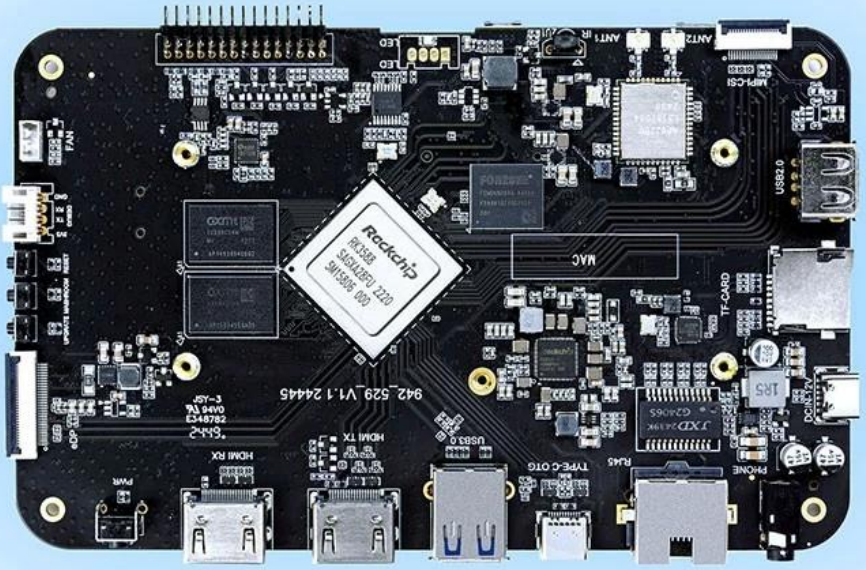
OTT TV Box 8K Ultra HD Octa-Core Android AI Player

Specifications	
Model No.	Rockchip RK3588 OTT TV Box
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. HDMI_RX supports up to 4K@60fps(3840*2160).
Input source	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

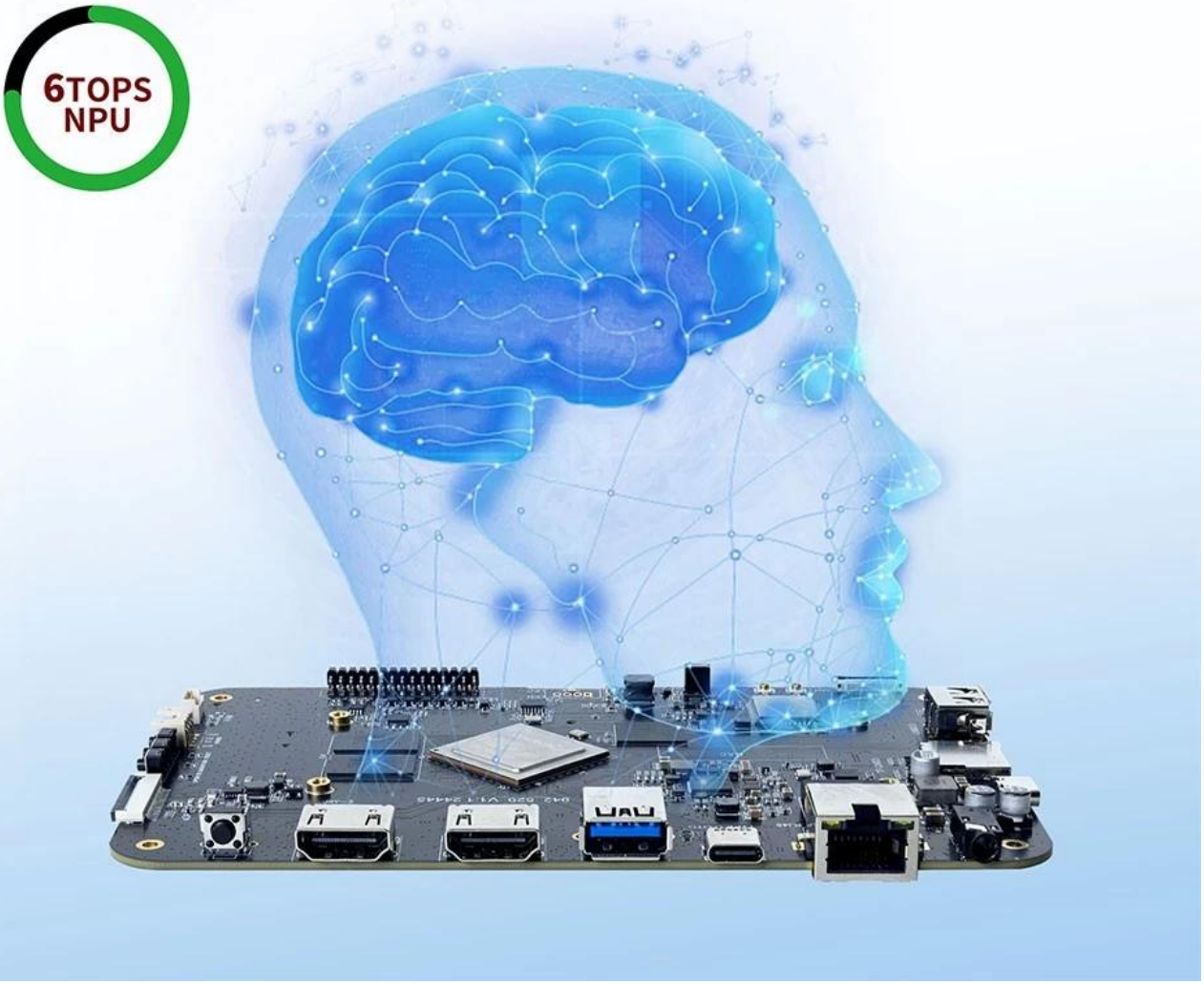
2.4 Ghz

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.

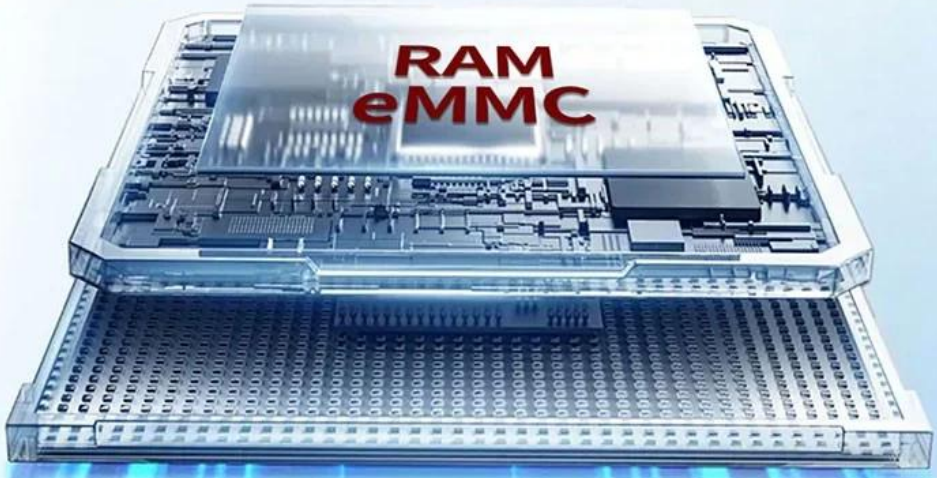


8K Video Encoding & Decoding

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.

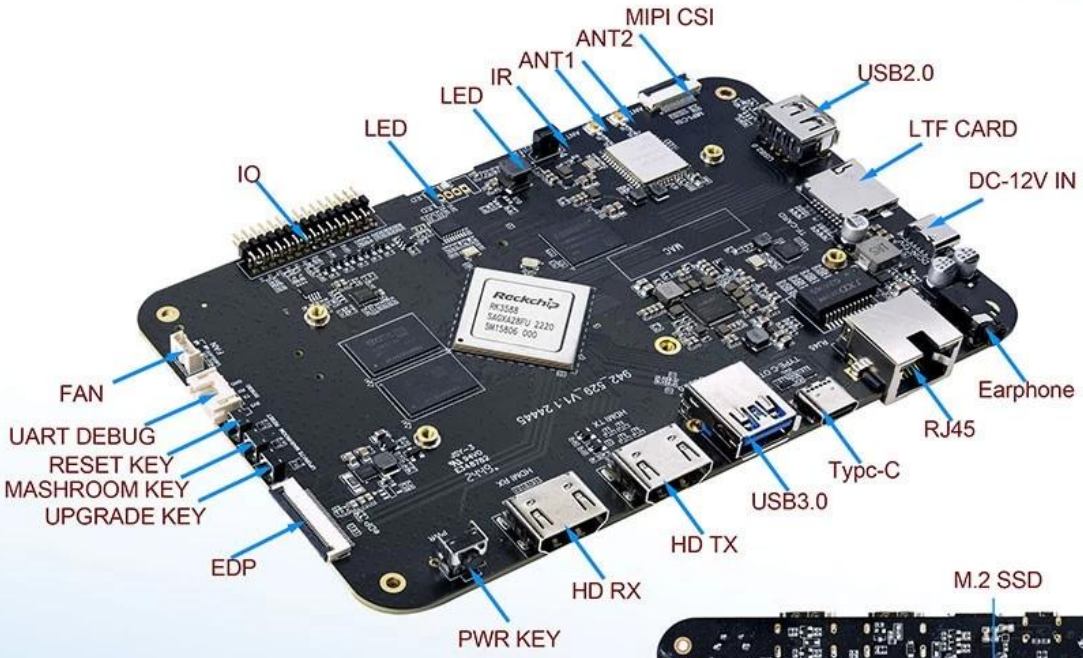


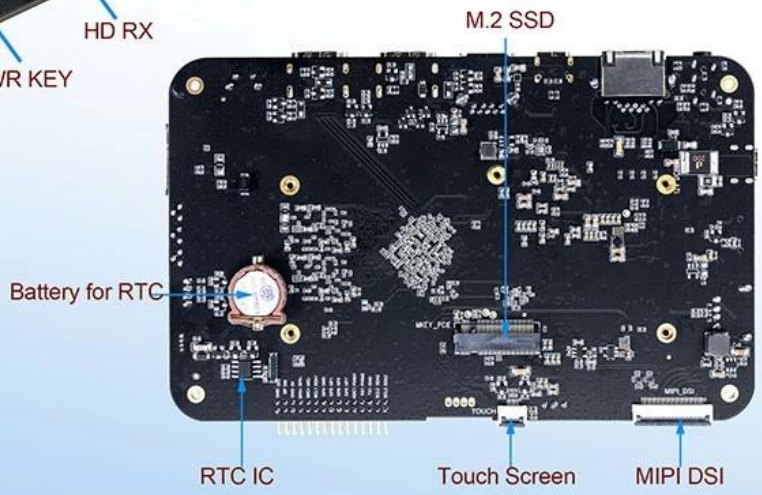
32GB

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.

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 **OTT TV Box 8K Ultra HD Octa-Core Android AI Player** represents the pinnacle of

entertainment and smart home technology. With cutting-edge hardware and AI-powered features, this device elevates your digital experience, offering superior streaming, gaming, and productivity.

Stunning 8K Ultra HD Resolution

This OTT TV box provides an **8K Ultra HD resolution**, offering unmatched clarity and picture quality for the ultimate viewing experience. Whether you're streaming the latest movies, playing high-definition games, or using apps, every detail is rendered in stunning precision. The advanced **HDR10+ support** enhances color accuracy, ensuring vivid and realistic visuals.

Powerful Octa-Core Processor

The heart of this TV box is the **Octa-Core processor**, which combines eight powerful cores for superior performance. With **Cortex-A76** cores for high-speed processing and **Cortex-A55** cores for power efficiency, this setup ensures smooth multitasking, lag-free streaming, and responsive gaming. It effortlessly handles the demands of 8K video playback and real-time processing.

AI-Powered Features for Enhanced Usability

Thanks to AI-powered capabilities, this TV box brings intelligent features to your home entertainment system:

- **Voice Control**: Use voice commands to control your media and smart devices.
- **Content Recommendations**: AI analyzes your viewing habits and suggests personalized content.
- **Smart Home Integration**: Manage and control your smart home devices, such as lights and thermostats, directly from the TV box interface.

These features make it an integral part of a modern smart home, enhancing convenience and accessibility.

High-Speed Connectivity

Stay connected with **WiFi 6**, providing faster speeds and more reliable connections for buffer-free streaming and gaming. The **HDMI 2.1** output supports 8K resolution and offers enhanced video and audio quality. With **USB 3.0** and **USB-C**, you can connect storage devices and peripherals with ease. Additionally, **Bluetooth 5.0** allows seamless pairing with wireless controllers, headphones, and other accessories.

Android OS for Versatility

Running on **Android OS**, this TV box gives you access to the Google Play Store, providing thousands of apps for streaming, gaming, productivity, and more. Whether you're browsing the internet, playing your favorite games, or streaming from platforms like Netflix and YouTube, the intuitive interface makes it easy to navigate.

Ample Storage and Memory

Equipped with **4GB RAM** and **32GB ROM**, the box ensures fast load times and smooth multitasking. Need more storage? The expandable memory option allows you to store movies, apps, and games without worrying about space limitations.

Multi-Purpose Use

This OTT TV box is designed for diverse applications, such as:

- **Home Entertainment**: Stream movies and TV shows in **8K** quality.
- **Gaming**: Play graphically intensive games with high frame rates.
- **Smart Home Hub**: Manage your smart home devices efficiently.
- **Business & Digital Signage**: Create stunning displays for your business or retail space.

Eco-Friendly and Sleek Design

This device is built with energy-efficient components to minimize power consumption while delivering superior performance. Its sleek, compact design ensures it fits seamlessly into any entertainment setup.

Conclusion

The **OTT TV Box** **8K Ultra HD Octa-Core Android AI Player** is the ultimate media device for any modern home or business. With its 8K resolution, AI features, and robust connectivity, it sets the bar for entertainment and productivity in the digital age