STATIONPC Station P2S Powerful Open Source Geek Computer User Manual

Contents

STATIONPC

STATIONPC Station P2S Powerful Open Source Geek Computer

Product Information

Specifications

- **Product:** Geek PC
- **Model:** Station P2S
- **FCC ID:** 2AKCT-SPCP2S

Product Features

- Quad-core 64-bit processor
- Quad-core 64bit Cortex-A55 processor with 22nm lithography process, up to 2.0GHz
- **GPU/VPU/NPU:**
  - OpenGL ES3.2/2.0 Vulkan1.1
  - 4K@60fps H.265/VP9 video decoding
  - 1080P@100fps H.265 video encoding
  - 1TOPS NPU
- **Operating Systems:** Station OS, Android, Ubuntu
- 8GB large RAM, frequency up to 1600MHz
- Dual Gigabit Ethernet (Dual 1000Mbps RJ45)
- 2.4G/5G Dual-band WiFi, BT5.0
- 4G LTE module can be expanded
- **A variety of interfaces:**
  - Control Port (RS232 x2, RS485x1)
  - HDMI2.0
  - GE (RJ45)
  - USB3.0
  - USB2.0

- USB-C (OTG)

Specifications

- **SOC:** RK3568
- **CPU:** Quad-core 64-bit Cortex-A55 processor, 22nm lithography process, frequency up to 2.0GHz
- **GPU:** ARM G52 2EE, supports OpenGL ES 1.1/2.0/3.2, OpenCL 2.0 and Vulkan 1.1, built-in high-performance 2D acceleration hardware
- **NPU:** 1Tops@INT8 RKNN NPU AI accelerator, supports one-click switching of Caffe/TensorFlow/TFLite/ONNX/PyTorch/Keras/Darknet
- **VPU:** 4K@60fps H.265/H.264/VP9 video decoding, 1080P@60fps H.265/H.264 video encoding
- **RAM:** 2GB/4GB/8GB LPDDR4
- **Storage:** 16GB/32GB/64GB/128GB eMMC, 16MB SPI Flash
- **Storage Expansion:** 1*SATA 3.0, 2.5inch, 7mm thickness SSD/HDD, 1*TF Card Slot
- **Ethernet:** 2*1000Mbps RJ45
- **Wireless:** 2.4G/5GHz Dual-band WiFi, 802.11 a/b/g/n/ac, Bluetooth 5.0
- **Video output:** Camera
- Audio
- **USB:** 1*USB3.0 (Max:1A), 2*USB2.0 (Max:500mA), 1*USB-C (USB2.0 OTG)
- Extended Interface
- Power
- **OS:** Android 11.0, Ubuntu 18.04, Buildroot + QT, Station OS
- **Dimension:** 142mm * 89mm * 35.5mm
- **Power Consumption:** Idle: 0.3W, Typical: 4.2W, Max: 7.8W
- Environment

Product Usage Instructions

Connect Bluetooth

1. Click the Bluetooth icon
2. Click the Bluetooth device you want to connect

Connect WiFi

1. Click the WiFi icon
2. Turn on wifi switch
3. Click the WiFi you want to connect
4. Enter Password
5. If the connection is successful, the status will show as Connected

FAQ

- **Q: What are the supported operating systems?**

A: The Geek PC supports Station OS, Android, and Ubuntu operating systems.

- **Q: Can I expand the storage of the Geek PC?**

  A: Yes, you can expand the storage with a SATA 3.0 SSD/HDD and a TF Card.
- **Q: What is the power consumption of the Geek PC?**

  A: The power consumption of the Geek PC is Idle: 0.3W, Typical: 4.2W, Max: 7.8W.

Product Features

-  **Quad-core 64-bit processor**

  Quad-core 64bit Cortex-A55 processor 22nm lithography process up to 2.0GHz
-  **GPU/VPU/NPU**
  - OpenGL ES3.2/2.0 Vulkan1.1
  - 4K@60fps H.265/VP9 video decoding 1080P@100fps H.265 video encoding 1TOPS NPU
-  **Operating systems**

  Station OS, Android, Ubuntu
-  **8GB large RAM**

  Up to 8GB RAM, frequency up to 1600MHz
-  **Dual Gigabit Ethernet**
  - Dual 1000Mbps RJ45)
  - 2.4G/5G Dual-band WiFi BT5.0 4G LTE module can be expanded.
-  **A variety of interfaces**

  Control Port (RS232 x2, RS485x1) HDMI2.0, GE (RJ45), USB3.0, USB2.0 USB-C (OTG)

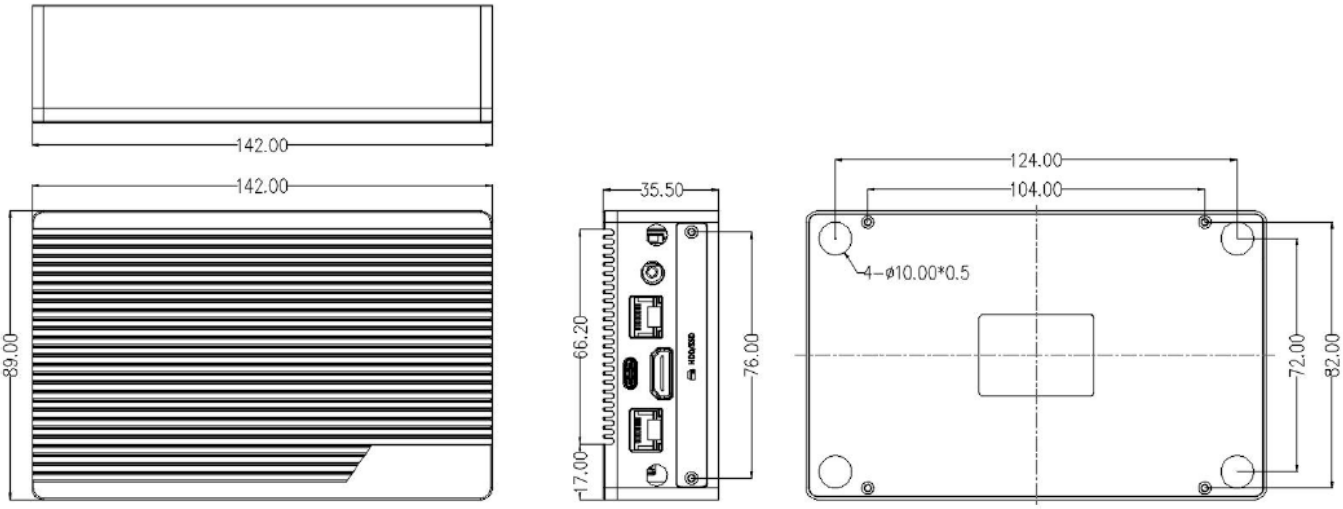
Specifications

- SOC RK3568
- CPU Quad-core 64-bit Cortex-A55 processor, 22nm lithography process, frequency up to 2.0GHz
- GPU ARM G52 2EE, Support OpenGL ES 1.1/2.0/3.2, OpenCL 2.0 and Vulkan 1.1, Built-in high-performance 2D acceleration hardware
- NPU 1Tops@INT8 RKNN NPU AI accelerator, Support one-click switching of Caffe/TensorFlow/TFLite/ONNX/PyTorch/Keras/Darknet
- VPU 4K@60fps H.265/H.264/VP9 video decoding,1080P@60fps H.265/H.264 video encoding
- RAM 2GB/4GB/8GB LPDDR4
- Storage 16GB/32GB/64GB/128GB eMMC, 16MB SPI Flash
- Storage Expansion 1*SATA 3.0 2.5inch 7mm thickness SSD/HDD ,1*TF Card Slot

- Ethernet 2*1000Mbps RJ45
- Wireless 2.4G/5GHz Dual-band WiFi, 802.11 a/b/g/n/ac Bluetooth 5.0 4G LTE network communication can be expanded.
- Video output 1 × HDMI2.0 4K@60Hz
- Camera 1 × MIPI-CSI, Support HDR function
- Audio 1 × HDMI audio output,1 × Phone headphone jack (3.5mm)
- USB 1*USB3.0 (Max:1A) 2*USB2.0 (Max:500mA) 1*USB-C (USB2.0 OTG
- Extended Interface 1 × RJ45 Control Port 1×RS485 + 2×RS232 1 × PH2.0-30P PWM GPIO I2S I2C UART SPDIF 1 × PH2.0-6P POE
- Power DC 12V (5.5*2.1mm, voltage tolerance±5%)
- OS Android 11.0 Ubuntu 18.04 Buildroot +QT Station OS
- Dimension 142mm * 89mm * 35.5mm
- Power Consumption Idle: 0.3W, Typical: 4.2W Max: 7.8W
- **Environment**
  - **Operating temperature:** -20°C-40°C, the product uses the adapter equipped with the machine for power supply.
  - **Operating temperature:** -20°C-60°C, the product should use the adapter(a maximum ambient temperature is 60°C) for the power supply.
  - **Storage Temperature:** -20°C- 70°C, Storage Humidity: 10% 80 %

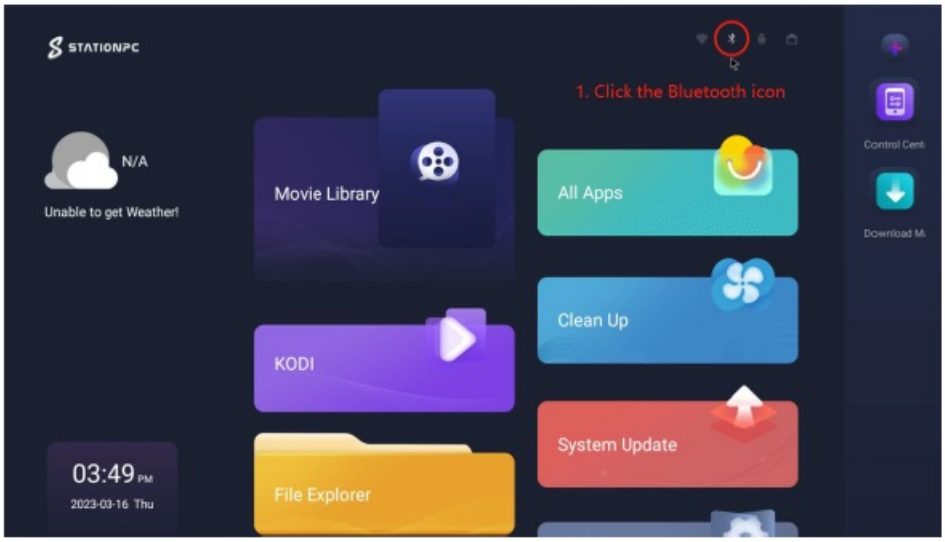
Interface description

Dimension

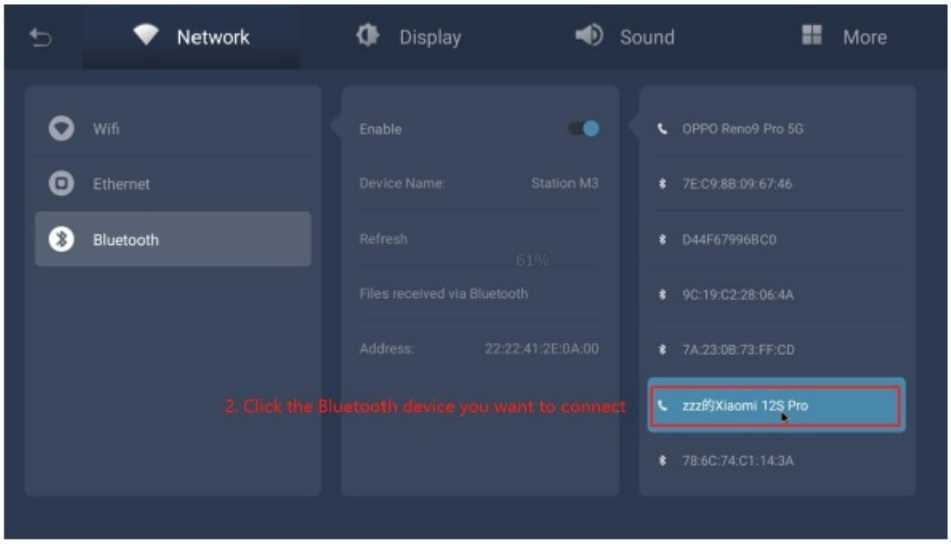


Connect Bluetooth

1. Click the Bluetooth icon

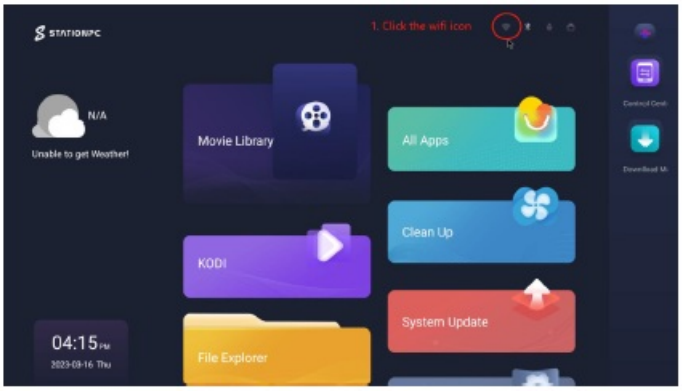


2. Click the Bluetooth device you want to connect

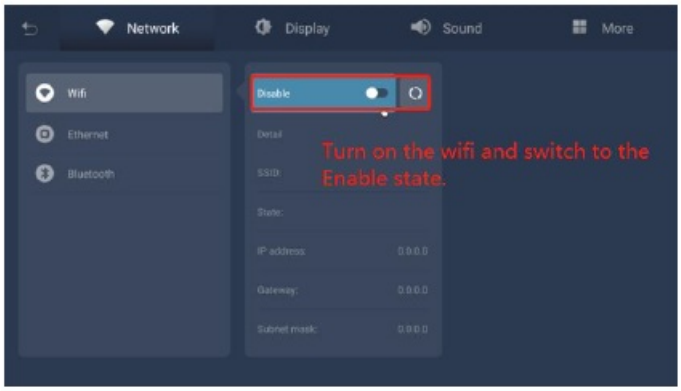


Connect WiFi

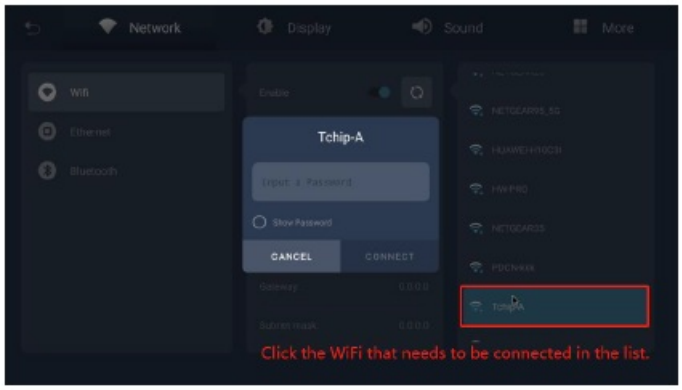
1. Click the WiFi icon



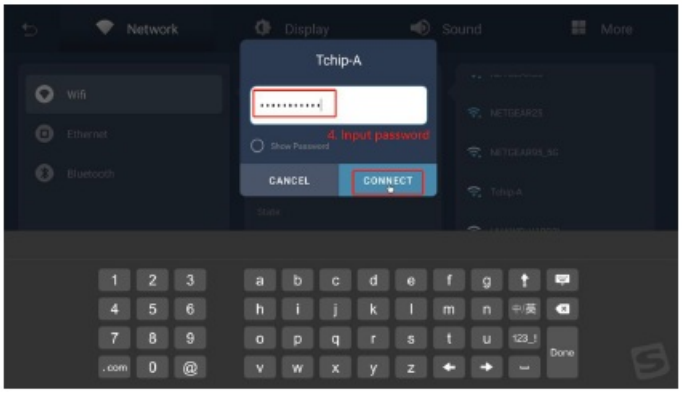
2. Turn on wifi switch



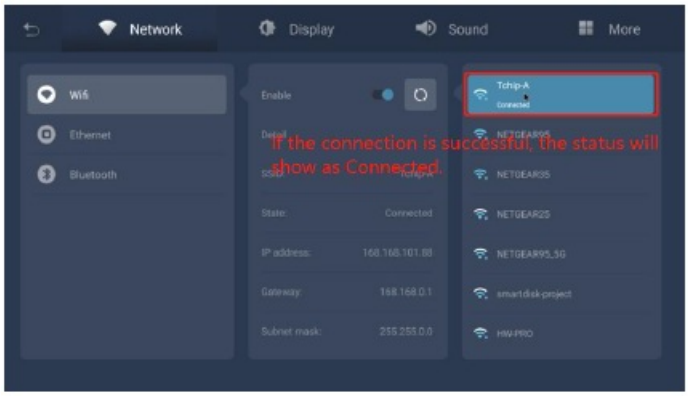
3. Click the WiFi you want to connect



4. Enter Password



5. If the connection is successful, the status will show as Connected.



FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, under Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used under the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with a minimum distance between 20cm of the radiator and your body: Use only the supplied antenna.

Documents / Resources

	STATIONPC Station P2S Powerful Open Source Geek Computer [pdf] User Manual Station P2S Powerful Open Source Geek Computer, Station P2S, Powerful Open Source Geek Computer, Open Source Geek Computer, Source Geek Computer, Computer

References

- User Manual