并行编译与优化
Parallel Compiler and Optimization

计算机研究所编译系统室

Introduction to Raspberry Pi

树莓派介绍

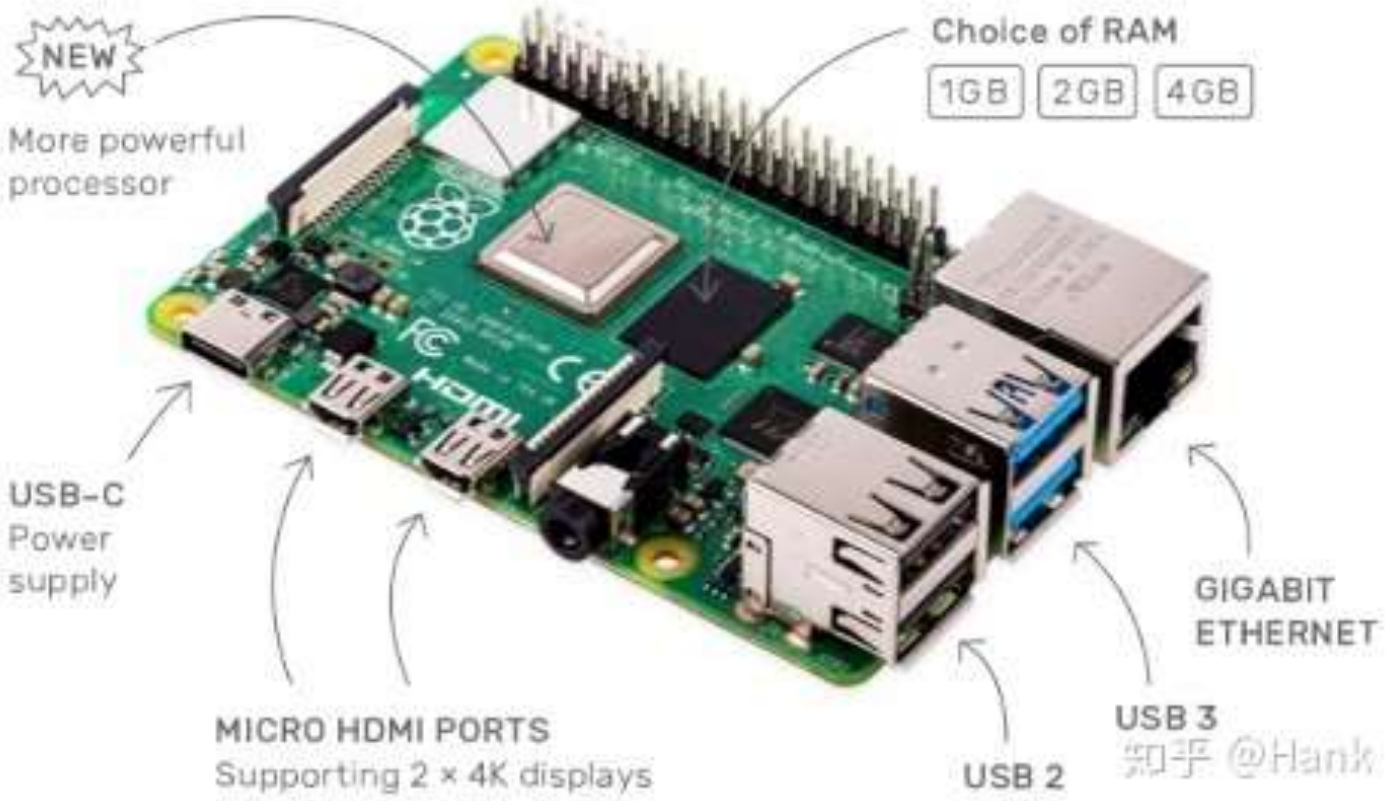
Contents

What is Raspberry Pi?

An ARM-based miniature computer

- Equipped with ARM processors (e.g. ,Cortex-A72)
- Use SD/MicroSD card as memory hard disk
- Provide USB interface to connect peripherals, such as mouse, keyboard
- HDMI interface

Overview


NEW
More powerful processor
Choice of RAM
1GB
2GB
4GB
USB-C
Power supply
MICRO HDMI PORTS
Supporting 2 × 4K displays
USB 2
USB 3
GIGABIT ETHERNET
知乎 @Hank

Start with?

- **1. Install Operating System (OS)**
- **2. Control Raspberry Pi**
- **3. Shutdown Cautiously**

Install Operation System

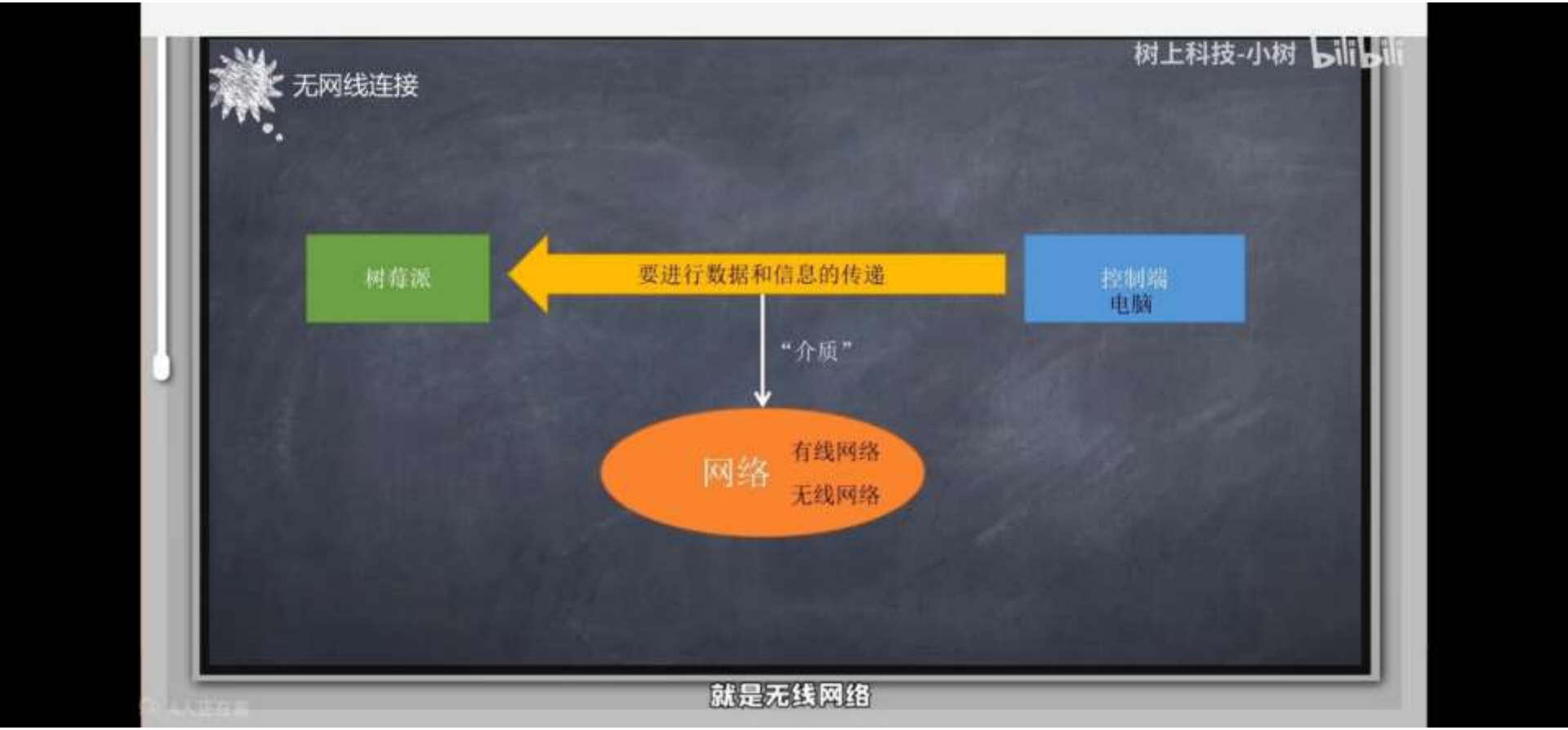
Selectable versions:

- **Raspberry Pi OS with desktop**
- **Raspberry Pi OS Lite**
- **32 or 64 bit**

Control Raspberry Pi

- **Regard it as a PC**
- **Regard it as a Server**
  - **Build connection by SSH**
  - **Remote control**

Control Principle



Configurate IP

Local configurations:

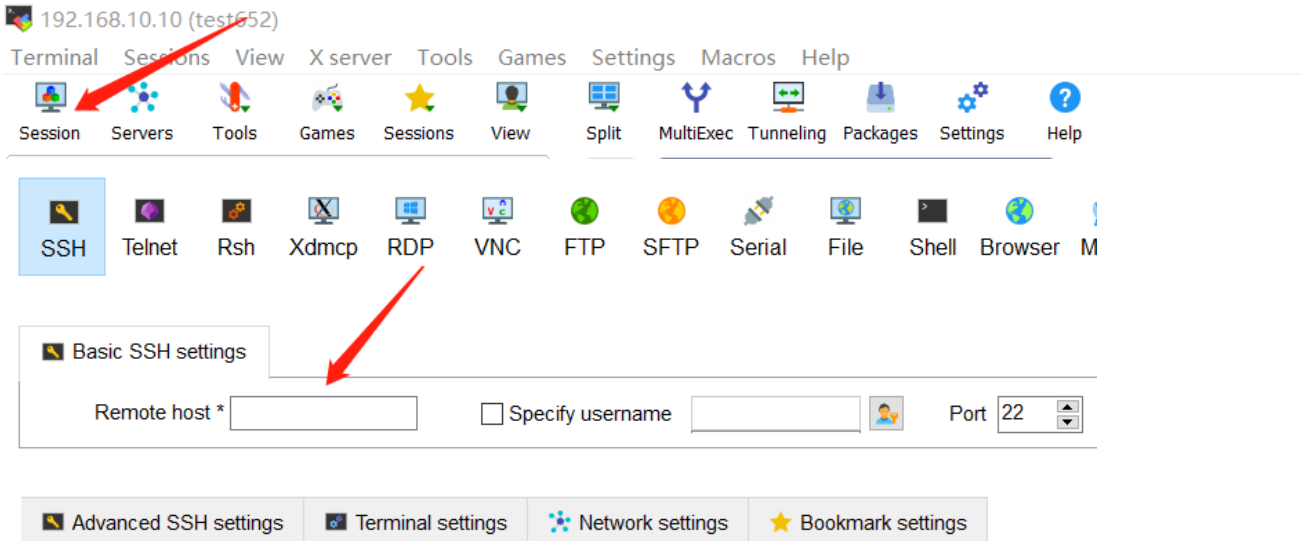
Configurate IP

Connection via SSH:

1. Download MobaXterm.exe

https://mobaxterm.mobatek.net/

2. Build a new configuration



Shutdown Cautiously

Recommended way:

- **sudo shutdown -h now**
- **sudo halt**
- **sudo poweroff**

And Reboot?

- **sudo reboot**

Common Commands

- **Set the gateway**

  route add default gw 192.148.43.1

- **Launch SSH servie**

  systemctl enable ssh

  service ssh start

- **Look over ip addresses**

  ifconfig

  ……

Resources

Including but not limited to:

- **Official website**

  https://www.raspberrypi.com/

- **CSDN**

  https://blog.csdn.net/weixin_45985341/article/details/113780422

- **Bilibili**

  https://b23.tv/OoPqFAb

Configurate IP

Connection via SSH:

Surf the Internet via wlan0

- **Graphical interface**
- **Configurate file**

1. `vim /etc/wpa_supplicant/wpa_supplicant.conf`
2. **Write following to the file**

```
network={

   ssid=""    wifiname

  psk=""      Password

}
```

3. **Reboot**