## What's the BPi-M3

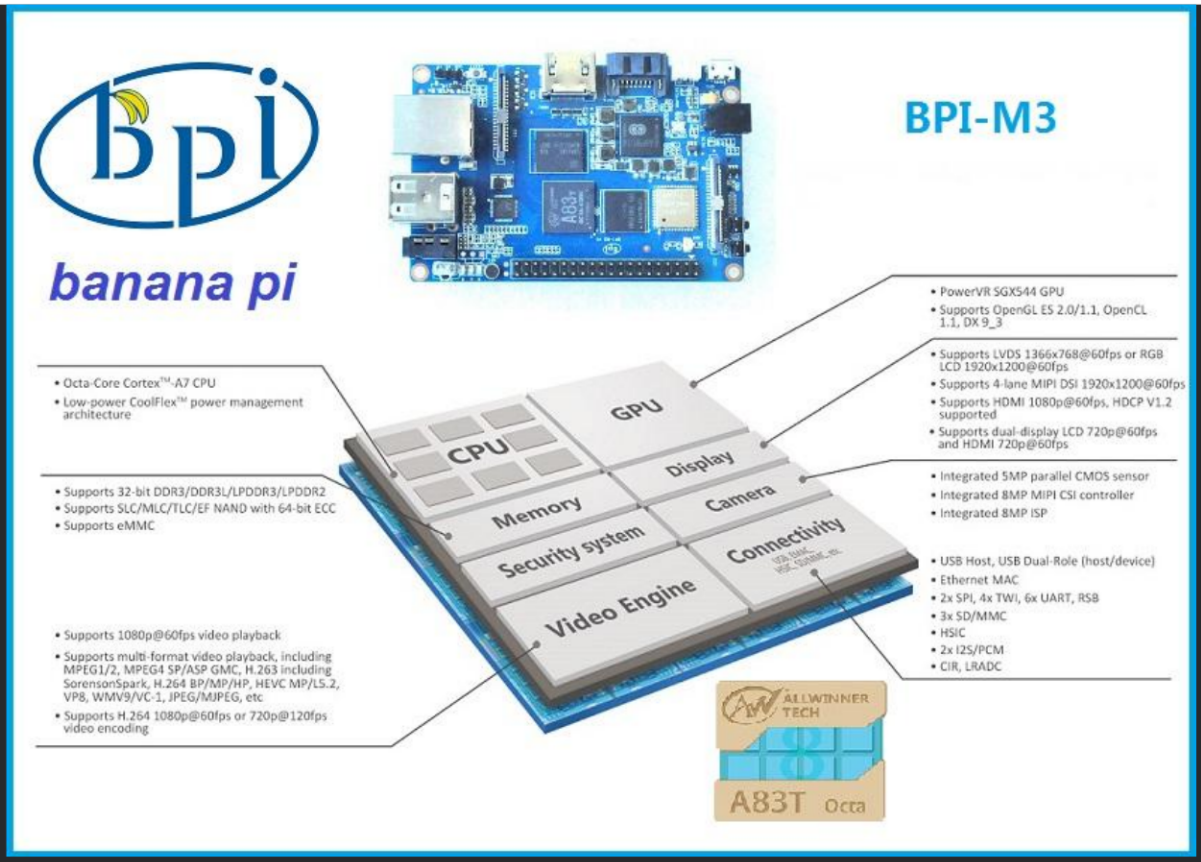
Banana PI BPI-M3 is the open source hardware platform, Banana PI BPI-M3 is an octa-core version of Banana Pi, it support WIFI+BT on board.

Banana Pi BPI-M3 series run Android, Debian linux, Ubuntu linux, Raspberry Pi image and others OS.and eMMC flash onboard.

Banana PI PBI-M3 hardware: 1.8GHz ARM Cortex-A7 octa-core processor, 2GB LPDDR3 SDRAM,

Banana PI BPI-M3with Gigabit Ethernet port, It can run with Android 5.1.1 smoothly. The size of Banana PI BPI-M3 same as banana pi M1+, it can easily run with the game it support 1080P high definition video output, the GPIO compatible with Raspberry Pi B+ and can run the ROM Image.

## Use Allwinner A83T octa-core CPU




# Hardware Specification

**Hardware Specification of Banana pi BPI-M3**

| | |
|---|---|
| Soc | Allwinner A83T ARM Cortex-A7 |
| CPU | A83T ARM Cortex-A7 octa-core,512 KB L1 cache 1 MB L2 cache |
| GPU | PowerVR SGX544MP1· Comply with OpenGL ES 2.0, OpenCL 1.x, DX 9_3 |
| SDRAM | 2GB LPDDR3 (shared with GPU) |
| Power | 5V @ 2A via DC power and/or MicroUSB (OTG) |

**Features**

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|---|---|
| Low-level peripherals | 40 Pins Header, 28×GPIO, some of which can be used for specific functions including UART, I2C, SPI, PWM, I2S. |

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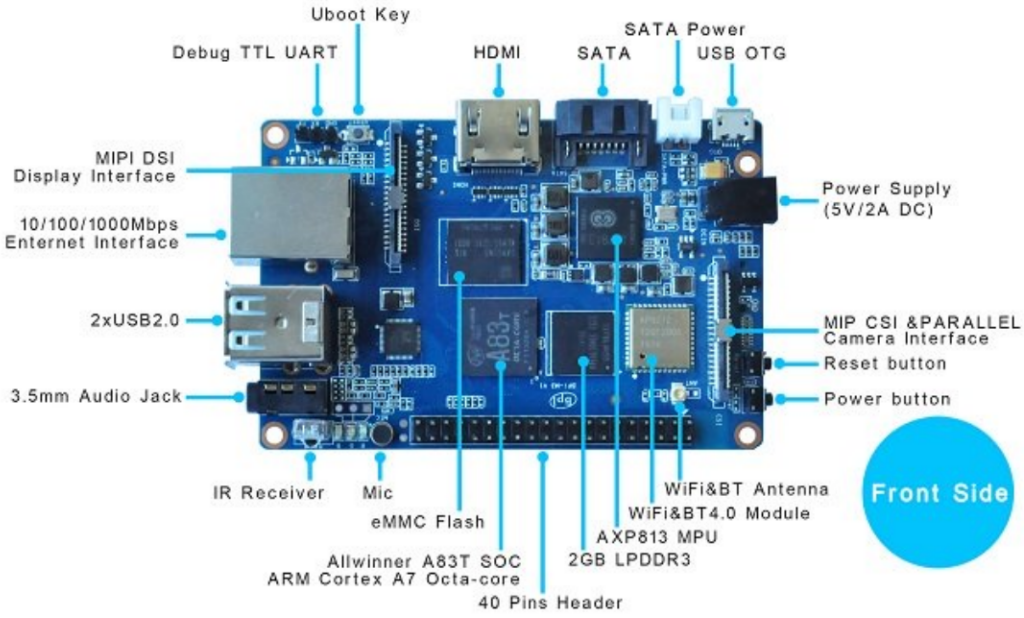
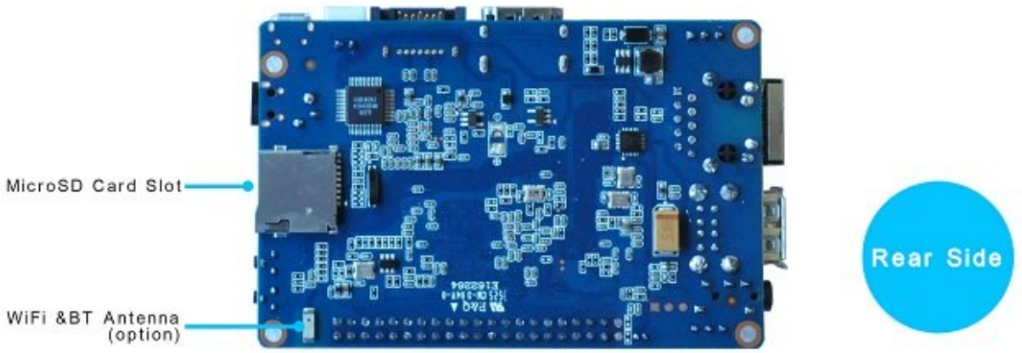
|---|---|
| On board Network | 10/100/1000Mbps ethernet (Realtek RTL8211E/D) |
| Wifi Module | WiFi 802.11 b/g/n (AP 6212 module on board) |
| Bluetooth | BT4.0 |
| On board Storage | MicroSD (TF) card,SATA2.0 ,eMMC 8G |
| Display | Supports multi-channel HD display:<br>HDMI 1.4 (Type A - full)<br>MIPI Display Serial Interface (DSI) for raw LCD panels<br>11 HDMI resolutions from 640×480 to 1920×1200 |
| Video | Multi-format FHD video decoding, including Mpeg1/2, Mpeg4, H.263,<br>H.264, etc H.264 high profile 1080p@60fps or 720p@120fps encoding<br>HEVC/H.265 decoder 1080P@30fps with software |
| Audio outputs | HDMI,analog audio (via 3.5 mm TRRS jack),<br>I2S audio (also potentially for audio input) |
| Camera | Parallel 8-bit camera interface<br>MIPI Camera serial Interface(CSI) |
| Audio input | On board micphone |
| USB | 2 USB 2.0 host, 1 USB 2.0 OTG |
| Buttons | Reset button, Power button, U-boot button |
| Leds | Power status Led and RJ45 Led |
| Other | IR reciever |
| Interface definition | |
| Sizes | 92 mm × 60mm |
| Weight | 45g |

# Interface


Uboot Key
Debug TTL UART
HDMI
SATA
SATA Power
USB OTG
MIPI DSI
Display Interface
10/100/1000Mbps
Enternet Interface
2xUSB2.0
3.5mm Audio Jack
Power Supply
(5V/2A DC)
MIP CSI &PARALLEL
Camera Interface
Reset button
Power button
IR Receiver
Mic
eMMC Flash
Allwinner A83T SOC
ARM Cortex A7 Octa-core
40 Pins Header
AXP813 MPU
2GB LPDDR3
WiFi&BT4.0 Module
WiFi&BT Antenna
Front Side


MicroSD Card Slot
WiFi &BT Antenna
(option)
Rear Side