



Multimedia Codecs

# Windows® Embedded CE Multimedia Codecs for the i.MX27 Applications Processor

## Overview

Freescale's high-performance multimedia codecs enable a series of popular audio, video and image applications for the i.MX27 applications processor. The multimedia codecs are provided as fully functional software packages to support various use cases, such as audio/video playback, audio/video record or image capture/display.

Video processing unit (VPU) Codec Software Packages for the i.MX27 applications processor consist of enabling software to support the hardware-accelerated codecs that reside on the processor.

## Key Features

- Support for i.MX27 processors
- Functional software packages with production-ready components that have been developed by Freescale
- Highly optimized software that is coded by Freescale processor experts
- Free implementation of popular multimedia algorithms
- Consistent application programming interface (API) and frameworks across all software packages
- Evaluation and production software packages available through a streamlined, Web-based licensing and delivery system
- Freescale development tools, test streams and documentation

## VPU Codec Software Packages

Hardware-accelerated codecs are generally referred to as components of the VPU. Selected hardware-accelerated codec libraries and drivers reside on the i.MX27 processor and Windows Embedded CE board support package (BSP), respectively.

The i.MX27 VPU Codec Software Package includes the wrappers (Direct Show filters) and audio/video file containers (parsers) required to enable H.264 BP, MPEG-4 SP and H.263 hardware-accelerated video encoders and decoders.

## The portfolio of codecs for the Windows Embedded CE i.MX27 platform includes:

### Hardware-Accelerated Video Codecs

H.264 BP Decoder

H.264 BP Encoder

MPEG-4 SP/H.263 P3 Decoder

MPEG-4 SP/H.263 P3 Encoder

### Parsers

M4A Demuxer (MPEG-4 audio)

M4V Demuxer (MPEG-4 video)

MP4 Demuxer (H.264/MPEG-4 + AAC/MP3)

## Hardware Requirements

The software packages run on the Applications Development System (ADS) development boards with supported i.MX27 processors. Visit [www.freescale.com/imx27](http://www.freescale.com/imx27).

## Platforms and Reference Designs

Platforms and reference designs help jump start your design. They include comprehensive software suites running on application-specific boards. The easy-to-use APIs enable customization and control of core system functions, letting you focus on adding value through product differentiation. For more information on platforms, reference designs and third-party reference designs, visit the Freescale i.MX System Solutions at [www.freescale.com/imxsystemsolutions](http://www.freescale.com/imxsystemsolutions).

## Availability and Licensing

Each codec software package is optimized to support the i.MX27 processors and is a licensed product. Licensees must sign a license agreement with Freescale prior to receiving the evaluation or production versions of the software packages. Visit [www.freescale.com/imx27](http://www.freescale.com/imx27) for more information.

## Licensing Restrictions for Third-Party Partner Codecs

Selected codecs that have been developed with Freescale partners require prior certification, including Microsoft and Coding Technologies (Dolby Labs) licensed codecs. To inquire about certification, please contact your distributor or sales representative.

## Worldwide Support

Each codec software package includes detailed release notes, data sheets and test streams to get you started. Online support for licensed software packages is also available at [www.freescale.com/support](http://www.freescale.com/support).

## Third-Party Partner Support

Freescale has an extensive global network of third-party developers that can provide additional codec software packages and provide system integration support. Visit [www.freescale.com/fwdn](http://www.freescale.com/fwdn) for more information on third-party partner support.

## Contact Us

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