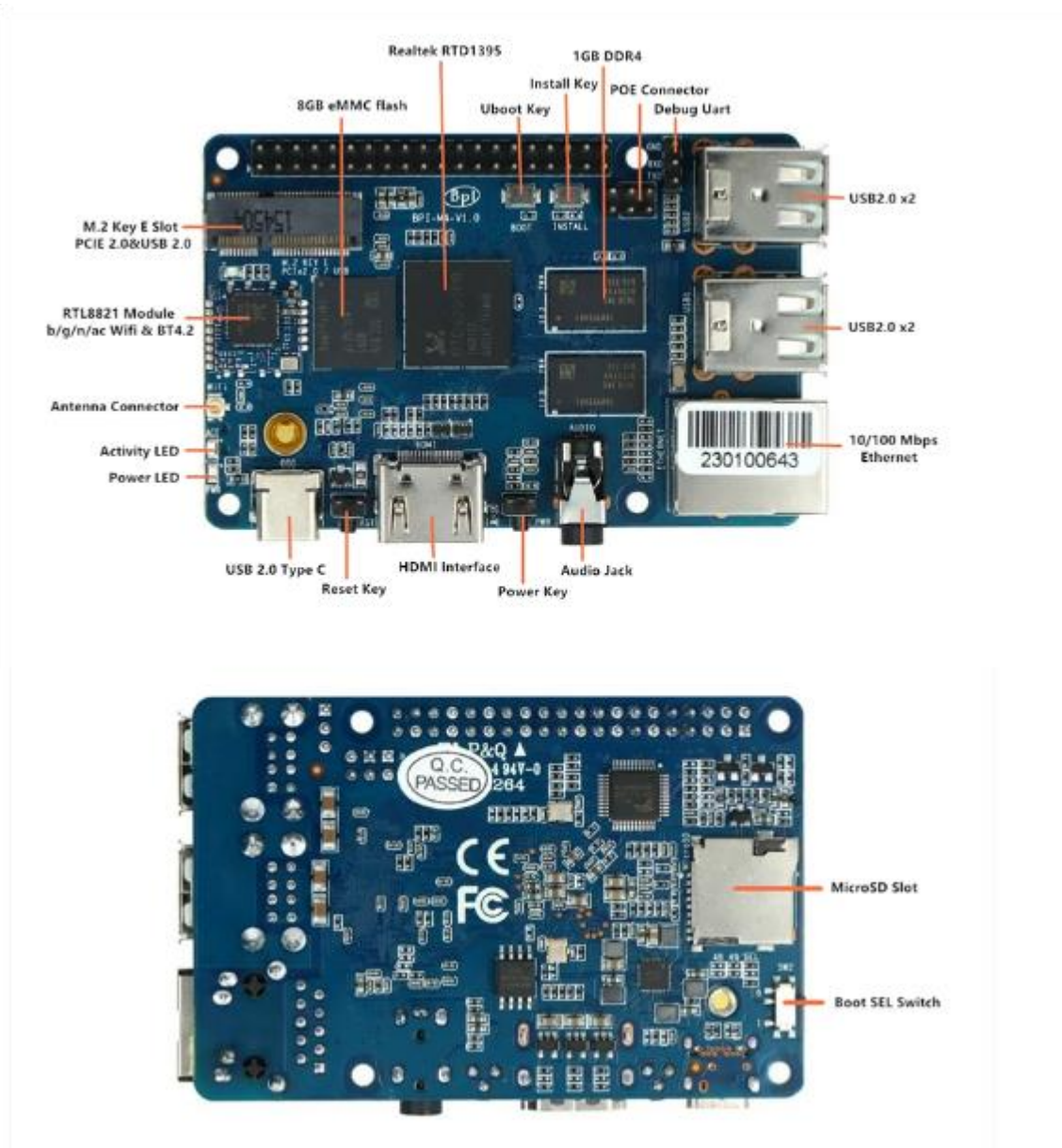


Banana Pi BPI-M4



Hardware spec

HardWare Specification of Banana pi BPI-M4	
CPU	Realtek RTD1395 ARM Cortex-A53 Quad-Core 64 Bit
GPU	Mali 470 MP4 GPU OpenGL ES 1.1/2.0
Memory	1 GB DDR4 (option 2 GB)
Storage	MicroSD slot with support for up to 256GB expansion and 8G eMMC flash with support for up to 64GB

Network	10/100 Mbit/s Ethernet + Wi-Fi 802.11 b/g/n/AC + Bluetooth 4.2
Video Output(s)	HDMI port and multi-channel audio output support 1080P H.264 H.265 2K/4K
Audio Output(s)	3.5mm jack and HDMI
PCIE	M.2 Key E slot PCIE 2.0 and USB 2.0
USB ports	USB 2.0 PORT (x4), USB 2.0 TYPE C(x1)
GPIO	40 Pin Header : GPIO (x28) and Power (+5V, +3.3V and GND). GPIO pins can be used for UART, I2C, SPI or PWM
Switches	Reset, Power and U-boot
LED	Power Status and Activity status
Power Source	5 volt @2A via Micro USB (TYPE C) or PoE support
Size & Weight	92x60mm, 48g
OS	Android and Linux

GPIO PIN define

Banana Pi BPI-M4 has a 40-pin GPIO header Following is the Banana Pi GPIO Pinout:

40 PIN GPIO of Banana pi BPI-M4			
GPIO Pin Name	Default Function	Function2 : GPIO	Function3
CON1-P01	VCC-3V3		
CON1-P02	DCIN		

CON1-P03	I2C1_SDA	GPIO-17	
CON1-P04	DCIN		
CON1-P05	I2C1_SCL	GPIO-16	
CON1-P06	GND		
CON1-P07	PWM1	GPIO-21	
CON1-P08	UR1_TX	GPIO-9	
CON1-P09	GND		
CON1-P10	UR1_RX	GPIO-8	
CON1-P11	SDIO-D0	GPIO-42	
CON1-P12	AIO_BCK	GPIO-3	
CON1-P13	SDIO-D1	GPIO-43	
CON1-P14	GND		
CON1-P15	SDIO-D2	GPIO-44	
CON1-P16	UR1_RTS	GPIO-11	
CON1-P17	VCC-3V3		
CON1-P18	UR1_CTS	GPIO-10	
CON1-P19	GSPI-MOSI	GPIO-31	

CON1-P20	GND		
CON1-P21	GSPI-MISO	GPIO-18	
CON1-P22	GPIO-47	GPIO-47	
CON1-P23	GSPI-SCK	GPIO-19	
CON1-P24	GSPI-CS	GPIO-20	
CON1-P25	GND		
CON1-P26	PWM2	GPIO-22	
CON1-P27	SDIO-D3	GPIO-45	
CON1-P28	PWM3	GPIO-23	
CON1-P29	SDIO-CLK	GPIO-41	
CON1-P30	GND		
CON1-P31	SDIO-CMD	GPIO-40	
CON1-P32	SPDIF	GPIO-50	
CON1-P33	AIO_CK	GPIO-4	
CON1-P34	GND		
CON1-P35	AIO_LRCK	GPIO-2	
CON1-P36	GPIO-53	GPIO-53	

CON1-P37	GPIO-34	GPIO-34	
CON1-P38	AI_SD	GPIO-5	
CON1-P39	GND		
CON1-P40	AO_SD	GPIO-6	

UART specification:

The header CON2 is the UART interface. For developers of Banana Pi, this is an easy way to get the UART console output to check the system status and log message.

Uart PIN define of Banana pi BPI-M4		
CON2 Pin Name	Default Function	GPIO
CON2-P1	GND	
CON2-P2	UART0-RX	
CON2-P3	UART0-TX	