

# Amlogic A311D2 Multimedia Network Player Android Smart Integrated Board

## Specifications

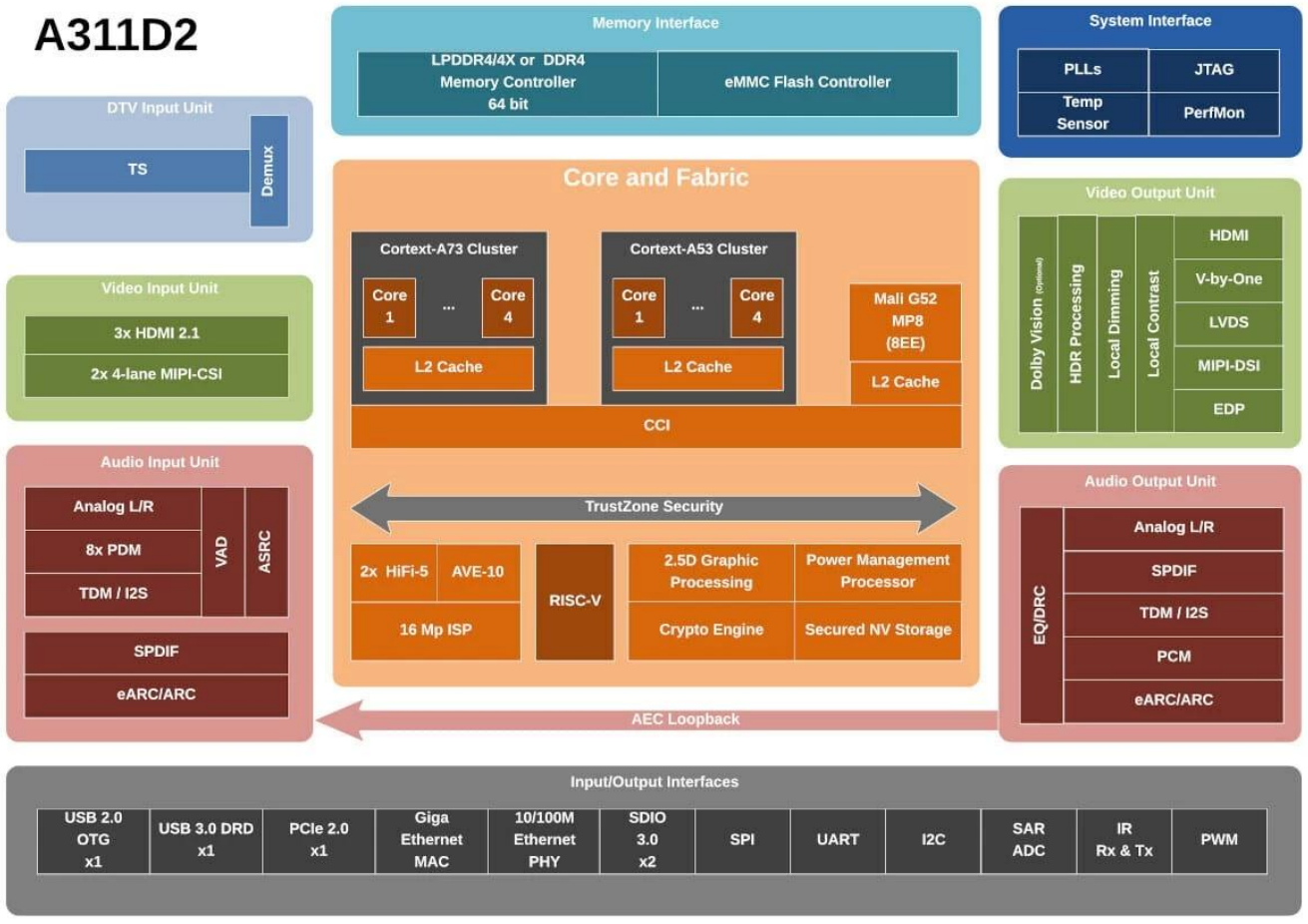
Model No.	Amlogic A311D2 Android Smart Integrated Board Multimedia Network Player
CPU	Amlogic A311D2 Quad Core Cortex-A73 + Quad Core Cortex-A53
GPU	ARM Mali-G52 MP8
RAM	4GB (max to 8GB/32GB for options)
ROM	32GB (64GB/128GB/256GB options)
OS	Android 11.0
Wi-Fi / BT	Built-in Wi-Fi (standard single band 2.4G supported; Dual band 2.4G/5G for options); BT4.2 or BT5.0 ( M.2 port for option)

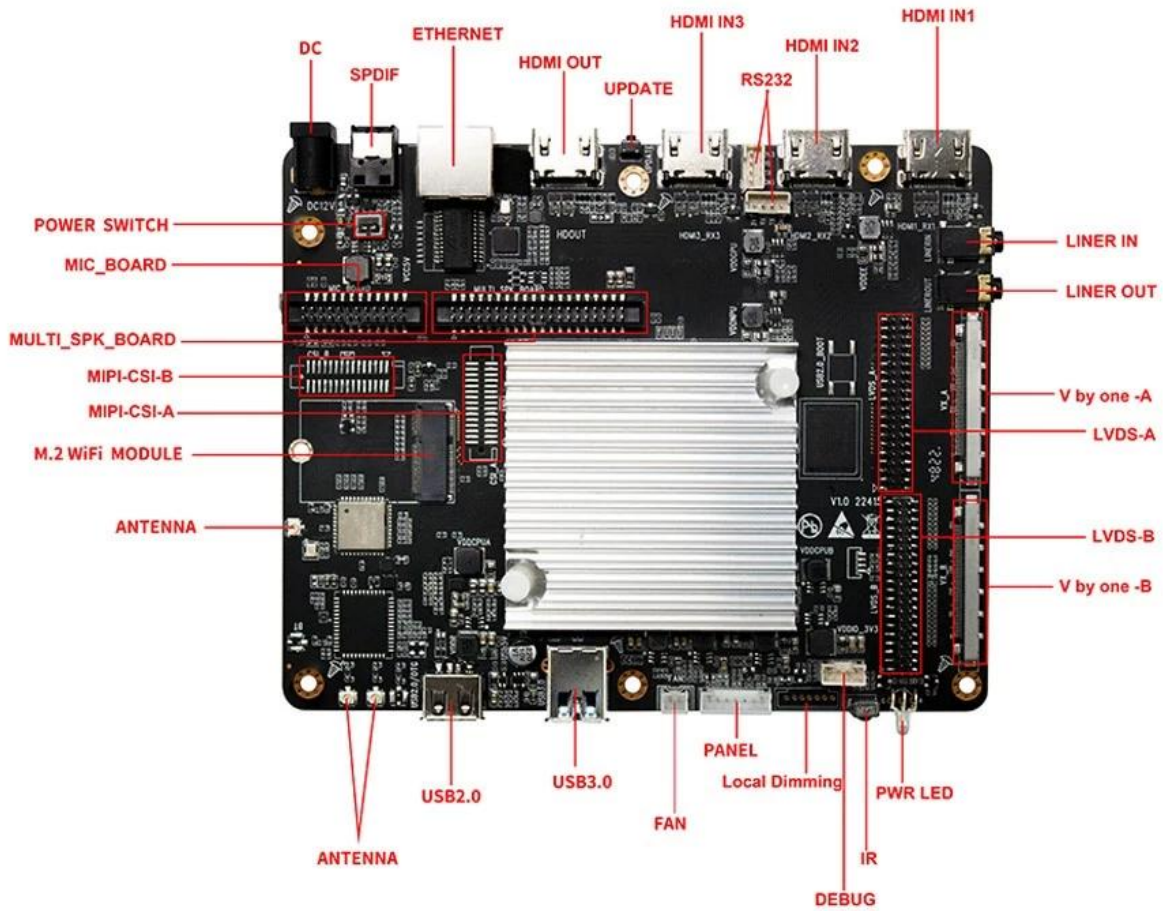
## I/O Port

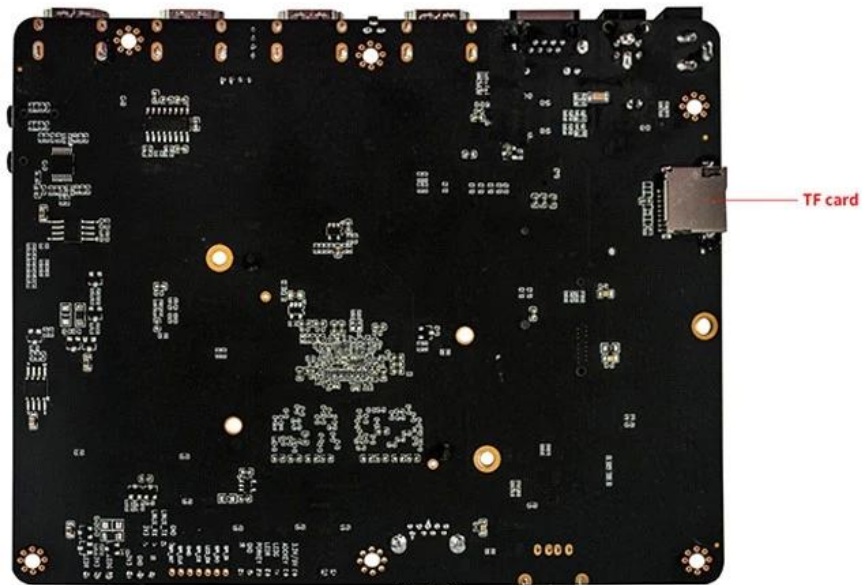
HDMI input	3*HDMI input
HDMI output	1*HDMI output
LVDS output	1 single/dual, can directly drive 50/60Hz LCD
V-By-One output	2*8-lane V-by-One, up to 4Kp60; support 4K*2K@60Hz output
Screen backlight interface	5V/12V power, Local Dimming or PWM dimming
USB port	1*USB 3.0 A port USB 2.0 A port ( for burning firmware) or ( mini USB OTG for option)
Serial ports	2*serial ports (2*RS232 or 2*TTL ports; If need TF card slot, then only 1* serial port available.)
Camera CSI	2*CSI input
MIC PDM	Some of the function pins are multiplexed with Camera CSI, need to confirm before use
Spk BOARD	Support I2S output
Ethernet	1*RJ45 port, 100M/1000M
SPDIF	SPDIF or COAX output for option
Line in	AUDIO_Line in
Line out	AUDIO_Line out
RTC	Support timer switch on/off
IR	IR receiver (on-board IR receiver for option)
Power LED	On-board or matching function board for option
Upgrade	Support local upgrade by TF & USB or OTA upgrade

Power Supply	5V/12V Power
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# A311D2







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## **Applicable Scope**

Amlogic A311D2 Multimedia Network Player Android Smart Integrated Board motherboard integrates multimedia network playback, LCD driver and Android intelligence, mainly for supporting LVDS and V-by-one screens of various sizes and resolutions. It is suitable for smart shelf, door advertising, commercial display, etc. It can also be applied to intelligent display terminal products, video terminal products, industrial automation terminal products, commercial display, self-service products, intelligent education, new retail and many other display fields. Such as: multimedia advertising machine, intelligent self-service terminal, intelligent retail terminal, etc.

## **Product Overview**

Amlogic A311D2 Multimedia Network Player Android Smart Integrated Board motherboard is

powered by Amlogic A311D2 chip with Android 11.0 OS; with superb audio and video processing capabilities. Octa-core processor designed for smart display applications, quad-core Cortex-A73 & quad-core Cortex-A53, up to 2.2GHz; Mali-G52 MP8 (8EE) GPU; supports up to 4Kp60 with 3\*HDMI 2.1 inputs, one 16MP ISP and 4K video encoding. Support 4K\*2K@60fps, H.265 hard decode and many other formats, rich peripheral interfaces.

## Product Features

- \*On-board V-By-One / LVDS output interface, no converter chip required;
- \*Support Ethernet & WiFi (M.2 port option) both and RTC;
- \*Rich expansion interfaces: 1\*OTG USB port, 1\*USB 3.0 A port, 2\*RS232 serial ports, 1\*TTL serial port, 1\*ADC interface; which is adaptable to various peripheral access requirements in the market;
- \*Support HDMI + LVDS or HDMI + V-by-one screen dual screen outputs;
- \*High definition: Supports up to 4K\*2K@60fps decoding and various LCD displays and cutting screens which with LVDS or V-By-One interfaces;
- \*2\*4-lane MIPI-DSI interfaces with resolution up to 1920\*1200;
- \*Support customization for Android system, providing reference code for the system call interfaces API. Perfectly support customer in upper layer application APP development;
- \*Support AV1, MP-10, VP9, AVS2, MPEG2, MPEG4, H.265, wmv, mkv, mov, iso and other mainstream video formats;
- \*Support 4K screenshot and recording;
- \*High memory bandwidth to support 4K user interface;

The Amlogic A311D2 Multimedia Network Player Android Smart Integrated Board is a full-featured smart TV solution with the following features and advantages:

1. **High-Performance Processor:** Powered by the Amlogic A311D2 processor, offering outstanding performance and efficiency for smooth multimedia experiences and fast app loading.
2. **4K Video Support:** Supports 4K video playback and HD video streaming, providing users with the clearest and most immersive viewing experience.
3. **Rich Connectivity Options:** Includes HDMI output, USB ports, Ethernet interface, and more, offering flexible connectivity options to meet different application needs.
4. **Multimedia Functionality:** Built-in multimedia features support various audio and video formats, catering to users' diverse media content needs.
5. **Smart Operating System:** Developed based on the Android operating system, with an intuitive user interface and a rich app ecosystem, offering users unlimited entertainment and functionality choices.
6. **Customization:** Supports custom development and application expansion to meet the personalized needs of different customers and application scenarios.
7. **Stable and Reliable:** Rigorously tested and quality-controlled to ensure product stability and

reliability for long-term use.

8. **Low Power Consumption Design:** Energy-efficient design effectively reduces power consumption, prolonging device lifespan and saving energy costs.
9. **Wide Applications:** Suitable for various applications such as smart TVs, smart speakers, smart home control, providing users with intelligent living experiences.

In summary, the [Amlogic A311D2 Multimedia Network Player](#) Android Smart Integrated Board is a powerful, stable, and versatile smart TV solution, delivering excellent audiovisual experiences and intelligent connectivity options to users.