## **Shuttle**®

## **P22U**

### **ALL IN ONE PC**







PROCESSOR	Intel <sup>®</sup> Comet Lake-U Celeron <sup>®</sup> 5205U, 1	.5W max. TDP
MEMORY	DDR4 SODIMM 2400 MHz slots, Supports dual channel up to 64GB (32GB x 2)	
VIDEO GRAPHICS	Intel Ultra HD 610 graphics	
VIDEO OUTPUT	HDMI 1.4b + VGA, Supports two additional displays	
AUDIO	C-Media CM6542 or Realtek ALC269, HD audio (Digital Audio is supported via HDMI) Line-out, MIC input	
MICROPHONE	Electret Condenser Microphone, 2W speakers x 2	
TOUCH SCREEN	11.6", 16:9 LCD TN display, 1366 x 768 px capacitive 10-point multi-touch, supports gloved touch (PVC, cotton, cotton/linen)	
WIRELESS LAN	Two internal WLAN antennas pre-installed, two perforations for optional external antennas	
ETHERNET	Intel i219 10/100/1000 MB/s operation	Supports Wake on LAN function
STORAGE INTERFACE	SATA III 6 GB/s interface, 2.5" device bay x 1	
FRONT PANEL	(1) Power LED (1) Hard Disk LED (1) Multi-touch LCD display	(1) Webcam (FHD) (1) Microphone
RIGHT PANEL	(2) COM port (optional) (1) Hole for optional antenna	
LEFT PANEL	<ul><li>(1) Power Button</li><li>(1) SD Card Reader</li><li>(1) Clear CMOs</li></ul>	<ul><li>(2) USB 3.2 Gen 1 port</li><li>(1) Hole for optional antenna</li><li>(1) Kensington Lock</li></ul>
BACK & BOTTOM PANEL	<ul><li>(1) VGA port</li><li>(1) HDMI 1.4b</li><li>(2) COM port</li><li>(1) Microphone in</li><li>(1) Headphone jack</li></ul>	(1) DC-in (2) USB 2.0 port (1) RJ45 LAN (2) USB 3.2 Gen 1 port
DIMENSIONS	15.5(L) x 10.7(W) x 1.6(H) inches	
POWER	Input: 100 - 240V AC, max 1.6A Output: 19V, max 3.42A	65W 19V power supply Battery optional
ACCESSORIES	Quick Guide 65W power adapter Screws	Driver DVD Power cord 2.5" drive bracket x 2
EXPANSION SLOT	(1) M.2 MAX to 2280 Type BM	
OS SUPPORT	Windows 10, Windows 11, Linux 64 bit	

For more information on all products, please contact us at <a href="mailto:sales@us.shuttle.com">sales@us.shuttle.com</a> or 626.820.9000

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Black chassis, Kensington Lock hole on back panel  100mm VESA mountable (stand can be removed to reveal screw holes)  Dimensions: 11.7 (W) x 10.7 (H) x 1.9 (D) inches (w/ cable box)  11.7 (W) x 8 (H) x 1.9 (D) inches (w/o cable box)  Weight: 5.4 LBS (net) / 7.5 LBS (gross)
External 65W power adapter (fanless), Battery optional AC input voltage: 100 - 240V, 50/60 Hz, max 1.6A Output: 19V DC, max 3.42A , max 65W
The system comes without an operating system installed. Compatibility: Windows 10, Windows 11, Linux 64 bit
Intel® Celeron® 5205U (ULV), i3-10110U optional 14 nm structure, Comet Lake-U platform (10th Gen Intel Core) CPU cores/threads: 2/2, L1/L2/L3 cache: 256kb/1MB/2MB CPU clock frequency: 1.9 GHz Max supported processor power consumption (TDP): 15W Supports 64 bit, AES-NI, VT-x (EPT), VT-d, Enhanced SpeedStep, NX bit, SSE 4.1/4.2 System on chip processor (SoC), no chipset required
Passive heatpipe cooling, no fan noise at all Suitable for noise sensitive environments Fanless, dust-free and virtually maintenance free
2 x 260 pin SODIMM slots Supports DDR4 2400 (PC4-19200) SDRAM at 1.2V Supports Dual Channel mode Supports a max. of 32GB per DIMM, up to 64GB total (2 x 32 GB) Supports two unbuffered DIMM module (no ECC or registered)
M.2 2280 M slot M.2 2280 BM slot provides the following interfaces: PCI-Express Gen 2.0 X4, SATA v3.0 (6 GB/s) interface  Supports M.2 cards with a width of 22 mm and a length of 80 mm. Supports M.2 SATA SSDs (with BM key) and M.2 PCI-E NVMe SSDs (with M key).
C-Media CM6542 or Realtek® ALC 269 audio codec, Digital audio supported via HDMI Two analog audio connectors (3.5 mm) on the bottom panel: 2 channel line-out (headphones), Microphone input
RJ45 connector supports Gigabit LAN at 10/100/1000 MB/s Intel i219 ethernet controller with MAC, PHY, PCIe interface Supports Wake on LAN (WOL) from S3, S4 modes Supports network boot by Preboot eXecution Environment (PXE) Supports Quick Sync Video and Clear Video HD technology
Integrated card reader supports SD, SDHC, and SDXC memory flash cards
Integrated full HD (1920 x 1080) webcam
Intel Ultra HD 610 graphics, GPU clock rate: 300 - 900 MHz Supports DirectX12, full H264, H265 8/10 bit, VP8/9, VC-1, AVC hardware decoding Supports Quick Sync Video and Clear Video HD technology  Two video ports support two additional independent screens: -HDMI 1.4b supports 1920 x 1080/60 Hz or 3840 x 2160/30 Hz -VGA/D-sub analog video supports 1920 x 1080/60 Hz  Multi-Monitoring modes Clone mode: all displays show the same content at 1366 x 768 resolution Extended mode: all displays show different content



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POWER CONSUMPTION	External 65W power adapter (fanless) Input: 100 - 240V AC, 50/60 Hz, max 1.6 A Output: 19V DC, max 3.42A, max 65W	
IP54 PROTECTED	The front panel is dust and splash water protected with protection class IP54	
24/7 NONSTOP OPERATION	Hard disk must be approved for long term operation by manufacturer, keep ventilation holes clear	
TOUCHSCREEN	11.6" LCD TN technology, 16:9 widescreen panel (1366 x 768 px), 1.05 Megapixel Capacitive touch panel with 10 point multi-touch, Stylus pen not supported Supports fingerprint input with gloves (PVC, cotton, cotton/linen)	
BIOS	AMI BIOS in 8 MB EEPROM with SPI interface Supports power-on-after-power-fail/always on Supports Wake-on-LAN from S3, S4, S5 ACPI states Supports hardware monitoring and watch dog functionality Supports Firmware TPM v2.0 functionality	
STORAGE	Supports one 2.5" SATA hard disk or SSD drive, max height 9.5 mm Supports SATA III (6 GB/s bandwidth), SATA cable pre-installed	
MICROPHONE/SPEAKERS	Front panel integrated with Electret Condenser Microphone and 2 x 2W speakers	
ONBOARD CONNECTORS	Internal USB 2.0 type A connector USB 2.0 headers x 3 (all occupied) Serial ATA connector (data/power) Speakers/MIC (4-pin, occupied) LPC connector (occupied)	eDP connector (Embedded DisplayPort) - occupied by display I2C connector CMOS battery connector (2 pin, occupied)
BACK/BOTTOM CONNECTORS	(1) HDMI 1.4b port (video/audio) (1) VGA port (analog video, 15 pol) (1) RJ45 Gigabit LAN (2) COM/serial (2) USB 3.2 Gen 1	<ol> <li>VESA mount holes (remove stand to reveal)</li> <li>Audio line out/headphones</li> <li>Microphone input (3.5 mm)</li> <li>DC input (5.5/2.5 mm)</li> <li>USB 2.0</li> </ol>
SIDE CONNECTORS	(1) Power button (2) USB 3.2 Gen 1 (2) COM port (optional)	<ul><li>(1) SD Card Reader</li><li>(2) Perforation for optional WLAN/LTE antennas (7 mm)</li><li>(1) Kensington Lock hole</li></ul>
INCLUDED ACCESSORIES	XPC installation guide Driver DVD Screw pack	External 65W/19V power adapter Power cord 2 x bracket to install 2.5" drive
OPTIONAL ACCESSORIES	M.2 WLAN module w/ two external antennas (WLN-M/WLN-M1) COM port adapter (PCP21/PCP11)	
ENVIRONMENTAL CRITERIA	Operating temperature: 0 - 40°C Ventilation holes must be kept clear	Humidity: 10 - 90% (non condensing)
CERTIFICATIONS	EMI: CE, FCC, RCM, VCCI, BSMI Safety: CB 60950/62368, cTUVus, BSMI	Other: RoHS, Energy Star v8.0, ErP, Lot 3
	This model is classed as a technical information equipment (ITE) in class B and is intended for use in living rooms and offices. The CE mark approves conformity by the EU directives: (1) 2014/30/EU relating to electromagnetic compatibility (EMC) (2) 2014/35/EU relating to Electrical Equipment designed for use within certain voltage limits (LVD) (3) 2009/125/EU relating to eco-design requirements for energy related products (ErP)	

BIOS DOWNLOADS: <a href="https://global.shuttle.com/products/productsDownload?pn=P22U">https://global.shuttle.com/products/productsDownload?pn=P22U</a>
SUPPORT LIST: <a href="https://global.shuttle.com/products/productsSupportList?pn=P22U">https://global.shuttle.com/products/productsSupportList?pn=P22U</a>

FAQ LIST: http://global.shuttle.com/support/faq

PRODUCT WARRANTY: https://www.shuttlecomputers.com/policies

### **ALL IN ONE PC**

#### **Front View and Left Side View**





- A Webcam (Full HD)
- **B** Multi-touch LCD screen
- **C** Microphone
- **D** Hard Disk LED
- **E** Power LED
- F Cable Box

- 1 Hole for optional antenna
- 2 Power button
- 3 Kensington Lock
- 4 SD card reader
- **5** USB 3.2 Gen 1 port x 2
- 6 Clear CMOS

## **ALL IN ONE PC**

## **Bottom and Right Side View**





- A COM port x 2
- **B** D-Sub/VGA video output
- **C** DC-in
- **D** USB 2.0 port x 2
- E RJ45 Gigabit LAN

- **F** USB 3.2 Gen 1 x 2
- **G** HDMI video output
- H Audio Line-out
- I Microphone input
- 1 Hole for optional antenna x 2
- 2 COM port x 2 (optional)
- 3 Kensington Lock

The stand on the back can be removed to reveal four VESA mounting screw holes.

VESA mount not included.

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#### **EQUIPPED WITH INTEL® COMET LAKE-U**

The P22U supports Intel® Comet Lake-U platform technology with an Intel® Celeron® 5205U dual core processor. It supports DDR4 2666 MHz memory (up to 64 GB) with Intel® Ultra HD 610 graphics for 4K/Ultra HD video playback.



#### **TOUCH SCREEN**

The 11.6" multi-touch screen does not require a mouse and keyboard, making it particularly suitable for interactive kiosk and point-of-sale applications.



#### **IP54 CERTIFIED DESIGN**

The front panel of the P22U is IP54 certified for dust and splash water resistance, suitable for indoor applications where the touch screen may be exposed to humidity and the occasional splashing of water.



#### **EXPANDABILITY PERIPHERAL CONNECTIVITY**

Equipped with USB 3.2 Gen 1, USB 2.0, RS232, Intel® Gigabit LAN, SD card reader, and FHD webcam, the P22U can easily connect to other commercial devices. An optional accessory offers COM port adapters for expansion.



#### **FANLESS DESIGN**

With a passive thermal cooling system, the fanless design reduces power consumption required by a fan. Use with solid state disks for an operational platform completely free of noise.

For more information on all products, please contact us at <a href="mailto:sales@us.shuttle.com">sales@us.shuttle.com</a> or 626.820.9000

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ACCESSORY	PCP11
DESCRIPTION	The PCP11 accessory adds up to two more COM ports for a total of
COMPATIBILITY	P20U/P22U/P51U/P52U series, DS10U/DS20U series, XH410G/XH510G/XH510G2, SH610R4
PORTS	External: Sub-D, 9-pin, male Internal: 10-pin (2x5), female, 2 mm pitch



ACCESSORY	PCP21
DESCRIPTION EXTERNAL PORTS	Dual RS232/COM port adapter for some all-in-one PCs; the P20U/P22U and P51U/P52U comes with two COM ports.  The PCP21 adds two more COM ports for a total of  COM1 (RS232) x 1, COM2 (RS232) x 1,  COM3 (RS232/RS422/RS485) x 1 (Supports 0V/+5V/+12V),  COM4 (RS232) x 1,
INTERNAL PORTS	DIO RJ11 port x 1  USB 2.0 x 2



ACCESSORY	WLN-M
DESCRIPTION	The WLN-M wireless LAN kit can be used to equip XPC cube and slim series models with the wireless LAN standard 802.11 n/ac at 2.4/5 GHz. The combo device supports Bluetooth 4.0.
ITEMS INCLUDED	M.2 2230 (NGFF) WLAN card, XPC slim antenna cables x 2 (8.3 in and 11.4 in), XPC cube antenna cables x 2 (20.8 in), Dipole antennas x 2, Quick guide, Driver DVD
OS SUPPORT	Windows 7, Windows 8.1, Windows 10, Windows 11, Linux (32/64 bit)