# Elevate Your Streaming Experience with the Rockchip RK3588 Octa Core Media Player



### **Specifications**

Model No. Rockchip RK3588 Streaming Media Player

CPU Rockchip RK3588 8nm process, quad-core Cortex-A76 + quad-core Cortex-A55

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)

RAM 4GB/8GB (64bit LPDDR4/LPDDR4x) ROM 32G/64G/128G/256G (eMMC5.0/ 5.1)

Type IEEE 802.11a/b/g/n/ac/ax

WiFi Frequency Wi-Fi6 2.4GHz/5.8GHz ( PCIe v3.0)

Antenna Type 2T2R

OS Android 12 and Multi-Language

Bluetooth Bluetooth 5.0

# Video&Audio CODEC

Video Codec

\* Real-time video decoder of

MPEG-1,MPEG-2,MPEG-4,H.263,H.264,H.265,VC-1,VP9,VP8 MVC,AV1

\* MMU Embedded

\* Multi-channel decoder in parallel for less resolution \* H.264 AVC/MVC Main10 L6.0 : 8K@30fps (7680x4320)

\* VP9 Profile0/2 L6.1: 8K@60fps (7680x4320)

\* H.265 HEVC/MVC Main10 L6.1 : 8K@60fps (7680x4320)

\* AVS2 Profile0/2 L10.2.6 : 8K@60fps (7680x4320)

\* AV1 Main Profile 8/10bit L5.3 : 4K@60fps (3840x2160)

\* MPEG-2 up to MP: 1080p@60fps (1920x1088) \* MPEG-1 up to MP: 1080p@60fps (1920x1088)

\* VC-1 up to AP level 3 : 1080p@60fps (1920x1088)

\* VP8 version2: 1080p@60fps (1920x1088)

Video Encoder

\* Real-time H.265/H.264 video encoding

\* Support up to 8K@30fps

\* Multi-channel encoder in parallel for less resolution

\* Dual 16M Pixel ISP with HDR&3DNR

I2S0 with 8 channels

\* Up to 8 channels TX and 8 channels RX path

\* Audio resolution from 16bits to 32bits

\* Sample rate up to 192KHz

Audio Codec \* Provides master and slave work mode, software configurable

\* Support 3 I2S formats (normal, left-justified, right-justified)

\* Support 4 PCM formats (early, late1, late2, late3)

\* Support TDM normal, 1/2 cycle left shift, 1 cycle left shift, 2 cycle left shift, right

shift mode serial audio data transfer

\* I2S, PCM and TDM mode cannot be used at the same time

### I/O Port

Power Supply DC 12V/2A Power ON: Blue

RTC Support

HDMI

IR Infrared + BT Voice Remote

HDMI OUT 1:HDMI 2.1/7680x4320@60Hz

HDMI OUT 2:HDMI 2.1/4096x2304@60Hz

HDMI IN:HDMI 2.0/HDMI 1.4b 4K x 2K video formats(3840x

2160p@24Hz/25Hz/30Hz and 4096x2160p@24Hz)

Earphone 1\*3.5mm Port

Ethernet 1:1\*1000M(RGMII) Ethernet 2:1\*1000M Ethernet

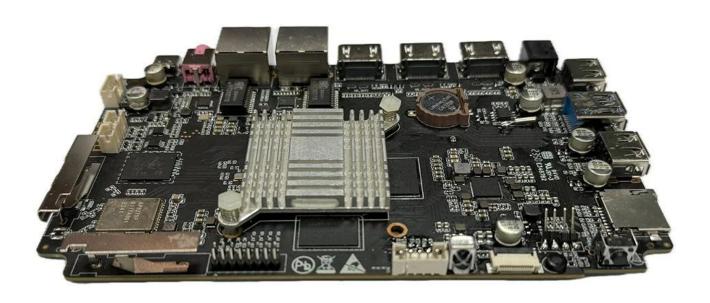
TF Card 1\*TF Card

2\*USB 2.0 (Host) USB port 1\*USB3.0 (Host)

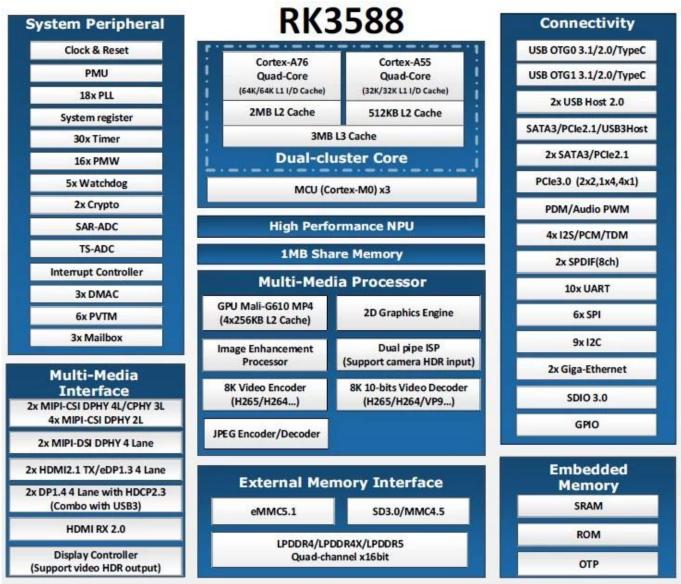
Type-C 1\*Type C 3.0 (Download Port) Supported Devices











**Typical Application Diagram - AIoT** 





### Introduction

The Rockchip RK3588 Octa Core Media Player is a cutting-edge device designed to revolutionize your home entertainment setup. Whether you're a movie enthusiast, a gamer, or someone who enjoys streaming the latest shows in ultra-high definition, this media player has the power and features to meet all your needs. With its advanced hardware, modern operating system, and support for the latest streaming technologies, the RK3588 is more than just a media player—it's a comprehensive entertainment solution.

### **Powerful Performance**

At the core of the Rockchip RK3588 Media Player is an Octa Core processor, a powerhouse that ensures fast, smooth performance across all applications. Whether you're navigating through menus, launching apps, or streaming 8K video content, the RK3588 handles it all with ease. The 4GB of RAM further enhances its multitasking capabilities, allowing you to switch between apps or run multiple processes without any slowdown. This combination of power and efficiency ensures that your media player not only performs well but also stays cool and quiet during operation, making it ideal for long movie marathons or gaming sessions.

# **8K Ultra HD Streaming**

One of the standout features of the RK3588 Media Player is its support for 8K Ultra HD streaming. As 8K content becomes more widely available, having a device capable of playing it in full resolution is essential for the best viewing experience. The RK3588 brings every frame to life with incredible detail, vibrant colors, and deep contrast, ensuring that you experience your favorite movies and shows like never before. Whether you're watching the latest blockbuster or a classic film, the 8K support ensures that you see every detail in the highest quality possible.

## **Android 12 Operating System**

Running on Android 12, the RK3588 Media Player offers a modern, intuitive interface that is easy to navigate. Android 12 brings a host of new features, including improved privacy settings, faster performance, and better compatibility with smart home devices. With access to the Google Play Store, you can download a wide array of apps, from popular streaming services like Netflix and Disney+ to games and productivity tools. The flexibility of Android allows you to customize your media player experience to suit your personal preferences, making it more than just a device for watching content.

# Advanced Connectivity with WiFi 6

In addition to its powerful performance and stunning visuals, the RK3588 Media Player is equipped with WiFi 6 technology, the latest in wireless connectivity. WiFi 6 offers faster speeds, greater capacity, and lower latency than previous generations, making it ideal for streaming high-definition content without buffering or lag. Whether you're streaming 8K content, playing online games, or

browsing the internet, WiFi 6 ensures that your connection is fast and reliable, providing a seamless entertainment experience.

# **Versatile Connectivity Options**

The RK3588 Media Player also comes with a variety of ports and connectivity options, including multiple USB ports, HDMI 2.1 for high-definition output, and Bluetooth support. These features allow you to connect a wide range of peripherals, such as external storage devices, game controllers, and wireless keyboards, enhancing the versatility of your media player. Whether you're looking to expand your storage, improve your gaming experience, or simply connect additional devices, the RK3588 offers the flexibility to do it all.

### Conclusion

The Rockchip RK3588 Octa Core Media Player is a top-of-the-line device that brings power, speed, and cutting-edge features to your home entertainment setup. With its Octa Core processor, 8K Ultra HD support, Android 12 operating system, and WiFi 6 connectivity, this media player offers everything you need for an unparalleled streaming experience. Whether you're watching movies, playing games, or exploring the latest apps, the RK3588 delivers the performance and quality you demand. Upgrade your entertainment system today with the Rockchip RK3588 Octa Core Media Player and enjoy the future of streaming, gaming, and more.