

Shuttle[®]

PRODUCT GUIDE

Superb for Home, Work, Business and Industrial applications

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Shuttle[®]

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COMPANY PROFILE

From its humble beginning in 1983 as a motherboard manufacturer, Shuttle has been devoted to innovating PC products over the years. In 2001, Shuttle built its reputation as the creator of the world's first Small-form-factor (SFF) computers, and received the global success with its XPC brand. Today, Shuttle's product development has broadened to consist of hardware and software-integrated solutions, including mini-Computers, Industrial Box PCs & Panel PCs, Edge Computers, Face recognition, and Kiosk solutions. It is actively targeting the development of reliable products and engagement at AIoT applications in various industries as Smart retail, Automation, Hospitality, Smart healthcare, and the medical market.

Based upon 35 years of experience in PC technology, Shuttle is now a SFF PC market leader that offers a complete line of computer solutions, including XPC Cube (13L), XPC Slim (3L/1.3L), XPC Nano (>1.3L) and All-in-One PCs. With unique features of silent cooling, energy efficiency, long-term operation and broad temperature spectrum, Shuttle PCs are widely being used for full digital signage applications such as digital advertising, digital menu boards, self-service kiosks and POS systems.

Headquartered in Taiwan, Shuttle has subsidiary offices located throughout the United States, Germany, Japan and China, and has established distribution channels in more than 30 countries and regions. Shuttle is a multinational company providing best-in-class sales and services for customers around the world.



AREAS OF APPLICATION



DIGITAL SIGNAGE

Whether it's in retail, catering, healthcare, banking or other public areas, Shuttle supplies the right player for product presentations, promotional videos and information release in every scenario. Choosing a platform with reliable, proven technology is as important as choosing its software system. With ranges of single, multiple and large-scale display options, Shuttle Mini-PCs enable productivity around industrial-grade performance at a compelling price.

POS

Running a store is not just about enthusiasm, and it is important to choose a POS system that supports every aspect of your daily operations. Shuttle's AIO PC adds advantages of broad temperature tolerance, plus IP54 dust and waterproofing to meet maximum stability for 24/7 operational requirements; it's the right choice for your POS deployment.



KIOSK

Under the expansion of network and peripheral technologies, today's kiosks have become a service platform involves multimedia and information, even become a part of sales channel to serve as vending, self-checkout lanes and e-ticketing. With its silent cooling design, every Shuttle model is certified by 24/7 operation. Thanks to the compact size that fits in limited spaces, plus added features such as broad temperature tolerances and rich peripheral interfaces, making it ideal for system integration in kiosks – even an 8-port configuration in such tiny machine is possible.



WORKSTATION

Modern workstations don't need to be big, bulky machines, but can be compact devices without compromising performance. Shuttle's Cube PCs come with a 13-liter stylish chassis that provide strong expansion capability, storage capacity and large-format graphics support to tailor your specific needs. Thanks to the exclusive I.C.E.2 cooling technology, these machines remain stable and run extremely quiet for 24/7 operations. With a high level of capability and flexibility, who needs a traditional tower PC anyway?



OFFICE

A Mini-PC is smaller than a traditional tower but with the same expandable capacity. That means a space-saving system can save valuable room on your desk. As a SFF PC market leader, Shuttle offers full mini-PC solutions across a wide choice of processors, storage capabilities, I/O connectivity as well as silent cooling design to perfect your work efficiency. Whatever your requirements, we have the right model for you.



XH410G

BIG POWER IN VERSATILE COMPACT PACKAGE

BUILT-IN PCIE X16 SLOT FOR VARIOUS CARD

The XH410G is powered by Intel® H410 chipset and supports 10th Gen LGA1200 Comet Lake 65W CPU, delivering reliability and high performance on complex tasks processing and 4K resolution content. Equipped one HDMI 2.0 and VGA, the XH410G supports dual independent displays, providing high productivity and dynamic visualization for digital signage and surveillance monitoring. With one PCI-E x16 expansion slot, it's able to install an extra graphics card, capture card, or more to meet the diverse application requirements. The XH410G also provides multiple I/O ports to connect peripherals, including 4xUSB 2.0, 4xUSB 3.2 Gen1, SATA 6Gbps, 2xM.2, and Intel® Gigabit LAN. It's suitable for workstation, surveillance, and video wall applications.



FEATURES

- Supports 10th Gen Intel® Core™ i3/i5/i7/i9, Pentium®, Celeron® processors for LGA1200 socket
- Single PCI-E x16 slot for various card installation (maximum size 208.5 x 120 x 30mm)
- Two M.2 slots for M.2 SSD, Bluetooth module, or Wi-Fi module
- Dual display productivity via one HDMI 2.0 and VGA
- VESA mount-ready
- 24/7 Certified, operable in 0-50°C (*With use of SSD and Wide Range Temp. SO-DIMM)

Model	XH410G	
Cooling system	Smart fan	
CPU	Intel® Cometlake-s LGA1200 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	
Chipset	Intel® H410	
Video Engine Processor	Intel® UHD Graphics series	
Max Resolution	HDMI 4096 x 2304@60Hz VGA 1920 x 1080@60Hz	
Memory	2 x DDR4 2933/2666 MHz, Max. 64GB	
Storage	1 x 2.5" HDD/SSD (max. 12.5 mm)	
Expansion Slot	1 x M.2 2280, M Key 1 x M.2 2230, E Key 1 x PCIe 3.0/2.0 x16 (Card length Max 208mm)	
Video Output	HDMI Port	1 x HDMI 2.0
	DisplayPort	-
	VGA Port	1
I/O Port	USB 3.2 Gen1/Gen2 (Front)	2/-
	USB 2.0 (Front)	2
	USB 3.2 Gen1/Gen2 (Rear)	2/-
	USB 2.0 (Rear)	2
	COM Port	RS232 x 1 (Optional)
	Line out/Mic in	1/1
Network	LAN	1 x Intel® Gigabit LAN
	Wifi	Optional (WLN-M)
VESA	Bracket included	
Dimension (L/W/H) mm	250 x 200 x 78.5	
Weight	NW (kg)	1.9
	GW (kg)	3.2
Certification	CB, CE,BSMI,cTUVus,FCC, RCM, VCCI, RoHS	
Operating Temperature (°C)	0~50	
Chassis	Metal	
Power Supply	19.5V/9.23A 180W external adapter	
Operating System	Windows 10 64bit, Linux	
Optional Accessories	WLN-M,PS01	

XH310R/XH310RV

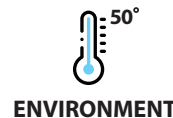
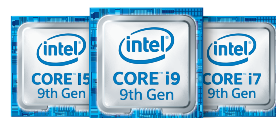
AFFORDABLE 3-LITER PC WITH SCALABILITY

FOR DIVERSE APPLICATIONS

The compact, versatile XH310R series is our 3-liter family with performance that's scalable to meet your needs. With a height of just 7.8 cm, the model supports Intel 8/9th gen processors, up to 64 GB of DDR4, 2x GigaLAN, HDMI 2.0a, DisplayPort, VGA, RS232, space for two hard drives and an NVMe SSD as well as expansion possibilities for WLAN and more. Also, for storage requirements, users have the option to create a three-drive space by replacing the ODD. The series sets itself apart from other models, does fear no challenge in serving as Office PC, Signage Player, Kiosk Player, Surveillance Client or any other situation.

FEATURES

- Supports 8/9th Gen Intel® processor family
- Flexible display support via HDMI 2.0a, DP and VGA
- Support one 3.5" HDD (optional with PHD4)
- Two M.2, two RS232, four USB 3.2 Gen 1, four USB 2.0 and dual LAN
- 24/7 certified in 0-50°C environments
- Optional 12V DC input available



Model	XH310R/XH310RV	
Cooling system	Smart fan	
CPU	Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	
Chipset	Intel® H310	
Video Engine Processor	Intel® UHD Graphics series	
Max Resolution	HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz VGA 1920 x 1080@60Hz	
Memory	2 x DDR4 2666/2400 MHz, Max. 64GB	
Storage	2 x 2.5" HDD/SSD, 1 x slim ODD or 3 x 2.5" HDD /SSD	
Expansion Slot	1 x M.2 2280, M Key 1 x M.2 2230, E Key	
Video Output	HDMI Port	1 x HDMI 2.0
	DisplayPort	1
	VGA Port	1
I/O Port	USB 3.2 Gen1/Gen2 (Front)	2/-
	USB 2.0 (Front)	2
	USB 3.2 Gen1/Gen2 (Rear)	2/-
	USB 2.0 (Rear)	2
	COM Port	1 x RS232 1 x RS232/422/485, Support 5V/12V
	Line in/Line out/Mic in	1/2/2
Network	LAN	2 x Intel® Gigabit LAN
	Wifi	Optional (WLN-M)
VESA	Optional (PV02)	
Dimension (L/W/H) mm	241 x 200 x 72	
Weight	NW (kg)	2.2
	GW (kg)	3.5
Certification	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	
Operating Temperature (°C)	0~50	
Chassis	Metal	
Power Supply	19V/4.74A 90W external adapter	
Operating System	Windows 10 64bit, Linux	
Optional Accessories	PS01, PV02, PHD4, WLN-M, PCM31	

DH470

ROBUST MULTITASKING 1 LITER PC FOR TRIPLE DISPLAYS

Based on the latest 10th Gen Intel LGA1200 Processors and support for high-speed 2933 MHz DDR4 memory, the DH470 is ready to take care of multitasking workloads and deliver powerful performance for a wide variety of business and vertical applications. Thanks to the integrated Intel® UHD graphics, the DH470 supports stunning 4K UHD resolution in multimedia content playback. It also supports triple displays, providing productivity benefits and dynamic visualization for digital signage applications. With only 43mm thickness, the DH470 still has room for two M.2 interfaces, eight USB ports, two RS232 ports and dual Gigabit LAN for expandability and connectivity.

FEATURES

- Supports 10th Gen Intel® Core™ i3/i5/i7/i9, Pentium®, Celeron® processors for LGA1200 socket
- Supports three independent displays
- 4x USB 3.2 Gen 2, 4x USB 3.2 Gen 1, 2x RS232, 1x SD card
- Two M.2 slots for strong expansion capacity
- Dual Intel® Gigabit LAN interfaces
- 24/7 operations in 0-50°C environments



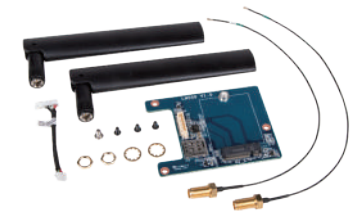
ACCESSORIES

WWN03

4G/LTE NETWORK EXTENSION KIT

The kit includes a riser adapter card, two antennas with cables to support 4G/LTE module plus SIM card for mobile network.

* 4G/LTE module is not included



WLN-M

WLAN-AC/BLUETOOTH COMBO KIT

The kit includes a M.2 2230 card, two antennas and cables, which supports 802.11ac/b/g/n WLAN and Bluetooth 4.0 as well.



PVG01

VGA PORT FOR XPC SLIM PCs

Compatible with Shuttle XPC slim PCs, the VGA output replaces one COM port, meaning only one COM port can be used while PVG01 is in use.

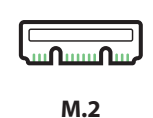
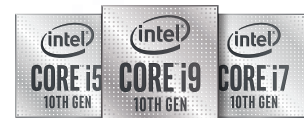


PS02

VERTICAL STAND FOR 1-LITER PCs

The stand is designed for 1-liter slim PCs, providing maximized stability when placing the model in the vertical position.





DH410

EXPERIENCE THE 10TH GEN POWER

FULL-SIZED PC PERFORMANCE
IN A TINY FOOTPRINT

DH410 supports 10th generation Intel Comet Lake LGA1200 CPU, providing up to 10 cores for effortless multitasking and smooth video playback. With built-in HDMI 2.0a and DisplayPort ports, users can configure two 4K displays easily. This compact model also includes eight USB ports, two serial ports, dual M.2 slots and DDR4 memory up to 64GB. The DH410 is the perfect choice as a solid PC for digital signage, POS, kiosk and many more.

FEATURES

- Supports 10th Gen Intel® Core™ i3/i5/i7/i9, Pentium®, Celeron® processors for LGA1200 socket
- Supports dual 4K displays via HDMI2.0a and DisplayPort
- Excellent Connectivity: 4x USB 3.2 Gen 1, 4x USB 2.0, 2x RS232, 1x SD card
- Two M.2 slots for strong expansion capacity
- Dual Intel® Gigabit LAN interfaces
- 24/7 operations in 0-50°C environments

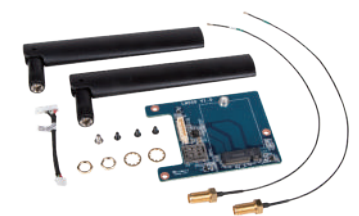
ACCESSORIES

WWN03

4G/LTE NETWORK EXTENSION KIT

The kit includes a riser adapter card, two antennas with cables to support 4G/LTE module plus SIM card for mobile network.

* 4G/LTE module is not included



WLN-M

WLAN-AC/BLUETOOTH COMBO KIT

The kit includes a M.2 2230 card, two antennas and cables, which supports 802.11ac/b/g/n WLAN and Bluetooth 4.0 as well.



PVG01

VGA PORT FOR XPC SLIM PCs

Compatible with Shuttle XPC slim PCs, the VGA output replaces one COM port, meaning only one COM port can be used while PVG01 is in use.



PS02

VERTICAL STAND FOR 1-LITER PCs

The stand is designed for 1-liter slim PCs, providing maximized stability when placing the model in the vertical position.



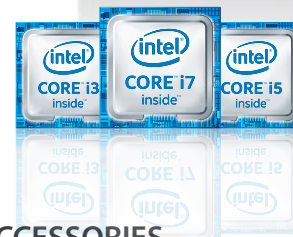
DH02U series

1-LITER SLIM PC FOR HIGH-DEMAND PERFORMANCE

To meet the escalating high performance demands of today's digital signage market, Shuttle now is offering its four HDMI output PC- DH02U series. With integrated 4 x HDMI 2.0, the DH02U series supports four 4K UHD displays. Equipped with exceptional NVIDIA GeForce graphics, the DH02U series delivers a breakthrough performance for real-time 4K and 3D rendering. It also provides a set of rich I/O configurations, including 2 x M.2 slots for SSD and WiFi modules, RJ45 for Gigabit LAN, as well as direct RS232 and multiple USB options.

FEATURES

- 4 processor SKUs for option- Intel® Core™ i7-7500U/i5-7200U/i3-7100U \ Celeron® 3865U
- Built-in NVIDIA GeForce® GTX 1050 4GB graphics
- Supports four 4K UHD displays via four HDMI2.0
- Two dual channel DDR4 memory slots
- Two M.2 slots for strong expansion capacity
- VESA mount included for versatile integration
- 24/7 operations in 0-50°C environments



GEFORCE GTX



QUAD DISPLAY



HDMI 2.0



ENVIRONMENT

ACCESSORIES

WLN-M

WLAN-AC/BLUETOOTH COMBO KIT

The kit includes a M.2 2230 card and two antennas with cables, which supports 802.11ac/b/g/n WLAN as well as Bluetooth 4.0.



PS02

VERTICAL STAND FOR 1-LITER PCs

The stand is designed for 1-liter slim PCs, providing maximized stability when placing the model in the vertical position.





Model		DH470	DH410	DH410S	DH370
Cooling system		Smart fan	Smart fan	Smart fan	Smart fan
CPU		Intel® Cometlake-s LGA1200 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	Intel® Cometlake-s LGA1200 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	Intel® Cometlake-s LGA1200 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor
Chipset		Intel® H470	Intel® H410	Intel® H410	Intel® H370
Video Engine Processor		Intel® UHD Graphics series	Intel® UHD Graphics series	Intel® UHD Graphics series	Intel® UHD Graphics series
Max Resolution		HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	HDMI 3840 x 2160@30Hz DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz DisplayPort 4096x2160@60Hz
Memory		2 x DDR4 2933/2666 MHz, Max. 64GB	2 x DDR4 2933/2666 MHz, Max. 64GB	2 x DDR4 2933/2666 MHz, Max. 64GB	2 x DDR4 2666/2400 MHz, Max. 64GB
Storage		1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card
Expansion Slot		1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key
Video Output	HDMI Port	1 x HDMI 2.0	1 x HDMI 2.0	1 x HDMI 1.4	1 x HDMI 2.0
	DisplayPort	2	1	1	2
	VGA Port	Optional (PVG01)	Optional (PVG01)	Optional (PVG01)	Optional (PVG01)
I/O Port	USB 3.2 Gen1/Gen2 (Front)	2(Include Type C x 1)/2	2/-	2/-	2/2
	USB 2.0 (Front)	-	2	2	-
	USB 3.2 Gen1/Gen2 (Rear)	2/2	2/-	2/-	2/2
	USB 2.0 (Rear)	-	2	2	-
	COM Port	1 x RS232 1 x RS232/422/485, Support 5V/12V	1 x RS232 1 x RS232/422/485, Support 5V/12V	-	1 x RS232 1 x RS232/422/485, Support 5V/12V
Line out/Mic in		1/1	1/1	1/1	1/1
Network	LAN	2 x Intel® Gigabit LAN	2 x Intel® Gigabit LAN	1 x Realtek Gigabit LAN	2 x Intel® Gigabit LAN
	Wifi	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)
VESA		Bracket included	Bracket included	Optional (PV04)	Bracket included
Dimension (L/W/H) mm		190 x 165 x 43	190 x 165 x 43	190 x 165 x 43	190 x 165 x 43
Weight	NW (kg)	1.3	1.2	1.3	1.3
	GW (kg)	2.05	2	2.05	2.05
Certification		CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI
Operating Temperature (°C)		0~50	0~50	0~50	0~50
Chassis		Metal	Metal	Metal	Metal
Power Supply		19V/4.74A 90W external adapter	19V/4.74A 90W external adapter	19V/4.74A 90W external adapter	19V/4.74A 90W external adapter
Operating System		Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux
Optional Accessories		WLN-M, PVG01, PS02, WWN03	WLN-M, PVG01, PS02, WWN03	WLN-M, PVG01, PS02, WWN03	WLN-M, PVG01, PS02



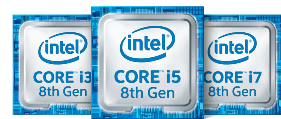
Model		DH310V2	DH310S	DH32U series	DH02U series	DA320
Cooling system		Smart fan	Smart fan	Smart fan	Smart fan	Smart fan
CPU		Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 65W processor	Intel® Pentium® 7505 or Intel® i3-1115G4/i5-1135G7/i7-1165G7	Intel® Celeron 3865U or Intel® i3-7100U/i5-7200U/i7-7500U	AMD 3000 series / 2000 series Ryzen R5 / Ryzen R3 / Athlon APU 65W processor
Chipset		Intel® H310	Intel® H310	Integrated in CPU	Integrated in CPU	AMD® A320
Video Engine Processor		Intel® UHD Graphics series	Intel® UHD Graphics series	Intel® DG1 Graphics	NVIDIA GeForce GTX 1050 GPU 4GB	Radeon® Vega series
Max Resolution		HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	HDMI 3840 x 2160@30Hz DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz 8192 x 4320@60Hz in Surround Mode	HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz
Memory		2 x DDR4 2666/2400 MHz, Max. 64GB	2 x DDR4 2666/2400 MHz, Max. 64GB	2 x DDR4 3200MHz, Max.64GB	2 x DDR4 2133 MHz, Max. 32GB	2 x DDR4 2933/2667 Mhz , Max 32GB
Storage		1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm)	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card
Expansion Slot		1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key (PCIe Gen 4x4) 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key
Video Output	HDMI Port	1 x HDMI 2.0	1 x HDMI 1.4	4 x HDMI 2.0b	4 x HDMI 2.0	1 x HDMI 2.0
	DisplayPort	1	1	-	-	2
	VGA Port	Optional (PVG01)	Optional (PVG01)	Optional (PVG01)	-	Optional (PVG01)
I/O Port	USB 3.2 Gen1/Gen2 (Front)	2/-	2(Include Type C x 1)/-	4	2/-	4/-
	USB 2.0 (Front)	2	2	-	2	-
	USB 3.2 Gen1/Gen2 (Rear)	2/-	2/-	4	2/-	2/-
	USB 2.0 (Rear)	2	2	-	-	2
	COM Port	1 x RS232 1 x RS232/422/485, Support 5V/12V	-	1 x RS232 1 x RS232/422/485, Support 5V/12V	1 x RS232	2 x RS232
Network	LAN	2 x Intel® Gigabit LAN	1 x Realtek Gigabit LAN	2 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN	2 x RTL8111H
	Wifi	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)
VESA		Bracket included	Optional (PV04)	Bracket included	Bracket included	Bracket included
Dimension (L/W/H) mm		190 x 165 x 43	190 x 165 x 43	190 x 165 x 43	190 x 165 x 43	190 x 165 x 43
Weight	NW (kg)	1.3	1.3	1.03	1.03	1.3
	GW (kg)	2.05	2.05	2.2	2.2	2.05
Certification		CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, BSMI, ETL, FCC, RCM, RoHS, VCCI	CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI
Operating Temperature (°C)		0~50	0~50	0~50	0~50	0~50
Chassis		Metal	Metal	Metal	Metal	Metal
Power Supply		19V/4.74A 90W external adapter	19V/4.74A 90W external adapter	19V/4.74A 90W external adapter	19V/6.32A 120W external adapter	19V/6.32A 120W external adapter
Operating System		Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux
Optional Accessories		WLN-M, PVG01, PS02	WLN-M, PVG01, PS02	WLN-M, PVG01, PS02, WVN03	WLN-M, PS02	WLN-M, PVG01, PS02, WVN03

DS10U

FANLESS, ENERGY-EFFICIENT 1-LITER PC

WITH WHISKEY LAKE-U PROCESSOR

The DS10U series is a fanless, ultra-compact PC powered by the 8th gen Intel® Whiskey Lake-U processor. With its rugged yet slim design, the DS10U provide exceptional levels of connectivity even in the limited space. It includes HDMI 2.0a, DisplayPort, USB 3.2, serial ports, Dual LAN and optional VGA. Thanks to its passive cooling architecture, the system is virtually maintenance-free and is approved for 24/7 nonstop operation. Designed to support both 12V and 19V inputs, the DS10U is a perfect fit for commercial and industrial applications, including Digital Signage, POS, Kiosk, Thin Client, Office PC and more.



FANLESS



DUAL LAN



NONSTOP

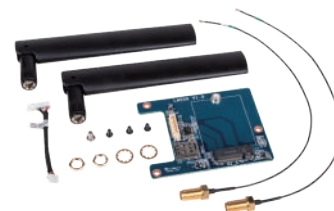
ACCESSORIES

WWN03

4G/LTE NETWORK EXTENSION KIT

The kit includes a riser adapter card, two antennas with cables to support 4G/LTE module plus SIM card for mobile network.

* 4G/LTE module is not included



FEATURES

- Powered by 8th Gen Intel® Whiskey Lake-U processors
- Dual 4K display support via HDMI and DisplayPort
- Dual Intel Gigabit Ethernet built in
- Fanless cooling design
- 24/7 operations in 0-40°C environments

PVG01

VGA PORT FOR XPC SLIM PCs

Compatible with Shuttle XPC slim PCs, the VGA output replaces one COM port, meaning only one COM port can be used while PVG01 is in use.





FEATURES

- Intel® Gemini Lake low-power consumption processor
- Supports three independent displays
- Supports 4K UHD content playback
- Supports SIM card kit for 4G LTE connectivity
- Fanless cooling design
- VESA mount included for versatile integration
- 24/7 operations in 0-40°C environments

ACCESSORIES

PS02

VERTICAL STAND FOR 1-LITER PCs

The stand is designed for 1-liter slim PCs, providing maximized stability when placing the model in the vertical position.



WWN01

4G/LTE NETWORK EXTENSION KIT

The kit includes a riser adapter card, two antennas with cables to support 4G/LTE module plus SIM card for mobile network.

- 4G/LTE module is not included



DL10J series

FANLESS 1-LITER PC FOR IOT-BASED DIGITAL SIGNAGE

Powered by Intel® Gemini lake Celeron® J4005 processor, the 1-liter DL10J with fanless and low power designs can support dual 4K display for digital signage applications. With the built-in M.2 2230 expansion slot, the DL10J supports the industrial-grade SIM card functionality, which enables seamlessly 4G LTE broadband connectivity for commercial and IOT applications in network-critical environments.



Model		DS10U series	DX30	DL20N series	DL10J
Cooling system		Fanless	Fanless	Fanless	Fanless
CPU		Intel® Celeron 4205U or Intel® i3-8145U/i5-8265U/i7-8565U	Intel® Celeron J3355	Intel® Celeron N4505 or Intel® Celeron N5105/Pentium N6005	Intel® Celeron J4005
Chipset		Integrated in CPU	Integrated in CPU	Integrated in CPU	Integrated in CPU
Video Engine Processor		Intel® UHD Graphics	Intel® HD Graphics	Intel® UHD Graphics	Intel® UHD Graphics
Max Resolution		HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	HDMI 3840 x 2160@30Hz DisplayPort 4096 x 2160@60Hz	HDMI 3840 x 2160@60Hz DisplayPort 4096 x 2160@60Hz VGA 1920 x 1080@60Hz	HDMI 3840 x 2160@30Hz DisplayPort 4096 x 2160@60Hz VGA 1920 x 1080@60Hz
Memory		2 x DDR4 2400/2133 MHz, Max. 64GB	2 x DDR3L 1866 MHz, Max. 8GB	2 x DDR4 2400 MHz, Max. 16GB	2 x DDR4 2400 MHz, Max. 8GB
Storage		1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 12.5 mm) 1 x SD card
Expansion Slot		1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key
Video Output	HDMI Port	1 x HDMI 2.0	1 x HDMI 1.4	1 x HDMI 2.0	1 x HDMI 1.4
	DisplayPort	1	1	1	1
	VGA Port	1	Optional (PVG01)	1	1
I/O Port	USB 3.2 Gen1/Gen2 (Front)	-/2	2/-	-/2	2/-
	USB 2.0 (Front)	4	-	-	-
	USB 3.2 Gen1/Gen2 (Rear)	-/2	-	2/-	-
	USB 2.0 (Rear)	-	4	2	4
	COM Port	1 x RS232/422/485, Support 5V/12V	1 x RS232 1 x RS232/422/485, Support 5V/12V	1 x RS232 1 x RS232/422/485, Support 5V/12V	1 x RS232 1 x RS232/422/485, Support 5V/12V
	PS/2 Port	-	1	-	-
	Line out/Mic in	1/1	1/1	1/1	1/1
Network	LAN	2 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN
	Wifi	Realtek 802.11 b/g/n/ac	Realtek 802.11 b/g/n	Optional (WLN-M)	Realtek 802.11 b/g/n
VESA		Bracket included	Bracket included	Bracket included	Bracket included
Dimension (L/W/H) mm		200 x 165 x 39.5	190 x 165 x 43	190 x 165 x 43	190 x 165 x 43
Weight	NW (kg)	1.4	1.5	1.5	1.5
	GW (kg)	2.1	2.07	2.07	2.07
Certification		CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, RED, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, RED, VCCI
Operating Temperature (°C)		0~40	0~40	0~40	0~40
Chassis		Metal + Plastic	Metal	Metal	Metal
Power Supply		19V/3.42A 65W external adapter	19V/2.1A 40W external adapter	19V/2.1A 40W external adapter	19V/2.1A 40W external adapter
Operating System		Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux
Optional Accessories		PVG01	PS02, PVG01	PS02, WWN03, WLN-M	PS02, WWN01



NC10U^{series}

A PALM-SIZED VERSATILE 4K PC

The NC10U series is available with four different processors including Intel® Celeron® and Core™ i3/i5/i7. With just 42mm tall, the case of NC10U series can accommodate one 2.5" HDD (up to 15mm) to provide a flexible storage space. The NC10U offers a wealth of connectors and expansion slots with HDMI, DisplayPort, USB3.2 Gen 1, audio and M.2 interfaces included. The NC10U is also supplied with a card reader, WLAN, Gigabit Ethernet and even a serial interface. Works with high-resolution monitors, you can use this model as your home media center, office computer or a platform for basic digital signage applications.

FEATURES

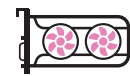
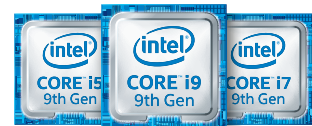
- 4 processor SKUs for option- Intel® Core™ i7-8565U/ i5-8265U/ i3-8145U, Celeron® 4205U
- Supports dual independent displays
- Supports 4K UHD content playback
- Supports up to 15mm 2.5-inch Hard Drive
- VESA mount ready
- 24/7 operations in 0-50°C environments

Model	NC10U	NC10U3/U5/U7
CPU	Intel® Celeron 4205U	Intel® Core™ i3-8145U/i5-8265U/i7-8565U
Video Engine Processor	Intel® UHD Graphics	
Max Resolution	HDMI 3840 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	
Memory	2 x DDR4 2400/2133MHz, Max. 64GB	
Storage	1 x 2.5" HDD/SSD (max. 15 mm) 1 x SD card	
Expansion Slot	1 x M.2 2280, M Key 1 x M.2 2230, E Key	
Video Output	HDMI Port	1 x HDMI 2.0
	DisplayPort	1
I/O Port	USB 3.2 Gen1 (Front)	2 (Include Type C x 1)
	USB 2.0 (Front)	-
	USB 3.2 Gen1 (Rear)	-
	USB 2.0 (Rear)	2
	COM Port	1 x RS232
	Line out/Mic in Combo	1
Network	LAN	1 x Intel® Gigabit LAN
	Wifi	Realtek 802.11 b/g/n
VESA Mount	Bracket included	
Stand	Bracket included	
Dimension (L/W/H) mm	142 x 142 x 42	
Weight	NW (kg)	0.4
	GW (kg)	1.2
Certification	CB, CE, cTUVus, BSMI, FCC, RCM, VCCI, RoHS, Red	
Operating Temperature (°C)	0~50	
Chassis	Plastic	
Power Supply	19V/3.42A 65W external adapter	
Operating System	Windows 10 64bit, Linux	

SH370R8 / SH310R4V2

XPC 300-SERIES SPACE-SAVING SCALABLE WORKSTATION

As the original small form factor PC maker, Shuttle offers a comprehensive line-up of mini PCs. The industry-renowned XPC cube series is only 1/3 size of a traditional tower, yet boasts impressive performance, reliability, and exclusive I.C.E 2 cooling technology, designed for almost limitless applications to meet your needs.



DUAL SLOT



TRIPLE DISPLAY



SMART FAN



SH370R8

SH370R8, the flagship model of the Shuttle XPC cube series. Ready for the 8th/9th Gen Intel Coffee Lake processors, this platform features up to 8 cores of processing power for high demand tasks. With barely a volume of 14.2 liters, the SH370R8 supports up to 128GB of DDR4 RAM, up to 10Gb/s transfer rate of USB 3.2 Gen 2 interfaces, four 3.5" hard drives, a large dual-slot graphics card, and a fast M.2 SATA/NVMe SSD-even stunning three 4K displays can be achieved.

FEATURES

- Supports Intel® 8th/9th Generation Processors up to 8 cores
- Supports high-end graphics cards up to 280 x 120 x 40 mm
- Three 4K display support via one HDMI 2.0a and two DisplayPort
- High speed transmission with four USB 3.2 Gen 2
- Strong scalability with one PCI-E x16, one PCI-E x4 and two M.2
- Equipped with Shuttle's exclusive I.C.E 2™ cooling engine



SH310R4V2

The SH310R4 is an entry-level cube PC with support for Intel 8th/9th Gen processors. Featuring up to 8 cores with integrated UHD graphics, the SH310R4 provides more power for demanding workflows. With HDMI, DP and VGA outputs built-in, users have more flexible options running multiple displays. Despite its seeming small cube, there is enough room to accommodate a whopping 64GB of DDR4, a fast M.2 SSD, a dual-slot graphics card, and even three storage drives. For a personal look and feel, the front panel can be customized by adding individual designs.

FEATURES

- Supports Intel® 8th/9th Generation Processors up to 8 cores
- High scalability with one PCI-E x16, one PCI-E x1, and two M.2
- Display support with HDMI 2.0a, DisplayPort and VGA outputs
- Multiple USB 3.2 gen 1 and USB 2.0 ports for connection options
- Equipped with Shuttle's exclusive I.C.E 2™ cooling engine





Model		SH570R8	SH570R6	SH370R8	SH370R6V2	SH310R4V2
CPU		Intel® Rocket lake- S / Comet lake- S LGA1200 socket Core i3/i5/i7/i9, Pentium, Celeron 125W processor	Intel® Rocket lake- S / Comet lake- S LGA1200 socket Core i3/i5/i7/i9, Pentium, Celeron 125W processor	Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 95W processor	Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 95W processor	Intel® CoffeeLake LGA1151v2 socket Core i3/i5/i7/i9, Pentium, Celeron 95W processor
Chipset		Intel® H570	Intel® H570	Intel® H370	Intel® H370	Intel® H310
Video Engine Processor		11 th processor support Intel® Xe graphic 10 th processor support Intel® UHD Graphics	11 th processor support Intel® Xe graphic 10 th processor support Intel® UHD Graphics	Intel® UHD Graphics series	Intel® UHD Graphics series	Intel® UHD Graphics series
Max Resolution		HDMI 4096 x 2160@60Hz (RKL-S) HDMI 4096 x 2160@30Hz (CML-S) DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz (RKL-S) HDMI 4096 x 2160@30Hz (CML-S) DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz	HDMI 4096 x 2160@60Hz DisplayPort 4096 x 2160@60Hz VGA 1920 x 1200@60Hz
Memory		4 x DDR4 3200/2933/2666 MHz, Max. 128GB	4 x DDR4 3200/2933/2666 MHz, Max. 128GB	4 x DDR4 2666/2400 MHz, Max. 128GB	4 x DDR4 2666/2400 MHz, Max. 128GB	2 x DDR4 2666/2400 MHz, Max. 64GB
Storage		4 x 3.5" HDD	2 x 3.5" HDD 1 x 5.25" ODD Bay	4 x 3.5" HDD	2 x 3.5" HDD 1 x 5.25" ODD Bay	2 x 3.5" HDD 1 x 5.25" ODD Bay
Expansion Slot	PCI Express Slots	1 x PCI-e x 16 Gen. 4.0 1 x PCI-e x 4 Gen. 3.0	1 x PCI-e x 16 Gen. 4.0 1 x PCI-e x 4 Gen. 3.0	1 x PCI-e x 16 Gen. 3.0 1 x PCI-e x 4 Gen. 3.0	1 x PCI-e x 16 Gen. 3.0 1 x PCI-e x 4 Gen. 3.0	1 x PCI-e x 16 Gen. 3.0 1 x PCI-e x 1 Gen. 2.0
	M.2	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key
Audio		HD 5.1 channel	HD 5.1 channel	HD 5.1 channel	HD 5.1 channel	HD 5.1 channel
Video Output	HDMI Port	1 x HDMI 2.0	1 x HDMI 2.0	1 x HDMI 2.0	1 x HDMI 2.0	1 x HDMI 2.0
	DisplayPort	2	2	2	2	1
	VGA Port	-	-	-	-	1
I/O Port	USB 3.2 Gen1(Front)	4 (Include Type C x1)	4 (Include Type C x1)	2	2	2
	USB 2.0 (Front)	-	-	-	2	-
	USB 3.2 Gen1/Gen2 (Rear)	-/4	-/4	2/4	2/4	2/-
	USB 2.0 (Rear)	4	4	2	2	4
	Line in/Line out/Mic in	1/2/2	1/2/2	1/2/2	1/2/2	1/2/2
Network	LAN	2 x Intel® Gigabit LAN	2 x Intel® Gigabit LAN	2 x Intel® Gigabit LAN	2 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN
	Wifi	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)	Optional (WLN-M)
Dimension (L/W/H) mm		332 x 216 x 198	332 x 216 x 198	332 x 216 x 198	332 x 216 x 198	332 x 216 x 198
Weight	NW (kg)	3.5	3.5	3.5	3.5	3.3
	GW (kg)	5	4.5	5	4.5	4.4
Certification		CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, BSMI, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, BSMI, FCC, RCM, RoHS, VCCI
Operating Temperature (°C)		0~40	0~40	0~40	0~40	0~40
Chassis		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Power Supply		500W 80 Plus Gold Flex ATX	300W 80 Plus Bronze Flex ATX	500W 80 Plus Sliver	300W 80 Plus Bronze	300W 80 Plus Bronze
Operating System		Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux
Optional Accessories		WLN-M, PHD3	WLN-M, PHD3	WLN-M, PHD3, J-RS232	WLN-M, PHD3, J-RS232	WLN-M, PHD3, J-RS232



FEATURES

- 19.5" capacitive screen with 10-point multi touch
- IP54 compliant front panel
- Includes HDMI and VGA outputs for three displays
- Fanless cooling design
- 24/7 certified in 0-40°C environments

ACCESSORIES

PCL71
COM/LPT DAUGHTER BOARD

Compatible with Shuttle X50 series and P9 series, it provides one RS232, one RS232/RS422/RS485 ports (both support 0V/5V/12V) and one parallel (LPT) port to the back panel.



POS01
COM/LPT/RJ11 DAUGHTER BOARD

Compatible with Shuttle X50 series and P9 series, it provides an additional RJ11 type DIO Port (12V/24V) and four COM Ports: (1) RS232, (1) RS232/422/485, (1) RJ45 type RS232, (1) RJ45 type RS232/422/485. *All COM ports are 0/5/12V compatible.



WWN02
4G/LTE ANTENNA EXTENSION KIT

The 4G/ LTE Antenna extension kit ensures superior connectivity and network quality in outdoor environment.

PNFC02
NFC EXPANSION MODULE

A NFC expansion module that is compatible with P9 series without transaction function.



P92U



MULTI-TOUCH



IP54



FANLESS

FANLESS ALL-IN-ONE PC SOLUTION WITH 19.5" MULTI-TOUCH DISPLAY

The P92U is a 19.5" all-in-one PC with 10 point multi-touch functionality of capacitive type. It is equipped with an Intel® Core™ i3/i5/Celeron® processor, fanless cooling system and 16:9 touch screen, making it ideal for digital out-of-home (DOOH) solution. It provides HDMI and VGA interface to connect with additional two displays. Thanks to its IP54-rated front panel, the system achieves high dust and splash proof level. Passive cooling techniques allow the P92U to run 24/7 operation not only quiet but also virtually maintenance free.

P51U

15.6" MULTI TOUCH ALL-IN-ONE PC FOR POS, POI AND KIOSK

The 15.6" P51U all-in-one PC combines a capacitive touchscreen offering accurate, and precise 10-plus touch response, with a high-definition, 16:9 widescreen format LCD, to create a multi-touch display that meets the most demanding interactive applications. It is equipped with Intel® Core™ i3/i5/Celeron® processor and can be integrated with rich peripherals such as POS, NFC and 4G LTE module for easy integration. With the IP54 front panel and passive cooling design, the P51U runs exceptionally quiet, very robust and stable for 24/7 operation.



FEATURES

- 10-point multi-touch screen with gloves support
- IP54 compliant front panel
- Supports triple display via HDMI and VGA
- Fanless cooling design
- Flexible expansion options for diverse applications
- 24/7 certified in 0-40°C environments

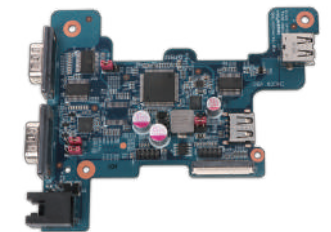


ACCESSORIES

POS03

COM/RJ11 EXPANSION BOARD

The POS03 is compatible with the Shuttle P51U. It features three RS232, one RS232/RS422/RS485 with 0V/5V/12V support and two USB ports for MSR and 4G dongle module.



WWN02

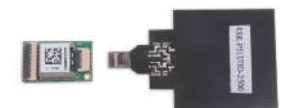
4G/LTE ANTENNA EXTENSION KIT

The 4G/ LTE Antenna extension kit ensures superior connectivity and network quality in outdoor environment.

PNFC03

NFC EXPANSION MODULE

A NFC expansion module that is compatible with P51U without transaction function.



P20U

FANLESS 11.6"

ALL-IN-ONE POS TERMINAL PC

The P20U is an 11.6-inch 16:9 All-in-One touchscreen PC, powered by Intel® Celeron® 3865 dual-core processor and support triple display via built-in HDMI and VGA ports. With the IP54 compliant front panel and completely fanless, the P20U is a very silent and stable machine for long-term operation, making it ideal for applications in any retail, self-service or hospitality environment that requires a small footprint AIO terminals or KIOSK. There are multiple expansion accessories available for option, allowing users to expand COM, RJ11, NFC or 4G/LTE function based on actual needs.



FANLESS



NONSTOP



IP54



FEATURES

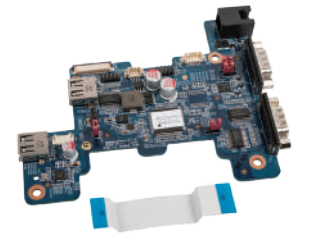
- 11.6" capacitive screen 10-point multi touch
- IP54 compliant front panel
- Supports triple display via HDMI and VGA
- Fanless cooling design
- Multiple accessory options: COM, RJ11, NFC, 4G or Magstripe Card Reader
- Support 12V DC/voltage input
- 24/7 certified in 0-40°C environments

ACCESSORIES

POS02

COM/RJ11 EXPANSION BOARD FOR P20U

The POS02 is compatible with the Shuttle P20U. It provides three RS232, one RS232/RS422/RS485 with 0V/5V/12V support and two USB ports for MSR and 4G dongle module.



WWN02

4G/LTE EXTENSION KIT FOR P20U

The 4G extension kit ensures superior connectivity and network quality in outdoor environment.



PMSR01

MAGNETIC STRIPE READER

The PMSR01 is compatible with Shuttle P20U and can be installed and powered through USB port.



PMSR02

MAGNETIC STRIPE READER

The PMSR02 is a magnetic stripe reader supporting transaction function. It's fully compatible with Shuttle P20U and can be installed and powered through USB port.



PNFC01

NFC EXPANSION MODULE

A NFC expansion module that is compatible with P20U without transaction function.





X50V7

FANLESS 15.6" ALL-IN-ONE PC FOR POS, POI, KIOSK APPLICATIONS

Shuttler X50V7 is an All-in-One PC boasting a 15.6-inch 16:9 touch screen and equipped with Intel® 8th Gen Celeron® 4205U dual-core processor. The new Whiskey Lake architecture helps deliver outstanding performance while increasing energy efficiency. Passive cooling and the IP54 front panel make the system virtually noise-free, maintenance-free, and ensure a highly stable 24/7 operation. Besides, with flexible expansion options, users can easily upgrade their device with COM, LPT, and DIO ports. Available in black and white to suit a variety of POS, POI, and Kiosk applications.



FANLESS



IP54



VESA MOUNT



FEATURES

- IP54 compliant front panel
- Supports triple display via HDMI and VGA
- Two dual channel DDR4-2400 memory slots
- Fanless cooling design
- Two expansion options: RS232 and Parallel expansion card
- 24/7 certified in 0-40°C environments

ACCESSORIES

PCL71

COM/LPT DAUGHTER BOARD

Compatible with Shuttler X50 series and P9 series, it provides one RS232, one RS232/RS422/RS485 ports (both support 0V/5V/12V) and one parallel (LPT) port to the back panel.



POS01

COM/LPT/RJ11 DAUGHTER BOARD

Compatible with Shuttler X50 series and P9 series, it provides an additional RJ11 type DIO Port (12V/24V) and four COM Ports: (1) RS232, (1) RS232/422/485, (1) RJ45 type RS232, (1) RJ45 type RS232/422/485. *All COM ports are 0/5/12V compatible.



WWN02

4G/LTE ANTENNA EXTENSION KIT

The 4G/ LTE Antenna extension kit ensures superior connectivity and network quality in outdoor environment.



Model		P92U	P90U	P51U	P20U	X50V7
Color		Black/White	Black/White	Black/White	Black	Black/White
Screen		19.5" LCD (16:9, 1600 x 900) Multi touch	19.5" LCD (16:9, 1600 x 900) Multi touch	15.6" LCD (16:9, 1920 x 1080) Multi touch	11.6" LCD (16:9, 1366 x 768) Multi touch	15.6" LCD (16:9, HD 1366 x 768) Single touch
CPU		Intel® Celeron 5205U	Intel® Celeron 3865U	Intel® Celeron 4205U	Intel® Celeron 3865U	Intel® Celeron 4205U
Video Engine Processor		Intel® UHD Graphics	Intel® HD Graphics 610	Intel® UHD Graphics	Intel® HD Graphics 610	Intel® UHD Graphics
Max Resolution		HDMI 4096 x 2304@30Hz VGA 1920 x 1080@60Hz	HDMI 3840 X 2160@30Hz VGA 1920 x 1080@60Hz	HDMI 4096 x 2304@30Hz VGA 1920 x 1080@60Hz	HDMI 3840 x 2160@30Hz VGA 1920 x 1080@60Hz	HDMI 4096 x 2304@30Hz VGA 1920 x 1080@60Hz
Memory		2 x DDR4 2400 MHz, Max. 64GB	2 x DDR4 2133 MHz, Max. 32GB	2 x DDR4 2400 MHz, Max. 64GB	2 x DDR4 2133 MHz, Max. 32GB	2 x DDR4 2400 MHz, Max. 64GB
Storage		1 x 2.5" HDD/SSD (max. 9.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 9.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 9.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 9.5 mm) 1 x SD card	1 x 2.5" HDD/SSD (max. 9.5 mm) 1 x SD card
Expansion Slot		1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key	1 x M.2 2280, M Key 1 x M.2 2230, E Key
Video Output	HDMI Port	1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4
	VGA Port	1	1	1	1	1
I/O Port	USB 3.2 Gen1 (Bottom)	2	2	2	2	2
	USB 3.2 Gen1 (Side)	2	-	2	-	2
	USB 2.0 (Bottom)	2	2	2	2	2
	USB 2.0 (Side)	-	2	-	2	-
	COM Port	2 x RS232 (Max. 4)	Optional (PCL71 / POS01)	2 x RS232 (Max. 4)	2 x RS232 (Max. 4)	2 x RS232 (Max. 4)
	Line out/Mic in	1/1	1/1	1/1	1/1	1/1
Network	LAN	1 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN	1 x Intel® Gigabit LAN
	Wifi	Realtek 802.11 a/b/g/n/ac Bluetooth 4.1	Realtek 802.11 a/b/g/n/ac Bluetooth 4.1	Realtek 802.11 a/b/g/n/ac Bluetooth 4.2	Realtek 802.11 b/g/n Bluetooth 4.1	Realtek 802.11 a/b/g/n/ac Bluetooth 4.2
Communication	Webcam	2M FHD	2M FHD	2M FHD	2M FHD	2M FHD
	Microphone	Capacitor	Capacitor	Capacitor	Capacitor	Capacitor
	Speaker	2 x 2W	2 x 2W	2 x 2W	1 x 2W	2 x 2W
VESA Mount		Support 100 x 100 mm	Support 100 x 100 mm	Support 100 x 100 mm	Support 100 x 100 mm	Support 100 x 100 mm
Dimension (W/H/D) mm		487 x 321 x 44	487 x 321 x 44	393.6 x 272.5 x 39.8	299 x 203 x 50	391 x 327 x 42
Weight	NW (kg)	4.29	4.29	3.25	2.47	3.13
	GW (kg)	5.62	5.62	4.5	3.39	4.16
Certification		CB,BSMI, CE, cTUVus,CEC, FCC, VCCI, RCM, CCC	CB, CE, CEC, cTUVus, CCC, BSMI, FCC, VCCI, RCM	CB,BSMI, CE,CCC, ETL,CEC,FCC, VCCI, RCM	CB, CE, cTUVus, BSMI, EAC, FAC, FCC, VCCI, RCM	CB, CE, cTUVus, FCC, VCCI, TELEC,RCM, BSMI
Operating Temperature (°C)		0~40	0~40	0~40	0~40	0~40
Adapter		19V/3.42A 65W external adapter	19V/3.42A 65W external adapter	19V/3.42A 65W external adapter	19V/3.42A 65W external adapter	19V/3.42A 65W external adapter
Battery		-	-	4 Cell/2200mAh (option)	-	-
Operating System		Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux
Optional Accessories		PCL71, POS01, WWN02, PNFC02	PCL71, POS01, WWN02, PNFC02	POS03, WWN02, PBCN01, PNFC03	POS02, WWN02, PMSR01, PMSR02, PNFC01	PCL71, POS01, WWN02
IP Level		Front Panel IP54	Front Panel IP54	Front Panel IP54	Front Panel IP54	Front Panel IP54



NS02 V2 series

FANLESS 0.5-LITER ANDROID PC

FOR BASIC DIGITAL SIGNAGE

The Shuttle NS02A V2/NS02E V2 is one of the most affordable models made for digital signage applications. The NS02 V2 series is equipped with Rockchip Octa-Core 1.5 GHz processor, built-in DDR3L 4GB low-voltage memory. It not only supports Full HD playback capability but also built-in HDMI 2.0 video output is able to support 4K Ultra HD at 60Hz. In addition, the NS02E V2 can support PoE (Power over Ethernet), allowing users easily to do on-site installation without any wire and AC adapter. The NS02 V2 series comes with pre-installed digital signage software that user can easily manage the signage content through their own mobile devices.



FEATURES

- Supports 4K UHD playback via HDMI 2.0
- Supports 2.5" SATA HDD/SSD and SD card Reader
- Built-in Gigabit Ethernet with PoE (NS02E V2 only)
- Built-in 4G memory and 32G eMMC
- WiFi 802.11 a/b/g/n/ac & Bluetooth 5.0
- Android 8.1

Model	NS02A V2	NS02E V2	
CPU	Rockchip RK3368 Octa Core 1.5GHz (ARM Cortex-A53)		
Max Resolution	HDMI 3840 x 2160@60Hz		
Memory	2GB (default) / 4GB (option)		
Storage	16GB eMMC (default) / 32GB (option) 1 x 2.5" HDD/SSD (max. 7 mm) 1 x SD card		
I/O Port	HDMI Port	1 x HDMI 2.0	
	USB 2.0 (Front)	2	
	USB 2.0 (Rear)	2	
	Line out/Mic in Combo	1	
Other	Remote power on pin header Recovery pin header		
	LAN	1 x Realtek Gigabit LAN	1 x Realtek Gigabit LAN (Support PoE, 802.3at)
Wifi	802.11 a/b/g/n/ac Bluetooth 5.0		
VESA Mount	Bracket included		
Dimension (L/W/H) mm	141 x 141 x 29		
Weight	NW (kg)	0.27	0.3
	GW (kg)	0.65	0.52
Certification	CB, CE, BSMI, cTUVus, FCC, RCM, VCCI		
Operating Temperature (°C)	0~40		
Chassis	Plastic		
Power Supply	12V/2A 24W external adapter	Support POE (PD), 802.3at	
Operating System	Android 8.1		



D230

SMART SHELF SIGNAGE WITH FACIAL RECOGNITION

FOR RETAIL SECTOR

For retailers who want to optimize shelf space to increase revenue with the innovative signage installation, the D230 is a perfect choice. The platform utilizes a 23.1" ruggedized shelf display combined with facial recognition and high definition sensors to play optimal multimedia contents, provide customer insights, and allow for content triggering on detected age and gender. Together with flexible split-screen feature, users can play content in multiple combinations to achieve advertising goals.



FACIAL RECOGNITION



MULTIMEDIA



SPLIT SCREEN



5xDISPLAYS



NONSTOP

FEATURES

- 23.1 bar-type shelf signage solution
- Detect the gender and age of users to play advertisement
- Split screens for videos, pictures and text demo separately and simultaneously
- Advanced power supply design to connect up to 5 devices
- 24/7 certified in 0-40°C environments
- Mobile app for Android 7.0 / iOS 11 or above

Model		D230
CPU		Six-core processor, 1.8GHz
Storage		16GB eMMC
Color		Black
Screen		23.1" LCD (1920 x 158), 400nits
I/O Port	USB 2.0	2
	SD card	1
	USB 2.0 (Side)	1
	RJ45	1
	Line out	1
	SIM card	1 (optional)
Network	LAN	10/100 Mbps
	Wifi	802.11 a/b/g/n/ac
	4G LTE	M.2 type (optional)
Communication	Webcam	2M FHD
	Speaker	1 x 2W
VESA Mount		100x100 mm, 75x75mm, 50x50mm
Dimension (L/W/H) mm		603 x 75 x 29
Certification		CB, CE, ETL, FCC, VCCI, RCM, BSMI
Operating Temperature (°C)		0~40
Adapter		12V/2A 24W wall mount adapter
		POE (optional)
Operating System		Android
Optional Accessories		PD230
IP Level		Front panel IP54

EN01 series

ENTERING A NEW ERA OF IOT

INTELLIGENT PLATFORM FOR DATA-INTENSIVE EDGE APPLICATIONS

Based on a wide selection of Intel® processor lineup, the low-power, fanless and tiny form factor Shuttle EN01 series serves an intelligent platform for data-intensive IoT edge applications. Areas of use include the industrial automation sector as well as the transportation and communications field.



Model		EN01J3	EN01J4	EN01E
Cooling system		Fanless	Fanless	Fanless
CPU		Intel® Celeron J3355	Intel® Pentium J4205	Intel® Atom x5-E3940
Chipset		Integrated in CPU	Integrated in CPU	Integrated in CPU
Video Engine Processor		Intel® HD Graphics 500	Intel® HD Graphics 505	Intel® HD Graphics 500
Max Resolution		HDMI 3840 x 2160@30Hz	HDMI 3840 x 2160@30Hz	HDMI 3840 x 2160@30Hz
Memory		4GB / LPDDR4 2400 MHz	8GB / LPDDR4 2400 MHz	8GB / LPDDR4 2400 MHz
Storage		Max. 64GB eMMC 1 x micro SD card slot	Max. 64GB eMMC 1 x micro SD card slot	Max. 64GB eMMC 1 x micro SD card slot
Expansion Slots		1 x M.2 3042, B Key	1 x M.2 3042, B Key	1 x M.2 3042, B Key
Video Output		1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4
I/O Port	USB 3.2 Gen1	2	2	2
	USB 2.0 (Micro A/B)	1	1	1
	SIM slot	1 x Nano SIM slot	1 x Nano SIM slot	1 x Nano SIM slot
Network	LAN	1 x Intel® Gigabit LAN 1 x POE-PD or POE-PSE (Optional)	1 x Intel® Gigabit LAN 1 x POE-PD or POE-PSE (Optional)	1 x Intel® Gigabit LAN 1 x POE-PD or POE-PSE (Optional)
VESA		Bracket included	Bracket included	Bracket included
Dimension (L/W/H) mm		92.4 x 54.4 x 90	92.4 x 54.4 x 90	92.4 x 54.4 x 90
Weight	NW (kg)	0.48	0.48	0.48
	GW (kg)	1.03	1.03	1.03
Certification		CB, CE, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, FCC, RCM, RoHS, VCCI	CB, CE, cTUVus, FCC, RCM, RoHS, VCCI
Operating Temperature (°C)		0~50	0~50	-20~60
Chassis		Metal	Metal	Metal
Operating System		Windows 10 64bit, Linux	Windows 10 64bit, Linux	Windows 10 64bit, Linux
Optional Accessories		MCAP01, PLA01, PSE01, PD01	MCAP01, PLA01, PSE01, PD01	MCAP01, PLA01, PSE01, PD01



MINIATURE



FANLESS



DIN RAIL



VESA MOUNT



WIDE TEMP RANGE

FEATURES

- Ultra-small industrial-grade PC, measuring only 92 x 54 x 90 mm
- Powered by Intel® Atom™ E3940 / Pentium® J4205 / Celeron® J3355 processor
* EN01 barebone is also available for Nvidia Jetson TX2
- 2x USB, 1x micro USB, HDMI, Giga LAN, M.2 and Micro SD reader
- Optional PoE function (PSE01/PD01) for simplified on-site installation
- Optional video capture function for surveillance and security uses



BPCWL02/BPCWL03

POWERFUL AND FANLESS DESIGN

WITH FLEXIBLE CONNECTIVITY AND FUNCTIONALITY

The BPCWL02/BPCWL03 are powered by the Intel® Whiskey Lake-U platform with the Intel UHD graphics engine, capable of offering the high-definition imaging with the dual independent display. Designed to meet a variety of IoT application needs, the fanless system combines multiple I/O interfaces includes three RS232, eight USB ports, and two HDMI outputs. The BPCWL02/BPCWL03 have built-in dual Intel® Gigabit LAN support for Wake on LAN and teaming function, further more with built-in WiFi 802.11ac + BT 4.2 module which makes high-speed data conveying possible and better compatibility for business network environment. Suitable to be used in digital signage, kiosk, data acquisition, industrial automation, and so on.



DUAL DISPLAY

4K UHD

DUAL LAN

FANLESS



FEATURES

- Based Intel® Whiskey Lake-U/UE Processors, from commercial to industrial
- Fanless thermal and robust aluminum chassis
- Modularity for I/O configurations to meet diverse application needs
- Multiple mounting supports: VESA, Ear Mount, DIN-rail
- Dual independent display via HDMI outputs
- Built-in Intel® i211 and i219 Dual Gigabit LAN
- Operating Temperature
BPCWL02: 0°C ~ 40°C
BPCWL03: -20°C ~ 60°C



		BPCWL02	BPCWL03
System	CPU	8 th Gen. Intel® Whiskey Lake Core i3-8145UE (default) Optional: i5-8265U, i5-8365UE, i7-8565U, i7-8665UE, Celeron® 4305UE	
	Memory	2 x 260 pin SO-DIMM up to 64GB Dual Channel DDR4 2400MHz	
	BIOS	AMI UEFI 64 Mbit	
Graphics	Chipset	Intel UHD Graphics	
	Display Interface	2 x HDMI 1.4b: 4096 x 2160@30Hz Supports dual displays	
Storage	Internal	1 x M.2 2280 M key (PCIe NVMe / SATA)	
Audio	Audio Codec	Realtek ALC662 2-channel	
Network	Ethernet	2 x Intel® Gigabit LAN	
	WLAN	Realtek RTL8821CE 802.11a/b/g/n/ac + Bluetooth 4.2 WLAN card M.2 2230 E key (Optional) External antenna (Dipole) x2 (Optional)	
I/O Interface	LAN	2 x RJ-45 (10/100/1000Mbps) Support Wake On LAN	
	Serial Ports	1 x RS-232 (DB-9) 2 x RS-232/422/485 (DB-9) (RS-232 with power supply: ring in/ 5V (standard) & 12V (with specific optional board))	
	USB	4 x USB3.2 Gen 1 (Type A) 4 x USB2.0	
	Audio	1 x Line-out 1 x Mic-in	
Power	Adapter	19V/4.74A 90W external adapter	19V/7.89A 150W external adapter
	Type	With option wide range board, MB support 9-36V DC-in	
Watchdog Timer	Watchdog	Support watchdog	
OS Support	OS Support	Windows 10 64bit Linux 64bit	
Mechanism	Mounting	VESA Mount 75 x 75 mm Ear Mount 256 x 100 mm Din Rail	
	Dimension (L/W/H) mm	245 x 169 x 57	245 x 169 x 57
	Weight	2.85kg	2.85kg
Environment	Operating Temperature	0°C ~ 40°C	-20°C ~ 60°C
	Relative Humidity	20% - 80% RH (non-condensing)	20% - 80% RH (non-condensing)
	EMC	CE, FCC, VCCI, BSMI, RCM	CE, FCC, VCCI, RCM
	Safety	CB, cTUVus, BSMI	CB, cTUVus

I/O CUSTOMIZATION KIT

BPCWL02 and BPCWL03 designed with a flexible customization kit, the front panel I/O can be configured to fulfill the needs of different applications.

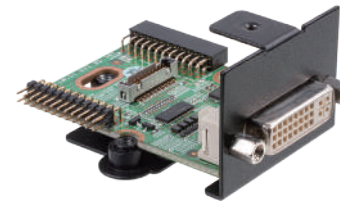
HDMI VIDEO OUTPUT
customization kit



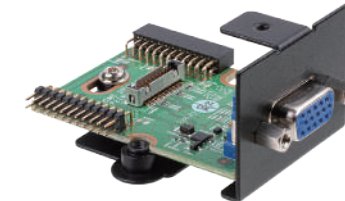
DISPLAYPORT VIDEO OUTPUT
customization kit



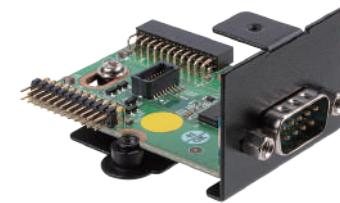
DVI-I VIDEO OUTPUT
customization kit



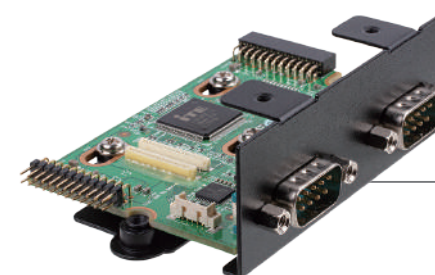
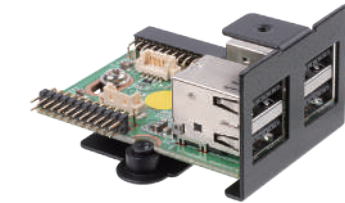
VGA VIDEO OUTPUT
customization kit



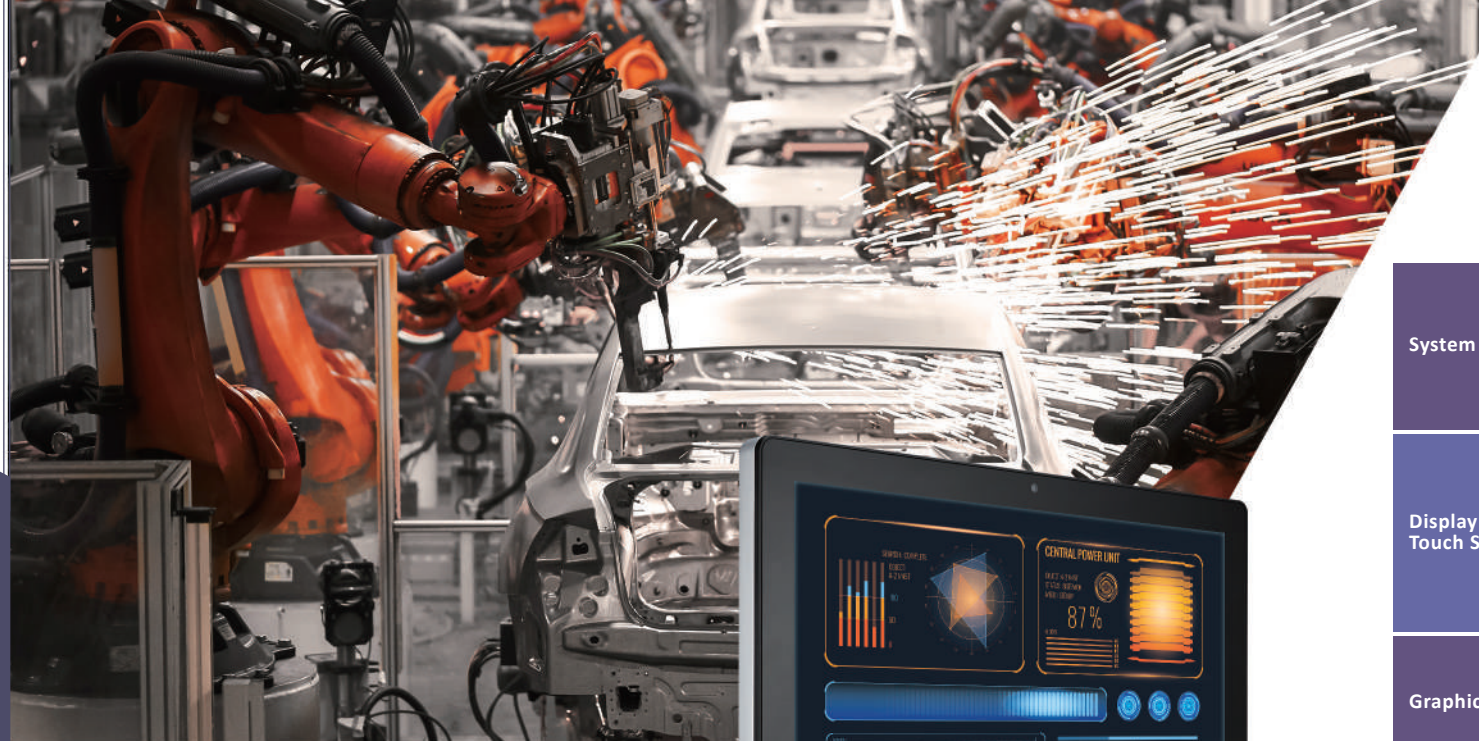
(DB3) 1X COM PORT
customization kit (RS232)



(DB4) 4X USB PORT
customization kit



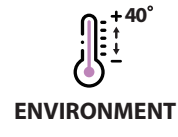
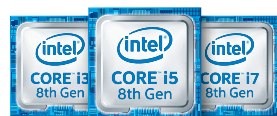
(DB2) 2X COM PORTS
customization kit (RS232/RS422/RS485)



P21WL01

21.5" MULTI-TOUCH PANEL COMPUTER

The P21WL01 is an industrial-grade panel PC integrating a 21.5-inch FHD TFT LCD panel and supporting 10-point touch function. Powered by Intel Whiskey Lake-U Core i platform, the fanless system features an IP65 front bezel design and rugged steel housing, providing the powerful and reliable performance of multitasking capabilities. Rich I/Os include four USB 3.2 Gen1, three COM ports, dual Intel Gigabit LAN, making the system easily integrate into a variety of business and industrial applications.



FEATURES

- Supports Intel® Whiskey Lake-U/UE Processors, from commercial to embedded
- IP65 front panel waterproof protection
- I/O interfaces: 1x HDMI, 1x DVI-I, 4x USB 3.2 Gen1, 1x RS232, 2x RS232/422/485 (support Ring in and 5V power), 2x RJ-45
- Dual Intel Gigabit LAN and dual internal antenna

		P21WL01
System	CPU	8th Gen. Intel® Whiskey Lake Core i3-8145UE (default) Optional: i5-8265U, i5-8365UE, i7-8565U, i7-8665UE, Celeron® 4305UE
	Memory	2 x 260 pin SO-DIMM up to 64GB Dual Channel DDR4 2400MHz
	BIOS	AMI UEFI 64 Mbit
Display & Touch Screen	Display	21.5" 1920 x 1080 Full HD TFT LED with 10-Point Projected Capacitive Multi-Touch
	Viewing Angle (H/V°)	89 (left), 89 (right), 89 (up), 89 (down)
	Brightness	350 cd/m2
	Contrast	1000 : 1
	Backlight Lifetime	30,000 hrs
Graphics	Chipset	Intel UHD Graphics
	Display Interface	1 x HDMI 1.4b: 4096 x 2160@30Hz 1 x DVI-I: 1920 x 1080@60Hz Supports triple displays
Storage	Internal	1 x M.2 2280 M key (PCIe NVMe / SATA) 1 x Swappable 2.5" SSD SATA 3.0 drive bay (compatible 7mm)
Audio	Audio Codec	Realtek ALC662 2-channel
Network	Ethernet	2 x Intel® Gigabit LAN
	WLAN	Realtek RTL8821CE 802.11a/b/g/n/ac + Bluetooth 4.2 (M.2 2230 E key) with 2 internal antenna(default)/external antenna(optional)
I/O Interface	LAN	2 x RJ-45 (10/100/1000Mbps) Support Wake On LAN
	Serial Ports	1 x RS-232 (DB-9) 2 x RS-232/422/485 (DB-9) (RS-232 with power supply: ring in/ 5V (standard) &12V (with specific optional board))
	USB	4 x USB3.2 Gen 1 (Type A)
	Audio	1 x Line-out 1 x Mic-in
	Power	Adapter
Watchdog Timer	Watchdog	Support watchdog
OS Support	OS Support	Windows 10 64bit Linux 64bit
Mechanism	IP Rating	IP65 Front Panel Protection
	Mounting	VESA Mount 100 x 100 mm
	Dimension (L/W/H) mm	543 x 334 x 49.9
	Weight	7.6kg
Environment	Operating Temperature	0°C ~ 40°C
	Storage Temperature	-20°C ~ 60°C
	Relative Humidity	20% - 80% RH (non-condensing)
	EMC	CE, FCC, VCCI, BSMI
	Safety	cTUVus, CB, BSMI
	RF	US, EU, Taiwan



INTERACTIVE SELF-SERVICE KIOSK

The kiosk is a self-service terminal that integrates hardware and software, allows many businesses to offer automation, efficiency, and novel user experience in many ways. Shuttle's interactive kiosks are designed with powerful computing, touch screen, and flexible I/O configuration while it also can be incorporated with a wide range of peripherals in self-service applications such as 1D/2D scanner, receipt printer, NFC, webcam, and payment devices. They can be customized based on the functional requirements and service purposes to meet the business's needs from entertainment to healthcare for ticketing, payments, check-in, wayfinding, information delivery, etc.

FEATURES

- Supports Intel® Whiskey Lake-U/UE processors or Rockchip ARM processor
- IP65 front panel waterproof protection
- Sturdy and robust SECC metal enclosure
- Mounting supports: Pole mount, Counter mount and Wall mount
- Supports a wide range of peripherals of 1D/2D scanner, thermal printer, NFC, IC Card reader, payment device and web cam for self-service applications



		K15WL01	K21WL01	K27WL04	K15RK01	K21RK01	K27RK04	
System	Processor	Intel® Whiskey Lake-U platform, Core™ i7 -8565U / i5-8265UE / i3-8145UE / Celeron-4305UE			Rockchip RK3368 Octa-core 1.5GHz (ARM Cortex-A53)			
	Memory	2 x DDR4 2400/2666MHz, Max. 32GB			DDR3L 2GB			
	Storage	1 x 2.5" HDD / SSD SATA3.0 drive bay (max. 7mm) 1 x M.2 2280 B+M Key (PCIe NVMe / SATA)			16GB eMMC onboard 1 x 2.5" HDD/SSD (max. 7mm) 1 x SD card			
	Graphics	Intel® UHD Graphics			-			
	Operation System	Windows 10 64bit / Linux 64bit			Android 8.1			
Display & Touch	LCD	15.6" LED	21.5" LED	27.5" LED	15.6" LED	21.5" LED	27.5" LED	
	Resolution	1920 x 1080 (Full HD)	1920 x 1080 (Full HD)	1920 x 1080 (Full HD)	1920 x 1080 (Full HD)	1920 x 1080 (Full HD)	1920 x 1080 (Full HD)	
	Screen Position	Landscape	Portrait	Portrait	Landscape	Portrait	Portrait	
	Touch	True-Flat PCAP Multi Touch			True-Flat PCAP Multi Touch			
	Viewing Angle (H/V°)	89 (left), 89 (right), 89 (up), 89 (down)			89 (left), 89 (right), 89 (up), 89 (down)			
	Brightness	350 cd/m2			350 cd/m2			
	Contrast	1000 : 1			1000 : 1			
	Backlight Lifetime	30,000 hrs			30,000 hrs			
Communication	Ethernet	1 x Intel® Gigabit LAN			1 x Realtek Gigabit LAN			
	Wireless	802.11a/b/g/n/ac + Bluetooth 4.2 with 2 external antenna			802.11b/g/n + Bluetooth 4.0 with 2 external antenna			
I/O Interface	USB	4 x USB3.2 Gen1 (Type A)			8 x USB2.0 for USB Peripherals 1 x USB2.0 (OTG)			
	Serial Port	1 x RS232 (DB-9)			-			
	Audio	2 x Internal 2W speaker			2 x Internal 2W speaker			
Peripherals	Camera	2MP FHD camera			2MP FHD camera			
	IC Card Reader	Friction Type User Card PC/SC 1.0 Standard Approval CPU card and Memory card compliant			Friction Type User Card PC/SC 1.0 Standard Approval CPU card and Memory card compliant			
	NFC/RFID Reader	EM compatible 64 bits, A SK Manchester coding or Mifare: ISO14443A standard			EM compatible 64 bits, A SK Manchester coding or Mifare: ISO14443A standard			
	Scanner	1D/2D barcode scanner			1D/2D barcode scanner			
	Printer	3" thermal printer w/auto cutter, 200mm/sec			3" thermal printer w/auto cutter, 200mm/sec			
Power	Adapter	19V/4.74A 90W external adapter			19V/4.74A 90W external adapter			
Mechanism	Mounting	Counter-mount, Pole-mount, Wall-mount			Counter-mount, Pole-mount, Wall-mount			
	Counter mount	Dimension (WxHxD)	370 x 310 x 500 mm	370 x 310 x 825 mm	370 x 517 x 870 mm	370 x 310 x 500 mm	370 x 310 x 825 mm	370 x 517 x 870 mm
		Weight	22kg	35kg	36kg	22kg	35kg	36kg
Environment	Operating Temperature	0 ~ 35°C			0 ~ 35°C			
	Storage Temperature	-20°C ~ 60°C			-20°C ~ 60°C			
	Relative Humidity	20% - 80% RH (non-condensing)			20% - 80% RH (non-condensing)			
Certification	EMC	CE, FCC			CE, FCC			
	Safety	cTUVus, CB			CB			



K27WL04

K21WL01

K15WL01



ACCESSORY LIST

Item	Description	Compatible with
J-RS232	1x COM expansion	SH310R4, SH310R4V2, SH370R6, SH370R6V2, SH370R8
PCL71	2x COM, 1x LPT expansion	P90U, P92U, X50V6, X50V7
PHD3	2.5" HDD/SSD expansion frame	SH310R4, SH310R4V2, SH370R6, SH370R6V2, SH370R8, SH570R6, SH570R8
PHD4	3.5" HDD expansion frame	XH310, XH310V, XH310R, XH310RV
PHD5	2.5" HDD/SSD expansion frame	NS02A, NS02E
PMSR01	Magnetic Stripe Swipe Reader without transaction function	P20U
PMSR02	Magnetic Stripe Swipe Reader with transaction function	P20U
PNFC01	NFC module	P20U
PNFC03	NFC module	P51U
POS01	4x COM, 1x LPT, 1x DIO expansion	P90U, P92U, X50V6, X50V7
POS02	2x USB2.0, 1x RJ11, 4x COM (COM3 support RS232/422/485 0V,5V,12V) expansion	P20U
POS03	2x USB2.0, 1x RJ11, 4x COM (COM3 support RS232/422/485 0V,5V,12V) expansion	P51U
PS01	Vertical stand	XH310, XH310V, XH310R, XH310RV

Item	Description	Compatible with
PS02	Vertical stand	DH02U-series, DH310, DH310V2, DH310S, DH370, DH410, DH410S, DH470, DX30, DL10J, DL20N series, NC10U-Series
PV02	VESA kit	XC60J, XH310, XH310V, XH310R, XH310RV
PV05	VESA kit	NS02A, NS02E
PVG01	VGA adapter	DH310, DH310V2, DH310S, DH370, DH410, DH410S, DH470, DX30, DA320, DH32U series
WLN-M	Wi-Fi expansion	DH02U-series, DH32U series, DH310, DH310V2, DH310S, DH370, DH410, DH410S, DH470, DL20N series, SH310R4, SH310R4V2, SH370R6, SH370R6V2, SH370R8, SH570R6, SH570R8, XC60J, XH110G, XH310, XH310V, XH310R, XH310RV
WWN01	4G / LTE connection module	DL10J, DL20N series
WWN02	4G / LTE antenna set	P20U, P51U, P90U
WWN03	4G / LTE antenna set	DS10U series, DH32U series, DH410, DH410S, DH470, DA320, DL20N series
MCAP01	FHD Capture Card	EN01 series
PD01	PoE PD Module	EN01 series
PLA01	4G/LTE Antenna Kit	EN01 series
PSE01	POE PSE Module	EN01 series

