

Rockchip RK3588 Octa-Core 8K Ultra HD



Rockchip RK3588
 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
 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

網路規格: 支援 10/100/1000 Mbps 網路規格

晶片:

晶片: AP6275P

晶片: WiFi:

晶片: 802.11ax/ac/a/b/g/n

晶片: 2.4 GHz 及 5GHz

晶片: MU-MIMO

晶片: BT:

晶片: BT:

晶片: BLE (低功耗藍牙)

晶片: BT

晶片: BT

晶片: HDMI TX 8K@60fps(7680x4320)

晶片: EDP 4K@60fps(3840x2160)

晶片: MIPI_CSI 4K@60fps(3840x2160)

晶片: DP(type-c) 4K@ 60fps(3840x2160)

晶片: HDMI RX 4K@60fps(3840-2160)

晶片: MIPI_DSI (顯示晶片)

晶片: PIP (顯示晶片)

晶片: HYM8563

晶片: HYM8563

晶片: PIP (顯示晶片)

晶片: PIP (顯示晶片)

晶片: PIP (顯示晶片)

晶片: PIP (顯示晶片)

晶片: PIP (顯示晶片)

網路規格

網路規格

網路規格

網路規格

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

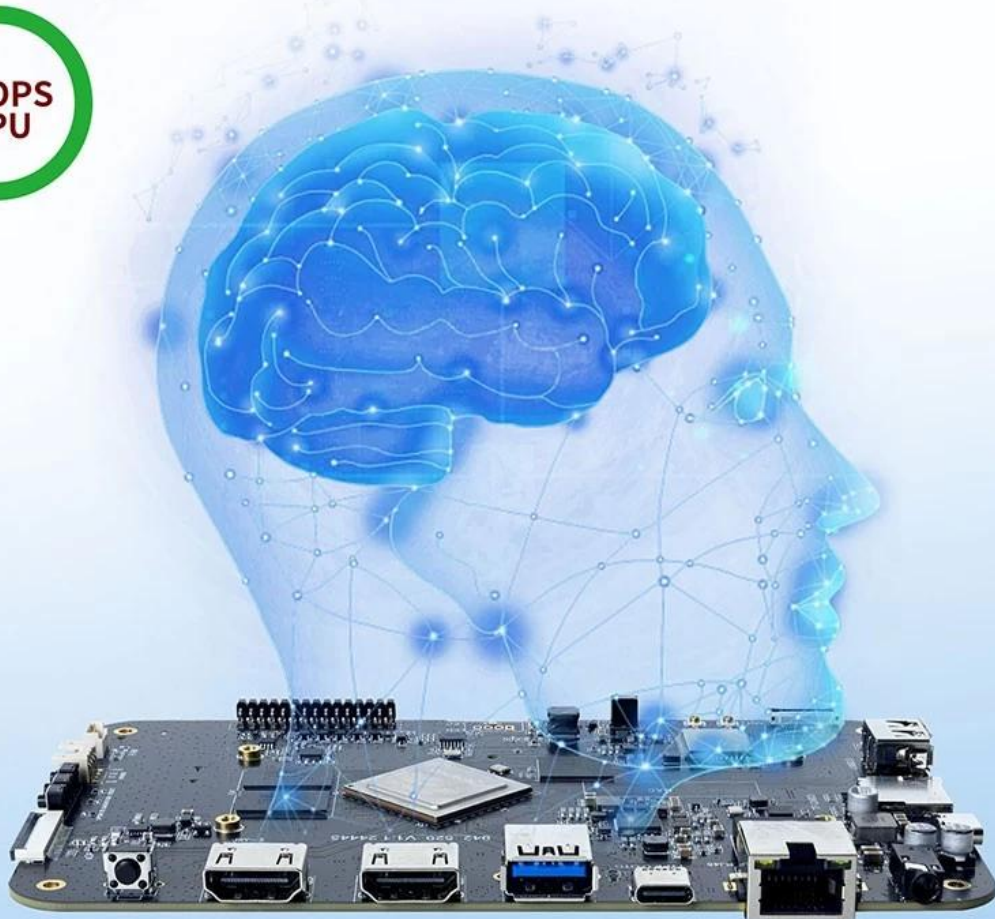
RK3588---Next-Generation Flagship AIoT CPU

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.



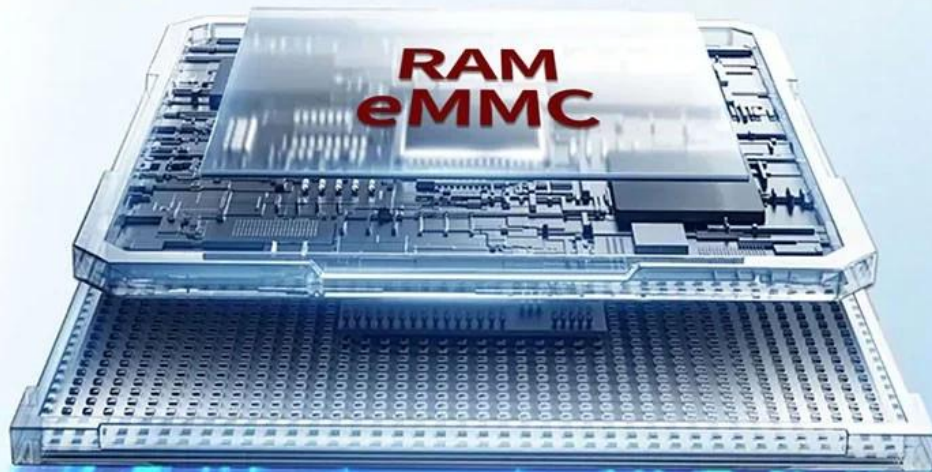
8K Video Encoding & Decoding

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

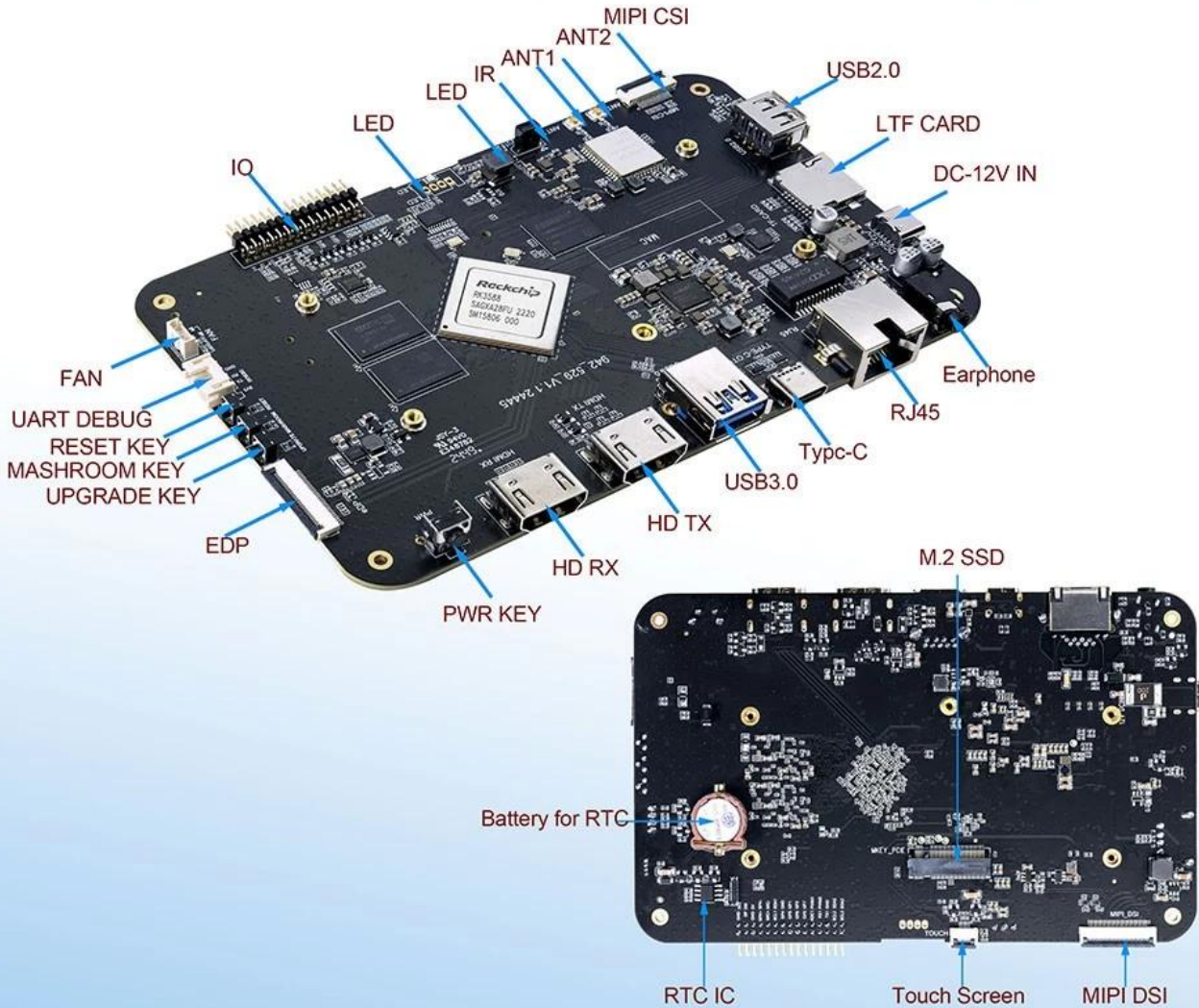
Up to 32GB RAM and 128GB eMMC storage, surpassing previous memory limits for faster response and meeting the demands of high-memory, high-storage applications.



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 Octa-Core AI
Cortex-A76 Cortex-A55
MP4 GPU 8K

Rockchip RK3588

Rockchip RK3588 Octa-Core
Cortex-A76 Cortex-A55
MP4 GPU 8K

8K Ultra HD

8K
HDR10

AI

AI
Rockchip RK3588

Android

Android
Google Play Store
Android

6, 5.0, HDMI 2.1, USB-C, PCIe

6, 5.0, HDMI 2.1, USB-C, PCIe

:

- 8K
- AI:
- AI:
- :
- :

###

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越
Rockchip RK3588 24核 AI 性能卓越
Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越
Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越
Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越

Rockchip RK3588 24核 AI 性能卓越