

# DATASHEET

DM29

## Change Log

Ver.	Description	Edit	Review	Date
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# Chapter 1 Overview

## 1.1 Scope of Application

DM29 is an OPS android signage player designed to pair with Promethean Interactive flat panel. It supports true 4K video playback with hardware-assisted support for various video formats and was designed with display integration in mind, and can be plugged directly into any Displaying device supporting the Open Pluggable Specification (OPS).

Due to the high performance level, the playback of Android-based Software Applications and the wide range of connectivity options, it is ideally suited for Digital Signage applications in Retail, Aviation and Transportation, Restaurants, Digital out of Home or most conventional signage uses.

## 1.2 Chip Introduction

- Amlogic S905X3 Quad-core ARM Cortex-A55 CPU
- ARM G31 MP2 GPU, OpenGL ES 3.2, Vulkan 1.1 and OpenCL 2.0 support
- Video/Picture Decoding
  - VP9 Profile-2 up to 8Kx4K@24fps
  - H.265 HEVC MP-10@L5.1 up to 8Kx4K@24fps
  - AVS2-P2 Profile up to 4Kx2K@60fps
  - H.264 AVC HP@L5.1 up to 4Kx2K@30fps
  - 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-1 MP/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
- Video/Picture Encoding
  - Independent JPEG and H.264 encoder with configurable performance/bit-rate
  - JPEG image encoding
  - H.265 video encoding up to 1080P@60fps with low latency
  - H.264 video encoding up to 1080P@30fps with low latency

### 1.3 Using Scenes



Smart Class



Seminar



Training Demo



BYOM

# Chapter 2 Datasheet

PARAMETER		
SoC	Amlogic S905X3 Quad core ARM Cortex-A55 up to 1.9GHz	
GPU	ARM G31 MP2 GPU, OpenGL ES 3.2, Vulkan 1.1 and OpenCL 2.0 support	
SYSTEM		
OS	Android 9	
VIDEO DECODER & ENCODER		
Decode	8K@24fps H.265/VP9 、4K@30fps H.264 AVC/MVC 、4K@60fps AVS2 1080P@60fps MPEG-1/-2/-4, AVS-P16/-P2, WMV, SP/MP/AP, RealVideo 8/9/10	
Encode	1080P@60fps H.265、1080P@30fps H.264	
HARDWARE & I/O		
Storage	DDR	4GB 64bit LPDDR4
	eMMC	16GB/32GB/64GB/128GB
Network	LAN	1 × 1000M Ethernet (POE optional)
	WiFi	1 × 2.4GHz/5GHz Dual band WiFi6, BT 5.0
	Data	1 × SIM card slot(5G/4G Lte)
Input/Output	Video	1 × HDMI output2.0 (8K@24fps) , 1 x standard OPS output
	Audio	1 × HDMI audio output, 1 x standard OPS output
External Storage	USB interface	2 × USB 3.0
	TF card	1 × TF Card
	SSD	1 × M.2 SSD (up to 128GB)
	RTC	1 × RTC (optional)
	Extension	1 × Debug
Power Supply	Power	DC12V (5.5*2.1mm, 9V~18V is optional, voltage deviation ±5% )
	POE	Power over Ethernet (Output power is 30W)
Consumption	Standby	0.3W (12V/110mA)
	Average	4.8W (12V/400mA)
	Maximum	7W (12V/1700mA)
Environment	Working temp.	-20°C- 60°C
	Stored temp.	-20°C- 70°C
	Stored humidity	10% ~ 90 %

## Chapter 3 Product photos



(Front side)



(Rear side)