1
	HDMI Port	1	1	1	1	1	1	1	1
	Display Port	2	1	-	2	-	-	1	1
I/O Port	USB 2.0	6	6	4	6	4	4	4	4
	USB 3.0	2	2	2	2	2	4	1	1
	eSATA Port	1	-	-	-	-	-	-	-
	COM Port	(1) RS232	(1) RS232 ,(1) RS232/422/485, Support 5V/12V	(1) RS232 ,(1) RS232/422/485, Support 5V/12V	(1) RS232 ,(1) RS232/422/485, Support 5V/12V	(1) RS232 ,(1) RS232/422/485, Support 5V/12V	-	(1) RS232 ,(1) RS232/422/485, Support 5V/12V	-
	Line in/Line out/Mic in	1/1/1	1/1/1	1/1/1	-/1/1	-/1/1	-/1/1	-/1/1	-/1/1
Ethernet/WiFi	10/100/1000 Mbps Ethernet Mini-PCIe 802/11 b/g/n WiFi module (optional)	10/100/1000 Mbps Ethernet (RJ45 X2, support teaming feature) Mini-PCIe 802.11b/g/n WiFi module (optional)	10/100/1000 Mbps Ethernet (RJ45 X2, support teaming feature) Mini-PCIe 802.11b/g/n WiFi module (optional)	10/100/1000 Mbps Ethernet (RJ45 X2, support teaming feature) Mini-PCIe 802.11b/g/n WiFi module (optional)	10/100/1000 Mbps Ethernet Mini-PCIe 802/11 b/g/n WiFi module (optional)	10/100/1000 Mbps Ethernet Mini-PCIe 802.11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIe 802.11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIe 802/11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIe 802.11 b/g/n WiFi module
Kensington Lock Hole	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mounting Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dimensions(L/W/H) mm	240 x 200 x 72	240 x 200 x 72	240 x 200 x 72	190 x 165 x 43	190 x 165 x 43	200 x 165 x 39.5	200 x 165 x 39.5	200 x 160 x 36	252 x 162 x 38.5
Weight	NW (kg)	2.2	2.2	2.2	1.3	1.3	1.3	1.6	2.1
	GW (kg)	3.5	3.5	3.5	2.05	2.05	2.05	2.3	2.8
Certification	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS
Operating Temperature (°C)	0~50	0~50	0~50	0~50	0~50	0~40	0~40	0~35	0~35
Chassis	Metal	Metal	Metal	Metal	Metal	Metal + Plastic	Metal + Plastic	Plastic	Plastic
Power Supply	90W external adapter	90W external adapter	90W external adapter	90W external adapter	90W external adapter	65W external adapter	65W external adapter	40W external adapter	40W external adapter
Operating System	Windows 7 / 8 / 8.1, Linux	Windows 7 / 8 / 8.1, Linux	Windows 7 / 8 / 8.1, Linux	Windows 7 / 8 / 8.1, Linux	Windows XP / 7 / 8, Linux	Windows XP / 7 / 8, Linux	Windows XP / 7 / 8, Linux	Windows 7 64bit, Windows 8/8.1 32bit & 64bit	Windows 7 64bit, Windows 8/8.1 32bit & 64bit
Accessories(Optional)	PS01, PV02, WLN-S (2T2R)	PS01, PV02, WLN-S (2T2R)	PS01, PV02, WLN-S (2T2R)	WLN-S (2T2R) , PVG01	WLN-S (2T2R)	-	-	PV03	PV01, PHD2

Slim series platform

High Performance & Multi-port platform

Mid-Range

Entry-Level

Models	XS36VL	XS35GS V3L	XS35V3L	XS35GS V2	XS35V2
Cooling system	Fanless	Fanless	Fanless	Fanless	Fanless
CPU	Intel® Atom D2550	Intel® Atom D2550	Intel® Atom D2550	Intel® Atom D525	Intel® Atom D525
Chipset	Intel® NM10	Intel® NM10	Intel® NM10	Intel® NM10	Intel® NM10
Video Engine Processor	Intel® GMA3650	AMD Mobility Radeon™ HD7450	Intel® GMA3650	AMD Mobility Radeon™ HD7450	Intel GMA 3150
Video Capability(Full HD or 4K)	HD	Full HD	HD	Full HD	HD
Memory	2 X DDR3 1066 MHz, Max 4GB	2 X DDR3 1066 MHz, Max 4GB	2 X DDR3 1066 MHz, Max 4GB	1 X DDR3 800 MHz, Max 4GB	1 X DDR3 800 MHz, Max 4GB
Storage Interface	SATA 3G / SD card reader	SATA 3G / SD card reader	SATA 3G / SD card reader	SATA 3G / SD card reader	SATA 3G / SD card reader
Storage Bay	1 X 2.5" Hdd or SSD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD	1 X 2.5" HDD or SSD 1 X 12.7mm Slim ODD
Expansion Slot	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe
	(1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E	(1) Half size Mini-PCI-E
Video Ouput	DVI Port	1	-	-	-
	VGA Port	1	1	1	1
	HDMI Port	1	1	1	1
	Display Port	-	-	-	-
I/O Port	USB 2.0	5	5	5	5
	USB 3.0	-	-	-	-
	eSATA Port	-	-	-	-
	COM Port	(2) RS232	-	-	-
Line in/Line out/Mic in	-/1/1	-/1/1	-/1/1	-/1/1	-/1/1
Ethernet/WiFi	10/100/1000 Mbps Ethernet Mini-PCIE 802.11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIE 802.11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIE 802.11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIE 802.11 b/g/n WiFi module	10/100/1000 Mbps Ethernet Mini-PCIE 802.11 b/g/n WiFi module
Kensington Lock Hole	Yes	Yes	Yes	Yes	Yes
Mounting Support	Yes	Yes	Yes	Yes	Yes
Dimensions(L/W/H) mm	200 x 160 x 36	252 x 162 x 38.5	252 x 162 x 38.5	252 x 162 x 38.5	252 x 162 x 38.5
Weight	NW (kg)	1.6	2.1	2.1	2.1
	GW (kg)	2.3	2.8	2.8	2.8
Certification	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS
Operating Temperature (°C)	0~35	0~35	0~35	0~35	0~35
Chassis	Plastic	Plastic	Plastic	Plastic	Plastic
Adapter	40W external adapter	40W external adapter	40W external adapter	40W external adapter	40W external adapter
Operating System	Windows 7 32bit	Windows XP / 7, Linux	Windows 7 32bit	Windows XP / 7, Linux	Windows XP / 7, Linux
Accessories(Optional)	PV03	PV01, PHD2	PV01, PHD2	PV01, PHD2	PV01, PHD2

ARM-based series platform

Models	DSA2LS	DSA2LV
Cooling system	Fanless	-
CPU	Freescale i.MX6 DualLite	Freescale i.MX6 DualLite
Video Engine Processor	Intergrated in I.MX6 Dual-lite	Intergrated in I.MX6 Dual-lite
Video Capability(Full HD or 4K)	Full HD	Full HD
Video Decode*	MPEG2, H.264, MPEG4/Xvid DivX H.264, AVI/Xvid H.264, Mov/H.264	MPEG2, H.264, MPEG4/Xvid DivX H.264, AVI/Xvid H.264, Mov/H.264
Memory	1GB DDR3 800MHz	1GB DDR3 800MHz
Storage	eMMC 4GB	eMMC 4GB
SD card reader	Support Max. 64GB	Support Max. 64GB
I/O Port	Video output	(1) HDMI, (1)VGA
	USB 2.0	3
	USB 3.0	-
	Mini USB 2.0	1
	UART	-
	RS232	1
	Audio	(1)Line out
Ethernet/WiFi	10/100/1000 Mbps Ethernet IEEE 802.11 b/g/n WLAN	10/100/1000 Mbps Ethernet IEEE 802.11 b/g/n WLAN
Kensington Lock Hole	Yes	-
Mounting Support	Yes	-
Dimensions(L/W/H) mm	142 x 190 x 35	-
Weight	NW (kg)	0.7
	GW (kg)	1.4
Certification	CE, FCC, C-TICK, CCC, BSMI, CB, EUP Lot6, R&TTE, RoHS	CE, RoHS
Operating Temperature (°C)	0~45	0~45
Relative Humidity	10-95%	10-95%
Chassis	Metal	-
Power Supply	10W Internal power supply	External power input 12V
Operating System	Android 4.2.2	Android 4.2.2
Wake-on-LAN	Yes	Yes

*Video decode format varies by media player software.



High-performance Industrial application Mini-server —XPC series

Shuttle's industry renowned XPC series is only 1/3 size of a traditional tower PC but delivers the same performance with high durability and strong expandability. The XPC series is equipped with Shuttle's I.C.E.2™ heat pipe cooling technology and smart fan design to efficiently remove waste heat. The XPC series supports the latest generation of Intel® processors and provides a robust I/O interface in addition to dual-slot PCI-Ex16 and Mini PCIe expansion slots. It features impressive performance to support diverse commercial applications, including multi-display digital signage, video wall, and mini server.



Support high-performance Intel® core processor



Equipped with Intel® 8 and 9 series chipsets, the XPC series supports Intel® newest Haswell/Haswell refresh LGA 1150 processors. The SX79R5 supports LGA 2011 Core i7/i7 Extreme Edition processors.

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 up to three independent screens (SH97R6 only)



The SH97R6 has one HDMI and two Display-Ports built-in to support three independent screens; The XPC 8 series provides one HDMI and one DVI-I interface to support dual-screen display.

Support high-end graphic applications



The XPC series is designed to power video walls and 3D graphics applications with support for dual slot graphic cards.

Strong Expandability



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

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 PCIe interface for wireless network cards to enhance data transfer speed.

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.

Power on by RTC



Save energy costs as well as the cost of on-site service with Power-On by RTC function. The XPC series can be automatically turned on and off with the Windows task scheduler and power on by RTC.

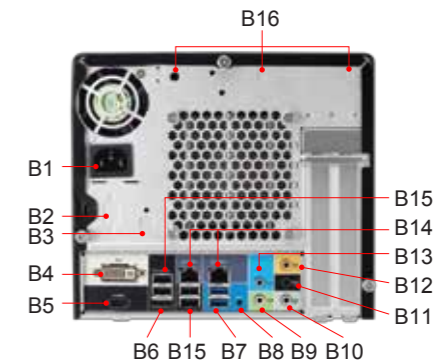
XPC series Front Panel



- F1. 5.25" Bay
- F2. 3.5" Bay
- F3. Eject Button
- F4. 3.5" Bay Open Button
- F5. Power Switch & Power LED
- F6. HDD LED

- F7. USB3.0 Ports
- F8. USB2.0 Port
- F9. Mic-in
- F10. Headphone
- F11. USB2.0 Port & Fast Charger

XPC series Back Panel

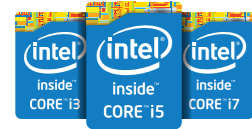


- B1. AC Power Socket
- B2. Serial Port (Optional)
- B3. S/PDIF Out Port
- B4. DVI-I Port
- B5. HDMI Port
- B6. eSATA
- B7. USB3.0 Ports
- B8. Clear CMOS Button

- B9. Front Speaker Out (L/R) Port
- B10. Side Speaker Out (L/R) Port
- B11. Rear Speaker Out (L/R) Port
- B12. Center/Subwoofer Speaker Out Port
- B13. Line-In Port
- B14. LAN Port
- B15. USB2.0 Port
- B16. Wireless LAN Perforation (Optional)

Application Fields





Models	SX79R5	SH97R6	SZ87R6	SH87R6	SH81R4
CPU	Intel® 2nd Generation Core i7/i7 Extreme Edition processor LGA 2011 CPU	Intel® Haswell/Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 84W CPU	Intel® Haswell/Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 84W CPU	Intel® Haswell/Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 84W CPU	Intel® Haswell/Haswell Refresh LGA 1150 Core i3/i5/i7, Pentium, Celeron 84W CPU
Chipset	Intel® X79	Intel® H97	Intel® Z87	Intel® H87	Intel® H81
Video Engine Processor	Add on VGA card	Intel® HD Graphic integrated in CPU (Dynamic video memory)	Intel® HD Graphic integrated in CPU (Dynamic video memory)	Intel® HD Graphic integrated in CPU (Dynamic video memory)	Intel® HD Graphic integrated in CPU (Dynamic video memory)
Memory	4 X DDR3 1600 MHz, Max. 32GB	4 X DDR3 1600 MHz, Max. 32GB	4 X DDR3 1600 MHz, Max. 32GB	4 X DDR3 1600 MHz, Max. 32GB	2 X DDR3 1600 MHz, Max. 16GB
Storage	SATA 3G/ 6G	SATA 6G	SATA 6G	SATA 6G	SATA 3G/ SATA 6G
Storage Bay	2x3.5" HDD or SSD 1x5.25" ODD bay	2x3.5" HDD or SSD 1x5.25" ODD bay	2x3.5" HDD or SSD 1x5.25" ODD bay	2x3.5" HDD or SSD 1x5.25" ODD bay	2x3.5" HDD or SSD 1x5.25" ODD bay
Audio	HD 7.1 channel	HD 7.1 channel	HD 7.1 channel	HD 7.1 channel	HD 5.1 channel
Ethernet	10/100/1000 Mbps (RJ45 X2 with teaming feature)	10/100/1000 Mbps (RJ45 X1)	10/100/1000 Mbps (RJ45 X2 with teaming feature)	10/100/1000 Mbps (RJ45 X1)	10/100/1000 Mbps (RJ45 X1)
Expansion Slot PCI Express Slots	(2) PCIE x16	(1) PCI-E X16, (1) PCI-E X4	(1) PCI-E X16, (1) PCI-E X1	(1) PCI-E X16, (1) PCI-E X1	(1) PCI-E X16, (1) PCI-E X1
	Mini-PCIe (1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E	(1) full size Mini-PCI-E (1) Half size Mini-PCI-E
Video output	DVI-I Port	-	-	1	1
	HDMI Port	-	1	1	1
	Display Port	-	2	-	-
I/O Port	USB 2.0	8	6	6	6
	USB3.0	4	4	4	4
	eSATA	1	-	1	1
	Front Headphone/Mic in	1/1	1/1	1/1	1/1
	S/PDIF Out	1	-	1	1
Power Supply	500W 80 Plus Silver	300W 80 Plus	500W 80 Plus Silver	300W 80 Plus	300W 80 Plus
Dimensions(L/W/H) mm	332x216x198	332x216x198	332x216x198	332x216x198	325x215x190
Weight	NW (kg)	3.5	3.5	3.5	3.5
	GW (kg)	5	5	5	5
Certification	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS
Operating Temperature (°C)	0~35	0~35	0~35	0~35	0~35
Chassis	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Operating System	Windows XP / 7 / 8, Linux	Windows 7 / 8, Linux	Windows 7 / 8, Linux	Windows 7 / 8, Linux	Windows 7 / 8 / 8.1, Linux
Accessories(Optional)	WLN-C, PHD3, J-RS232	WLN-C, PHD3, J-RS232	WLN-C, PHD3, J-RS232	WLN-C, PHD3, J-RS232	WLN-C, PHD3, J-RS232

All-in-One



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

The X50 and X70 AIO series are 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/Rear/Side Panel



- 01. Stand / Handle
- 02. Microphone
- 03. Webcam
- 04. LCD Display (X50V2 PL non-touch)
- 05. WiFi LED
- 06. Hard disk drive LED
- 07. Power LED
- 08. Stereo speaker

- 09. Power Switch
- 10. Stylus pen
- 11. SD card reader
- 12. MIC-in
- 13. Headphone
- 14. LAN Port
- 15. USB Port
- 16. Stand / Handle

- 17. HDMI Port
- 18. USB Port
- 19. VGA Port
- 20. Power input
- 21. Printer Port (Optional)
- 22. COM Port (Optional)
- 23. Kensington Lock

X70 series Front/Rear/Side Panel



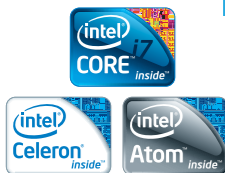
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|---|---------------------------|-----------------------------|---------------------|
| 01. Webcam | 07. Mic-in | 13. Clear CMOS Button | 19. Kensington Lock |
| 02. Microphone | 08. Headphone | 14. DC-in | 20. Thermal Vent |
| 03. LCD Display(Single/Multi/Non Touch) | 09. Lan Port | 15. COM Ports | 21. Power Button |
| 04. Hard Disk Drive LED | 10. USB 3.0 Port COM Port | 16. Printer Port (Optional) | 22. USB 2.0 Port |
| 05. Power LED | 11. HDMI Port | 17. COM Ports (Optional) | 23. USB 2.0 Port |
| 06. Stereo speaker | 12. USB 2.0 Port | 18. Stand / Handle | 24. SD Card Reader |

Interactive Touch Display



Enhance user experience with options for seamless single or multi-touch interactivity.

Flexible CPU options



Meet computing demands in a variety of environments, Shuttle offers both barebone and CPU-equipped systems to drive Intel® Core™, Celeron™, and Atom™ technology.

Advanced heat pipe cooling design



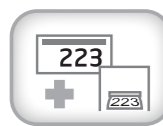
Made with Shuttle's exclusive heat pipe technology, the smart fan equipped X70 series and fanless X50 series are designed for remarkably cool and quiet operation.

24/7 high stability



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

Application Fields



Queuing System



Retail POS



Public-web KIOSK



Information KIOSK



Intercom System

Connect with peripheral devices



Shuttle offers a diverse I/O interface in addition to an optional LPT/COM accessory for customers who need added connectivity with peripherals.

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.

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.

Green Design: Low-power consumption



Made with quality parts that strictly adhere to the EU's RoHS standards. The series features energy-efficient computing processes that decrease power consumption.

Specification



Models	X50V2 Plus	X50V3L	X50V4	X70 S/M/N
Panel	15.6"	15.6"	15.6"	18.5" X70S: Single touch X70M: Multi-touch X70N: Non-touch
CPU	Intel® Atom D525	Intel® Atom D2550	Intel® Celeron 2957U	Intel® 2nd/3rd Generation LGA1155 socket Core i3/i5/i7, Pentium, Celeron 65W processor
Chipset	Intel® NM10	Intel® NM10	Integrated in CPU	Intel® H61
Video Engine Processor	Intel® GMA 3150	Intel® GMA 3650	Intel® HD Graphic engine	Intel® HD Graphic series engine integrated in CPU (Dynamic Video Memory)
Memory	2 X DDR3 800 MHz, Max 4GB	2 X DDR3 1066 MHz, Max 4GB	1 X DDR3L 1333 MHz, Max 8GB	2 X DDR3 1333 MHz, Max 16GB
Storage	SATA3 / SD card reader	SATA3 / SD card reader	SATA6 / SD card reader	SATA3/SATA6 / SD card reader
Expansion Slot	Mini-PCIe	Mini-PCIe	Mini-PCIe	Mini-PCIe
Video Output	VGA Port	1	1	-
	HDMI Port	-	1	1
I/O Port	COM Port	optional	optional	RS232 X1
	USB2.0	4	4	4
	USB 3.0	-	-	2
	Audio	HD 2 channel, 2X 2W internal speaker	HD 2 channel, 2X 2W internal speaker	HD 2 channel, 2X 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 (RJ45 X2, support teaming feature)
	802.11 b/g/n WLAN	802.11 b/g/n WLAN	802.11 b/g/n WLAN	802.11 b/g/n WLAN
Webcam	Yes	Yes	Yes	Yes
Microphone	Yes	Yes	Yes	Yes
Dimensions(L/W/H) mm	391.3x327x42	391.3x327x42	391.3x327x42	468x364x57
Weight	NW (kg)	2.92	2.92	4.6
	GW (kg)	4.2	4.2	6.5
Certification	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS	CB,CE,BSMI,ETL,CCC, FCC,C-tick,RoHS
Operating Temperature (°C)	0~40	0~40	0~40	0~50
Adapter	40W	40W	65W	120W
Operating System	Windows XP / 7, Linux	Windows 7 32bit	Windows 7 / 8, Linux	Windows XP / 7 / 8, Linux
Color	Black/White	Black/White	Black/White	Sliver
Accessories(Optional)	PCL68	PCL69	PCL70/POS01	PCL70



Store and Share the Great Moments in Life with OMNINAS

Shuttle's NAS product line called "OMNINAS" consists of network attached-storage devices that feature powerful data storage, backup, security, and multiple servers. OMNINAS is designed to become one's hub of multimedia content to make sure users always have access to their files via Android or iOS mobile devices.

Convenient Hot Swap Function

The OMNINAS has a unique HDD tray design that simplifies HDD installation and also supports the One-button Hot-Swap function.

RAID 1

In RAID 1 mode, users can easily replace backup HDDs with a simple click of a button while the system is still running. This feature also provides HDD data safety backup protection.



Hotspot Function

The OMNINAS has a built-in Wireless AP* that supports the Hotspot function. This allows the OMNINAS to extend its application environment to the wireless network and all Wi-Fi compatible devices at home or in the office, making digital content accessible worldwide. Users can search and access the NAS database directly and experience its convenience wirelessly.

*Wireless AP depending on model.



Superb Transfer Performance

The OMNINAS offers superb transfer performance with speeds of up to 110MB/s*. It allows multiple users to access the data simultaneously and is designed specifically for small offices, workgroups or home use.

*Transfer performance depending on model and system environment.



1. Acronis True Image backup software

The OMNINAS models come bundled with a copy of *Acronis True Image Personal Edition software. This utility provides powerful data backup capabilities that support full backups or selected backups of key files, enhanced flexibility and convenience of data backups.

*Acronis backup software will vary depending on the model.



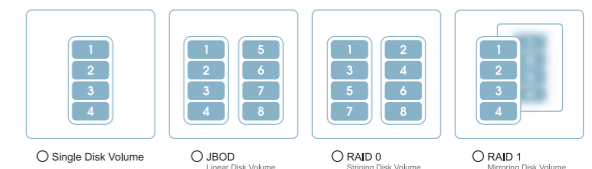
2. USB 3.0 & SD Card Reader

The OMNINAS comes with USB 3.0 high-speed ports that boast transfer rates of up to 5.0Gbps (640Mbyte/sec) - around 10 times faster than USB 2.0. The built-in SD card reader with "Auto Copy" function stores digital content to the NAS quickly and conveniently.



3. Supports RAID 0/1/JBOD modes

The OMNINAS supports RAID 0, RAID 1 and JBOD modes. Users are free to choose which mode is right for them - highest read/write performance (RAID 0), best data protection (RAID 1) or largest useful capacity (JBOD).



4. Energy-saving and Green Power design

The OMNINAS design conforms to international IEEE802.3az Energy-Efficient Ethernet standard and the minimum power consumption of only 9W. The eco-friendly Green Power design of the OMNINAS saves energy and costs at the same time.

* Minimum power consumption depending on model.



5. Powerful & Multiple server functions

Print Server

The OMNINAS works as a print server. Simply connect a printer to the NAS to share copies over the network.

iTunes Server

Creating an iTunes server based on an OMNINAS is easy and allows users to play back media content and stream it directly to devices with iTunes clients over a network.

DLNA Media Server - Twonky

The integrated Twonky DLNA Media Server software automatically sorts media stored on the NAS so that users no longer need to spend time organizing files. High compatibility with other DLNA devices and support for a wide range of multimedia formats enables the OMNINAS to easily play more multimedia content.



TWONKYSERVER™

6. Excellent cooling design

The OMNINAS uses 2.5mm thick stylish aluminum for its casing which not only blends in with home design but also serves as a smart low-noise cooling system. The fan speed adjusts automatically in order to ensure reliable and quiet operation.





Hardware Spec

	KD22	KD20	KS10
CPU	Marvell 88F6707 1.2GHz SOC	PLX 7821/750Mhz dual-core	Marvell 88F6707 800MHz SOC
HDD	2 x 3.5" HDD or 2x 2.5" HDD/SSD	2 x 3.5" HDD or 2x 2.5" HDD/SSD	1 x 3.5" HDD
Lockable HDD Tray	Yes	Yes	No screw required
OS	Embedded Linux	Embedded Linux	Embedded Linux
Largest single HDD capacity supported	> 4TB	> 4TB	> 4TB
DRAM	512MB DDR3	256MB DDR2	256MB DDR3
NAND	1Gb	1Gb	1Gb
USB 2.0	1 (flash drive, external HDD, hub, printer, digital camera, etc.)	2 (flash drive, external HDD, hub, printer, digital camera, etc.)	2 (1 at front panel) (flash drive, external HDD, hub, printer, digital camera, etc.)
USB 3.0	2 (front panel) (flash drive, external HDD, hub, printer, digital camera, etc.)	1 (front panel) (flash drive, external HDD, hub, printer, digital camera, etc.)	N/A
Card Reader	1 (front panel) SD Card	1 (front panel) SD Card	1 (front panel) SD Card
10/100/1000 Ethernet	1 (100 green, 1000 amber; access/link blinking green)	1 (100 green, 1000 amber; access/link blinking green)	1 (100 green, 1000 amber; access/link blinking green)
	IEEE 802.3az for Green Lan	N/A	IEEE 802.3az for Green Lan
Wireless Support	2.4 GHz operation frequency	N/A	2.4 GHz operation frequency
	AP mode, IEEE 802.11 b/g/n	N/A	AP mode, IEEE 802.11 b/g/n
RAID	0, 1, JBOD	0, 1, JBOD	Single
Support single HDD	Yes and single expansion	Yes	Yes
Hot Swap	Yes	Yes	N/A
Hot Swap button (zero configuration)	1 for each HDD	1 for each HDD	N/A
RTC	Yes	Yes	Yes
Power Adaptor	65W	65W	40W
Alarm Buzzer	System Warning	System Warning	System Warning
Fan	Smart fan	Smart fan	Fanless
Reset Button	Back panel	Back panel	Back panel
Power Button	Front panel	Front panel	Back panel
Secure lock	Kensington lock	Kensington lock	Kensington lock
Operation Temperature	0 - 40 °C	0 - 40 °C	0 - 40 °C
Operation Humidity	10-95%	10-95%	10-95%
Certification	CE, FCC, C-TICK, BSMI, CB, EUP Lot6, R&TTE	CE, FCC, C-TICK, BSMI, CB, EUP Lot6	CE, FCC, C-TICK, BSMI, CB, EUP Lot6, R&TTE
Chassis	Aluminum/Plastic	Aluminum/Plastic	Plastic
Size	169.8mm (H) x 90.0mm (W) x 225.0mm(L)	169.8mm (H) x 90.0mm (W) x 225.0mm(L)	124mm (H) x 60mm (W) x 205mm (L)
Weight	2716 g	2716 g	550g
Accessories	Power Adaptor (65W), AC Power Cord, Ethernet Cable, CD, QSG, HDD Screws	Power Adaptor (65W), AC Power Cord, Ethernet Cable, CD, QSG, HDD Screws	Power Adaptor (40W), AC Power Cord, Ethernet Cable, CD, QSG

*Performance depends on the testing environment

Software Spec

	KD22	KD20	KS10
OS	Embedded Linux		
Supported OS	Microsoft Windows XP and above, Mac OS and Linux		
Mobile Device Access	iPhone, iPad, Android phone, Android tablet		
Supported Mobile OS	iOS 6.0 and above, Android 2.3 and above		
Mobile Device Application	App Store for iPhone & iPad, Google Play for Android phone & tablet		
Supported Browser	IE 8.0 or later, Firefox 3 or later, Safari 3 or 4 and Google Chrome		
Languages	12 (English, 繁體中文, 简体中文, 日本語, Deutsch, Français, Русский, Nederlands, Español, Italiano, Dansk, Türkçe)		
File System	Internal : XFS		
	External: EXT2, EXT3, XFS, NTFS, FAT, FAT32	External: XFS, NTFS, FAT, FAT32	External: EXT2, EXT3, XFS, NTFS, FAT, FAT32
Accessing Right Management	Users Management (Max. users: 256)	Users Management (Max. users: 50)	Users Management (Max. users: 256)
	Folder Management (Max. shared folders: 256)	Folder Management (Max. shared folders: 20)	Folder Management (Max. shared folders: 256)
LAN Configuration	Public/Private folders configuration		
	DHCP/Static IP		
Networking Services	Hostname/Group name		
	Samba Server (File sharing)		
	DHCP client		
	USB Storage devices sharing		
	Printer Server		
	iTunes Server		
	Twonky DLNA Media Server		
	Apple File Protocol (AFP)	-	Apple File Protocol (AFP)
	NTP for time synchronization		
	FTP / SSL FTP Server	-	FTP / SSL FTP Server
Backup	Quick Copy for USB Storage devices (USB Storages to NAS)		
	Acronis Backup Software		
	Time Machine support		
	NAS to USB Storage backup		
	NAS to NAS backup		
Scheduling	Memory card to NAS		
	Schedule backup		
Remote Access	Schedule for NTP time synchronization		
	Remote Access by Internet Browser		
	Remote Access by Smartphone		
Disk Management	Wake on Lan	-	Wake on Lan
	HDD Spin-down timer		
	Single disk, Single disk expansion, RAID 0/1, JBOD	Single disk, RAID 0/1, JBOD	Single disk
	Check Disk		
	Disk usage status management		
Download	Disk Format		
	SMART information report		
System Setup/Tools	BT Download without PC (schedule download, tasks download, download configuration, etc.)		
	On line Firmware upgrade	Firmware upgrade	On line Firmware upgrade
	Time-Zone Settings		
	Wizard and installer for easy setup		
	NAS Discovery tool (Finder to search/connect/map drives)		
Others	Factory Reset		
	System log		
	Schedule on/off	-	Schedule on/off
	Power Interrupt auto resume	-	Power Interrupt auto resume
	One touch power button to turn on/off LED	-	One touch power button to turn on/off LED



All-in-One Face Recognition Solution - The HR70 series

Shuttle's HR70 series face recognition system is an All-in-One model with two built-in full HD cameras. The face recognition angle is dual-axis ± 15 degrees to provide non-invasive, non-contact face recognition. The HR70 series is equipped with Intel® high-performance dual-core processor to enhance recognition speed and provide highly accurate recognition capability. The HR70 series features built-in RS232, RS485, and GPIO controllers to support various peripherals and to provide versatile application capabilities. The HR70 series is the best solution for attendance systems and entrance access control for small & medium business, government, banks, education, research institutions, and community applications.

Rapid and Accurate Identification Capability

Shuttle's HR70 series is equipped with an Intel® high-performance dual-core processor to effectively enhance its database search and facial recognition capabilities. The system's False Acceptance Rate (FAR) is less than 0.01%, and its False Rejection Rate (FRR) is less than 1.9%. The HR70 series features two LED lights to provide fast and highly accurate identification ability that can be used in low-light environments.

Flexible Multifunction Configuration

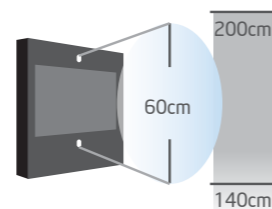
Shuttle's HR70 series has two built-in Full HD cameras. It can detect persons within a 140cm-200cm height range from a distance of up to 60cm from the device. Its face recognition angle is dual-axis ± 15 degrees (shot from the side or from above/below). The series has two verification combination choices: 1) ID+ face or 2) face, fingerprint, and RFID all in one.

Multiple Interfaces

Shuttle's HR70 series is fit for diverse applications with built-in RS232, RS485, and GPIO controllers that support a variety of related peripherals. Among these controllers, GPIO can be used in access control solutions that allow users to strictly control the access security. This interface can further be integrated with VIP membership control mechanisms to provide optional services.

Application Fields

- Visitor registration
- Employee attendance management
- Access Control
- Airport Immigration system



Support multiple languages

The HR70 provides eight languages with i18n technology and json text format, including English, Traditional/Simplified Chinese, Japanese, German, French, Spanish, and Russian; the UI design is customizable depending on customer needs.

Multi-Sync Capability

Setting through the network, users can set up multiple HR70 into a group. After the system is configured, user's data can be synchronized to each other. Users only need to register once. The facial recognition can be performed at any HR70 even if network is disconnected. This multi-sync capability is beneficial for businesses with numerous branches that require multi-location management, providing clients with convenient management and efficient access control.



Multiple Recognitions

In addition to face recognition, the administrator can decide to add RFID or fingerprint to provide multiple identity recognition. The system provides three different types of recognition sequence.



Dual Lens PIP automatically switch

The HR70 series is equipped with two Full HD identification cameras that operate simultaneously to cater to users of different heights. As users approach, the HR70 will detect height and begin facial recognition with upper or lower cameras.



Security fraud – Liveness Detection

Eye detection algorithms ensure accurate liveness detection. Divided into high, medium, and low security levels, the HR70 series activates face recognition only if there is eye movement and cannot be bypassed with mobile or print photos.



Event Trigger Function

The system administrator can configure on/off and time settings for system events like welcome greetings, access errors, doorbell, and lighting control settings.





Software Spec

Items	HR70	HR70S
Operating System	Ubuntu Linux 12.04	
detection height range	Up to down 60cm, based on distance 60cm	
Recognition speed	2-3 seconds	
Face Recognition	Recognize rate	FAR default 0.01% / FRR 1.9 % (under FAR 0.01%)
	Face Angle	Two axis ±15degree
	Liveness detection	Eyes motion detection
	Standards	ISO/IEC19794-5:2005
Fingerprint recognition	Fingerprint verification and identification	N/A
RFID reader support	Support Mifare contactless card	N/A
Multi-Recognition	Face+Fingerprint+RFID(ID) RFID(ID)+Face+Fingerprint Fingerprint+Face+ RFID(ID)	ID+Face
Access control	Dry contact output. Normal open	
Webcam	Build in two Full-HD cameras. Cameras recognize at the same time.	
Management	System information / System setting / User management / Log Update / Export / Import / Device Test / Event Trigger / Green Power	

Hardware Spec

	HR70	HR70S	
Integrated Processor	Intel® Celeron™ 1037U processor / Max. TDP: 17W		
Chipset	Intel® NM70		
Video Engine Processor	Intel® HD Graphics integrated		
Memory	2GB DDR3 RAM		
Internal Storage	32GB mSATA SSD		
Panel	7", 16:9, LED, 1024 x 600 /Single Touch		
Audio	1x 2W internal mono Speaker / 1 x internal Electret Condenser Microphone		
Webcam	2 x Full HD camera		
Network	10/100/1000 Mbps Ethernet (1x RJ45) / 802.11 b/g/n WIFI controller (Optional)		
I/O	Video Out	(1) HDMI	
	Audio / MIC	(1) 3.5mm Line out, (1) 3.5mm MIC in	
	USB 3.0 / USB 2.0	(1) USB3.0, (1) USB2.0	
	RS232	(1) RS232, (1) RS485	
	GPIO	(2) Form A contact Relay output(Max. 2A@120VAC/24VDC) / (2) Digital In dry contact	
	Optional	RFID Card reader / Fingerprint reader	N/A
Other	200 Lux LED Light / Power On After Power Failure / Wake On LAN / Support VESA mount		
	Contactless Card reader support ISO14443A/B Fingerprint reader support ISO19794-2	N/A	
Power Supply	100~240V AC (with 65W external adapter)		
Certificate	CE, BSMI, ETL, FCC		
Dimension (L/W/H) mm	230 x 255 x 49	230 x 195 x 31	
Weight	NW (kg)	1.01	0.81
	GW (kg)	1.83	1.63
Material	Plastic		

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.



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