

Embedded Media Player - Compact Model

Powered by original computing algorithm "DMNA" based on mathematical methods

1 Abstract

- This software is a lightweight media player module that delivers high-quality playback of various video content.
- It integrates a group of high-speed, high-quality, low-power decoders equipped with TMC's proprietary computer algorithm "DMNA," achieving high playback performance and stability despite its lightweight design.
- It provides stable playback quality even in environments with limited processing power and power consumption, such as embedded devices and edge terminals.

2 Features

• TMC video and audio decoders included as standard

Equipped with a wide range of decoders, including H.264, MPEG-2, JPEG, and MP3, supporting a wide variety of media formats.

The module contains all the necessary media playback functions, minimizing the need for additional implementation in the application.

• High-efficiency decoding with DMNA technology

Our proprietary "DMNA" technology significantly reduces the computational load for decoding.

It simultaneously achieves high-speed processing, low power consumption, and stable, high image quality, making it particularly effective for embedded devices and edge environments.

• Compact, easy-to-integrate module configuration

The core functions required for media playback have been optimized and made compact for embedded use.

A simple, proprietary C API allows for easy integration into existing systems.

• Reliable file playback functionality

Supports major container formats, including MP4, MKV, AVI, and MOV.

Frame drop suppression, synchronization control, and buffer optimization deliver stable playback quality across a wide range of the environment.

3 Specification

Supported video format	MP4, MOV, MKV, AVI
Supported video decoding standard	H.264, MPEG-2 video, JPEG
Supported audio	MP3
Supported CPUs	ARM Cortex-A (32/64-bit)
Supported OS	Linux, AzureRTOS, FreeRTOS
Player functions	Play, Stop, Seek

CONTACT

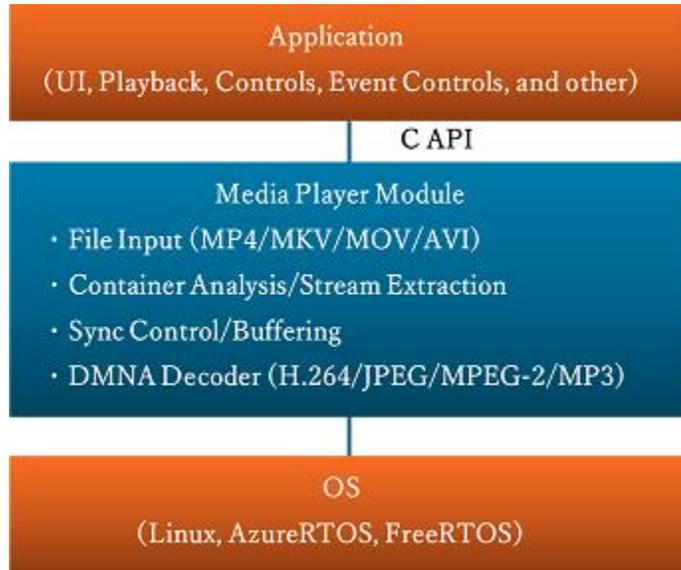
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4 Composition



5 Usage example

① Video Guide Display for Home Appliances

Smooth playback of operation guides and instruction videos for small appliances.



② Video Instructions for Equipment and Device Operation

Ideal for displaying instruction manuals, start-up guides, inspection procedures, and more.



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