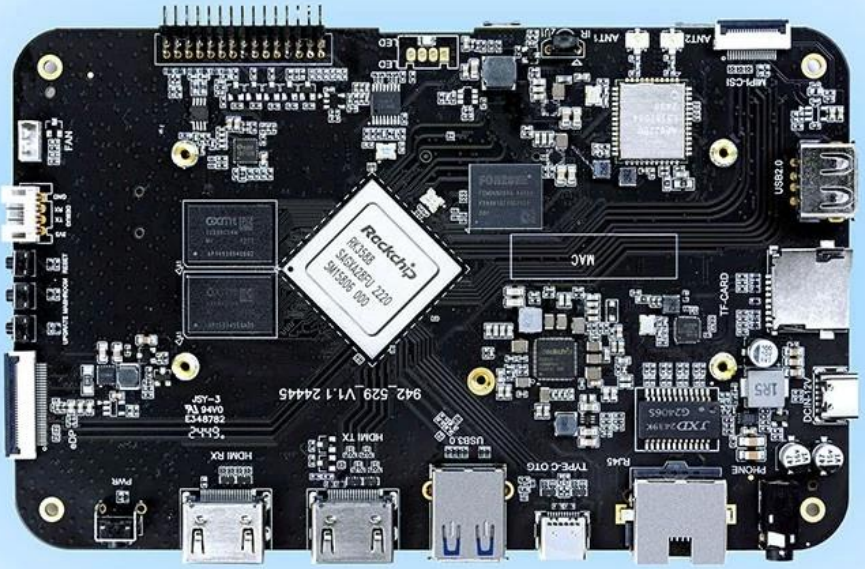
Ultra HD Streaming Media Player with Rockchip RK3588 Octa-Core CPU 4GB RAM 32GB ROM

Specifications	
Model No.	Rockchip RK3588 Streaming Media Player
CPU	Rockchip RK3588 Octa-Core ARM, Quad-Core Cortex-A76 @2.4GHz and Quad-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 Embedded high performance 2D image acceleration module
NPU	6 TOPS (Supports int4/int8/int16/FP16/BF16/TF32 Acceleration)
RAM	4GB LPDDR4X (2GB*2, Supports up to 32GB)
ROM	32G
WiFi	Built-in WiFi Module, 802.11 ax/ac/a/b/g/n
OS	Android 12
Bluetooth	Bluetooth 5.0
Hardware Interface	
Power input	Type-C Port (12V/2A)
Storage Extension	1*TF Card Slot 1*PCIE Hard Disk Data Port
Remote Control	1* Infrared Remote Control Receiver
RTC Battery	CR1220 Button Battery Onboard
Serial Port	2*UART Serial Port
Ethernet	1* 10/100/1000 Mbps RJ45 Port
WiFi	Built-in WiFi Module, 802.11 ax/ac/a/b/g/n
USB Port	1*USB3.0 Port 1*USB2.0 Port 1* USB2.0 Port Reserved 4-Pin socket
LED Indicator	1*Three-Color LED Indicator
LCD Interface	1*Four-Channel 32-Pin Sequential MIPI interface 1*Dual-cChannel 30-Pin Sequential EDP interface
Video Output Interface	1*HD Output Port, Support HD 2.1 up to 8K@60Hz output 1*DP Output Port, Support DP1.4 up to 4K@60Hz output
Video input	1*MIPI-CSI (dual-channel) 1*HD input Port, Supports up to HD 2.0 4K@60Hz input
Audio interface	1*MIC 1*L/R, Left and Right Sound Channel Output (3.5mm Headset Port) 1*SPK
Other interfaces	7*GPIO, 3.3V Voltage 4*I2C, 3V Voltage, Support Touch Screen 1*ADC 2*PWM 1*5V Cooling Fan

Software Performance	
Video&Audio CODEC	Decoding Performance: Supports MPEG-1, MPEG-2, MPEG-4, H.263, H.264, H.265, VC-1, VP9, VP8, MVC and AV1@MMU embedded real-time video decoding; Multi-channel parallel decoding, supporting lower resolutions; H.264 AVC/MVC Main10 L6.0: support 8K@30fps(7680*4320); VP9 Profile0/2 L6.1: Support 8K@60fps(7680*4320)); H. 265 HEVC/MVC Main10 L6.1: support 8K@60fps(7680*4320); AVS2 Profile 0/2 L10.2.6: Support 8K@60fps(7680*4320); AV1 main configuration file 8/10bit L5.3: Support 4K@60fps(3840*2160); The MPEG-2 supports up to MP: 1080p@60fps(1920*1088); The MPEG-1 supports up to MP: 1080p@60fps(1920*1088); VC-1 supports up to AP level3: 1080p@60fps(1920*1088); VP8 version2□1080p@60fps(1920*1088) Multi-Channel Audio Decoding: MP3,AAC,FLAC,WAV and other mainstream audio formats.
Ethernet	Module: RTL8111HS Performance: Support 10/100/1000 Mbps, providing stable and fast wired connection performance. Function: Support auto-negotiation function to automatically identify and configure network speed and duplex mode.
WiFi & BT	Module: AP6275P WiFi specifications: Support 802.11ax/ac/a/b/g/n for high-speed wireless network connectivity of up to 2.4 Gbps. Support 2.4GHz and 5GHz dual frequency bands, optimize signal intensity and interference minimize. Support MU-MIMO technology to improve the data transmission efficiency during multi-user connection. BT specifications: □BT 5.0, support all traditional BT features and high-speed transmission. □Support BLE (bluetooth low energy) technology. □Support multiple BT devices to connect simultaneously, ensuring stable connections and efficient communication..
Display Output	HDMI_TX supports up to 8K@60fps(7680x4320). EDP supports up to 4K@60fps(3840x2160). MIPI_CSI supports up to 4K@60fps(3840x2160). DP(type-c) supports up to 4K@ 60fps(3840x2160). Can be applied scene multi-screen display, different screen multi-display.
Input source	HDMI_RX supports up to 4K@60fps(3840*2160). MIPI_DSI(for camera) Suitable for PIP (picture-in-picture),conference machines and embedded external input source applications.
RTC	Chipset: HYM8563 This chip can maintain time operation through an external battery when the system is powered off, making it suitable for any application scenario that requires continuous tracking of time after power failure. It has basic alarm and timer functions, allowing you to set wake-up commands, which can be applied to timed on/off operations.

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
0cta-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.

8nm
LP process

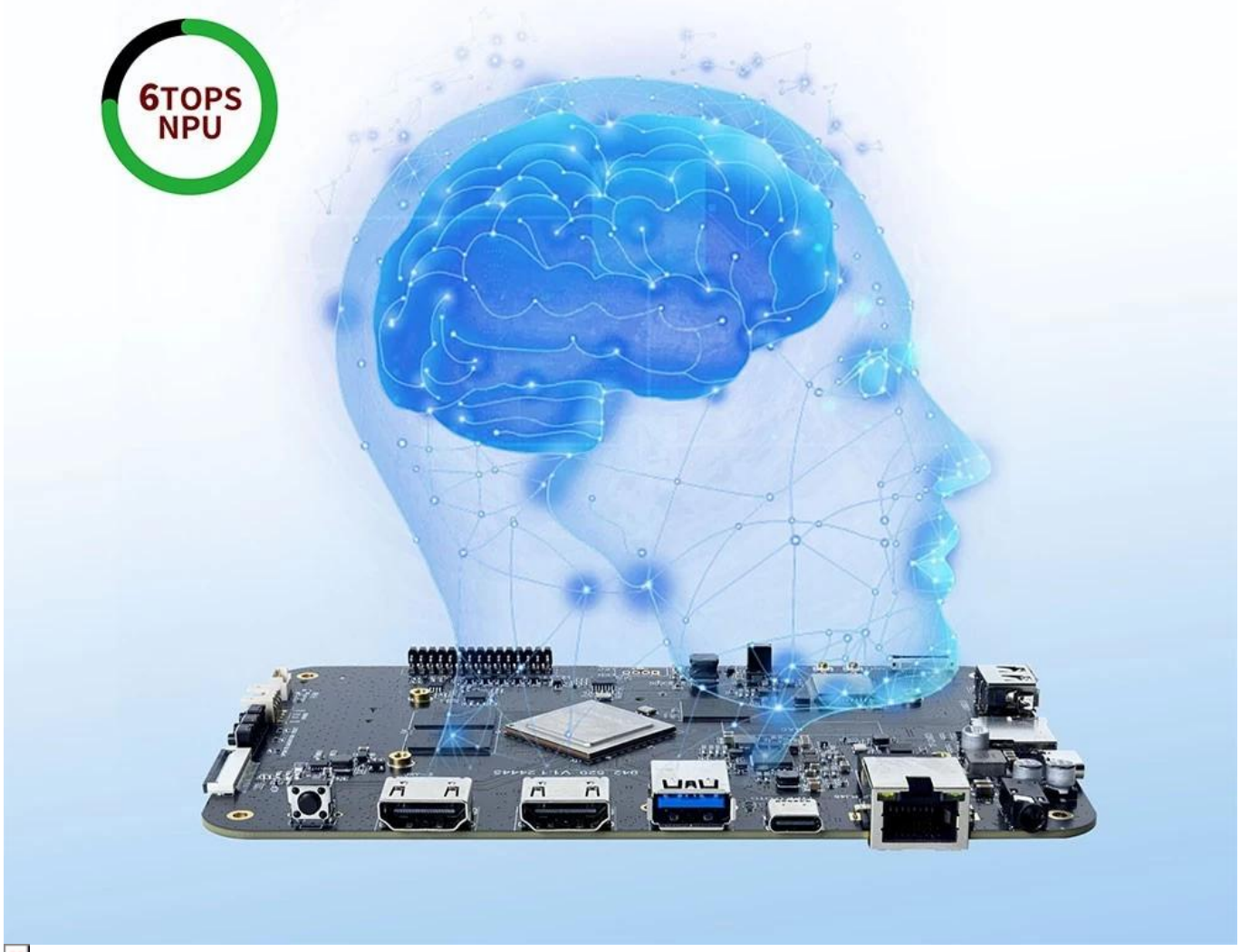
2.4 Ghz

Octa-core
A76+A55

6TOPS
NPU

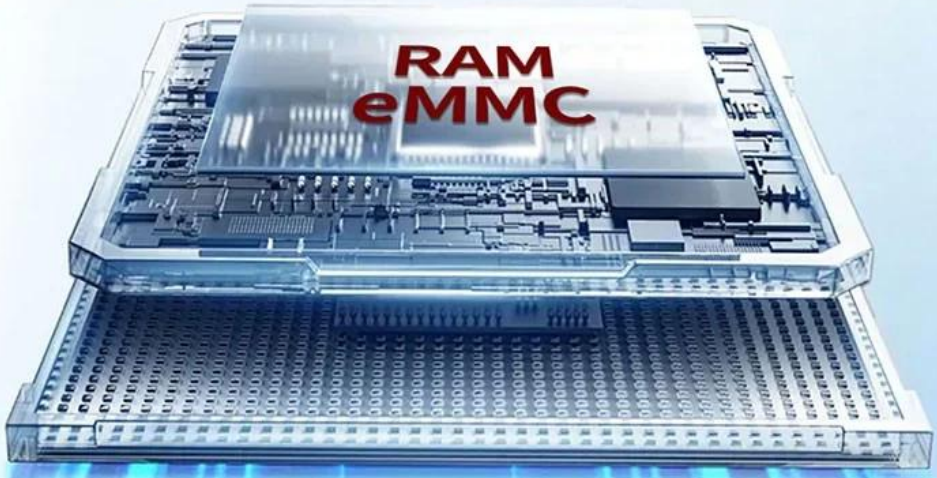
6 TOPS Powerful Computing Boosts AI Applications

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.



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.

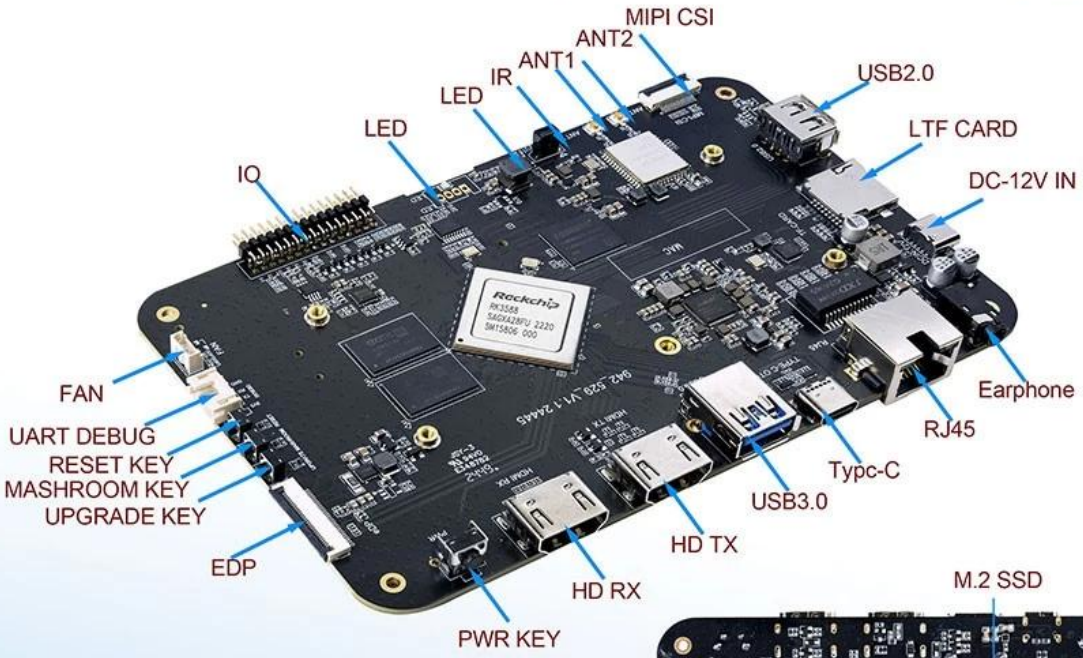


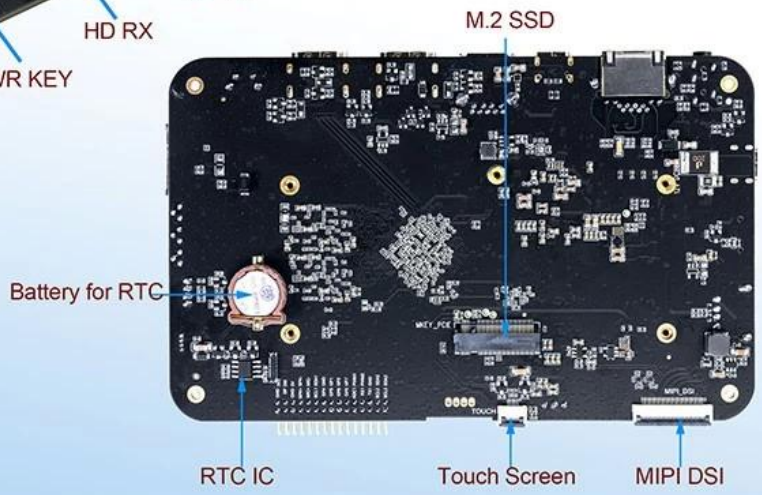
32GB

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.

Main Features
*The CPU is RK3588 Octa-core ARM processor (Quad Core Cortex-A76 and Quad Core Cortex-A55), with na maximum main frequency up to 2.4 GHz. It features with quad core Mali-G610 GPU, NPU computing power reaches 6TOPs with powerful performance.
*Manufacturing process: 8nm LP.
*With various LCD screen interfaces: four-channel MIPI, dual-channel EDP.
*Touch screen supporting the I2C interface.
*Support for TF card or PCIE drives as an additional storage extension.
*With multiple input and output extension, dual-channel UART serial port and seven-channel GPIO for input and output.
*With Android 12 OS

The **8K Ultra HD Streaming Media Player with Rockchip RK3588 Octa-Core CPU, 4GB RAM,**

and 32GB ROM is engineered to redefine entertainment and productivity. Combining cutting-edge hardware with a user-friendly interface, this device is perfect for high-resolution streaming, gaming, and professional applications.

Powerful Rockchip RK3588 Octa-Core CPU
At its core, the device is powered by the **Rockchip RK3588 Octa-Core processor**, delivering lightning-fast performance for demanding tasks. With four Cortex-A76 cores for high performance and four Cortex-A55 cores for power efficiency, this CPU handles multitasking with ease. The integrated **Mali-G610 MP4 GPU** ensures stunning graphics and smooth playback of 8K content.

Ample Memory and Storage
The media player includes **4GB of RAM**, enabling seamless multitasking and responsive performance. Its **32GB ROM** provides ample storage for apps, media, and files, ensuring quick access to all your favorite content. Expandable storage options further enhance its versatility for users with extensive media libraries.

Immersive 8K Ultra HD Experience
This device supports **8K Ultra HD resolution**, offering breathtaking clarity and vivid color reproduction. Paired with **HDR10+ technology**, it provides enhanced contrast, dynamic range, and true-to-life visuals, making it ideal for movies, gaming, and professional digital displays.

AI-Powered Features
The Rockchip RK3588 integrates AI capabilities for advanced applications like facial recognition, voice control, and real-time analytics. These features make it suitable for smart homes, interactive business solutions, and AI development projects.

Android OS for Seamless Operation
Running on the **Android operating system**, the device ensures intuitive navigation and access to a vast library of apps from the Google Play Store. The customizable interface and software compatibility make it perfect for both personal entertainment and professional tasks.

Advanced Connectivity
Stay connected with cutting-edge technologies, including:

- **WiFi 6** for high-speed, stable wireless connections
- **Bluetooth 5.0** for pairing peripherals like keyboards and speakers
- **HDMI 2.1** for crisp, high-resolution display output
- **USB-C and USB 3.0 ports** for external devices and fast data transfer

Versatile Applications
This media player is designed for a variety of uses, including:

- **Home Entertainment**: Stream 8K movies, play immersive games, and access your favorite apps.
- **Gaming**: Enjoy smooth gameplay with exceptional graphics.
- **Digital Signage**: Showcase vibrant content for retail and professional settings.
- **Professional Use**: Enhance video conferencing, presentations, and real-time analytics.
- **AI Development**: Leverage its processing power for AI projects.

Compact and Modern Design
The device’s sleek and compact design fits easily into any environment. Its energy-efficient components minimize power consumption, making it an eco-friendly choice for home and business

applications.

Why Choose This Media Player?
The **8K Ultra HD Streaming Media Player** stands out for its superior performance, advanced features, and versatile applications. Whether you're a tech enthusiast, gamer, or business professional, this device meets diverse digital needs with ease.

Conclusion
Delivering exceptional performance and stunning visuals, the **Ultra HD Streaming Media Player with Rockchip RK3588 Octa-Core CPU, 4GB RAM, and 32GB ROM** is the ultimate device for modern entertainment and professional tasks. With its state-of-the-art features, it offers unmatched versatility and value, making it an essential addition to any digital setup.