Android 11 TV Box with Amlogic A311D2 Quad Core and Mali-G52 GPU
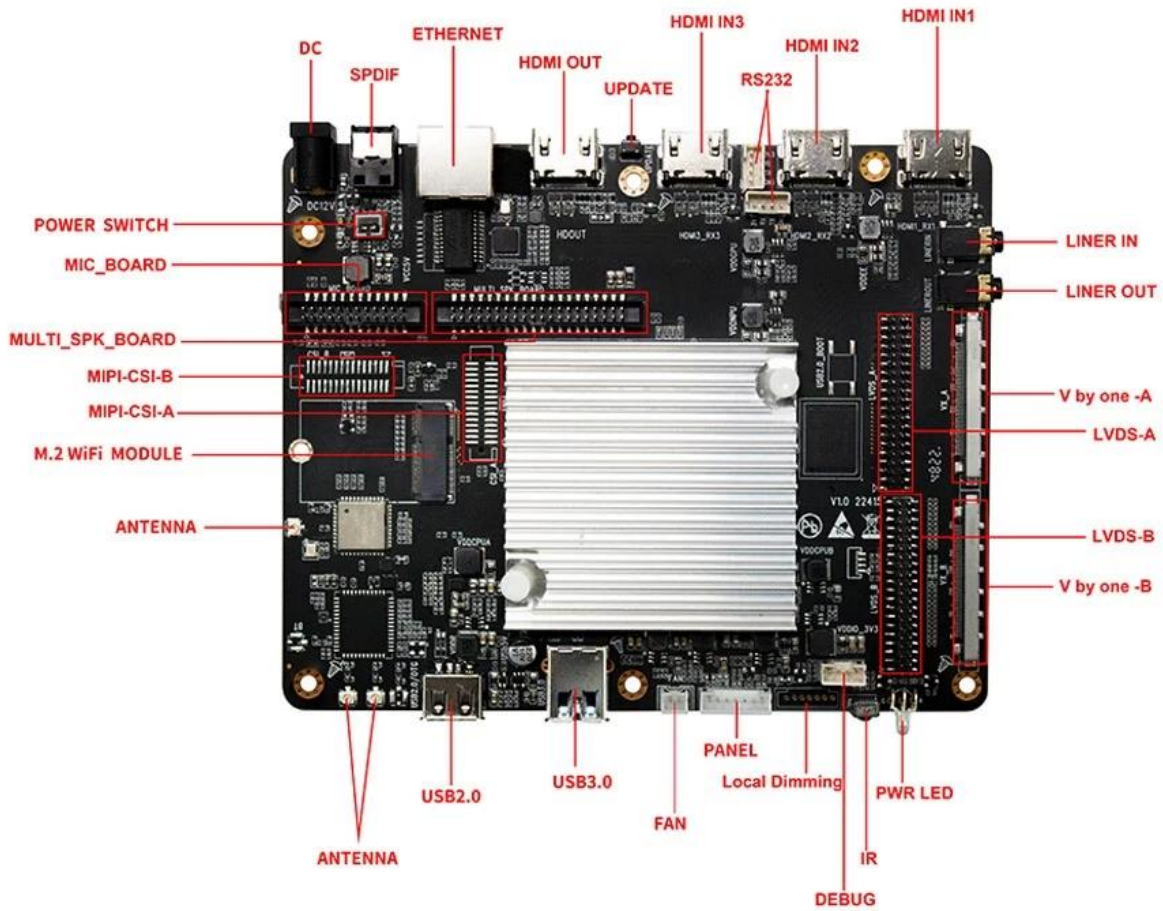
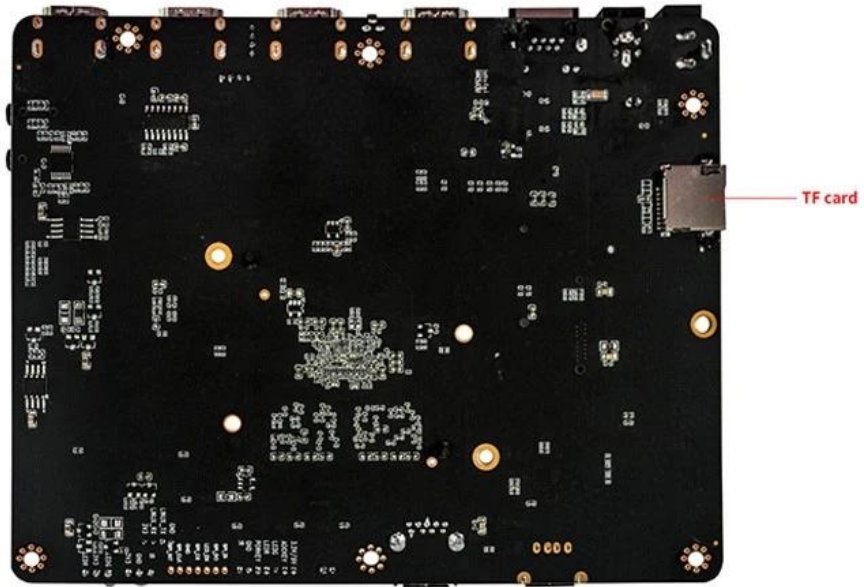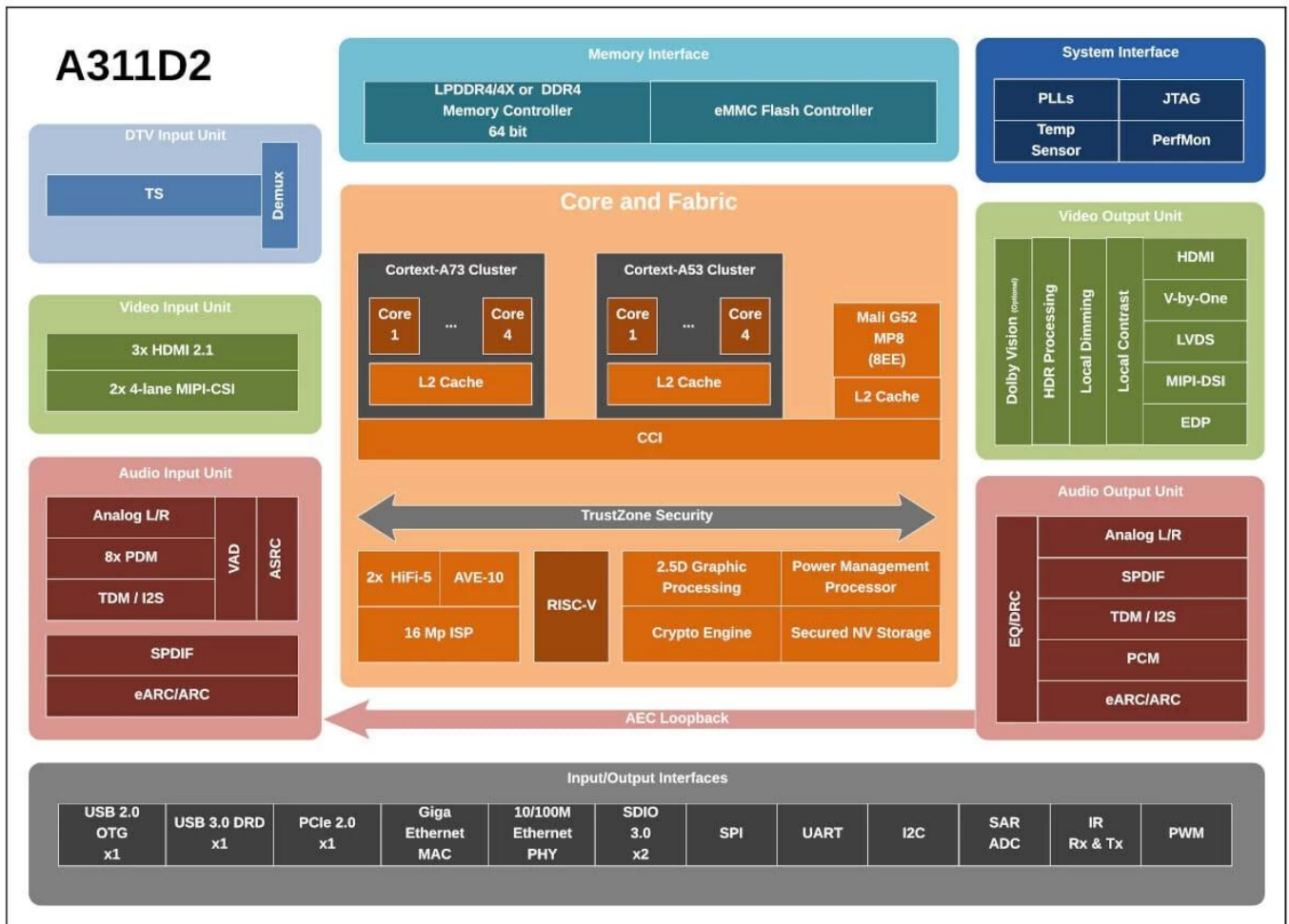| Specifications	
Model No.	Amlogic A311D2 TV Box
CPU	Amlogic A311D2 Quad Core Cortex-A73 + Quad Core Cortex-A53
GPU	ARM Mali-G52 MP8
RAM	4GB (max to 8GB/32GB for options)
ROM	32GB (64GB/128GB/256GB options)
OS	Android 11.0
Wi-Fi / BT	Built-in Wi-Fi (standard single band 2.4G supported; Dual band 2.4G/5G 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

TF card

Applicable Scope

Amlogic A311D2 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 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 Android 11 TV Box with Amlogic A311D2 Quad Core processor and Mali-G52 GPU is a powerful and versatile device that takes your home entertainment to the next level. Designed for those who demand high performance, this TV box offers exceptional processing power and graphical capabilities, making it ideal for both streaming 4K Ultra HD content and playing graphic-intensive games.

At the heart of this device is the Amlogic A311D2 Quad Core processor. This advanced chipset ensures that the TV box can handle demanding tasks with ease, from streaming high-definition movies to running multiple apps simultaneously. The quad-core architecture allows for efficient multitasking, ensuring that your device remains fast and responsive even when running several applications at once. Whether you're switching between streaming services, browsing the web, or downloading new apps, the Amlogic A311D2 provides the speed and reliability you need.

Complementing the powerful processor is the Mali-G52 GPU, a high-performance graphics unit designed to deliver stunning visuals. With support for 4K Ultra HD resolution, the Mali-G52 ensures that every frame is rendered with sharpness, clarity, and vibrant color. Whether you're watching a movie, streaming live sports, or playing the latest games, this GPU provides a visually immersive experience that brings your content to life. The combination of the Amlogic A311D2 and Mali-G52 makes this TV box a formidable entertainment device, capable of handling the most demanding visual content with ease.

Running on Android 11, this TV box provides a modern, user-friendly interface that is both intuitive and highly customizable. Android 11 offers a host of new features, including improved privacy settings, better device management, and enhanced support for the latest apps and games. With access to the Google Play Store, you can download and enjoy a wide array of applications, from popular streaming services like Netflix, Hulu, and Amazon Prime Video to the latest games and social media platforms. Android 11 also ensures that your device stays up to date with the latest software updates and security patches, providing a secure and smooth user experience.

In addition to its powerful hardware and modern software, the Android 11 TV Box with Amlogic A311D2 offers a variety of connectivity options. It includes multiple USB ports for external storage or peripherals, HDMI for high-definition video output, and an Ethernet port for a stable wired internet connection. The device also supports Wi-Fi, allowing you to connect to your home network wirelessly. This range of connectivity options makes it easy to integrate the TV box into your existing home entertainment system, whether you're connecting to a surround sound system, a gaming console, or other devices.

The TV box is also designed with ease of use in mind. Setting up the device is straightforward, with an intuitive setup process that gets you up and running in minutes. The remote control is ergonomically designed, providing easy access to all the essential functions, and the user interface is

streamlined for quick navigation and efficient use. Whether you're a tech-savvy user or someone new to smart TV boxes, this device is designed to provide a hassle-free experience.

In conclusion, the Android 11 [TV Box](#) with Amlogic A311D2 Quad Core and Mali-G52 GPU is a top-of-the-line device that delivers exceptional performance for all your entertainment needs. With its powerful processing capabilities, stunning 4K visuals, and the versatility of Android 11, this TV box is perfect for streaming, gaming, and more. Whether you're upgrading your home theater system or looking for a reliable media player, this device offers the performance, reliability, and features that make it a standout choice in today's market.