Android Smart TV Box Ccompany, Android TV Box Gigabit Ethernet

Specifications	
Model No.	Amlogic S922X Android Smart TV Box
CPU	Amlogic S922X 64-bit quad core ARM® Cortex™ A73 CPU and dual core ARM® Cortex™ A53 CPU
GPU	ARM MaliTM-G52 MP4 GPU processor
ROM	2GB/4GB LPDDR4
Internal Storage	16GB/64GB eMMC
OS	Android 9.0
Video&Audio CODEC	
Video/Picture CODEC	Amlogic Video Engine (AVE) with dedicated hardware decoders and encoders HW UHD 4K H.265 75fps 10-bit video decoder & low latency 1080p H.265/H.264 60fps encoder Support multi-video decoder up to 4Kx2K@60fps+1x1080P@60fps Supports multiple "secured" video decoding sessions and simultaneous decoding and encoding Video/Picture Decoding VP9 Profile-2 up to 4Kx2K@60fps H.265 HEVC MP-10@L5.1 up to 4Kx2K@60fps AVS2-P2 Profile up to 4Kx2K@60fps H.264 AVC HP@L5.1 up to 4Kx2K@30fps H.264 MVC up to 1080P@60fps MPEG-4 ASP@L5 up to 1080P@60fps (ISO-14496) WMV/VC-1 SP/MP/AP up to 1080P@60fps AVS-P16(AVS+) /AVS-P2 JiZhun Profile up to 1080P@60fps MPEG-2 MP/HL up to 1080P@60fps (ISO-13818) MPEG-1 MP/HL up to 1080P@60fps (ISO-11172) RealVideo 8/9/10 up to 1080P@60fps H.265/H.264 video encoding up to 1080P@60fps with low latency Multiple language and multiple format sub-title video support MJPEG and JPEG unlimited pixel resolution decoding (ISO/IEC-10918) Supports JPEG thumbnail, scaling, rotation and transition effects Supports *.mkv,*.wmv,*.mpg, *.mpeg, *.dat, *.avi, *.mov, *.iso, *.mp4, *.rm and *.jpg file formats Supports Dolby VisionOptional, HDR10, HDR10+, HLG and PRIME HDR processing
Video/Picture Encoding	Independent JPEG and H.265/H.264 encoder with configurable performance/bit-rate JPEG image encoding H.265/H.264 video encoding up to 1080P@60fps with low latency
Video Output	Built-in HDMI 2.1 transmitter including both controller and PHY with CEC, Dynamic HDR and HDCP 2.2, 4Kx2K@60 max resolution output CVBS 480i/576i standard definition output Supports all standard SD/HD/FHD video output formats: 480i/p, 576i/p, 720p, 1080i/p and 4Kx2K 4-lane MIPI DSI interface, resolution up to 1920*1080 with rotation and panel calibration Supports MP3, AAC, WMA, RM, FLAC, Ogg and programmable with 7.1/5.1 down-mixing Built-in serial digital audio SPDIF/IEC958 input/output and PCM input/output 3 built-in TDM/PCM/I2S ports with TDM/PCM mode up to 84kHz x32bits x 8ch or 96kHz x 32bits x 32ch and I2S mode up to 384kHz x 32bitsx8ch Digital microphone PDM voice input with programmable CIC, LPF & HPF, support up to 8 DMICs Built-in stereo audio DAC Supports concurrent dual audio stereo channel output with combination of analog+PCM or I2S+PCM
Decoder Format	HD MPEG1/2/4, H.265/HEVC, HD AVC/VC-1, RM/RMVB, Xvid/DivX3/4/5/6, RealVideo8/9/10
Media Format	Avi/Rm/Rmvb/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg
Music Format	MP3/WMA/AAC/WAV/OGG/DDP/TrueHD/HD/FLAC/APE
Photo Format	HD JPEG/BMP/GIF/PNG/TIFF
Port	
USB host	USB2.0, Max480Mbps/USB3.0, Max5.1Gbps
SIM	MICRO SIM
HDMI	HDMI 2.2/1ch Lvds/1ch EDP

LAN	RJ45 wire Ethernet connection 100/1000M Ethernet support
WiFi/ Bluetooth	AP6398S(Wi-Fi+BT) 2.4G+5.8G
4G	PCIE Port
TF	microSD(Max 128G)
HDD	Support SATA Max2TB(Not included)
Power	
Power Supply	12V DC/3AΦ5.5*Φ2.5mm

This product is the network Android system motherboard, which is suitable for intelligent display terminal equipment, industrial automation terminal, computer vision/algorithm, 3D experience, game/entertainment equipment, high-performance Face Recognition calculation/storage, AI intelligence with high performance requirements. It can be widely used as the high-end demand intelligent mainboard of finance, advertising, security, transportation, public transportation and other industries.

This product adopts the latest generation of 12 nm ultra-low power AI chip s922x of Amlogic. It is an advanced application processor, integrating a powerful CPU, GPU subsystem, secure 4K video codec engine and first-class HDR image processing. The CPU of S922x main system adopts large and small architecture, which integrates four core arm cortex-a73 CPU cluster and dual core cortex-a53 cluster with unified secondary cache to improve system performance. Each CPU core includes a separate neon SIMD coprocessor to improve the software media processing capacity. Ave-10 can decode 4kx2k resolution video at a speed of 75 frames/second, and has a complete trusted video path (TVP) for security applications, supporting complete formats, including: MVC, MPEG-1/2/4, vc-1/WMV, AVS, AVS +, avs2 realvideo, MJPEG stream, H.264, h265-10, VP9 and JPEG pictures without size restrictions. The independent encoder can encode JPEG or h.265/h.264 format, up to 1080p, 75 frames per second. It supports 4kx2k @ 60fp (3840 * 2160) output of hdmi2.2 interface and 4K point screen of V by one interface. It supports HDCP 2.2, stereo audio DAC, CVBS output, 4-channel Mipi DSI interface, multi TDM, PCM, I2S and SPDIF digital audio I/O interface, 8-Channel far-field PDM digital microphone (dmic) input and DVP camera interface. The product comes with 2x2 WiFi (supporting 2.4G and 5.8G dual frequency) + 4.1 wireless network module, supporting Gigabit Ethernet interface and infrared remote control, keyboard and mouse operation.

Highlights

o   Amlogic 64-bit quad core ARM® Cortex™ A73 CPU and dual core ARM® Cortex™ A53 CPU

o   ARM Mali-G52 MP4 GPU processor

o   HW UHD 4KH.265 75fps 10-bit video decoder & low latency 1080p H.265/H.264 60fp sencoder

o   Dolby Visionand HDR10, HDR10+, HLG and PRIME HDR video processing

o   Build in Cortex-M4 core for always on processing

o   TrustZone based security for DRM video streaming

o   WIFI, BT,USB, SD, Ethernet, Analog Audio

o   Power management auxiliary processor

Amlogic S922X is an advanced application processor designed for Android hybrid OTT/IPTV Set Top Box(STB) and high-end media box applications. It integrates a powerful CPU, GPU subsystem, a secured 4K video CODEC engine and a best-in-class HDR image processing pipeline withall major peripherals to form the ultimate high-performance multimedia AP.

The main system CPU is based on Big. Little architecture which integrates a quad-core ARM Cortex-A73 CPU cluster and a dual-core Cortex-A53 cluster with united L2 cache to improve systemper formance. Each CPU core includes the separate NEON SIMD co- processor toimprove software media processing capability.
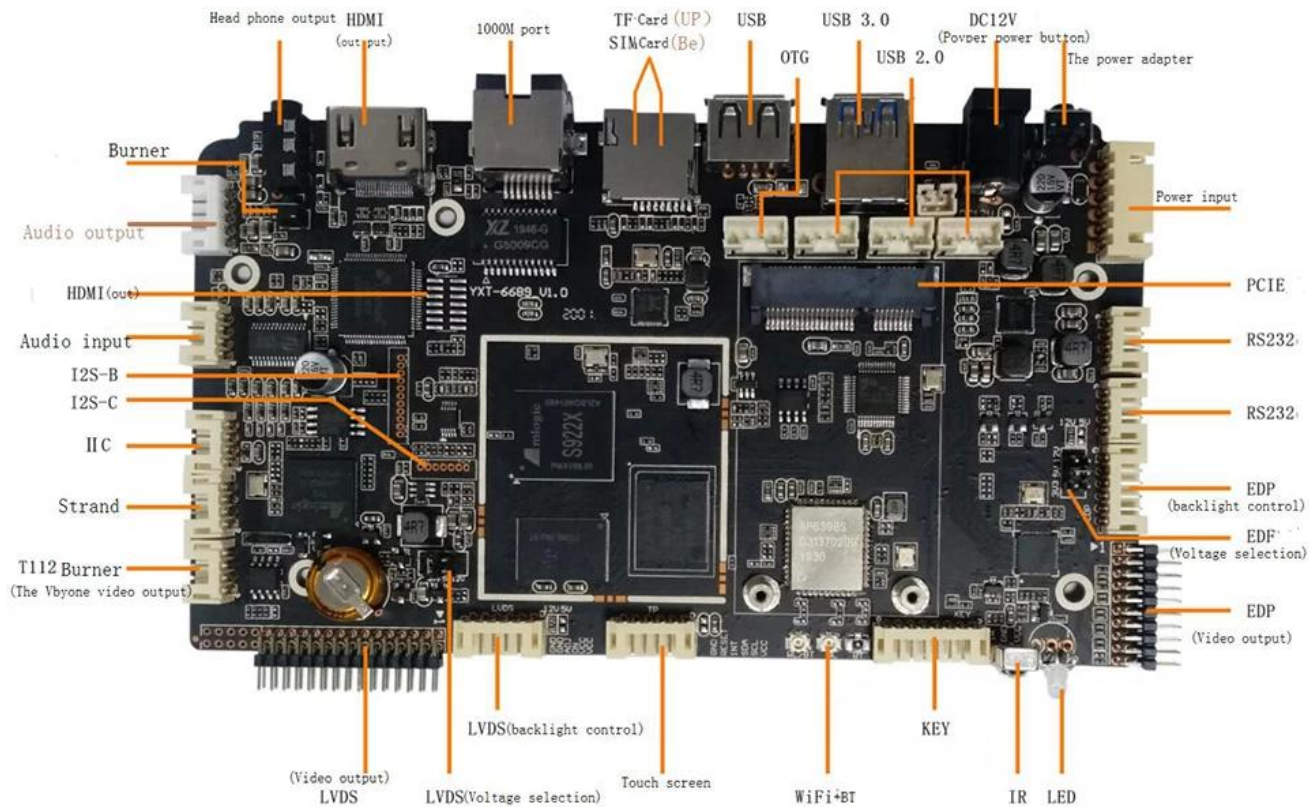
The graphic subsystem consists of twographic engines and a flexible video/graphic output pipeline. The ARM Mali-G52 MP4 GPU handles all OpenGL ES 3.2 Vulkan 1.0 and OpenCL 2.0 graphic programs, while the 2.5D graphics processor handles additional scaling, alpha, rotation and color space conversion operations. Together, the CPU and GPU handle all operating system, networking, user-interface and gaming relatedtasks. The video output pipeline includes Dolby Visionoptional HDR10, HDR10+,HLG and PRIME HDR processing, REC709/BT2020 processing, motion adaptive edgee nhancing de-interlacing, flexible programmable scalar, and manypicture enhancement filters before passing the enhanced image to the video outputports.

Amlogic Video Engine (AVE-10) offloads the Cortex-A53 CPUs from all video CODEC processing. It includes dedicated hardwarevideo decoder and encoder. AVE-10 is capable of decoding 4Kx2K resolution videoat 75fps with complete Trusted Video Path (TVP) for secure applications andsupports full formats including MVC, MPEG- 1/2/4, VC-1/WMV, AVS, AVS+, AVS2 RealVideo, MJPEG streams, H.264, H265-10, VP9 and also JPEG pictures with nosize limitation. The independent encoder is able to encode in JPEG orH.265/H.264 up to 1080p at 60fps.
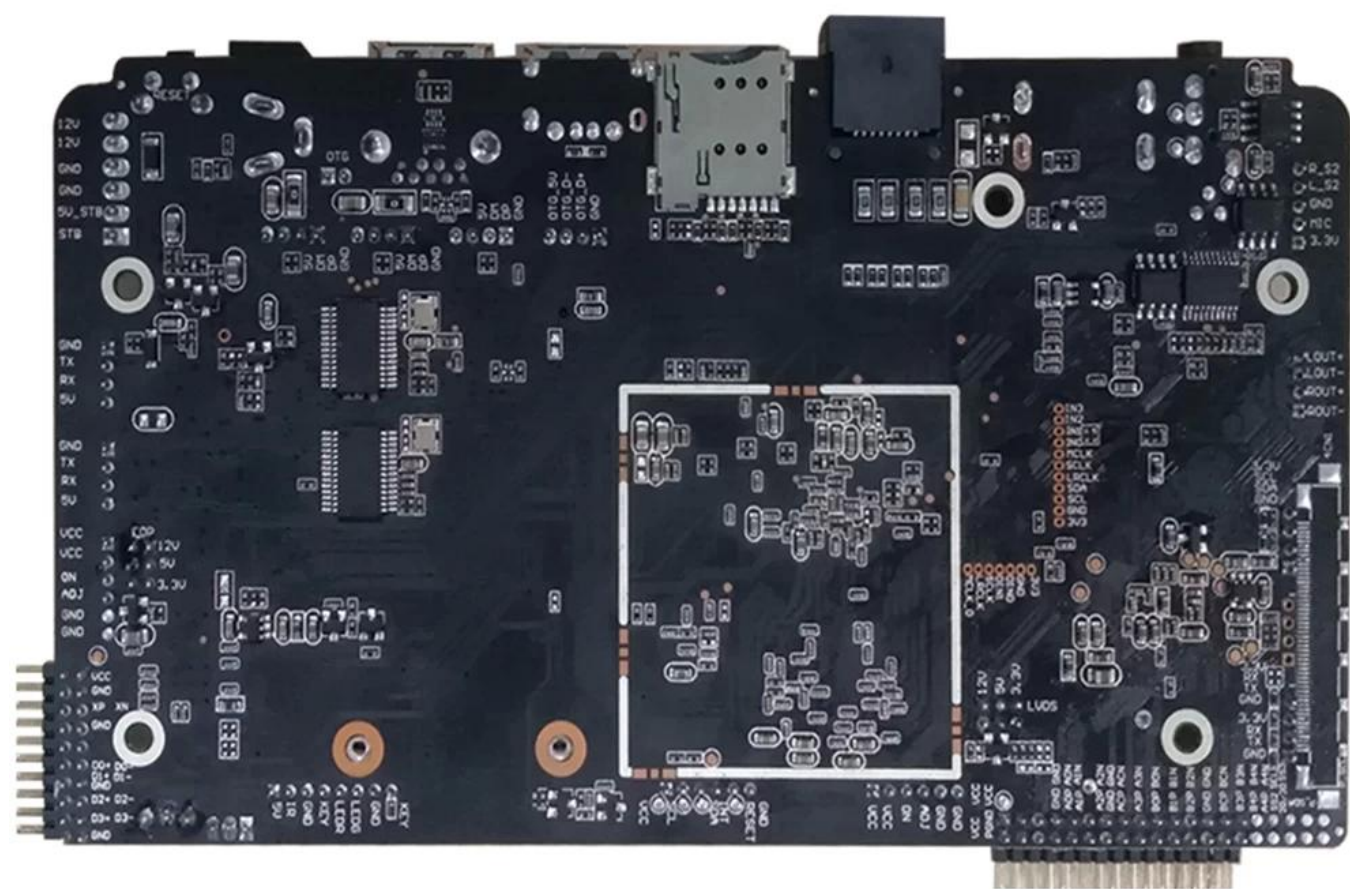
Amlogic S922X integrates all standard audio/video input/output interfaces including a HDMI2.1 transmitter with 3D, Dynamic HDR, CEC and HDCP 2.2 support, stereo audio DAC, a CVBS output, 4-lane MIPI DSI interface, multiple TDM, PCM, I2S and SPDIF digital audio input/outputinterfaces, 8 channel far-field PDM digital microphone (DMIC) inputs and a DVPcamera interface.
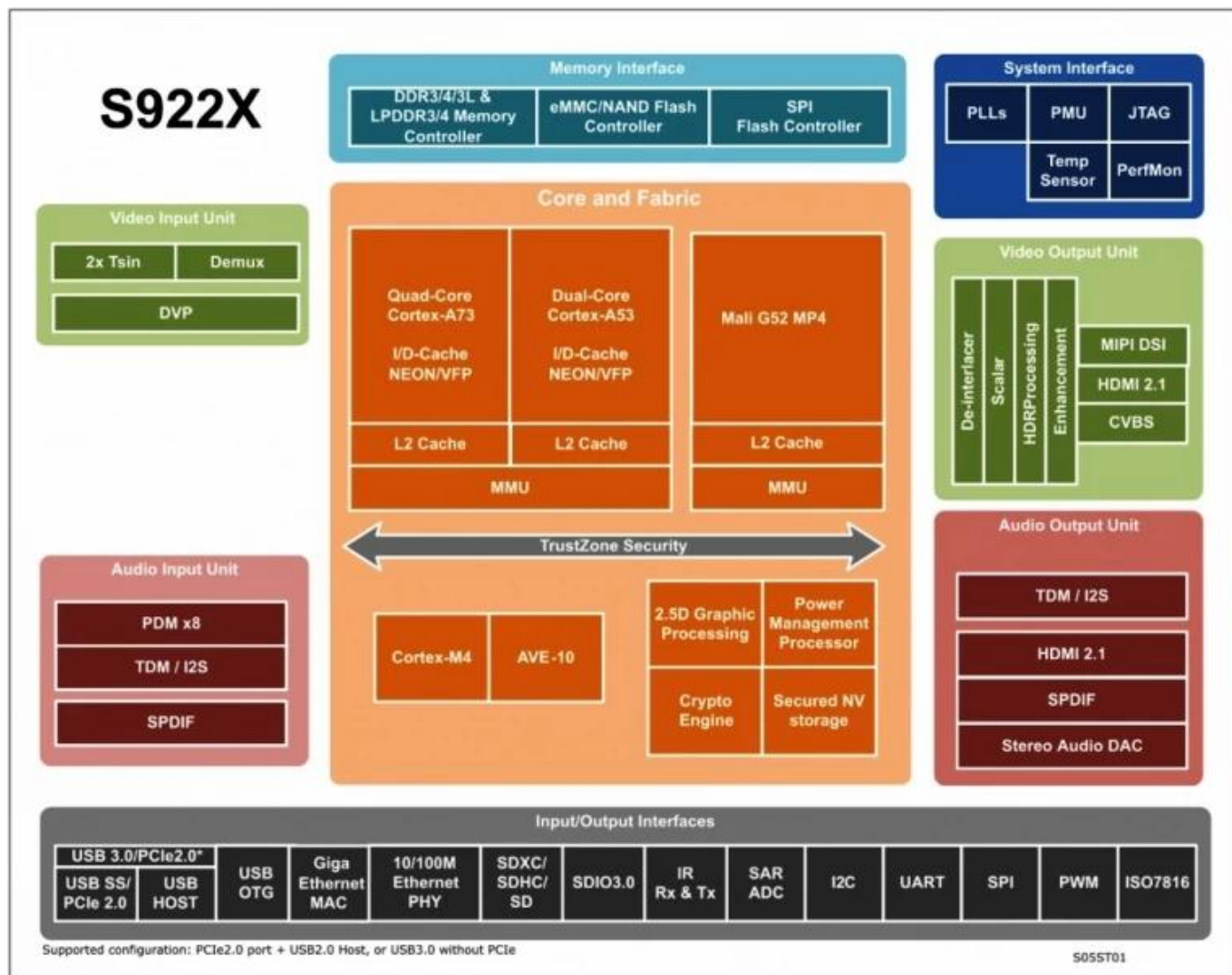
Amlogic S922X also integrates a set offunctional blocks for digital TV broadcasting streams. The built-in two demuxcan process the TV streams from the serial and parallel transport stream inputinterface, which can connect to external tuner/demodulator.

The processor has rich advanced network andperipheral interfaces, including a 10/100/1000M Ethernet MAC with RGMII,10/100M Ethernet PHY, one USB XHCI OTG 2.0 port, one USB3.0 and PCIe

Head phone output HDMI (output) 1000M port TF·Card (UP) SIMCard (Be) USB USB 3.0 DC12V (Povper power button) The power adapter

Burner OTG USB 2.0

Audio output

Power input

HDMI (out)

PCIE

Audio input

RS232

I2S-B

RS232

I2S-C

IIC

EDP (backlight control)

Strand

EDF (Voltage selection)

T112 Burner (The Vbyone video output)

EDP (Video output)

LVDS(backlight control)

KEY

(Video output) LVDS

LVDS(Voltage selection)

Touch screen

WiFi+BT

IR LED

Innovative Android Smart TV Box Experience Our company is dedicated to pushing the boundaries of home entertainment with our innovative Android Smart TV Box. Featuring Gigabit Ethernet connectivity, our device ensures blazing-fast internet speeds, eliminating buffering and lag for uninterrupted streaming of your favorite content in stunning 4K resolution.

Seamless Streaming and Gaming Experience a world of entertainment at your fingertips. Our Android Smart TV Box supports a wide range of streaming platforms, including Netflix, Amazon Prime Video, Hulu, and more. Stream your favorite movies, TV shows, and videos with exceptional clarity and detail.

Gaming enthusiasts will appreciate the powerful hardware and graphics capabilities of our Smart TV Box. Play your favorite Android games with smooth frame rates and responsive controls for an immersive gaming experience.

User-Friendly Interface and Navigation Navigating through apps, settings, and content is effortless with our user-friendly Android OS interface. Customize your home screen, access apps with ease, and enjoy personalized recommendations based on your viewing habits.

Gigabit Ethernet for Lightning-Fast Connectivity Say goodbye to slow internet speeds and buffering issues. Our Android TV Box with Gigabit Ethernet ensures stable and reliable connectivity, allowing you to stream, download, and browse without interruptions.

Voice Control and Remote Management Take control of your entertainment experience with voice commands. Our Smart TV Box supports voice control, enabling you to search for content, adjust settings, and launch apps using simple voice commands. Additionally, remote management features allow you to control your TV Box from your smartphone or tablet for added convenience.

Compact Design, Powerful Performance Despite its compact size, our Android Smart TV Box packs a punch in terms of performance. Powered by robust hardware and optimized software, it delivers smooth multitasking, fast app loading times, and seamless content playback.

Conclusion In conclusion, our Android Smart TV Box Company is committed to delivering exceptional entertainment solutions with Gigabit Ethernet connectivity, intuitive features, and outstanding performance. Elevate your home entertainment experience with our cutting-edge Android TV Box. Experience innovation like never before.