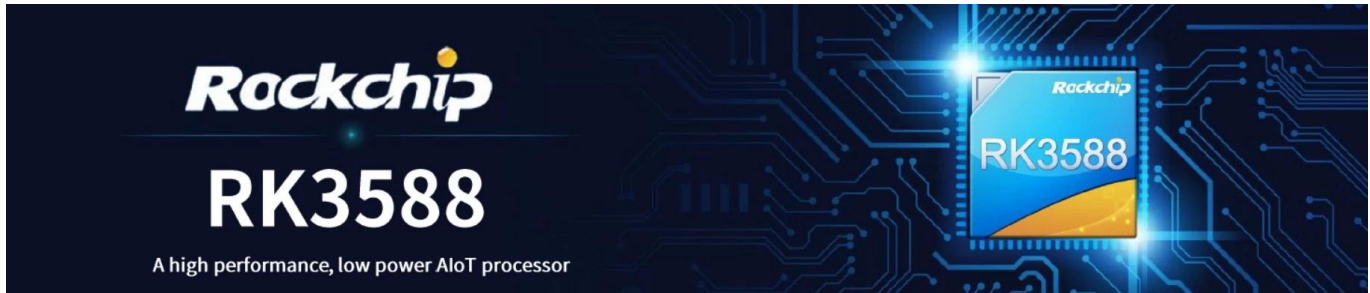


# Android TV Rockchip RK3588 AI



Rockchip RK3588 Android TV  
 Rockchip RK3588 ARM Quad-Core Cortex-A76 @2.4GHz Quad-Core Cortex-A55@1.8GHz  
 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  
 6 int4/int8/int16/FP16/BF16/TF32  
 4GB LPDDR4X (2GB-2 32B)  
 32G  
 802.11 ax/ac/a/b/g/n  
 12  
 5.0

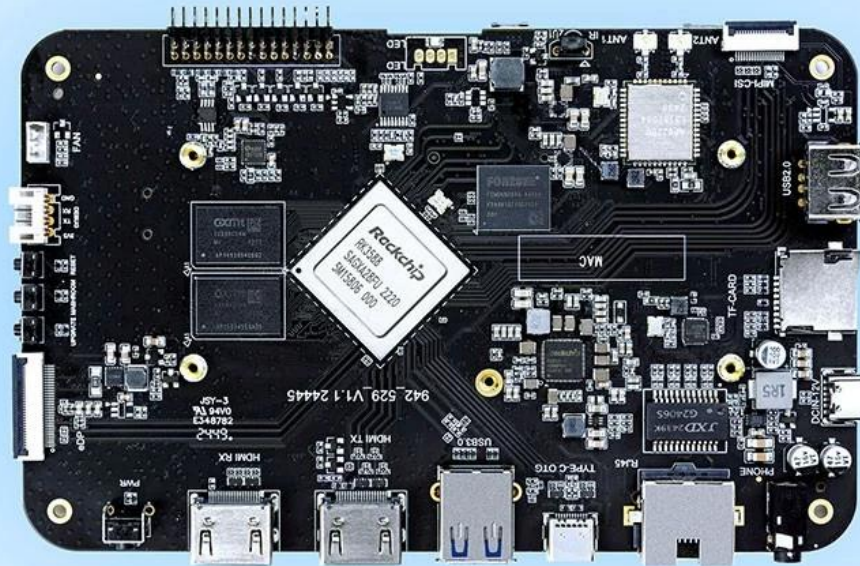
Type-C (12V/2A)  
 1 - TF  
 1 - PCIE  
 1 -  
 CR1220  
 2 - UART  
 1-10/100/1000 Mbps RJ45  
 802.11 ax/ac/a/b/g/n  
 1 - USB3.0  
 1 - USB2.0  
 1 - USB2.0 4  
 1 - LED  
 1 - MIPI 32  
 1 - EDP Dual-cChannel 30  
 1 - HD 2.1 8K @ 60Hz  
 1 - DP DP1.4 4K @ 60Hz  
 1 - MIPI-CSI (32)  
 1 - HD 2.0 4K @ 60Hz  
 1 -  
 1 - L/R, 3.5  
 1 -  
 7 - GPIO, 3.3V  
 4 - I2C, 3V,  
 1-  
 2-  
 1-5V

MPEG-1, MPEG-2, MPEG-4, H.263, H.264, H.265, VC-1, VP9, VP8, MVC AV1@MMU  
 H.264 AVC/MVC Main10 L6.0: 8K@30fps(7680-4320);  
 VP9/2 L6.1: 8K@60fps(7680-4320);  
 H.265 HEVC/MVC Main10 L6.1: 8K@60fps(7680-4320);  
 AVS2 0/2 L10.2.6: 8K@60fps(7680-4320);  
 AV1 8/10 L5.3: 4K@60fps(3840-2160);  
 MPEG-2 MP 1080p@60fps(1920-1088);  
 MPEG-1 MP 1080p@60fps(1920-1088);  
 VC-1 AP 3: 1080p@60fps(1920-1088);  
 VP8 2 - 1080p@60fps(1920-1088)  
 MP3,AAC,FLAC,WAV

晶片: RTL8111HS  
網路規格: 10/100/1000 Mbps  
晶片: AP6275P  
WiFi: 802.11ax/ac/a/b/g/n 2.4 Gbps  
2.4GHz 5GHz  
MU-MIMO  
BT: 5.BT 5.0 BLE (BT)  
BT  
HDMI\_TX 8K@60fps(7680x4320)  
EDP 4K@60fps(3840x2160)  
MIPI\_CSI 4K@60fps(3840x2160)  
DP(type-c) 4K@ 60fps(3840x2160)  
HDMI\_RX 4K@60fps(3840-2160)  
MIPI\_DSI (DSI)  
PIP (PIP)  
HYM8563

# 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**  
8K Codec  
H.265 HEVC



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



**WiFi6**  
**1000M** LAN



**BT5.x**



**Android/Linux**

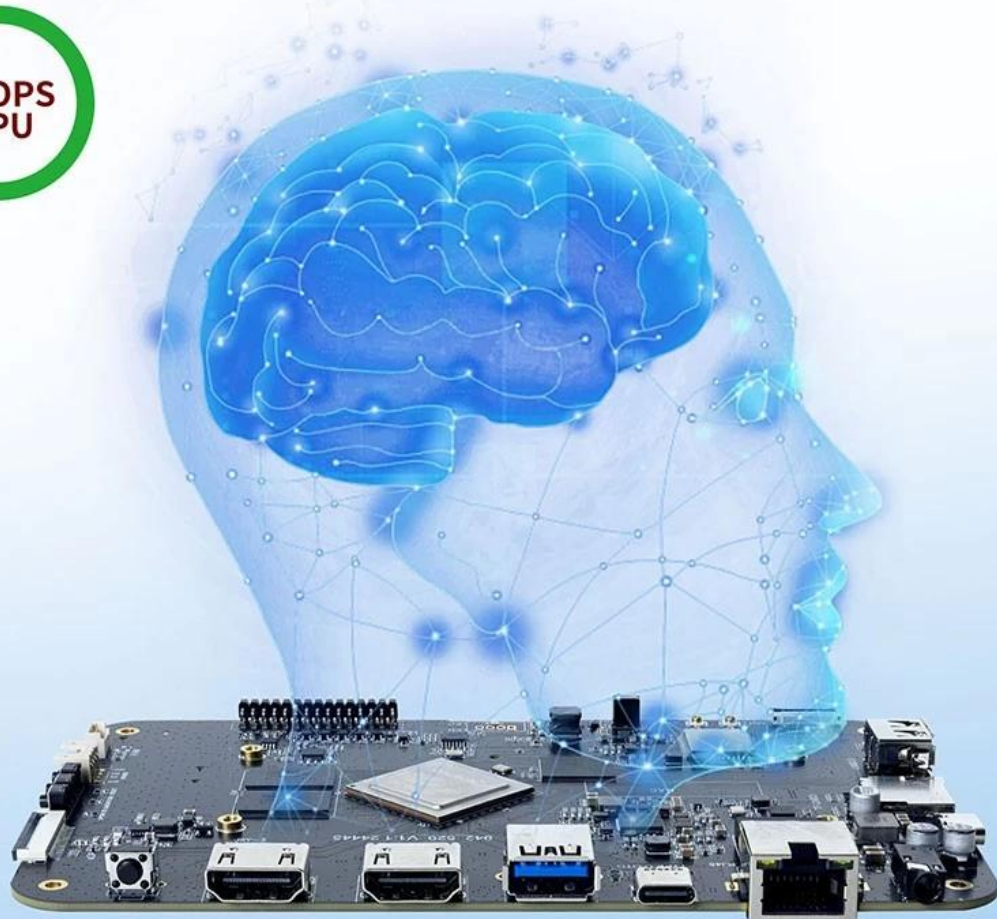
# RK3588---Next-Generation Flagship AIoT CPU

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.



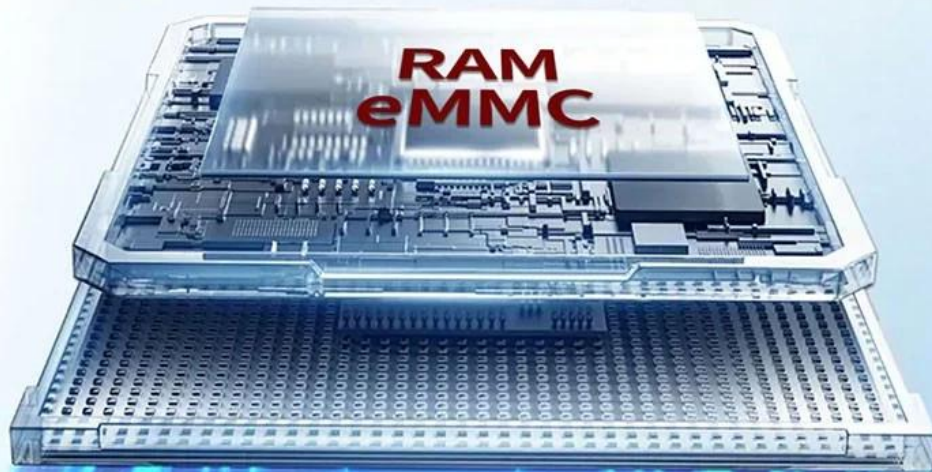
## 8K Video Encoding & Decoding

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

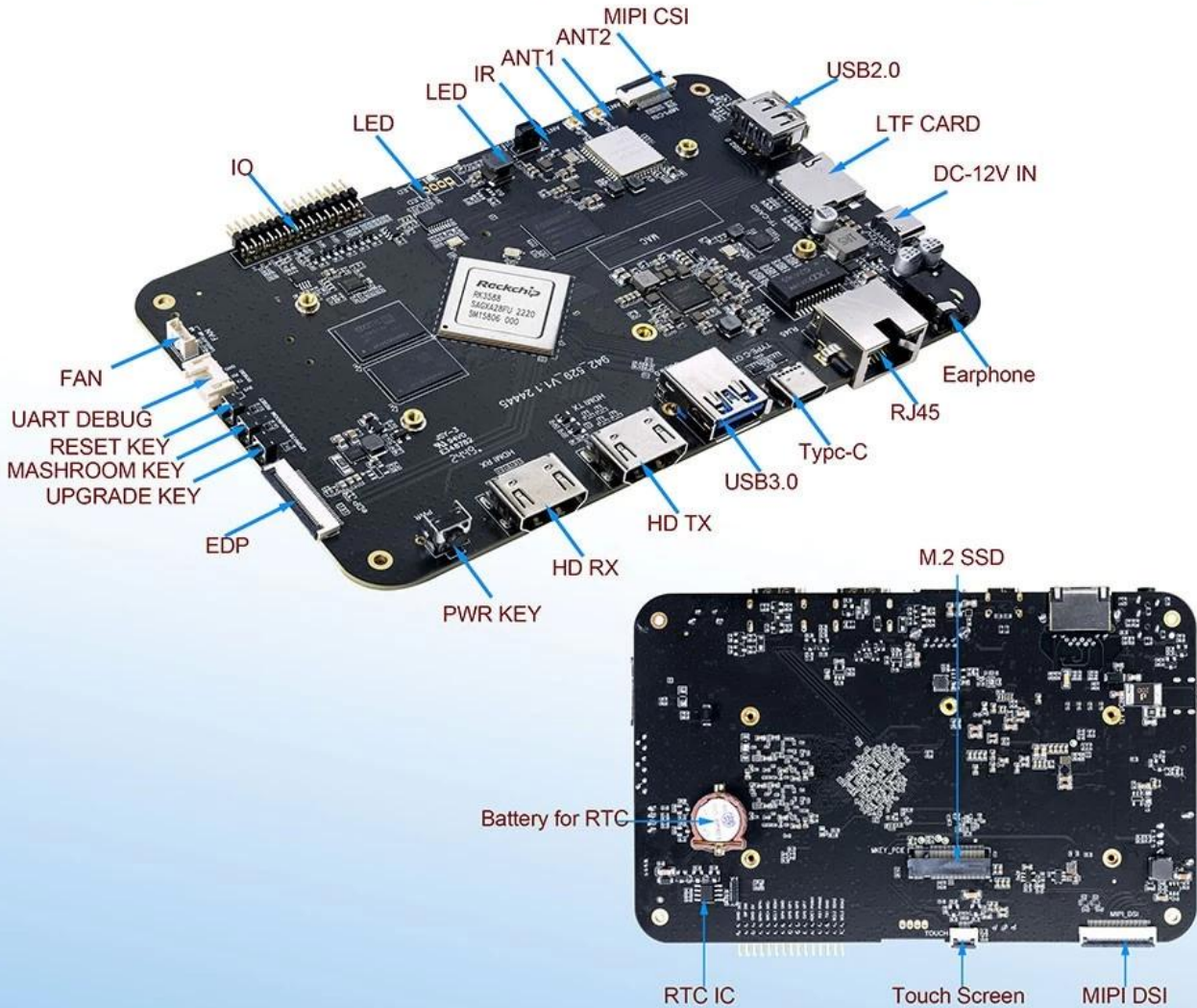
Up to 32GB RAM and 128GB eMMC storage, surpassing previous memory limits for faster response and meeting the demands of high-memory, high-storage applications.



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.





Rockchip RK3588 8K Ultra HD AI

### Rockchip RK3588: 8K Ultra HD AI

Rockchip RK3588 Cortex-A76 Cortex-A55 8K AI

### 8K Ultra HD

8K HDR10

### AI

AI RK3588 AI

### Android

Android Google Play Store

WiFi

WiFi 5.0 HDMI, USB-C PCIe WiFi 6

Android TV

Android TV

- 8K AI

