

# Amlogic S928X 8K Wi-Fi 6E Set Top Box

## Specifications

Model No.	Amlogic S928X Set Top Box
CPU	Amlogic S928X ARM Cortex-A76+Quad-Core ARM Cortex-A55
GPU	ARM Mali-G57 MC2, 4K GUI OpenGL ES 3.2, Vulkan 1.2 and OpenCL 2.0
NPU	3.2 TOPS
RAM	64-bit DDR4, LPDDR4/4X UP to 8GB DDR4266
eMMC	eMMC 5.1, SLC NAND Flash
Decoding resolution	Amlogic Video Engine (AVE) with dedicated hardware decoders and encoders Decoding AV1 MP-10 @ L6.1 up to 8Kp60 VP9 Profile-2 @ 6.1 up to 8Kp60 H.265 HEVC MP-10 @ L6.1 up to 8Kp60 AVS3 Phase 1 up to 8Kp60 AVS2-P2 Profile up to 8Kp60 H.264 AVC HP @ L5.2 up to 4Kp60 MPEG-4, WMV/VC-1, AVS, MPEG-2, MPEG-1 up to 1080p60 MJPEG and JPEG unlimited pixel resolution decoding (ISO/IEC-10918) Support multi-video decoder up to 4x 4Kp60 Encoding JPEG image encoding up to 4Kp60 H.265 video encoding up to 4Kp60 with low latency H.264 video encoding up to 4Kp60 with low latency 8th Generation Advanced Amlogic TruLife Image Engine with support for Dolby Vision (optional), HDR10+, HDR10, HLG, and HDR Vivid processing
AI accelerator	Up to 3.2 TOPS Neural Network Accelerator (NNA) with Tensor Processing Unit (TPU) architecture, supports TensorFlow and Caffe
Video output	HDMI 2.1a transmitter including both controller and PHY supporting CEC, Dynamic HDR, and HDCP 2.2/2.3, up to 8Kp60 max resolution output with support for eARC, VRR, QMS, QFT, ALLM, DSC & SBTM Support for MP3, AAC, WMA, RM, FLAC, Ogg Vorbis, Opus, SRS TruVolume, Dolby Audio (optional), DTS (optional), and programmable with 7.1/5.1 down-mixing Low-power VAD
Audio output	Built-in SPDIF input/output up to 192KHz 16/24/32bit stereo 3x built-in TDM/PCM/I2S ports with TDM/PCM mode up to 48kHz x 32bits x 32ch or 192kHz x 16bits x 16ch and I2S mode up to 384kHz x 32bits x 16ch Digital microphone PDM input with programmable CIC, LPF, HPF, support up to 8 DMICs Built-in stereo audio DAC
Network interface	10/100/1000 MAC
USB2.0 interface	1x USB XHCI OTG 2.0, 2x USB 2.0 host, 1x USB 3.0 (5 Gbps) multiplexed with PCIe 2.0

# S928X



\* Supported configuration: PCIe 2.0 port + USB 2.0 Host, or USB3.0 port without PCIe.









Amlogic S928X is the first 8K UHD smart STB SoC integrating ARM Cortex-A76, ARM Cortex-A55 and self-developed neural network processor. It supports 8Kp60 video decoding function of global mainstream video formats—AV1, H.265, VP9, AVS3, AVS2, etc. Meanwhile, 4K GUI, intelligent SR and other functions are viable as well, thus providing an outstanding hardware engine for customized high-end applications.

As the demand for high-performance multimedia entertainment continues to rise, Amlogic has once again delivered an innovative solution with the launch of its latest S928X chip. Designed to deliver a seamless, immersive multimedia experience, the S928X chip boasts a range of impressive features that are sure to impress tech enthusiasts and consumers alike.

One of the key selling points of the S928X chip is its powerful processing capabilities. The chip is equipped with an eight-core ARM Cortex-A53 CPU, which provides lightning-fast speeds and delivers exceptional performance for a wide range of multimedia applications. Whether you're streaming 4K content, playing high-definition games, or running multiple apps at once, the S928X chip ensures that you enjoy a smooth and uninterrupted experience.

Another standout feature of the S928X chip is its support for high-quality audio and video output. The chip supports up to 4K resolution at 60 frames per second, which means that you can enjoy your favorite movies and TV shows with breathtaking clarity and detail. Additionally, the chip supports HDR10 and HLG technologies, which provide a wider color gamut and better contrast, making your viewing experience more immersive than ever before.

The S928X chip is also designed to deliver a high-quality gaming experience. The chip is equipped with a powerful Mali-G31 MP2 GPU, which provides exceptional graphics performance and supports OpenGL ES3.2, Vulkan 1.1, and OpenCL 2.0. This means that you can play the latest games with stunning graphics and enjoy smooth, lag-free gameplay.

In addition to its impressive hardware specs, the S928X chip also features advanced software optimizations that enhance its performance and usability. The chip is based on the Android TV 10 operating system, which provides a user-friendly interface and access to a wide range of apps and content. The chip also supports Google Assistant, which allows you to control your TV and other connected devices with your voice.

The S928X chip is also designed with connectivity in mind. The chip supports dual-band Wi-Fi and Bluetooth 5.0, which ensure fast and reliable wireless connectivity. It also features a range of ports, including HDMI, USB, and Ethernet, which provide flexible connectivity options for a wide range of devices and peripherals.

Overall, the Amlogic S928X chip is a game-changing solution for high-performance multimedia entertainment. Its powerful processing capabilities, support for high-quality audio and video output, and advanced software optimizations make it a standout choice for tech enthusiasts and consumers who demand the best in multimedia entertainment. Whether you're streaming your favorite content, playing games, or using your TV for other applications, the S928X chip ensures that you enjoy a seamless, immersive experience.

Introducing our cutting-edge Amlogic S928X 8K Wi-Fi 6E Set Top Box. Immerse yourself in the world of ultra-high-definition entertainment with 8K resolution. Experience lightning-fast internet speeds with Wi-Fi 6E technology, ensuring seamless streaming and gaming. Transform your TV into a smart hub with access to a wide range of apps and content. Upgrade your home entertainment system with our advanced Amlogic S928X [Set Top Box](#).