ROCK Pi 4 Model A 4GB

SKU 102991283

What is ROCK Pi

ROCK PI is a Single Board Computer (SBC) in an ultra-small form factor that offers class-leading performance while leveraging outstanding mechanical compatibility. The ROCK PI offers makers, IoT enthusiasts, hobbyists, PC DIY enthusiasts and others a reliable and extremely capable platform for building and tinkering their ideas into reality.

ROCK Pi 4 is a Rockchip RK3399 based SBC(Single Board Computer) by Radxa. It can run android or some Linux distributions. ROCK Pi 4 features a six-core ARM processor, 64bit dual channel 3200Mb/s LPDDR4, up to 4K@60 HDMI, MIPI DSI, MIPI CSI, 3.5mm jack with mic, 802.11 ac WIFI, Bluetooth 5.0, USB Port, GbE LAN, 40-pin color expansion header, RTC. Also, ROCK Pi 4 supports USB PD and QC powering.

Class-Leading Performance

ROCK Pi has a modern and powerful hexa-core ARM-based processor, RK3399 inside, it offers significantly improved performance versus other popular SBC boards. All models are equipped with LPDDR4 3200Mb/s RAM and optional high-performance eMMC modules, boost all applications.

Maker Friendly, IoT Connectivity

ROCK Pi features maker friendly expansion options, including a 40-pin GPIO interface that allow for interfacing with range inputs from buttons, switches, sensors, LEDs, and much more. ROCK Pi also features a Gbit LAN for the network, with dedicated bus and controller, it works without latency under heavy load network applications. On board 802.11 ac wifi offers 2.4G&5G WLAN connectivity. With Bluetooth 5.0, ROCK Pi benefits-improved Bluetooth speed and greater range. ROCK Pi also features one USB 3.0 host and one USB 3.0 OTG ports, each 5Gbps/s, working independently. The USB 3.0 OTG can work as a USB device such as Android ADB or USB gadgets. A hardware switch is provided for OTG mode switch.

AI Capabilities

ROCK Pi supports mainstream AI stack with GPU acceleration. Furthermore, a dedicated hardware NPU accelerator coming up next for ROCK Pi will boosts complex Machine Learning algorithm and reduce the power. Industrial standard MIPI CSI connector makes it easy to connect existing cameras to ROCK Pi and ROCK Pi also supports industrial standard MIPI DSI for LCD and touch screen. With the hardware-accelerated algorithm, it's great for Computer Vision application, Robotics and much more

Processor	64bit hexa core processor
	Rockchip RK3399
	Dual Cortex-A72, frequency 1.8Ghz with quad Cortex-A53, frequency 1.4Ghz
	Mali T860MP4 GPU, supports OpenGL ES 1.1 /2.0 /3.0 /3.1 /3.2, Vulkan 1.0, Open CL 1.1 1.2, DX11.

Memory	LPDDR4
	64bit dual channel LPDDR4@3200Mb/s, 4GB
Storage	eMMC module
	Optional industrial compatible high-performance eMMC module, 8G/16G/32G/64G/128G available
	uSD card
	uSD slot supports up to 128G uSD card
	M.2 SSD
	M.2 connector supports up to 2T M.2 NVME SSD
Display	HDMI
	HDMI 2.0 up to 4k@60
	MIPI DSI
	MIPI DSI 2 lanes via FPC connector
	HDMI and MIPI DSI can work at the same time, support mirror mode or extend mode.
Audio	3.5mm jack with mic
	HD codec that supports up to 24-bit/96kHz audio.
Camera	MIPI CSI

	MIPI CSI 2 lanes via FPC connector, support up to 8MP camera
Wireless	None
USB	USB 3.0 OTG x1
	hardware switch for host/device switch, the upper one
	USB 3.0 HOST x1
	dedicated USB3.0 channel, the lower one
	USB 2.0 HOST x2
Ethernet	GbE LAN
IO	40-pin expansion header :
	- 1 x UART
	- 2 x SPI bus
	- 2 x I2C bus
	- 1 x PCM/I2S
	- 1 x SPDIF
	- 1 x PWM
	- 1 x ADC
	- 6 x GPIO

	- 2 x 5V DC power in
	- 2 x 3.3V power pin
Others	RTC
	RTC battery connector for time backup(optional)
Power	USB PD
	Support USB Type C PD 2.0, 9V/2A, 12V/2A, 15V/2A, 20V/2A
	Qualcomm® Quick Charge™
	Support QC3.0/2.0 adapter, 9V/2A, 12V/1.5A
Size	85mm x 54mm

Part List:

1 x ROCK Pi 4 Model A 4GB

ECCN/HTS

ECCN	3A991.a
HSCODE	8471504090
UPC	