

4K IPTV Set Top Box Solutions with Rockchip RK3588 Octa-Core Processor

Specifications

Model No.	Rockchip RK3588 4K IPTV
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"> * 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)
Audio Codec	<p>Video Encoder</p> <ul style="list-style-type: none"> * 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 <p>I2S0 with 8 channels</p> <ul style="list-style-type: none"> * Up to 8 channels TX and 8 channels RX path * Audio resolution from 16bits to 32bits * Sample rate up to 192KHz <p>I2S</p> <ul style="list-style-type: none"> * 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
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

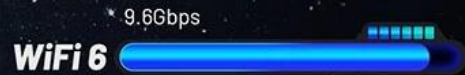
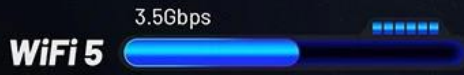


8K 7680×4320



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



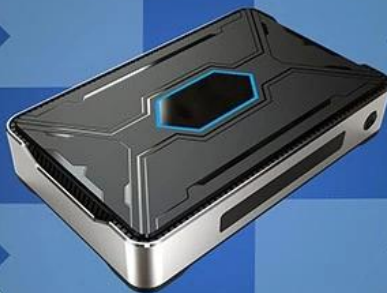
WHAT CAN WE DO?



Watch movies



Working Conference



Teaching



Play games

Interface & Dimension



The **4K IPTV Set Top Box Solutions with Rockchip RK3588 Octa-Core Processor** represents the cutting edge of home entertainment technology, providing an all-in-one solution for ultra-high-definition streaming, IPTV access, and media playback. At its core, the device is powered by the **Rockchip RK3588**, a powerful **octa-core processor** that ensures smooth, lag-free performance even when handling demanding tasks like 4K streaming, multitasking, and running intensive applications.

This set-top box supports **Ultra HD 4K** resolution, offering users a visually stunning experience. Whether you're watching the latest movies, streaming live sports, or enjoying IPTV services, the **4K UHD** output ensures crisp, vibrant visuals with four times the resolution of standard HD. The **HDR support** further enhances the viewing experience by delivering better color accuracy, deeper contrast, and a more immersive experience.

Designed for the modern user, the **Rockchip RK3588-powered** IPTV set-top box offers unparalleled versatility. With access to various streaming platforms such as **Netflix, YouTube,**

Amazon Prime, and **Hulu**, you can enjoy all your favorite content at your fingertips. Additionally, this device supports multiple IPTV providers, making it a perfect choice for cord-cutters who want to access live TV channels and on-demand content without a traditional cable subscription.

The performance of this set-top box is bolstered by **dual-band WiFi** support, allowing users to connect to both 2.4GHz and 5GHz networks for optimal streaming performance. The 5GHz band is especially useful for 4K streaming, as it offers higher speeds and less interference, ensuring smooth, buffer-free playback. For those who prefer a wired connection, the device is also equipped with an **Ethernet port**, offering even greater stability for high-speed internet access.

One of the standout features of this set-top box is its robust connectivity options. The inclusion of **USB 3.0** ports ensures fast file transfers and compatibility with external storage devices, allowing you to play media files directly from USB drives or external hard drives. Additionally, the box is equipped with **Bluetooth** functionality, enabling easy pairing with wireless keyboards, game controllers, headphones, and other accessories, enhancing the overall user experience.

The **Rockchip RK3588** processor also provides excellent support for **H.265 hardware decoding**, which reduces the amount of bandwidth needed to stream video. This feature allows users to enjoy 4K content without needing an extremely high-speed internet connection, as it optimizes data compression without sacrificing video quality.

In terms of setup and usability, the **Android-based operating system** makes it incredibly user-friendly. The familiar Android interface allows for easy navigation through menus, and users can download additional apps and games from the **Google Play Store**. With its plug-and-play setup, you can quickly connect the device to your TV via the **HDMI port** and begin streaming in minutes.

For gamers and media enthusiasts, this set-top box offers support for a variety of multimedia formats, from video and audio files to image galleries, providing a comprehensive entertainment solution. The **octa-core CPU** also ensures that users can run demanding applications and games with minimal lag, making this device perfect for both casual users and tech enthusiasts.

In conclusion, the **4K IPTV [Set Top Box](#) with Rockchip RK3588 Octa-Core Processor** is a high-performance, versatile device that delivers top-tier streaming and IPTV functionality. Its powerful processor, **4K UHD support**, and seamless connectivity options make it an essential addition to any home entertainment system, offering a superior viewing experience in every sense.