

POE Android Digital Signage Player

Specifications

Model No.	Amlogic A311D POE Android Digital Signage Player
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

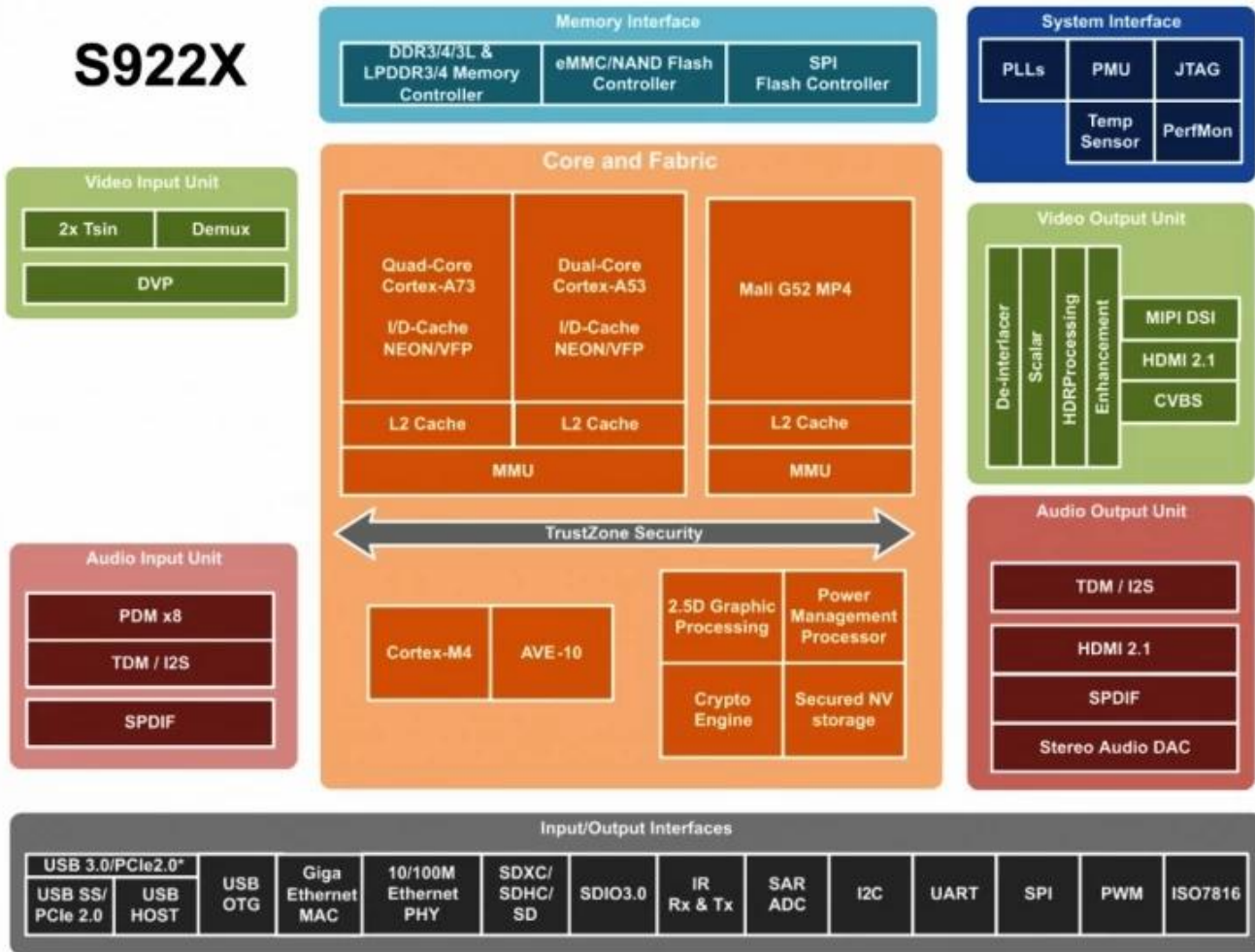
Port

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

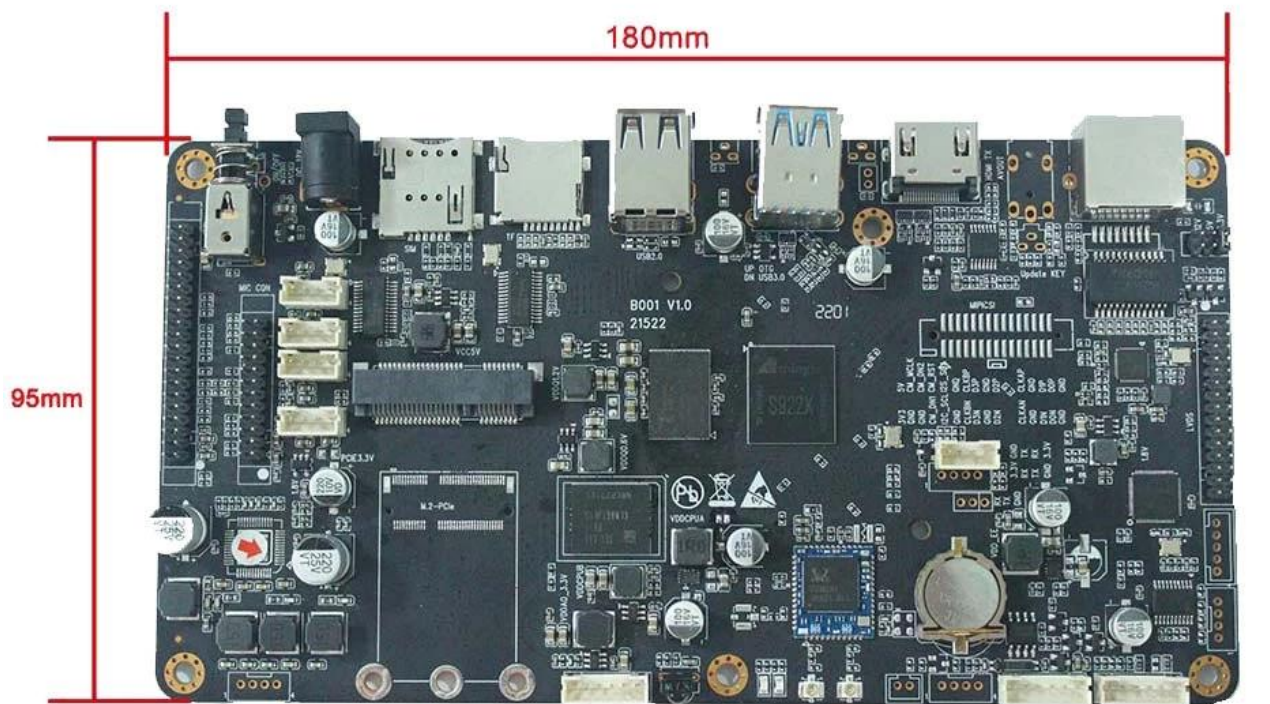
Power Supply	12V, 2.5DC Connector
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S922X

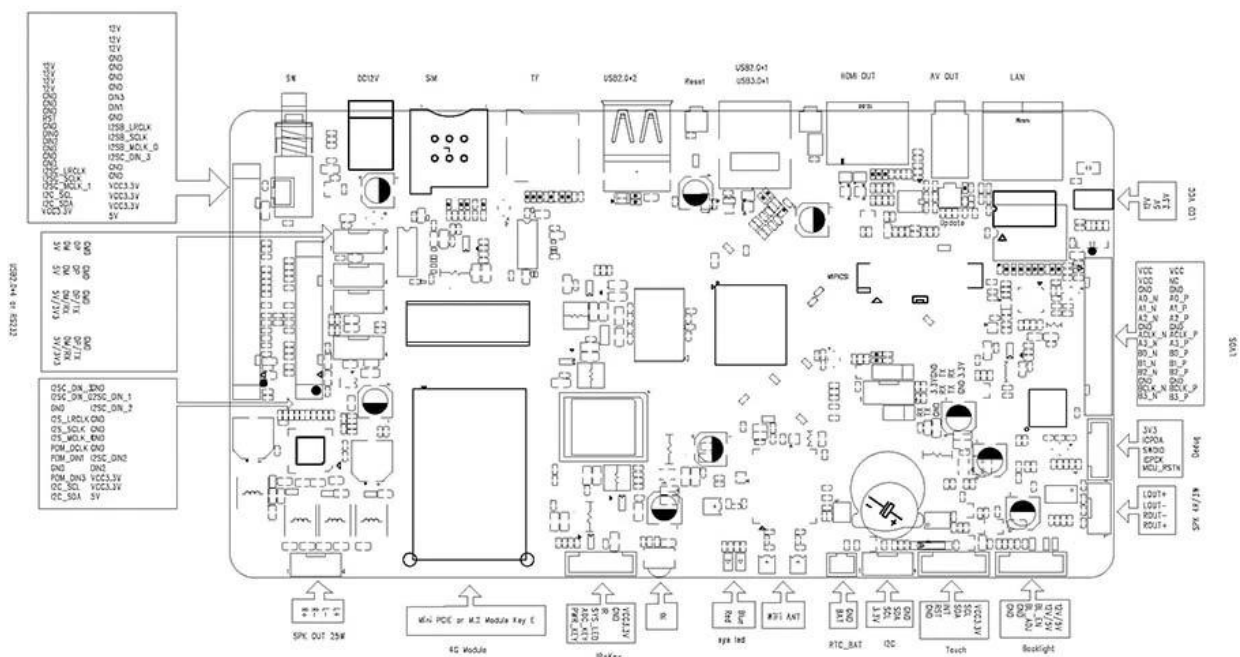


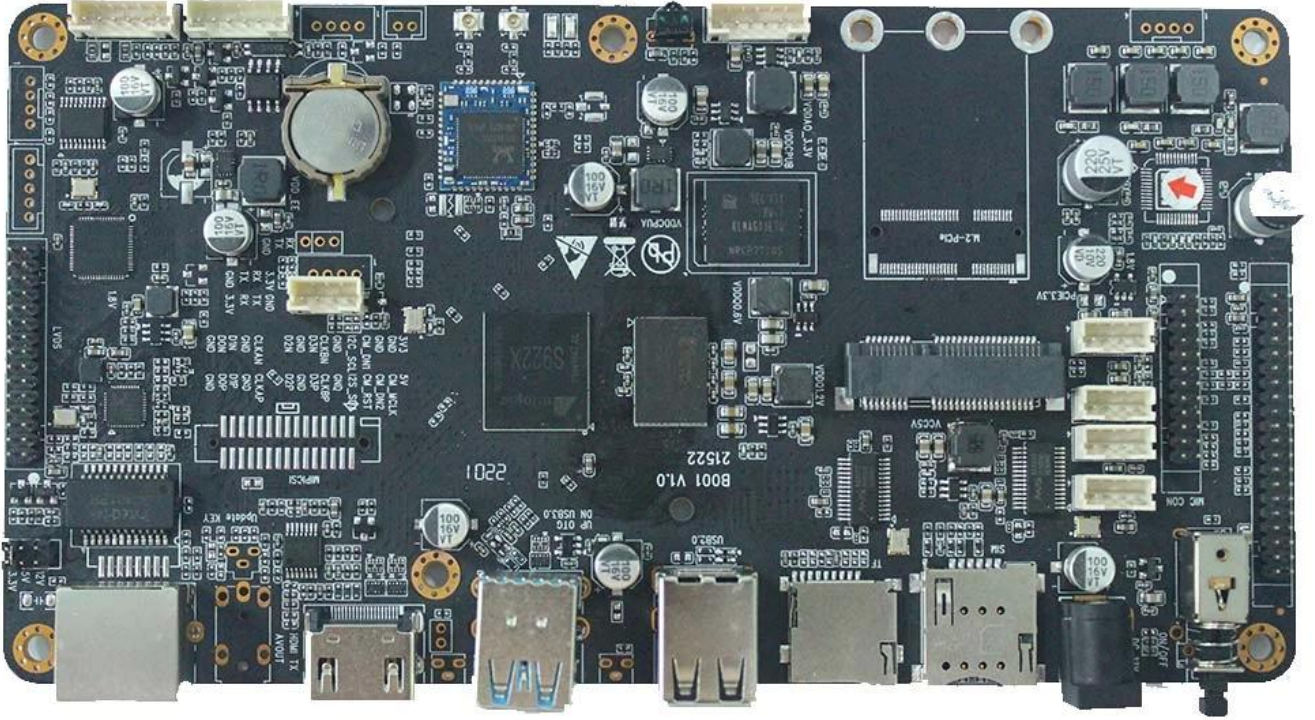
Supported configuration: PCIe2.0 port + USB2.0 Host, or USB3.0 without PCIe

S055T01



180mm*95mm*20mm





Amlogic A311D Android Development 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, 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

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- (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

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- (7) Concurrent multi-core processing
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- (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

Our POE Android Digital Signage Player revolutionizes the way you deploy and manage digital signage solutions, offering unparalleled convenience, flexibility, and performance. Designed for businesses of all sizes, from small retailers to large enterprises, our player provides a reliable and feature-rich platform for showcasing dynamic content and engaging your audience.

At the heart of our POE Android Digital Signage Player is Power over Ethernet (POE) technology, which enables both power and data to be transmitted over a single Ethernet cable. This innovative feature simplifies installation and reduces clutter by eliminating the need for separate power cables. With POE support, you can easily deploy our player in various locations, including retail stores, corporate offices, hospitality venues, and more, without worrying about power outlets or cable management.

Our player runs on the Android operating system, offering a familiar and user-friendly interface that

makes content management a breeze. With access to the Google Play Store, you can download and install a wide range of apps, including digital signage software, media players, content creation tools, and more, to customize your signage experience. Whether you're displaying promotional videos, interactive menus, social media feeds, or live streams, our player provides the flexibility and versatility to meet your needs.

Furthermore, our POE Android Digital Signage Player supports stunning 4K resolution, delivering crisp and clear visuals that captivate viewers and grab attention. Whether you're showcasing high-resolution images, videos, or graphics, our player ensures that your content looks its best on any display. With support for advanced multimedia formats and codecs, you can create immersive and engaging experiences that leave a lasting impression on your audience.

With our player, content playback is seamless and hassle-free. Whether you're streaming content from the cloud, playing media from a USB drive, or displaying content from a local network, our player ensures smooth and reliable performance. Advanced features such as remote management, scheduling, and playlist support allow you to easily update and manage content across multiple displays from anywhere with an internet connection.

In addition, our POE Android Digital Signage Player offers a range of connectivity options to suit your specific needs. With HDMI, USB, Ethernet, and Wi-Fi connectivity, you can easily connect to a variety of displays, peripherals, and network infrastructure. This flexibility allows you to integrate our player seamlessly into your existing signage setup and expand your digital signage network as your business grows.

In summary, our POE Android Digital Signage Player is the ideal solution for businesses looking to enhance their signage solutions with cutting-edge technology and versatile features. With POE support, Android capabilities, 4K resolution, and seamless content playback, our player offers everything you need to create captivating digital experiences that drive engagement and elevate your brand. Transform your signage setup with our [POE Android Digital Signage Player](#) today.