Android System Digital Signage Player - Interactive Multimedia Solution



Specifications

Model No. Amlogic S905D3 Android Digital Signage Player
CPU Amlogic S905D3 Quad Core 64 Bit ARM Cortex-A55

GPU ARM G31 MP2

RAM 2GB/LPDDR3, can be expanded to 4GB/LPDDR3

Internal Storage 16GB EMMC; 32GB/64GB optional

OS Android 9.0

Video&Audio CODEC

Video and Picture Decoding Amlogic Video Engine (AVE) with dedicated hardware decoders and encoders

Support multi-video decoder up to 4x1080P@60fps

Supports multiple "secured" video decoding sessions and simultaneous decoding and encoding

Video/Picture Decoding

VP9 Profile-2 up to 4Kx2K@60fps

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

AVS2-P2 Profile up to 4Kx2K@60fpsH.264 AVC HP@L5.1 up to 4Kx2K@30fps

MPEG-4 ASP@L5 up to 1080P@60fps (ISO-14496)

WMV/VC-1SP/MP/APupto1080P@60fps

– AVS-P16(AVS+)/AVS-P2JiZhunProfileupto1080P@60fps

MPEG-2MP/HLupto1080P@60fps□ISO-13818)MPEG-1MP/HLupto1080P@60fps(ISO-11172)

- RealVideo8/9/10upto1080P@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,*.rmand*.jpgfile formats

Video coding —Independent IPEG and H.264 encoder with configur able performance/bit-rate

-JPEG image encoding

-H.265/H.264 video encoding up to 1080P@60fps with low latency

Decoder Format HD MPEG1/2/4, H.265/HEVC, HD AVC/VC-1, RM/RMVB, Xvid/DivX3/4/5/6, RealVideo8/9/10

Media Format Avi/Rm/Rmvb/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg

Music Format MP3/WMA/AAC/WAV/OGG/DDP/TrueHD/HD/FLAC/APE

Photo Format HD JPEG/BMP/GIF/PNG/TIFF

Port

USB host USB2.0, Max480Mbps/USB3.0, Max5.1Gbps

SIM MICRO SIM

Video output HDMI 2.1/1ch Lvds/1ch EDP (schedule V by one interface)
RJ45 RJ45 wire Ethernet connection 100/1000M Ethernet support

Wi-Fi/ Bluetooth AP6398S(Wi-Fi+BT)2.4G+5.8G Dual Frequency

4G PCIE Port

TF Micro SD(Max 128G)

HDD Support SATA Max2TB(Not included)

Power

Amlogic S905D3 is the main board of network Android system, applicable to intelligentdisplay terminal equipment, industrial automation terminal, computer vision, master control of shared products, intelligent access control, such as:advertising machine (double screen display), new retail terminal, vendingmachine, interactive printing, face painting payment, intelligent accesscontrol and other products, applied to advertising, security, transportation, public transport and other industries.

Thisproduct adopts the Amlogic ultra-low S905D3 chip optimized in 2019, and theoperating system is Android 9.0. Its main system CPU is four core armcortex-a55, which has a unified L3 cache. In addition, cortex-a55 CPU also includes neon SIMD coprocessor to improve the software media processing capacity. It supports high dynamic range processing of H.264 HDR10 and HLG, 10bits of H.265/vp9, AVS, AVS+, avs2 realvideo, MJPEG stream, and JPEG pictures without size limitation; independent encoder can encode to 1080P at the speedof 60 frames/second with JPEG or H.265/H.264; it supports output of 4Kx2K @60fp (3840 *2160) of HDMI 2.1 interface. The product comes with 2x2 WiFi(supporting 2.4G and 5G dual frequency)+Bluetooth 4.1 wireless network module, and supports Ethernet Gigabit Ethernet interface, infrared remote control, keyboard and mouse.

ProductFeatures

- (1)RAMand ROM can be customized according to customer needs; 2GB/LPDDR3 can beenhanced to 4GB/LPDDR3
- (2)DCvoltage input: DC+12V/3A, normal working power consumption < 5W, standby powerconsumption < 0.5W
- (3) Dual-screen different display, support remote OTA upgrade, local USB, SD cardupgrade.
- (4)USB 4G network card can be expanded through PCI-e hardware interface;
- (5) Support Android system customization service, can provide special APP customization service;
- (6)Provide system API interface code to perfectly support customers' upper APP
- (7)Support USB playback, hot swap, convenient and fast content update
- (8) Picture playback: rotation, zoom, pan, slide show, background music playback
- (9)Play mode: single repeat play, folder loop play, full disk loop play
- (10) Audio mode: left and right channels, stereo; maximum support 2*15W audio output
- (11)OSD multi-language: support Chinese, English, French, German, etc.
- (12)Support all kinds of peripheral expansion: the chip comes with USB2.0 and USB3.0 interfaces to realize the docking of various network terminal devices

Precautions for assembly

In the process of assembly and use, please pay attention to the following (andnot limited to) problem points.

- ([]). Short circuit between bare board and peripherals.
- (\square) . During the installation and fixing process, avoid the deformation of the bare board due to the fixing reasons.
- ([]). When installing the EDP/MIPI/LVDS screen, payattention to whether the screen voltage and current are in compliance. Payattention to the direction of pin 1 of the screen holder.
- ([]). When installing the EDP/Mini/LVDS screen, payattention to the backlight voltage and current of the screen. If the power ofthe screen backlight is above 20W, whether to use other power boards for powersupply.
- (\square) . When installing peripherals (USB, IO), pay attention to the peripheral IO level and current output issues.
- (\square). When installing the serial port, pay attention towhether 232,485 devices are directly connected. Whether the connection of TX and RX is correct.
- ([]). Whether the input power is connected to the powerinput interface. According to the evaluation of the total peripherals, whetherthe input power voltage and current meet the requirements. Don't connect the power supply input power from the backlight socket for the convenience of operation.

Tips

- 1. Before using the product, be sure to read the product specificationscarefully.
- 2. For boards that are not ready for installation, they should be stored inanti-static protective bags.
- 3. When holding the board, wear an anti-static wristband or protective gloves, and should be trained to touch only its edges.
- 4. When the motherboard is connected to the power supply, check the powersupply voltage.
- 5. In order to avoid damage to the product, each time the main board and boardare plugged or reconfigured, the power must be turned off or the power cordshould be unplugged from the power socket.
- 6. Before you need to connect or unplug any equipment, make sure that all powercords have been unplugged in advance.
- 7. In order to avoid unnecessary damage to the product caused by frequentswitch-on and switch-off, you should wait at least 30 seconds before switchingon.
- 8. If an abnormal situation occurs during the use of the equipment, please finda professional to deal with it.

Display Out	Quad-core Cortex™-A53		Connectivity
DE3.3			USB2.0 OTG x 1
HDMI 2.0a 4K@60fps			USB2.0 HOST x 3
TV CVBS OUT	Video Engine GPU		UART
Audio	Video Engine	G7 0	SPI
Audio Codec	H.265 4K@60fps VP9, AVS2 4K@30fps		TWI
DMIC	Video Decoder	System Peripheral	TSC
OWA OUT	H.264 1080p@60fps Video Encoder	GIC	
Audio HUB (embedded 3 I2S/PCM)		Thermal Sensor	CIR Receiver
External Memory	Security System	Timer	LRADC
	Security Boot	High Speed Timer	PWM
DDR4/DDR3/DDR3L/ LPDDR3/LPDDR4 32-bit bus	Crypto Engine	PSI	SDIO 3.0
8-bit Nand Flash 80-bit ECC	SID	DMA	EMAC 10/100/1000 Mbps
SD3.0/eMMC5.0 1/4/8-bit bus	TrustZone	ІОММИ	Ethernet PHY

Introduction

In the fast-paced world of digital advertising, having a reliable and efficient solution is crucial. The Android System Digital Signage Player is designed to meet the demands of modern businesses, offering an interactive multimedia solution that transforms the way you present content. Whether you're looking to enhance your retail displays, corporate communications, or public information systems, this player delivers exceptional performance and ease of use.

High-Quality Video Playback

One of the standout features of this digital signage player is its support for 4K video playback. This ensures that your content is displayed in the highest quality possible, capturing the attention of your audience with vibrant and clear visuals. High-definition content is essential in creating an immersive and engaging experience, and our player guarantees that your advertisements and information are presented in the best light.

Seamless Integration

Our Android System Digital Signage Player is designed to integrate seamlessly with your existing digital signage network. This makes it a versatile addition to your digital marketing toolkit, allowing

for easy expansion and adaptation of your advertising strategy. The player supports various media formats and offers compatibility with a wide range of digital signage software, ensuring that you can use it with your current setup without any hassle.

Remote Content Management

One of the significant advantages of this digital signage player is its remote content management capabilities. With an intuitive interface, you can update and schedule content from anywhere, ensuring that your displays are always current and relevant. This feature is particularly beneficial for businesses with multiple locations, as it allows for centralized control over all digital signage units, saving time and resources.

Ultra-Thin Design and Easy Installation

The design of the Android System Digital Signage Player is both sleek and functional. Its ultra-thin profile makes it easy to install in any setting, whether behind a screen or mounted on a wall. The straightforward installation process means you can have your digital signage up and running in no time, minimizing downtime and maximizing productivity.

Versatile Applications

This digital signage player is suitable for a wide range of applications. In retail, it can be used to showcase promotions, highlight products, and engage customers. In corporate environments, it can display important announcements, company news, and interactive presentations. Public spaces can benefit from its use for informational displays, wayfinding, and emergency notifications. The possibilities are endless with such a versatile and powerful tool.

Conclusion

The <u>Android System Digital Signage Player</u> is a top-tier solution for businesses looking to enhance their digital advertising and communication strategies. With its high-quality video playback, seamless integration, remote content management, and easy installation, it offers everything you need to create dynamic and engaging displays. Invest in this interactive multimedia solution and take your digital signage to the next level, captivating your audience and driving business growth.