

# **i.MX25 SDK Windows Embedded CE 6.0**

## **Multimedia Framework**

### **Release Notes**

## **1 Introduction**

This document contains important information about the package contents, and instructions for building Freescale components on an i.MX25 3-stack platform running Windows Embedded CE 6.0.

This document does not provide any details of the architecture or APIs in the codecs.

You should have a basic understanding of Microsoft DirectShow framework.

All features are believed to function correctly, except as noted in this document.

### **Contents**

1	Introduction .....	1
2	Release Contents .....	2
2.1	SDK Documentation Package .....	2
2.2	SDK Software Packages.....	2
3	System Requirements.....	3
3.1	Hardware Requirements.....	3
3.2	Software requirements.....	3
4	What is new .....	4
4.1	New Features and Enhancements.....	4
4.2	Defect Fixes.....	4
5	Supported Features .....	5
6	Known Problems.....	7
6.1	Known Defects.....	7
6.2	Limitations/Issues .....	7



## 2 Release Contents

### 2.1 SDK Documentation Package

The documentation package provided with this release includes all of the documents in the documentation package.

**Table 1. Document Package**

Document Package	Descriptions
MX25_MMFMWK_WINCE_DOCKIT.zip	Documentation set

The compressed file includes all of the related documents in the document package.

**Table 2. Document Contents**

Document Name	Descriptions
imx25_WinCE60_MMFW_RN	Release notes
imx25_WinCE60_MMFW_UG	SDK user's guide

### 2.2 SDK Software Packages

Multimedia framework Software Development Kit (SDK) software packages are the collection of both Freescale developed codec and 3-rd party codec. Freescale developed codec will be archived as the installer package (in .exe files). And the 3-rd party codec are archive as SDK patches (in .zip files).

**Table 3. Software Packages Contents**

Document Name	Descriptions
WCE600_MX25-PDK1_7_09.12.00_SDK_MM.exe	SDK installer with framework source codes, framework binaries, core lib binaries, core lib header files and support documents

## **3 System Requirements**

### **3.1 Hardware Requirements**

- MX25 3-Stack Rev 2.0

### **3.2 Software requirements**

- Build machine should be running Microsoft Windows XP.
- Build machine should have the following installed:
  - Windows Embedded CE 6.0 with Platform Builder
  - i.MX25 PDK1.1 Windows Embedded CE 6.0 BSP

## 4 What is new

This section describes the new changes in this release (version 5.10.0), including new features and defect fixes.

### 4.1 New Features and Enhancements

The following table describes the new features and enhancements since last release.

**Table 4. New Features and Enhancements**

Changes and improvements	Descriptions
New feature of parser	Support swot audio format in mp4 parser; Support .m4b Quicktime audiobook format in mp4 parser

### 4.2 Defect Fixes

Table 5 describes the issues that have been resolved since the previous release.

**Table 5. Defect Fixes List**

NO.	CR ID	Headline

## 5 Supported Features

Table 6~Table 7 identifies the features provided by this release.

**Table 6. Audio Features List**

Feature		Profile	Channel	Sample Rate (Hz)	Bit rate (bps)
Audio decoding	AAC	MPEG-2 and MPEG-4 audio low complexity (LC) profile	<=5.1	8K~96K	8K~256K
	MP3	MPEG-1 Audio Layer I MPEG-1 Audio Layer II MPEG-1 Audio Layer III	Mono / Stereo	<=48K	8K~320K
	WMA Standard	WMA V10 Standard L1 profile	Mono / Stereo	44.1K	64K~161K
		WMA V10 Standard L2 profile	Mono / Stereo	<=48K	<=161K
		WMA V10 Standard L3 profile	Mono / Stereo	<=48K	<=385K
Audio encoding	MP3	MPEG-1 Audio Layer III	Mono / Stereo	32/ 44.1/ 48K	8K~320K

**Table 7. Speech Features List**

Feature		Profile	Sample Rate (Hz)	Bit rate (bps)
Speech decoding / encoding	G.711	G.711 decoder/encoder	8K	64K
	G.723	G.723.1 decoder/encoder	8K	5.3/6.3K
	G.726	G.726 decoder/encoder	8K	16/24/32/40K
	G.729	G.729a/b decoder/encoder	8K	8K
	AMR	AMR Narrow Band decoder/encoder	8K	4.75/5.15/5.9/ 6.7/7.4/7.9/ 10.2/12.2K
		AMR Wide Band decoder/encoder	16K	6.6/8.85/12.65/ 14.25/15.85/ 18.25/19.85/ 23.05/23.85K

Table 8 identifies the feature matrix for audio playback.

**Table 8. Playback Feature Matrix**

Filename Extension	Container	Audio Codec
.mp3	MPEG-1 Audio Layer III	MP3
.wma	Advanced Systems Format	WMA10
.aac		AAC
.mp4	MPEG-4 Part 14	AAC, MP3
.m4a	MPEG-4 Part 14	AAC, MP3

.m4b	MPEG-4 Part 14	AAC
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Table 9 identifies the version number for each component in this release.

**Table 9. Component Versions**

Components		Version
Audio codecs	AAC decoder	3.04.0
	MP3 decoder	2.05.0
	MP3 encoder	2.02.0
	WMA decoder	3.01.0
Speech codecs	G.711 decoder / encoder	2.00.0
	G.723 decoder / encoder	2.00.0
	G.726 decoder / encoder	2.01.0
	G.729ab decoder / encoder	3.01.0
	AMR_NB decoder / encoder	2.02.0
	AMR_WB decoder / encoder	2.01.0
Parsers	MP4 Parser	5.15.2

## 6 Known Problems

This section will cover known problem with this release.

### 6.1 Known Defects

Table 10 identifies the engineering change requests that have not been resolved.

**Table 10. Known Defects List**

NO.	CR ID	Headline

### 6.2 Limitations/Issues

Table 11 identifies the limitations of each component.

**Table 11. Limitations/Issues List**

Item	Description
Audio feature limitations	AAC ADIF File format decoding does not support trick mode seeking, so the Windows CE media player does not display a time progress bar
	WMA codec supports WMA10 Standard decoding
	Playback AAC and MP3 in the Windows CE player does not support Fast Forward or Fast Backward
	Playback WMA in the Windows CE media player does not support Fast Backward, but only supports 2x Fast Forward

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