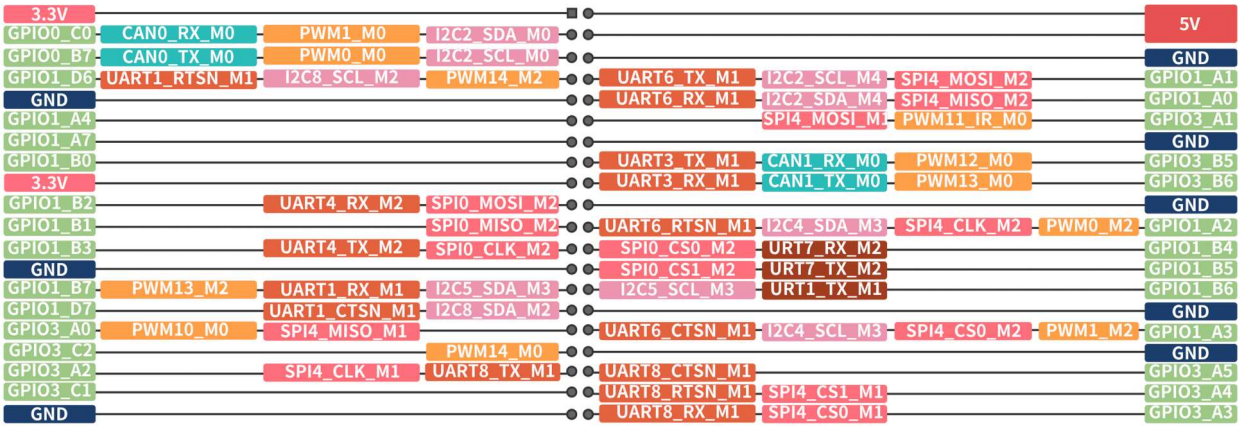
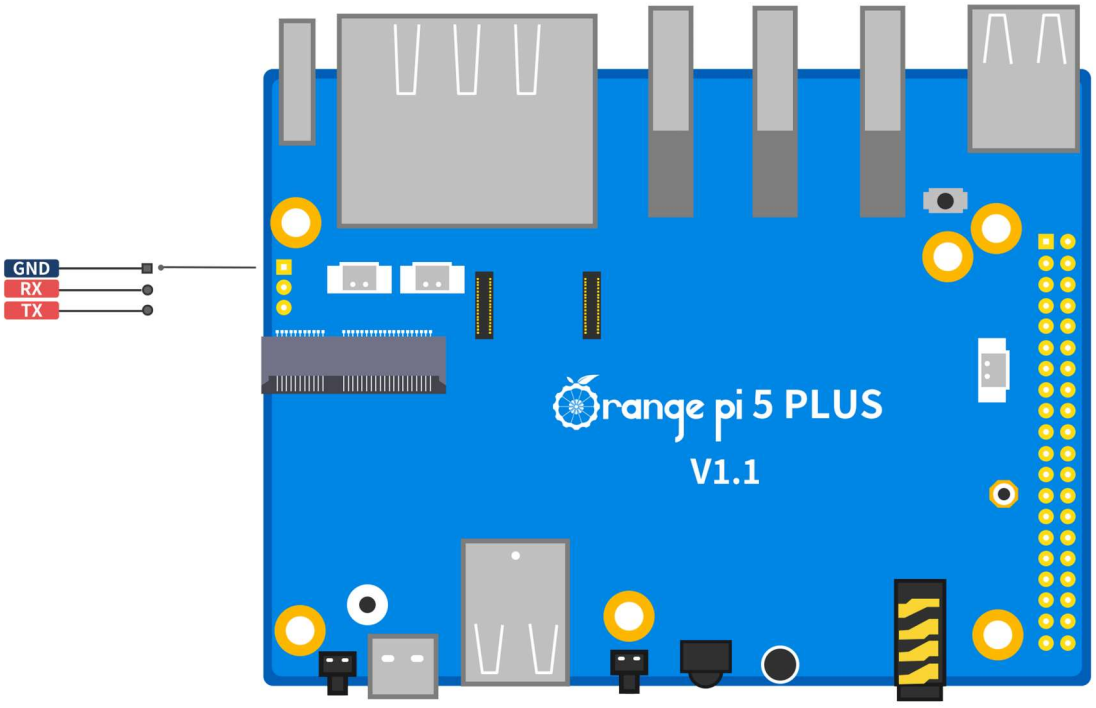
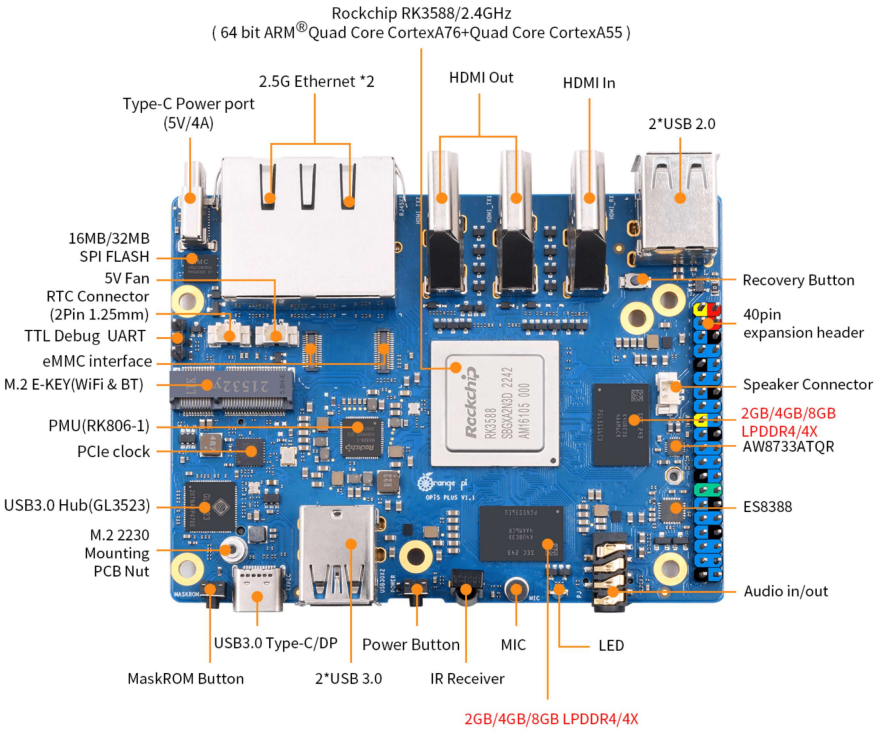
Orange Pi 5 Plus Pin Definition

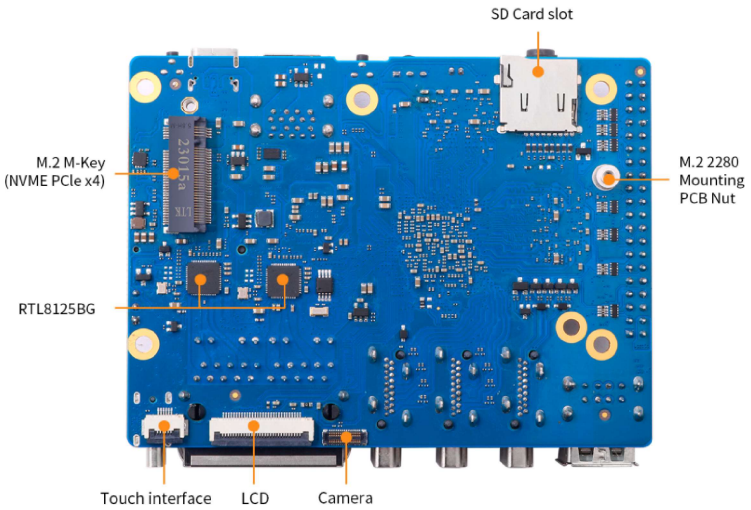




Product display



Top View



Bottom View

Hardware Parameters

SoC	Rockchip RK3588 (8nm LP process)
CPU	• 8-core 64-bit processor • 4 x Cortex-A76(2.4GHz), 4 x Cortex-A55(1.8GHz) and separate NEON co-processors
GPU	• Arm Mali-G610 • Built-in 3D GPU • Compatible with OpenGL ES1.1/2.0/3.2, OpenCL 2.2 and Vulkan 1.2
NPU	Embedded NPU supports INT4/INT8/INT16/FP16 mixed operation, with up to 6Tops computing power
PMU	RK806-1
RAM	4GB/8GB/16GB （LPDDR4/4X）
Memory	• QSPI Nor FLASH: 16MB/32MB • MicroSD card slot: up to 128GB • eMMC socket: 16GB/32GB/64GB/128GB/256GB eMMC module can be attached • M.2 2280 slot for NVMe SSDs (PCIe 3.0 x4) up to 2,000 MB/s
USB	USB3.0 × 2 USB2.0 × 2 Type-C ×1

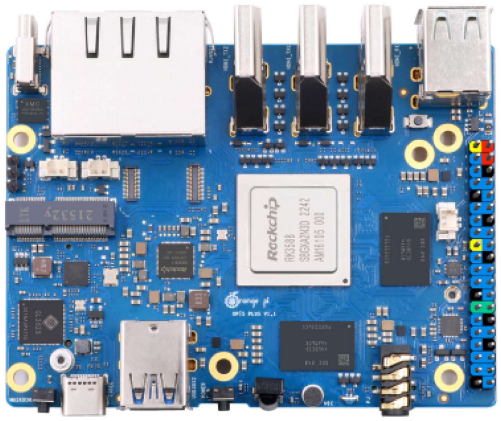
Video	• 2x HDMI 2.1 out up to 8k@60FPS • 1x Type-C with DP TX 1.4A，up to 8K@30FPS • 1x HDMI in with up to 4K@60FPS • 1 x MIPI DSI TX 4 Lane，up to 4K @60Hz
TP interface	1x 6Pin FPC socket
Camera	• 1XMIPI CSI 4 Lane
Audio	CODEC:ES8388 • 1xAudio 3.5mm jack with mic • 1xMIC In • 1xHDMI 2.1 eARC • 1xSPK
Ethernet	2xPCIe 2.5G LAN（RTL8125BG)
Expansion Port	40Pin dual row pins with the following multiplexing functions: UART, I2C, SPI, CAN, I2S, PDM, AUDDSM, SDIO, PWM, GPIO
PCIe M.2 M-KEY Socket	M.2 connector M key (bottom) for NVMe with PCIe 3.0 x4 lanes 2280 SSD
PCIe M.2 E-KEY Socket	M.2 connector E key (top) for connectivity with PCIe 2.0 x1/PCM/UART/USB2.0,2230 Wi-Fi6 /BT supported
Button	1×MaskROM key 1xRecovery 1×on/off key
Power Source	Support Type-C power supply, 5V@4A
IR receiver	1x IR receiver tube
LED	RGB LED side light

FAN	5V FAN
RTC	2Pin: RTC backup battery
Debugging	3Pin debug serial port (UART)
Supported OS	Orangepi OS（Droid）、Orangepi OS（Arch）、Ubuntu22.04、Debian11、Android12

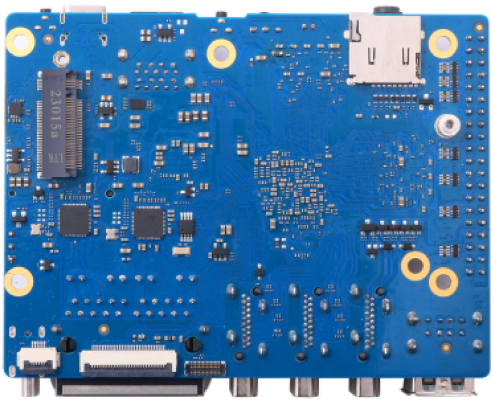
Appearance specification introduction

Dimension	100mm * 75mm
Weight	86.5g

Product display



Front



Back



45° angle


Rockchip