

# Smart Android TV Box, Best Android TV Box Manufacturer

| <b>Specifications</b>        |   |
|------------------------------|---|
| Model No.                    | Amlogic A311D Best Android TV Box Manufacturer  |
| 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   |
| <b>Video&amp;Audio CODEC</b> |   |
| 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;<br>Support MP3 and other audio formats; support JPG, JPEG, BMP, PNG, GIF and other photo formats |
| <b>Port</b>                  |   |
| Video output                 | 1 channel LVDS 40-pin 2.0mm double-pin, can support 8bit, 10bit screen;<br>1 channel HDMI output;<br>1 channel AV output  |
| Video input                  | x1, MIPI CSI  |
| Audio output                 | 4-pin 2.5mm socket 25W@2 amplifier and 3W@2 speaker   |
| Network interface            | x1, 10M/100M Ethernet<br>WIFI+BT, 2.4G single band or 2.4G/5G dual band for options<br>PCIE slot (4G) x1 or M.2 slot (4G) x1 for options  |
| USB2.0 interface             | USB OTG x1 (available for HOST)<br>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   |
| <b>Power</b>                 |   |
| Power Supply                 | 12V, 2.5DC Connector  |

# S922X



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

S055T01

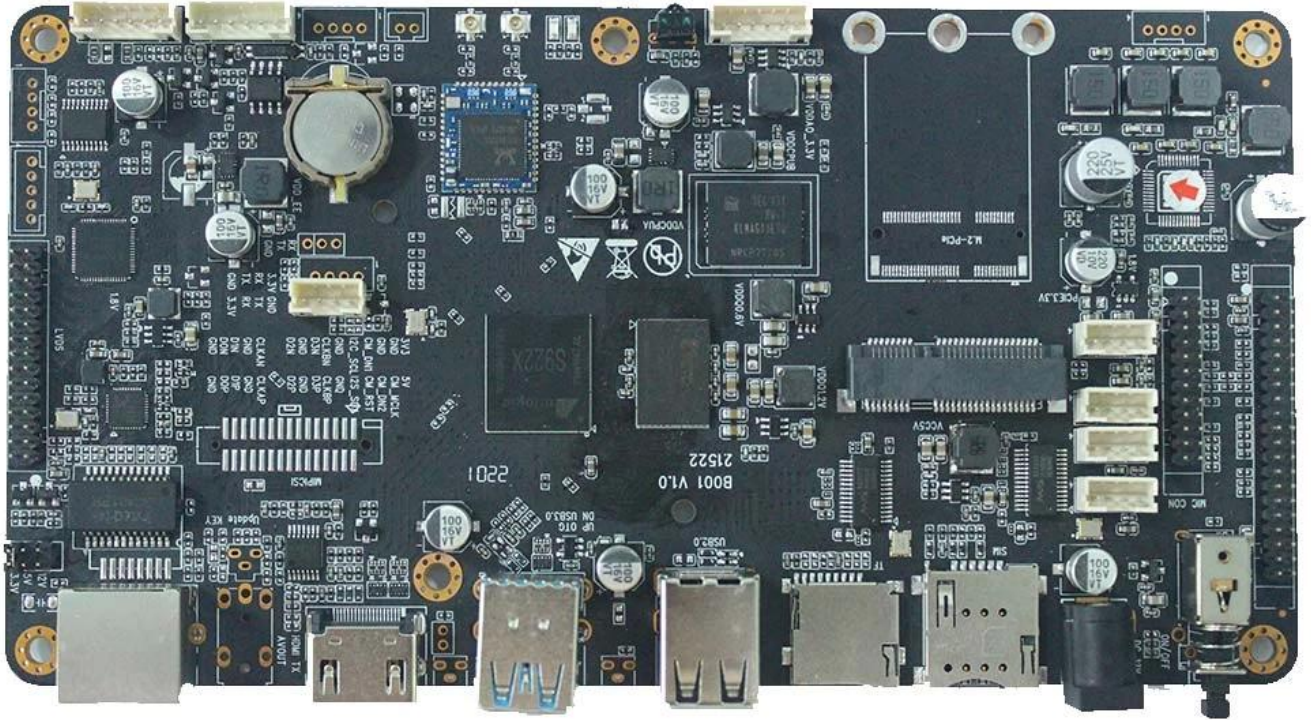


180mm

95mm

180mm\*95mm\*20mm





Amlogic S922X Android Development Board multimedia network player-LCD driver integrated board adopts Amlogic S922X 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, 2x dual 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 to 4Kx2K@60fps

H.265 HEVCMP-10@L5.1 up to 4Kx2K@60fps

AVS2-P2 Profile up to 4Kx2K@60fps

H.264 AVCHP@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-1MP/HL up to 1080P@60fps (ISO-11172)

RealVideo 8/9/10 up to 1080P@60fps

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

### (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 low latency

### 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

### CPU Sub-system

- (7) Quad Core ARM Cortex-A73 and Dual Core ARM Cortex-A53 CPU
- (8) ARMv8-A architecture with Neon and Crypto extensions
- (9) Unified system L2 cache
- (10) Build-in Cortex-M4 core for always on processing
- (11) Advanced TrustZone security system
- (12) Application based traffic optimization using internal QoS-based switching fabrics

#### 3D Graphics Processing Unit

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

#### Video/Picture CODEC

- (6) Amlogic Video Engine (AVE) with dedicated hardware decoders and encoders
- (7) Support multi-video decoder up to 4Kx2K@60fps+1x1080P@60fps
- (8) Supports multiple "secured" video decoding sessions and simultaneous decoding and encoding
- (9) Video/Picture Decoding

#### VP9 Profile-2 up to 4Kx2K@60fps

- H.265 HEVCMP-10@L5.1 upto 4Kx2K@60fps
- AVS2-P2 Profile up to 4Kx2K@60fps
- H.264 AVCHP@L5.1 upto 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-1MP/HL upto 1080P@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 and transition effects

Supports \*.mkv, \*.wmv, \*.mpg, \*.mpeg, \*.dat, \*.avi, \*.mov, \*.iso, \*.mp4, \*.rm and \*.jpg file formats

#### (10) 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

- (5) Built-in HDMI 2.1 transmitter including both controller and PHY with CEC, Dynamic HDR and HDCP 2.2, 4Kx2K@60 max resolution output
- (6) CVBS 480i/576i standard definition output
- (7) Supports all standard SD/HD/FHD video output formats: 480i/p, 576i/p, 720p, 1080i/p and 4Kx2K
- (8) 4-lane MIPI DSI interface, resolution up to 1920\*1080 with rotation and panel calibration

Welcome to the pinnacle of home entertainment - our smart Android TV box, engineered by the best Android TV box manufacturer in the industry. Let's delve into what makes this device a game-changer for your TV viewing experience.

### **Cutting-Edge Features**

Our smart Android TV box boasts cutting-edge features that redefine how you interact with your TV. From lightning-fast processing power to crystal-clear 4K resolution, every detail is designed to enhance your entertainment.

### **Seamless Streaming and Gaming**

With our Android TV box, streaming your favorite movies, shows, and music is effortless. Enjoy lag-free playback and discover new content on popular streaming platforms like Netflix, Hulu, Amazon Prime Video, and more. Dive into immersive gaming experiences with access to a vast library of Android games.

### **Intuitive User Interface**

Navigate with ease using our intuitive user interface. Customize your home screen, organize apps, and access settings seamlessly. The included remote control or optional voice commands make interaction a breeze.

### **Versatile Connectivity**

Connect your smart Android TV box to other devices with ease. Whether it's your soundbar, gaming console, or smart home devices, our box offers versatile connectivity options like HDMI, USB, Bluetooth, and Wi-Fi.

### **Voice Control**

Take control with your voice. Our smart Android TV box supports voice commands, allowing you to search for content, adjust settings, and launch apps hands-free. It's a whole new level of convenience.

### **App Ecosystem**

Explore a vast ecosystem of apps and services via the Google Play Store. From streaming apps to productivity tools, educational content to fitness apps, there's something for everyone. Stay entertained, informed, and productive right from your TV.

### **Sleek Design**

Our smart Android TV box features a sleek and modern design that complements any entertainment setup. Compact yet powerful, it fits seamlessly into your living space.

### **Customer Support**

We stand by our product and offer dedicated customer support to ensure your experience is smooth from setup to daily usage. Our team is here to assist with any questions or technical issues you may encounter.

### **Conclusion**

In conclusion, our smart [Android TV box](#) from the best Android TV box manufacturer combines cutting-edge technology with user-friendly features to deliver an unparalleled entertainment experience. Upgrade your TV setup today and discover a world of possibilities at your fingertips.