Android TV Box Supplier

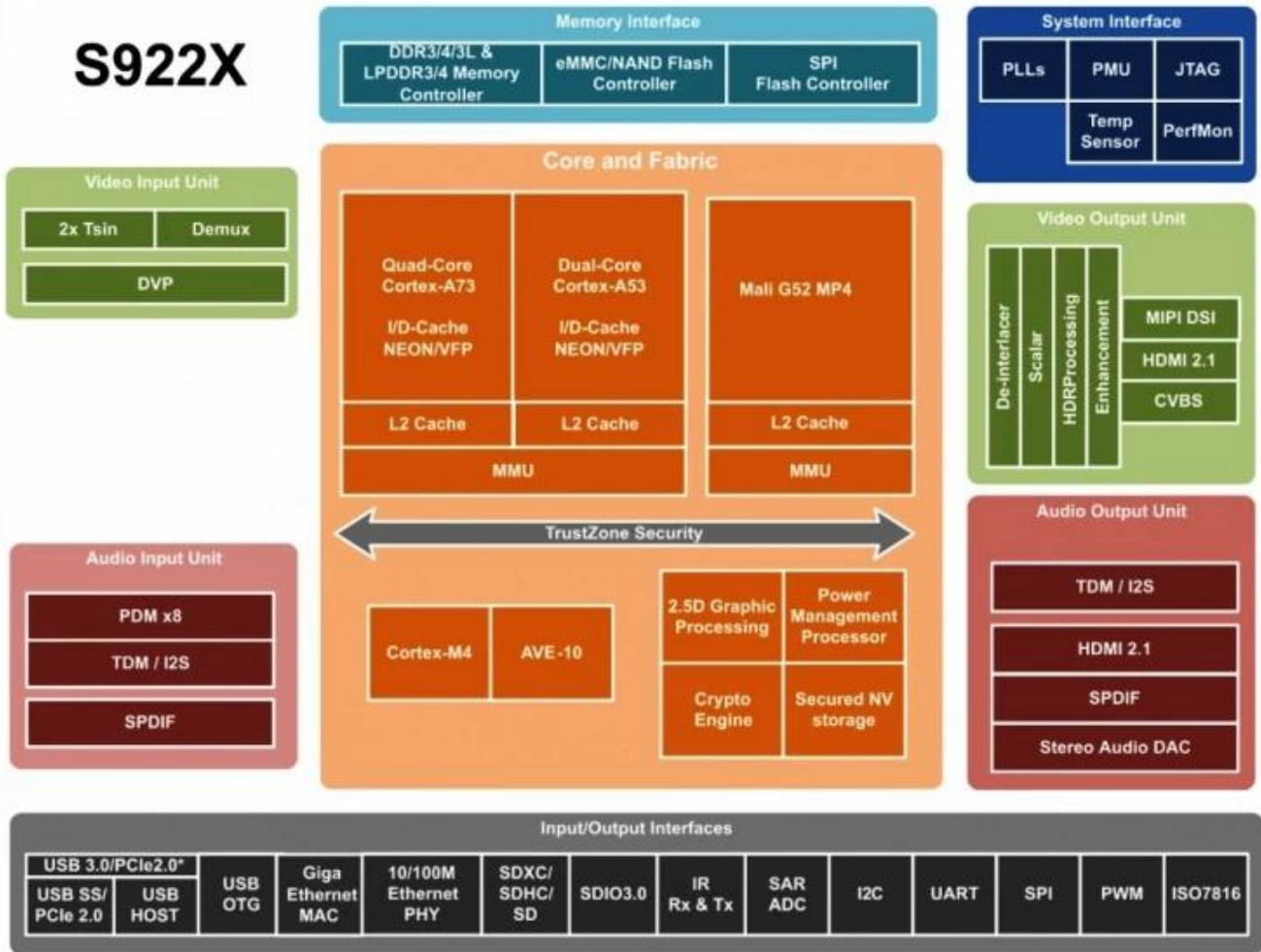| Specifications	
Model No.	Amlogic A311D Android TV Box Supplier
CPU	Amlogic A311D Quad Core ARM Cortex A73 and Dual Core ARM Cortex A53 1.98Ghz
GPU	ARM Mali-G52 MP4 (6EE) OpenGL ES 3.2, Vulkan 1.1 and OpenCL 2.0
RAM	DDR4 2GB/4GB
ROM	16GB eMMC (Expandable up to 128GB)
OS	Android 9.0
Video&Audio CODEC	
Decoding resolution	Support 4K H265 10Bit, H.264, AVS, MPEG-2 and many other formats
Multimedia Support	Support MPEG1, MPEG2, MPEG4, H.264, WMV, MKV, TS, flv and other video formats; Support MP3 and other audio formats; support JPG, JPEG, BMP, PNG, GIF and other photo formats
Port	
Video output	1 channel LVDS 40-pin 2.0mm double-pin, can support 8bit, 10bit screen; 1 channel HDMI output; 1 channel AV output
Video input	x1, MIPI CSI
Audio ouput	4-pin 2.5mm socket 25W@2 amplifier and 3W@2 speaker
Network interface	x1, 10M/100M Ethernet WIFI+BT, 2.4G single band or 2.4G/5G dual band for options PCIE slot (4G) x1 or M.2 slot (4G) x1 for options
USB2.0 interface	USB OTG x1 (available for HOST) USB HOST x7
Backlight interface	x2, 6-pin 2.0mm socket
Infrared interface	x1, 7-pin 2.0mm socket, supports both red and green LED indicators
Function expansion port	Serial ports x4
TF card slot	x1
SIM card slot	x1
RTC	Supports time synchronization
Power	
Power Supply	12V, 2.5DC Connector

S922X

Memory Interface

DDR3/4/3L & LPDDR3/4 Memory Controller	eMMC/NAND Flash Controller	SPI Flash Controller

System Interface

PLLs	PMU	JTAG
	Temp Sensor	PerfMon

Video Input Unit

2x Tsin	Demux
DVP	

Core and Fabric

Quad-Core Cortex-A73 I/D-Cache NEON/VFP	Dual-Core Cortex-A53 I/D-Cache NEON/VFP	Mali G52 MP4
L2 Cache	L2 Cache	L2 Cache
MMU		MMU

TrustZone Security

Cortex-M4	AVE-10

2.5D Graphic Processing	Power Management Processor
Crypto Engine	Secured NV storage

Video Output Unit

De-interlacer | Scalar | HDRProcessing | Enhancement

MIPI DSI
HDMI 2.1
CVBS

Audio Input Unit

PDM x8
TDM / I2S
SPDIF

Audio Output Unit

TDM / I2S
HDMI 2.1
SPDIF
Stereo Audio DAC

Input/Output Interfaces

USB 3.0/PCIe2.0*		USB OTG	Giga Ethernet MAC	10/100M Ethernet PHY	SDXC/ SDHC/ SD	SDIO3.0	IR Rx & Tx	SAR ADC	I2C	UART	SPI	PWM	ISO7816
USB SS/ PCIe 2.0	USB HOST												

Supported configuration: PCIe2.0 port + USB2.0 Host, or USB3.0 without PCIe

S05ST01

180mm

95mm

B001 V1.0
21522

180mm*95mm*20mm
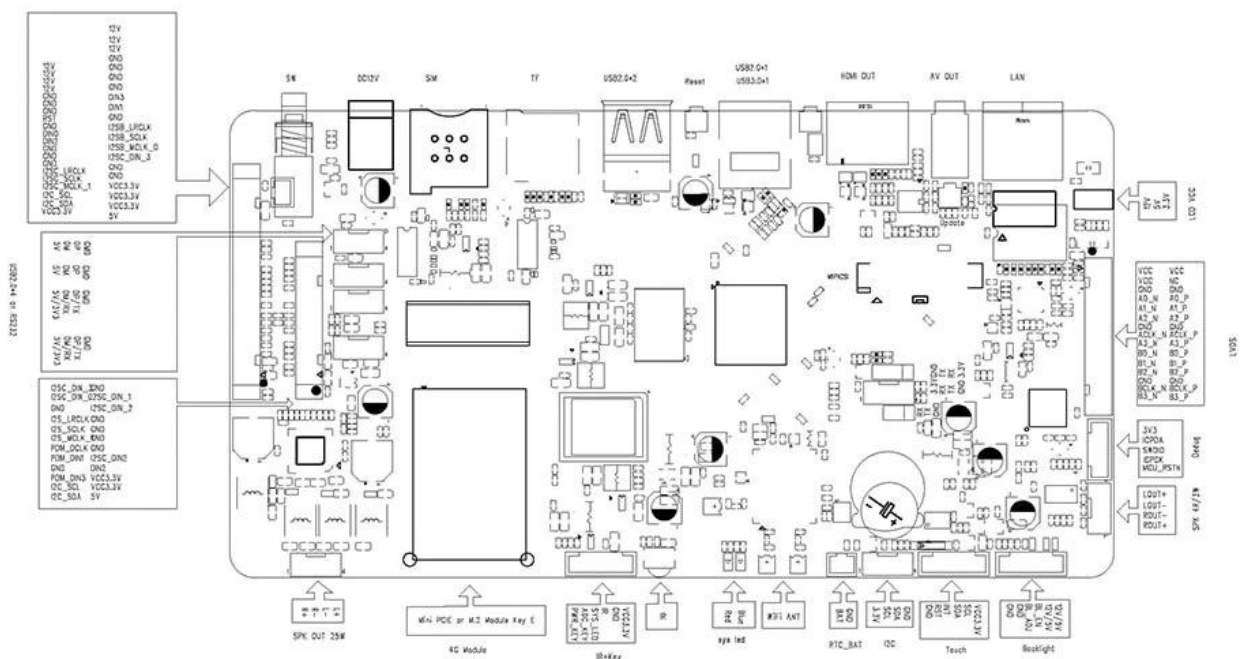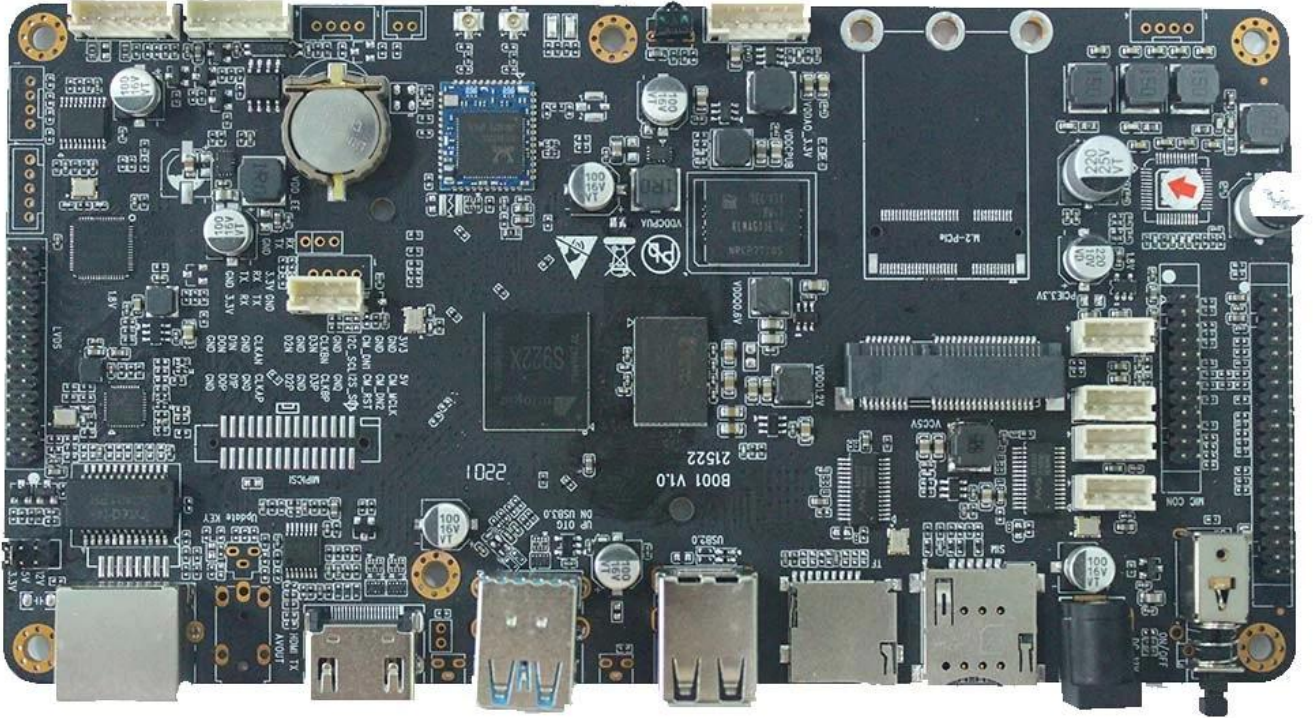
Amlogic A311D Android Dvelopment Board multimedia network player-LCD driver integrated board adopts Amlogic A311D 12nm high-end chip, which supports UHD 4K@60fps hardware video decoding. It also supports supports H.265 10-bit, H.264 and AVS+ and many other formats. Support HDR10 and HLG high dynamic range processing, with multi-channel UART and USB interfaces. Support Bluetooth, WIFI, 4G and Ethernet functions. Support AV serial use, SD card expansion. Perfectly supports all kinds of touch screens, suitable for high-performance intelligent display terminal equipment, industrial automation terminal, computer vision/algorithm, 3D experience, game/amusement equipment, high-performance face recognition computing/storage, AI intelligence, etc. It can be widely used as a high-end intelligent motherboard for various industries such as finance, advertising, security, transportation, and public transportation.

(1) With various interfaces
- 1 channel LVDS video output (40pins)
- 1 channel HDMI video output
- 5 channels USB2.0
- 4 channels RS232 (can be modified to USB2.0 by patch)
- 1 channel MIPI CSI
- 1 channel AV output
- 1 channel I2C
- I2SC/IS2B
- 1 channel 25W super power amplifier and 3W speaker interface

(2) Hybrid networking to break through network constraints
- Support wired, WiFi and 4G access, can realize multi-network hybrid networking
(3) Easy to operate & fast maintenance
- Support breakpoint playback
- Super multi-period timing switch function
- Support U disk loading or direct playback
- Support automatic repair, remote upgrade, intelligent domain name resolution

Chip Performance

CPU Sub-system
(1) Quad Core ARM Cortex-A73 and Dual Core ARM Cortex-A53 CPU
(2) ARMv8-A architecture with Neon and Crypto extensions
(3) Unified system L2 cache
(4) Build-in Cortex-M4 core for always on processing
(5) Advanced TrustZone security system
(6) Application based traffic optimization using internal QoS-based switching fabrics

3D Graphics Processing Unit
(1) ARM Mali-G52 MP4 (4ppc) GPU
(2) 8-wide warps, 2xdual texture pipe, 6x8-wide execution engines(EE)
(3) Concurrent multi-core processing
(4) OpenGL ES3.2, Vulkan 1.0 and OpenCL 2.0 support

Video/Picture CODEC
(1) Amlogic Video Engine (AVE) with dedicated hardware decoders and encoders
(2) Support multi-video decoder up to 4Kx2K@60fps+1x1080P@60fps
(3) Supports multiple "secured" video decoding sessions and simultaneous decoding and encoding
(4) Video/Picture Decoding
VP9 Profile-2 up to4Kx2K@60fps
   H.265 HEVCMP-10@L5.1upto 4Kx2K@60fps
   AVS2-P2 Profile up to 4Kx2K@60fps
H.264 AVCHP@L5.1upto 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 to1080P@60fps
   MPEG-2 MP/HL up to 1080P@60fps(ISO-13818)
MPEG-1MP/HLupto1080P@60fps(ISO-11172)
RealVideo 8/9/10 up to 1080P@60fps
Multiple language and multiple format sub-title videosupport
MJPEG and JPEG unlimited pixel resolution decoding(ISO/IEC-10918)
Supports JPEG thumbnail, scaling, rotation andtransition effects
Supports *.mkv,*.wmv,*.mpg, *.mpeg, *.dat, *.avi,*.mov, *.iso,*.mp4, *.rm and*.jpg file formats
(5) 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 lowlatency

Video Output

(1) Built-in HDMI 2.1 transmitter including both controller and PHY with CEC, Dynamic HDR and HDCP 2.2, 4Kx2K@60 max resolution output
(2) CVBS 480i/576i standard definition output
(3) Supports all standard SD/HD/FHD video output formats: 480i/p, 576i/p, 720p, 1080i/p and 4Kx2K
(4) 4-lane MIPI DSI interface, resolution up to 1920*1080 with rotation and panel calibration

Chip Performance

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Welcome to our range of premium Amlogic A311D Android TV Boxes, where cutting-edge technology meets superior entertainment. As a trusted supplier, we are dedicated to providing you with a seamless and immersive viewing experience that redefines your entertainment standards.

Powerful Amlogic A311D Chipset:

Our Android TV Box is powered by the advanced Amlogic A311D chipset, ensuring smooth and responsive performance for all your entertainment needs. Whether you're streaming high-definition content, playing graphics-intensive games, or multitasking between apps, the Amlogic A311D chipset delivers exceptional speed and efficiency.

4K Ultra HD Streaming:

Experience breathtaking visuals with support for 4K Ultra HD streaming. Watch your favorite movies, TV shows, and videos in stunning detail and clarity, bringing every scene to life on your big screen.

Advanced Gaming Capabilities:

Immerse yourself in a world of gaming with our Android TV Box's advanced gaming capabilities. From casual games to intense multiplayer experiences, the Amlogic A311D chipset ensures smooth gameplay with high frame rates and responsive controls.

Seamless App Integration:

Access a vast library of apps, games, and streaming services with seamless integration on our Android TV Box. Customize your entertainment experience, discover new content, and stay connected with the latest apps directly from your device.

Dual-Band Wi-Fi and Ethernet Connectivity:

Stay connected with dual-band Wi-Fi and Ethernet connectivity options. Enjoy fast and stable internet access for streaming, downloading, and browsing, ensuring uninterrupted entertainment at all times.

Bluetooth Support:

Connect wireless peripherals such as keyboards, mice, headphones, and game controllers with built-in Bluetooth support. Enhance your gaming and multimedia experience with effortless connectivity.

User-Friendly Interface:

Navigate through your favorite content effortlessly with our user-friendly interface. Easily switch between apps, customize settings, and discover new content with intuitive controls and organized menus.

Secure and Up-to-Date Software:

We prioritize security and software updates to ensure that your Android TV Box is always protected against vulnerabilities and equipped with the latest features and improvements. Enjoy peace of mind knowing that your device is secure and up-to-date.

Conclusion:

As your trusted Amlogic A311D [Android TV Box supplier](), we are committed to delivering unmatched entertainment experiences with cutting-edge technology, seamless performance, and intuitive interfaces. Elevate your entertainment setup with our premium Android TV Box and immerse yourself in a world of endless possibilities.