

# Rockchip RK3588 Octa Core Smart TV Box

## Specifications

Model No.	Rockchip RK3588 Octa Core Smart TV Box
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)
WiFi	Type IEEE 802.11a/b/g/n/ac/ax 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	<ul style="list-style-type: none"><li>* Real-time video decoder of MPEG-1,MPEG-2,MPEG-4,H.263,H.264,H.265,VC-1,VP9,VP8 MVC,AV1</li><li>* MMU Embedded</li><li>* Multi-channel decoder in parallel for less resolution</li><li>* H.264 AVC/MVC Main10 L6.0 : 8K@30fps (7680x4320)</li><li>* VP9 Profile0/2 L6.1 : 8K@60fps (7680x4320)</li><li>* H.265 HEVC/MVC Main10 L6.1 : 8K@60fps (7680x4320)</li><li>* AVS2 Profile0/2 L10.2.6 : 8K@60fps (7680x4320)</li><li>* AV1 Main Profile 8/10bit L5.3 : 4K@60fps (3840x2160)</li><li>* MPEG-2 up to MP : 1080p@60fps (1920x1088)</li><li>* MPEG-1 up to MP : 1080p@60fps (1920x1088)</li><li>* VC-1 up to AP level 3 : 1080p@60fps (1920x1088)</li><li>* VP8 version2 : 1080p@60fps (1920x1088)</li></ul>
Audio Codec	<p>Video Encoder</p> <ul style="list-style-type: none"><li>* Real-time H.265/H.264 video encoding</li><li>* Support up to 8K@30fps</li><li>* Multi-channel encoder in parallel for less resolution</li><li>* Dual 16M Pixel ISP with HDR&amp;3DNR</li></ul> <p>I2S0 with 8 channels</p> <ul style="list-style-type: none"><li>* Up to 8 channels TX and 8 channels RX path</li><li>* Audio resolution from 16bits to 32bits</li><li>* Sample rate up to 192KHz</li></ul> <p>Provides master and slave work mode, software configurable</p> <ul style="list-style-type: none"><li>* Support 3 I2S formats (normal, left-justified, right-justified)</li><li>* Support 4 PCM formats (early, late1, late2, late3)</li><li>* Support TDM normal, 1/2 cycle left shift, 1 cycle left shift, 2 cycle left shift, right shift mode serial audio data transfer</li><li>* I2S, PCM and TDM mode cannot be used at the same time</li></ul>

## I/O Port

Power Supply	DC 12V/2A Power ON: Blue
RTC	Support
IR	Infrared + BT Voice Remote
HDMI	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(3840x2160p@24Hz/25Hz/30Hz and 4096x2160p@24Hz)
Earphone	1*3.5mm Port
Ethernet	Ethernet 1:1*1000M(RGMII) Ethernet 2:1*1000M
TF Card	1*TF Card

USB port                    2\*USB 2.0 (Host)  
                                  1\*USB3.0 (Host)  
Type-C                      1\*Type C 3.0 (Download Port) Supported Devices



# Rockchip RK3588

Next generation Octa-Core processor with high performance AI system-on-module



# 8K Ultra High Quality

Unlock the potential of 8K video output and 4K video input.  
Rich details display to let you see the world more clearly.



4K 3840×2160

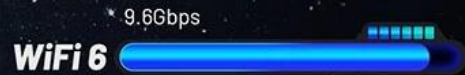
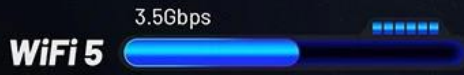


8K 7680×4320



# WiFi 6

WiFi6 is faster and has a larger capacity



2T2R 802.11 ax/ac/a/b/g/n



BT 5.0



# Android 12/Linux Debian11

Compatible with Android and Linux operating systems



# Multi-Screen Different Display

Enhance your viewing experience with multi-screen display.  
Perfect for immersive, high-definition, multi-screen interactive scenarios.



# Large Memory Capacity

Large storage capacity up to 32GB RAM and 128GB ROM, which allows you to install a wide number of applications.

RAM  4G 8G 16G 32G

ROM  16G 32G 64G 128G





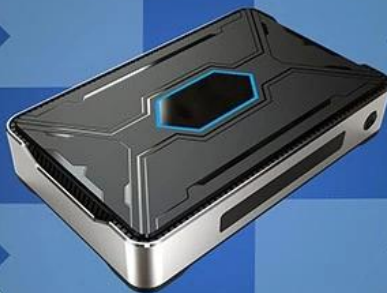
# WHAT CAN WE DO?



Watch movies



Working Conference



Teaching



Play games

# Interface & Dimension



## Introduction

The Rockchip RK3588 Octa Core Smart TV Box is a cutting-edge device that revolutionizes your home entertainment experience. With its advanced hardware and software capabilities, this Smart TV box is designed to deliver unmatched performance, enabling you to enjoy 8K Ultra HD content, play games, and explore a wide range of apps with ease. Whether you're upgrading your current setup or building a new entertainment system, the RK3588 Smart TV Box is the perfect choice for a seamless and immersive viewing experience.

## Powerful Octa Core Processor

At the heart of the Rockchip RK3588 Smart TV Box is the Octa Core processor, which offers exceptional processing power and speed. This advanced chipset ensures that the device can handle demanding tasks such as 8K Ultra HD streaming, multitasking, and gaming without any lag. The eight cores work in harmony to provide a smooth and responsive experience, making it easy to switch between apps, stream high-definition content, and enjoy rich, detailed visuals.

## **Stunning 8K Ultra HD Streaming**

One of the most impressive features of the Rockchip RK3588 Smart TV Box is its ability to support 8K Ultra HD streaming. As 8K content becomes more widely available, having a device capable of delivering this level of detail is essential for the ultimate viewing experience. The RK3588 ensures that every frame is rendered with stunning clarity, vibrant colors, and deep contrasts, allowing you to experience your favorite movies and shows in a way you've never seen before. This Smart TV box truly brings the cinema experience into your living room.

## **Advanced Android 12 Operating System**

The Rockchip RK3588 Smart TV Box runs on Android 12, the latest version of Google's operating system. Android 12 offers a host of new features and improvements, including a more intuitive user interface, enhanced privacy controls, and faster performance. With access to the Google Play Store, you can download a vast array of apps, including streaming services, games, productivity tools, and more. The operating system's flexibility allows you to customize your Smart TV box to suit your entertainment needs, making it a versatile addition to any home.

## **WiFi 6 and Enhanced Connectivity**

To ensure a seamless streaming experience, the RK3588 Smart TV Box is equipped with WiFi 6 technology. WiFi 6 provides faster speeds, greater capacity, and lower latency, making it ideal for streaming 8K content without buffering or interruptions. This advanced connectivity ensures that your Smart TV box remains fast and responsive, even when multiple devices are connected to the same network. Additionally, the device includes multiple USB ports, HDMI 2.1 for high-definition output, and Bluetooth support, allowing you to connect peripherals such as external drives, game controllers, and wireless keyboards.

## **Versatile Entertainment Hub**

The Rockchip RK3588 Smart TV Box is not just a streaming device; it's a comprehensive entertainment hub. Its powerful hardware, combined with Android 12 and extensive connectivity options, allows you to transform your TV into a multifunctional smart entertainment center. Whether you're streaming movies, playing games, browsing the internet, or using productivity apps, the RK3588 offers a seamless and enjoyable experience. The device's versatility and performance make it an essential addition to any modern home entertainment setup.

## **Conclusion**

The Rockchip RK3588 Octa Core [Smart TV Box](#) is an exceptional device that offers a premium entertainment experience. With its powerful processor, 8K Ultra HD support, Android 12 operating system, and advanced connectivity features, this Smart TV box is designed to meet all your entertainment needs. Whether you're watching movies, gaming, or exploring apps, the RK3588 delivers top-tier performance, making it the ultimate choice for a high-quality, immersive home entertainment experience. Upgrade your TV today with the Rockchip RK3588 and enjoy the future of streaming and smart entertainment.