

# AI 电视 Rockchip RK3588 电视芯片 电视芯片 Android TV 电视



## 电视芯片

电视芯片	Rockchip RK3588 电视芯片 TV 电视
CPU	Rockchip RK3588 电视芯片 ARM, 电视芯片 Cortex-A76 @2.4GHz 电视芯片 Ccore Cortex-A55@1.8GHz
GPU	ARM Mali-G610 MC4, OpenGL ES 1.1/2.0/3.1/3.2, Vulkan 1.1, 1.2, OpenCL 1.1,1.2,2.0 电视芯片 电视 2D 电视芯片 电视 电视
NPU	6 TOPS(int4/int8/int16/FP16/BF16/TF32 电视芯片 电视)
电视	4GB LPDDR4X(2GB*2, 电视 32GB 电视)
电视 电视	32G
WiFi	电视 WiFi 电视, 802.11 ax/ac/a/b/g/n
OS	电视电视 12
电视电视	电视电视 5.0

## 电视芯片 电视芯片

电视 电视	C 电视(12V/2A)
电视电视 电视	1*TF 电视 电视
电视 电视	1*PCIE 电视 电视 电视 电视
电视 电视	1* 电视 电视 电视 电视
RTC 电视	CR1220 电视 电视 电视
电视 电视	2*UART 电视 电视
电视	1* 10/100/1000Mbps RJ45 电视
WiFi	电视 WiFi 电视, 802.11 ax/ac/a/b/g/n
USB 电视	1*USB3.0 电视
	1*USB2.0 电视
	1* USB2.0 电视 电视 4 电视 电视
LED 电视	1*3 电视 LED 电视
LCD 电视电视	1*4 电视 32 电视 MIPI 电视电视
	1* 电视 c 电视 30 电视 EDP 电视电视
电视 电视 电视电视	1*HD 电视 电视, HD 2.1 电视 8K@60Hz 电视 电视
	1*DP 电视 电视, DP1.4 电视 4K@60Hz 电视 电视
电视 电视	1*MIPI-CSI(电视 电视)
	1*HD 电视 电视, 电视 HD 2.0 4K@60Hz 电视 电视
	1*电视
电视 电视电视	1*L/R, 电视 电视 电视 电视 电视(3.5mm 电视 电视)
	1*SPK
	7*GPIO, 3.3V 电视
	4*I2C, 3V 电视, 电视电视 电视
电视 电视电视	1*ADC
	2*PWM
	1*5V 电视

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# High-Performance AI Development Board

The RK3588 is a flagship AIoT chip built on 8nm LP process, featuring an octa-core CPU (up to 2.4GHz), ARM Mali-G610 MP4 GPU, and a 6TOPs NPU for AI acceleration. It also integrates a 48MP ISP with HDR & 3DNR, supporting major deep learning frameworks for enhanced AI performance.



**RK3588**  
Octa-core CPU



**Mali-G610**  
MC4 1GHz GPU



**6TOPs**  
NPU



**8K Codec**  
H.265 HEVC



**4~32GB RAM**  
**8~128GB ROM**



**WIFI6**  
**1000M LAN**



**BT5.x**



**Android/Linux**

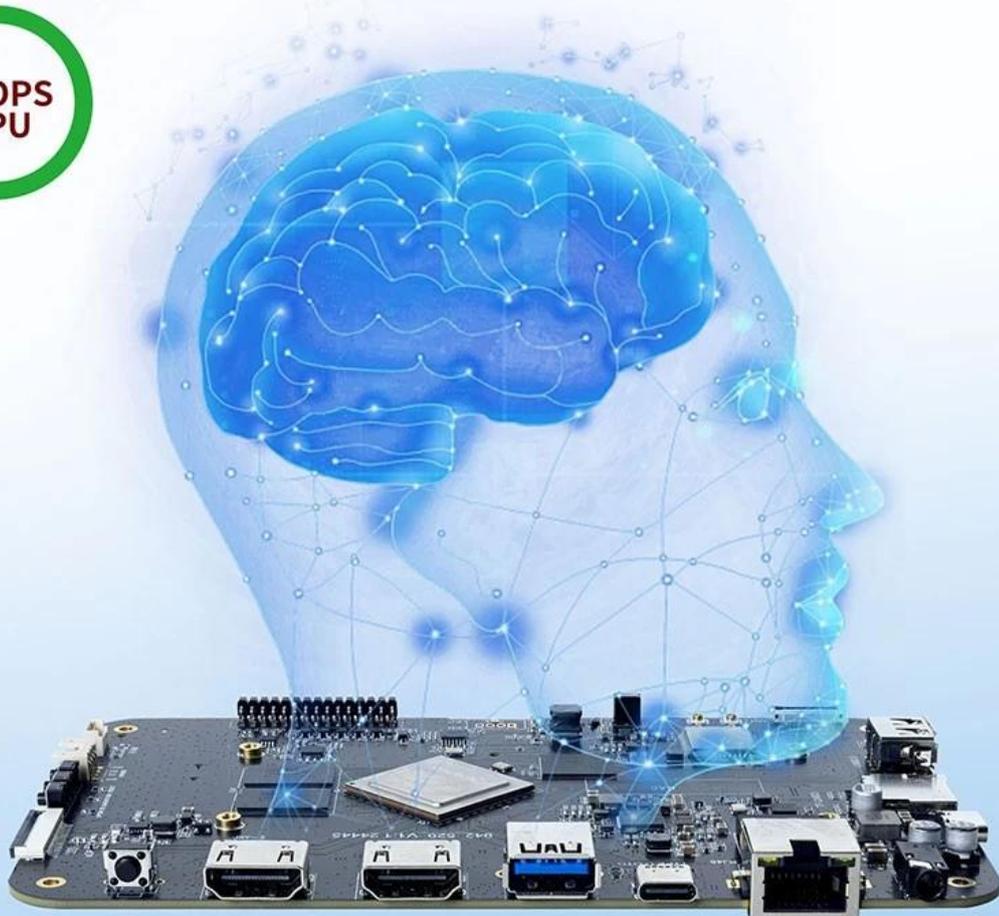
# RK3588---Next-Generation Flagship AIoT CPU

Powered by the RK3588 octa-core 64-bit chipset, with ARM Mali-G610 MP4 GPU and 6TOPs AI NPU for superior AI performance and expanded possibilities.



# 6 TOPS Powerful Computing Boosts AI Applications

Powerful NPU with 6TOPS performance, supporting INT4/INT8/INT16 operations. Compatible with TensorFlow, MXNet, PyTorch, Caffe, and more. Efficiently accelerates convolution and traditional image processing operations like Gaussian filter, median filter, Laplacian, and Sobel, ideal for edge computing and vision control applications.



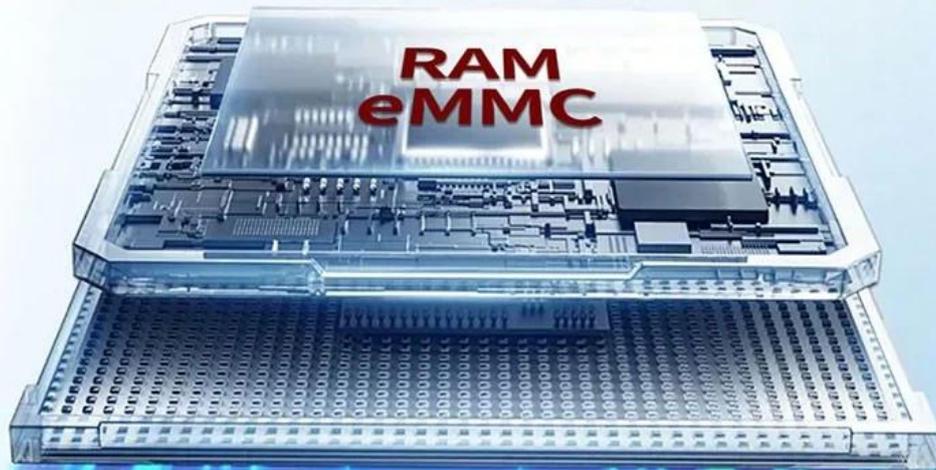
## 8K Video Encoding & Decoding

Supports 8K@60fps H.265/VP9 decoding and 8K@30fps H.265/H.264 encoding, with up to 32x 1080P@30fps decoding and 16x 1080P@30fps encoding. Delivers stunning 8K video quality.



## 32GB Large RAM & 128GB EMMC

Up to 32GB RAM and 128GB eMMC storage, surpassing previous memory limits for faster response and meeting the demands of high-memory, high-storage applications.



32GB  
128GB

# Rich Expansion Interfaces

Multiple video output and input interfaces support simultaneous 8K@60fps video output and 4K@60fps video input. It also supports quad-screen display for high-definition interactive scenarios. The board offers rich expansion interfaces for diverse industry applications.



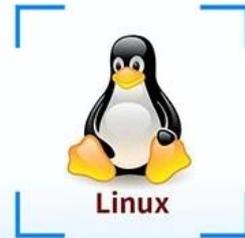
# Powerful Network

Onboard Gigabit Ethernet, dual-band WiFi 6 (2.4GHz/5GHz), and Bluetooth 5.3 ensure seamless network connectivity and flexible support for various application needs.



# Open System Architecture

Multi-system compatibility supporting Android 12 and Debian 11, with deep customization of the Linux kernel for remote upgrades and management, enhancing operational efficiency and ease.



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\*CPU □ RK3588 □□□□ ARM □□□□(Quad Core Cortex-A76 □ Quad Core Cortex-A55)□□ □□ □ □□□□ □□ 2.4GHz□□□. □□ □□ Mali-G610 GPU□ □□□□ □□□ NPU □□□ □□□ □□□□ 6TOP□ □□□□□.

\*□□ □□: 8nm LP.

\*□□□ LCD □□ □□□□□: 4□□ MIPI, □□ □□ EDP.

\*I2C □□□□□□ □□□□ □□□□□.

\*□□ □□□□ □□□□ TF □□ □□ PCIE □□□□□ □□□□□.

\*□□ □□ □ □□ □□, □□ □□ UART □□ □□ □ □□ □ □□□ 7□□ GPIO□ □□□□□.

\*□□□□□ 12 OS □□

□□□ AI □□ **Rockchip RK3588** □□□□□ □□□ □□□ **Android TV** □□ □□□ □□□ □□□ □ □□ □□□□ □□□ □□□ □□□□□□ □□□□□□. □□□ □□□□□□□ □□ □□□ □ TV □□□ □□□ □□□ □□□ □□ □□□ □□□ □□□ □□□□□ □□□□□□.

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Rockchip RK3588 □□□□□ □ TV □□□ □□□□□. □□ □□ □□□□ 4□□ Cortex-A76 □ 4□□ Cortex-A55 □□□ □□□□. □ □□

