

Amlogic T982 Quad Core 4K Digital Signage Board-LCD Driver Integrated Board

Specifications

Model No.	Amlogic T982 Digital Signage
CPU	Amlogic T982 Quad-Core ARM Cortex-A55 Processor up to 1.9GHz
GPU	ARM Mali-G52 MP2 OpenGL ES 3.2, Vulkan 1.1 and OpenCL 2.0
RAM	2GB
ROM	8GB (8GB/32GB/64GB Optional)
OS	Android 13
Wi-Fi / BT	2.4Ghz (2.4G/5G Optional); BT4.2

I/O Port

LVDS Output	1 Single/Dual Channel, Drive 50/60Hz LCD Screen
V-BY-ONE Out	4K*2K@60Hz
Standard Screen Backlight Control Interface	12V, Enable, PWM Dimmer;
USB2.0	1*USB OTG, 1*USB2.0 A
Serial Port	1*RS232 1*TTL
Other Expansion Interfaces	Multipath IO interface, ADC and Button interface
Ethernet	10/100M Fast Ethernet RJ45 Port
RTC	Timer Switch
Upgrade	Support Local USB And OTA Upgrade
Size	125mm*80mm

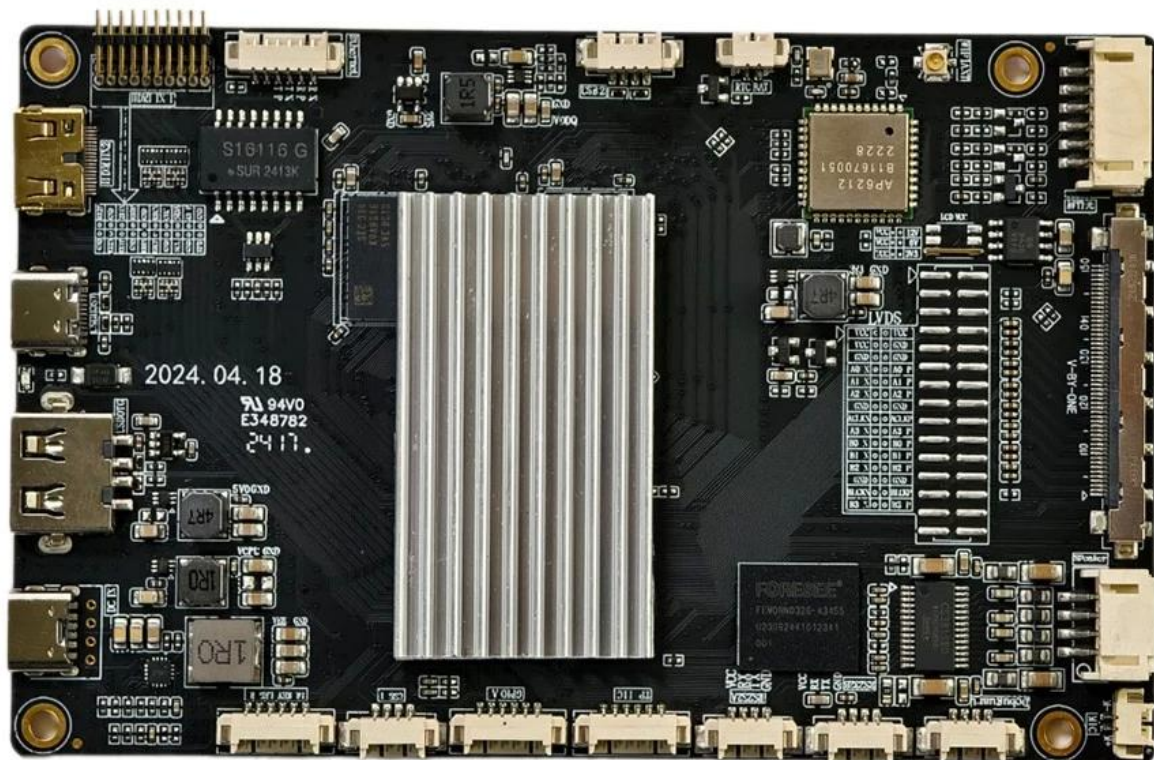


@mlogic

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T982

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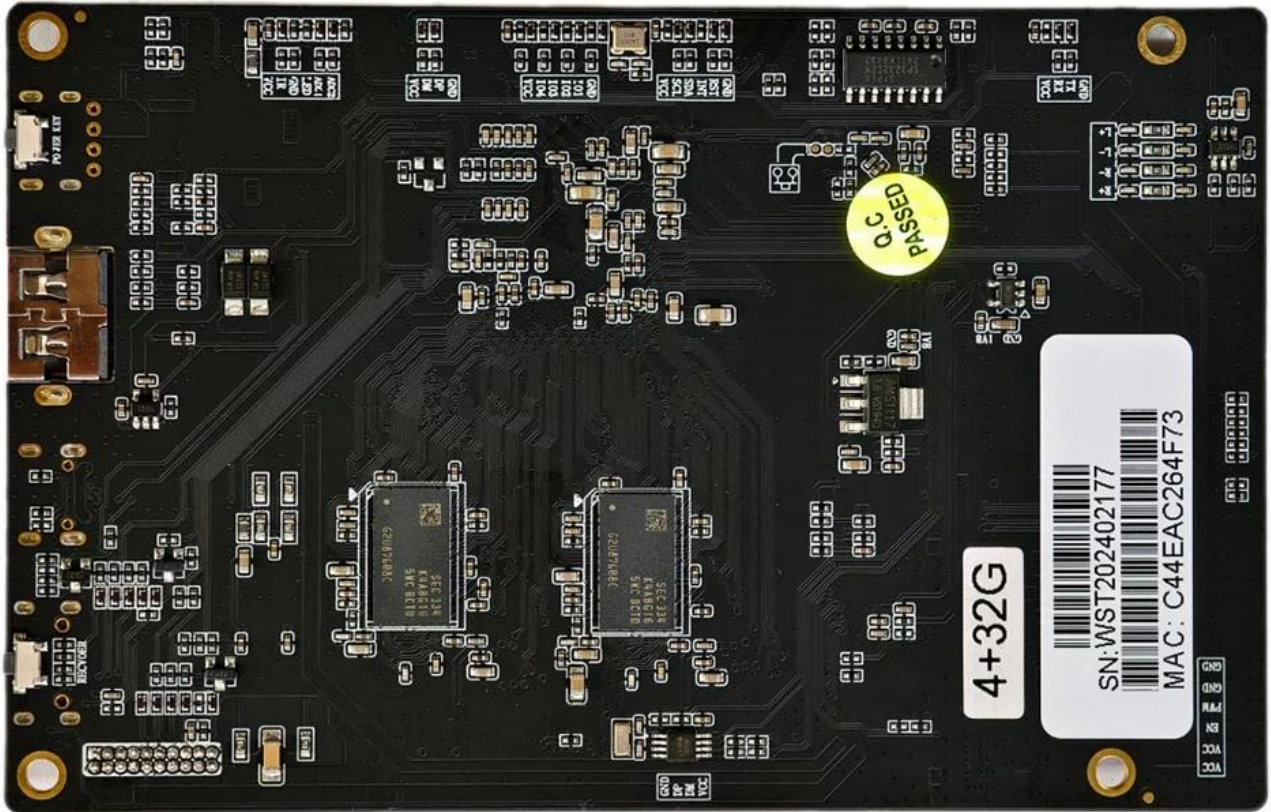
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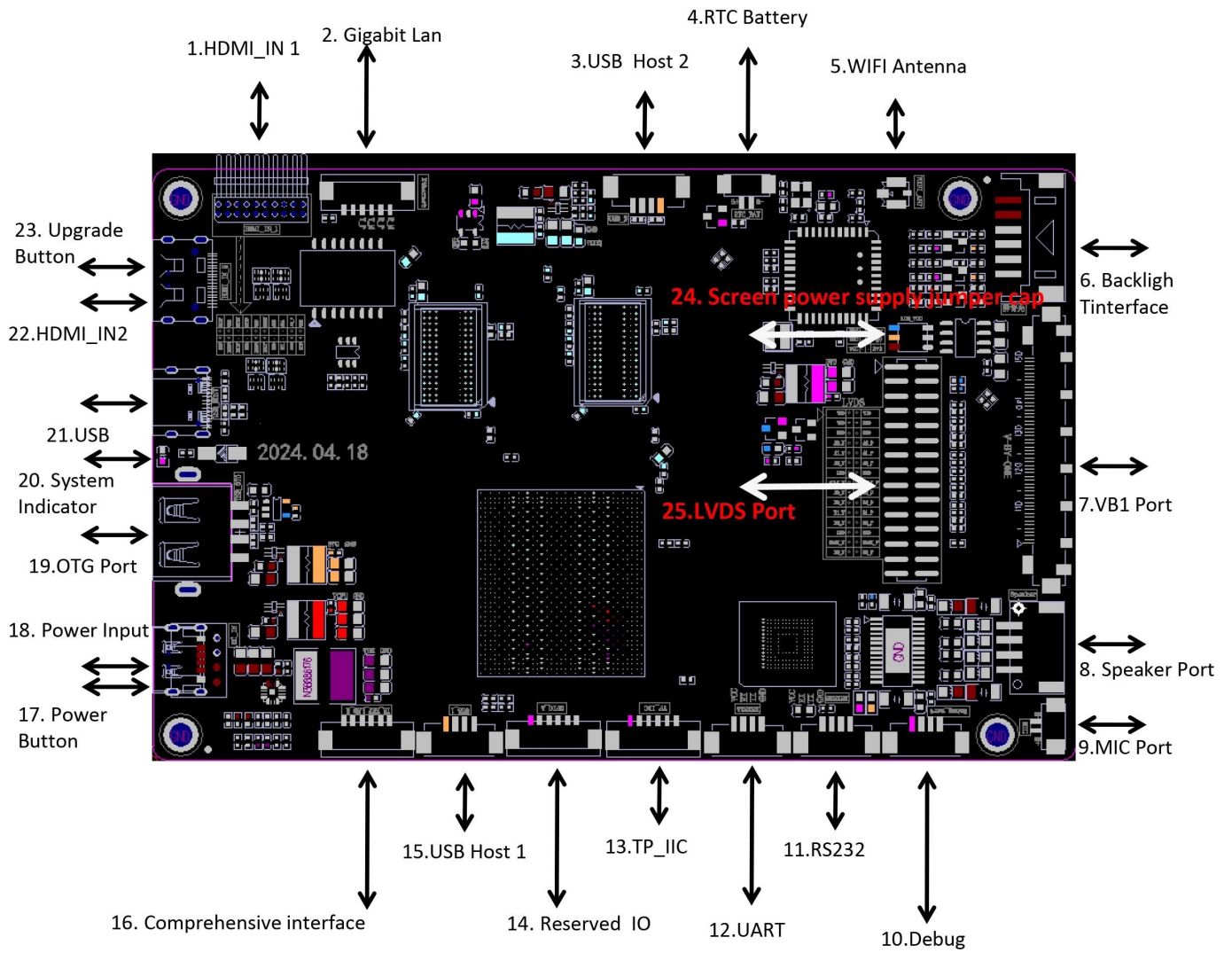


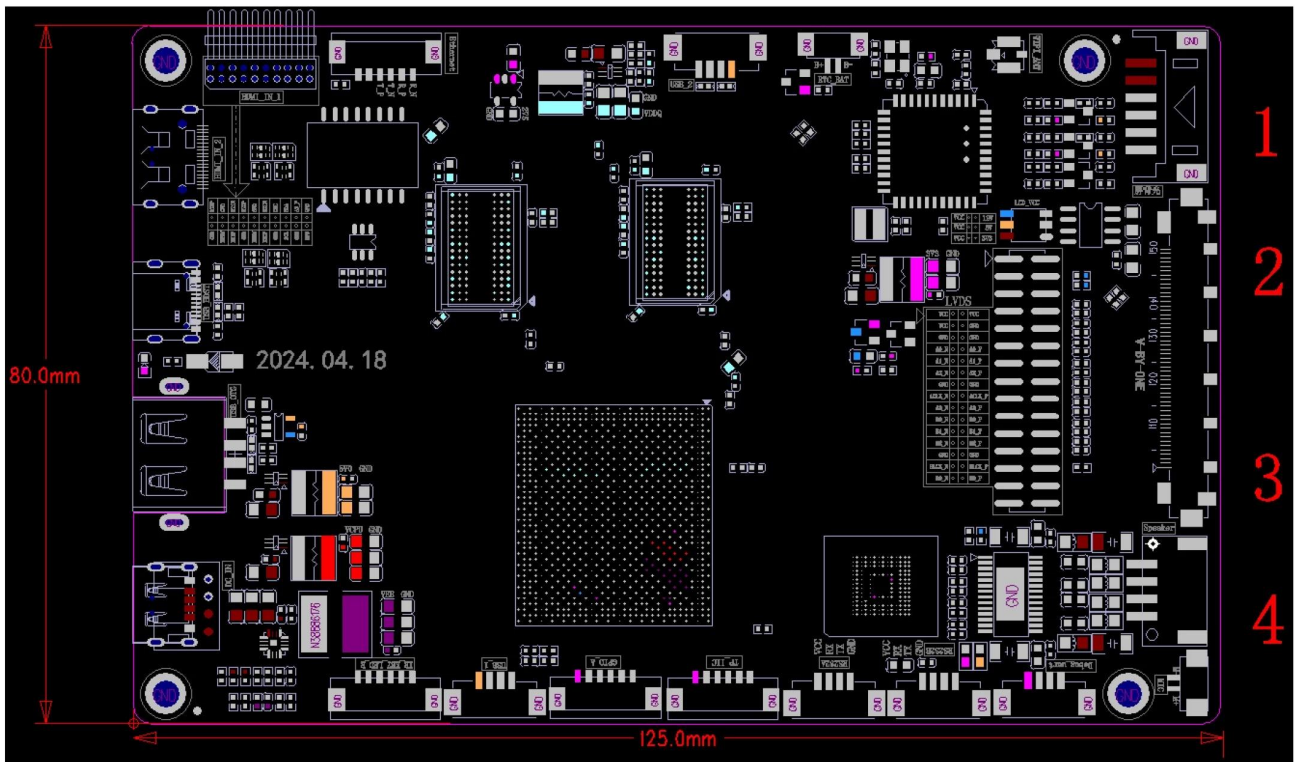
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PCB: 4-Layer Board
 Size: 80mm*125mm, Plate thickness 1.2mm
 Screw hole specifications: $\Phi 3.0\text{mm} \times 4$

Amlogic T982 Digital Signage is an Android smart motherboard designed primarily for supporting cut-to-size screens in various dimensions and resolutions. It is ideal for applications such as smart shelves, storefront advertising, and commercial displays, and it also serves well in smart display terminals, video-based terminal products, and industrial automation terminals. Suitable use cases include ultra-thin advertising machines, smart self-service terminals, and intelligent retail terminals.

Powered by the Amlogic T982 chipset, this device features a quad-core Cortex-A55 processor with a peak frequency of 1.9 GHz and a Mali-G52 GPU. It includes an integrated NPU delivering 2.6 TOPS processing power, supports 4K resolution and H.265 hardware decoding, and runs on the Android 13 operating system. It offers multi-channel video output and input, along with a rich selection of peripheral interfaces for extensive device expansion. With ultra-low power consumption and robust performance, it is an optimal choice for commercial displays, self-service applications, and new retail solutions.

- **Built-in V-By-One / LVDS Output and MINI HDMI Input.**
- **Network Support:** Wired and WiFi connectivity.
- **Comprehensive Expansion Interfaces:** The motherboard includes four USB ports—two standard USB ports (one OTG USB port and one USB 2.0 port) and two internal expansion USB ports—along with one RS232 serial port, one TTL serial port (supports wake-up), one TP_IIC, multiple GPIOs, and ADC interfaces, meeting a wide range of peripheral connectivity requirements.
- **High Resolution:** Supports up to 8K*4K@30fps decoding and various LCD displays, including LVDS/V-By-One and cut-to-size screens.
- **Android OS Customization:** Provides system API reference code, offering seamless support for upper-layer application development.
- **Touchscreen Compatibility:** Fully compatible with infrared, optical, capacitive, resistive,

and touch film-based touchscreens.

- **User-Friendly Operation:** Easy to operate, with simple and convenient maintenance.

The Amlogic T982 Quad-Core 4K Digital Signage Board with Integrated LCD Driver is a high-performance solution crafted for businesses seeking to elevate their digital signage capabilities. Powered by the Amlogic T982 chipset, this board is equipped with a quad-core processor that ensures smooth, efficient handling of multimedia content and high-resolution display needs, meeting the demands of today's digital signage market.

With 4K Ultra HD support, the T982 signage board enables businesses to captivate audiences with vivid, detailed visuals. Whether used for promotional displays, menu boards, wayfinding in large public spaces, or informational kiosks, the board's ability to deliver high-quality, lifelike images makes it a valuable tool for engaging viewers. The integrated LCD driver adds convenience by directly supporting LCD panels, which simplifies system setup and reduces the need for additional hardware. This integration not only streamlines installation but also minimizes potential connectivity issues, ensuring reliable and latency-free content playback.

Running on the Android OS, this signage board provides broad compatibility with Android applications, allowing for a wide range of multimedia formats and interactive capabilities. The Android environment offers an intuitive interface, making it easy for content managers to design, schedule, and update content. Users benefit from a large ecosystem of digital signage and management apps available for Android, giving businesses the flexibility to tailor their signage displays to suit specific needs. This compatibility also allows for future scalability, as new applications can be integrated into the system as business needs evolve.

The Amlogic T982 board is designed with extensive I/O options, including HDMI, USB, Ethernet, and Wi-Fi capabilities, making it adaptable to a variety of setups. Its multiple connectivity options ensure that peripheral devices such as touchscreens, cameras, and sensors can be easily connected, enhancing interactive potential. Network connectivity also supports remote content updates and device management, allowing for efficient control of multiple signage displays from a central location.

Energy efficiency is another standout feature of the Amlogic T982 Quad-Core board, as it's engineered to maintain low power consumption while operating 24/7, which is essential for digital signage that needs to remain active continuously. This power efficiency not only reduces heat buildup, extending the board's lifespan, but also translates to lower operational costs—a critical factor for businesses running multiple displays.

The Amlogic T982 Quad-Core 4K Digital Signage Board with Integrated LCD Driver is a robust, versatile choice for any commercial environment requiring high-quality digital displays. With its combination of strong processing capabilities, Android OS, 4K visual support, and seamless LCD integration, this board is suitable for a wide range of applications, from interactive kiosks in retail and hospitality to information boards in corporate or public settings. This board offers a comprehensive solution for businesses looking to deploy effective, eye-catching digital signage that enhances customer engagement and improves communication.