

RN00202

i.MX Android Extended Codec Release Notes

Rev. android-16.0.0_2.0.0 — 24 July 2026

Release notes

Document information

Information	Content
Keywords	Android, i.MX, android-16.0.0_2.0.0
Abstract	The features described in the release notes are NXP extended media formats and codecs based on Android native media framework.



1 Release Description

The features described in the release notes are NXP extended media formats and codecs based on Android native media framework.

Only codecs that have no license restriction are included in the standard release package.

Codecs that have license restriction are provided in separate packages. For more details, see [Section 6](#).

2 Supported Hardware SoCs/Boards

- i.MX 8M Mini EVK
- i.MX 8M Nano EVK
- i.MX 8M Plus EVK
- i.MX 8M Quad EVK
- i.MX 8ULP EVK
- i.MX 8QuadMax MEK
- i.MX 8QuadXPlus MEK
- i.MX 95 EVK
- i.MX 952 EVK

3 What's New

- Enhanced stability and robustness.

4 Enhanced Features

4.1 Local playback

This section describes the local playback information.

4.1.1 Enhanced and extended formats and codecs

The following table provides the information about the enhanced codecs.

Table 1. Enhanced codecs

File extension	Demuxers	Video decoders	Audio decoders
.mp3	-	-	MP3
.aac/.adts	-	-	AAC LC/PLUS
.wav	-	-	LPCM
.flac	-	-	FLAC
.amr/.awb	-	-	AMR-NB/AMR-WB
.mp4 .mov	MP4	MPEG4 SP/ASP except GMC H.264 BP/MP/HP MPEG2 H.263 MJPEG HEVC	AAC LC/PLUS MP3 Vorbis PCM

Table 1. Enhanced codecs...continued

File extension	Demuxers	Video decoders	Audio decoders
.m4a	MP4	-	AAC LC/PLUS
.3gp	MP4	MPEG4 SP/ASP except GMC H.264 BP/MP/HP H.263 HEVC	AAC LC/PLUS AMR-NB AMR-WB
.avi	AVI	MPEG4 SP/ASP except GMC Xvid H.264 BP/MP/HP H.263 MJPEG HEVC	AAC LC/PLUS MP3 LPCM
.wma	ASF	-	WMA STD, PRO, Lossless
.wmv/.asf	ASF	VC-1 SP/MP/AP HEVC	WMA STD, PRO, Lossless
.mkv/.mka	MKV	H.264 BP/MP/HP MPEG4 SP/ASP except GMC Xvid VC-1 SP/MP/AP HEVC VP8 VP9 MPEG2 H.263	AAC MP3 WMA STD, PRO, Lossless Vorbis Opus PCM
.flv	FLV	Sorenson H.263 H.264 BP/MP/HP	MP3 AAC
.mpg .vob .ts .m2ts	MPEG2/PS MPEG2/TS	MPEG2 BP/MP MPEG2 BP/MP H.264 BP/MP/HP HEVC	MP3 AAC LPCM
.webm	MKV	VP8 VP9	MP3 AAC LC/PLUS
.rmvb	RM	RV 8/9/10	RA
.rm	RM	RV 8/9/10	AAC
.ra	RM	-	RA

Note:

- For detailed video and audio codec capability, see [Section 5](#).
- ASF, WMV, WMA, and RMVB are restricted codec packages and are not generally available. Install them from the Restricted Codec Package.
- MJPEG subtypes and MJPEG_2000 and MJPEG_B are not supported.
- MJPEG only supports YUV420 and YUV422 (horizontal) color formats.

4.2 Streaming playback

The following table provides the information about streaming playback.

Table 2. Feature matrix for streaming playback

Protocol	File format
HTTP	.mp4/.3gp/.mov .flv/.f4v .avi .wmv/.asf .mpg/.vob/.ts .mp3 .aac .wma .mkv
RTP	.ts
UDP	.ts

To set up RTP/UDP streaming, perform the following operations:

- Install vlc 1.1.5 on Windows OS or Ubuntu.
- For UDP streaming server, run VLC with the following command:

```
vlc -vvv stream_file_name --sout udp://:1234
```

- For the RTP streaming server:
 1. Start VLC with the GUI, and select **Media > Streaming**.
 2. Press **Add** to load the stream file, press **Stream**, and click **Next**.
 3. Select **RTP/Mpeg Transport Stream** from the drop-down list, and click **Add**.
 4. Enter your board IP address (such as 10.193.101.11) and base port number 5004, and deselect **Activate Transcoding**.
 5. Press **Stream** at the bottom. The server is started.
- For the UDP streaming client, run the Gallery on the Android platform with the following command:

```
am start -n com.android.gallery3d/com.android.gallery3d.app.MovieActivity -d  
udp://:1234
```

- For the RTP streaming client, run Gallery on the Android platform with the following command:

```
am start -n com.android.gallery3d/com.android.gallery3d.app.MovieActivity -d  
rtp://:5004
```

- For the uni-cast, use the client IP address when starting the server, and use the server IP address when starting the client.

4.3 Audio pass through streaming

Audio pass through supports audio AC-3 and DD-plus. To enable audio pass through, run the following command to set the property:

```
setprop vendor.persist.audio.pass.through 2000
```

5 Codec Specification

5.1 Video decoder for i.MX with VPU hardware

Table 3. Video decoder for i.MX with VPU hardware

	Format	Platform	Profile	Max. Bit Rate	Min. Resolution	Max. Resolution	Frame Rate	Portrait Mode	Comment
Video Decoder	HEVC	i.MX 8M Quad	main/main 10	160 Mbps	144 x 144	4096 x 2304	60 fps (3840 x 2160)	Y	-
		i.MX 8M Plus i.MX 8M Mini	main/main 10	100 Mbps	144 x 144	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8 Quad XPlus	main	100 Mbps	144 x 144	4096 x 2160	30 fps (3840 x 2160)	Y	-
		i.MX 8 QuadMax	main	100 Mbps	144 x 144	4096 x 2160	60 fps (3840 x 2160)	Y	-
		i.MX 95	main	160 Mbps	64 x 64	4096 x 2304	60 fps (3840 x 2160)	Y	-
		i.MX 952	main/main 10	160 Mbps	32 x 32	4096 x 2304	60 fps (3840 x 2160)	Y	-
	H.264	i.MX 8M Quad	HP/MP/BP	60 Mbps	48 x 48	4096 x 2304	30 fps (3840 x 2160)	Y	-
		i.MX 8M Plus i.MX 8M Mini	HP/MP/BP	60 Mbps	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	HP/MP/BP	50 Mbps	64 x 64	4096 x 2160	30 fps (3840 x 2160)	Y	-
		i.MX 6	HP/MP/BP	50 Mbps	64 x 64	1920 x 1080	60 fps (1920 x 1080)	N	-
		i.MX 95	HP/MP/BP	160 Mbps	64 x 64	4096 x 2304	60 fps (3840 x 2160)	Y	-
		i.MX 952	High10/ HP/MP/BP	160 Mbps	32 x 32	4096 x 2304	60 fps (3840 x 2160)	Y	-
	VP9	i.MX 8M Quad	profile 0, 2	100 Mbps	144 x 144	4096 x 2304	60 fps (3840 x 2160)	N	-

Table 3. Video decoder for i.MX with VPU hardware...continued

	Format	Platform	Profile	Max. Bit Rate	Min. Resolution	Max. Resolution	Frame Rate	Portrait Mode	Comment
		i.MX 8M Plus i.MX 8M Mini	profile 0, 2	100 Mbps	144 x 144	1920 x 1080	60 fps (1920 x 1080)	Y	-
	VP8	i.MX 8M Quad	-	60 Mbps	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8M Plus i.MX 8M Mini	-	60 Mbps	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	-	60 Mbps	64 x 64	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 6Quad	-	20 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
		i.MX 6Dual Lite	-	20 Mbps	64 x 64	1280 x 720	30 fps (1280 x 720)	N	-
	MPEG4/ XVID	i.MX 8M Quad	SP/ASP	-	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	SP/ASP	-	64 x 64	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 6	SP/ASP	40 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
	MPEG2	i.MX 8M Quad	MP	-	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	MP	-	64 x 64	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 6	MP	50 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
	H.263	i.MX 8M Quad	P0/P3	-	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-

Table 3. Video decoder for i.MX with VPU hardware...continued

	Format	Platform	Profile	Max. Bit Rate	Min. Resolution	Max. Resolution	Frame Rate	Portrait Mode	Comment
		i.MX 8 Quad XPlus i.MX 8 QuadMax	P0/P3		64 x 64	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 6	P0/P3	20 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
	WMV9/VC1	i.MX 8M Quad	AP/MP/SP	-	48 x 48	1920 x 1080	60 fps (1920 x 1080)	N	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	AP/MP/SP		64 x 64	1920 x 1080	60 fps (1920 x 1080)	N	-
		i.MX 6	AP/MP/SP	45 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
	MJPEG	i.MX 8M Quad	-	180 Mpixl	48 x 48	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	-	-	64 x 64	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 6	-	120 Mpixl	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
		i.MX 95 i.MX 952	-	-	64 x 64	4096 x 2160	60 fps (3840 x 2160)	Y	-
	RV	i.MX 8M Quad	8/9/10	-	48 x 48	1920 x 1080	60 fps (1920 x 1080)	N	-
		i.MX 8 Quad XPlus i.MX 8 QuadMax	8/9/10	-	64 x 64	1920 x 1080	60 fps (1920 x 1080)	N	-
		i.MX 6	8/9/10	40 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
	Sorenson Spark	i.MX 8 Quad XPlus	-	-	64 x 64	1920 x 1080	60 fps (1920 x 1080)	Y	-

Table 3. Video decoder for i.MX with VPU hardware...continued

	Format	Platform	Profile	Max. Bit Rate	Min. Resolution	Max. Resolution	Frame Rate	Portrait Mode	Comment
		i.MX 8 QuadMax							

Note:

- Please find supported formats based on each platform.
- RealVideo format is supported again on i.MX 8QuadXPlus and 8QuadMax.

5.2 Video encoder for i.MX with VPU hardware

Table 4. Video encoder for i.MX with VPU hardware

	Format	Platform	Profile	Max. Bit Rate	Min. Resolution	Max. Resolution	Frame Rate	Portrait Mode	Comment
Video Encoder	H.265	i.MX 8M Plus	main/main 10	40 Mbps	136 x 136	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 95	main	100 Mbps	256 x 128	4096 x 2304	60 fps (3840 x 2160)	N	-
	H.264	i.MX 8M Mini	HP/MP/BP	40 Mbps	144 x 96	1920 x 1080	60 fps (1920 x 1080)	Y	-
		i.MX 8M Plus	HP/MP/BP	40 Mbps	144 x 144	1920 x 1080	60 fps (1920 x 1080)	Y	
		i.MX 8QuadXPlus/8 QuadMax	HP/MP/BP	20 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	Y	-
		i.MX 6	BP	20 Mbps	64 x 64	1920 x 1080	30 fps (1920 x 1080)	N	-
		i.MX 95	HP/MP/BP	100 Mbps	256 x 128	4096 x 2304	60 fps (3840 x 2160)	N	-
		i.MX 952	HP/MP/BP	50 Mbps	96 x 16	4096 x 2304	30 fps (3840 x 2160)	N	
	VP8	i.MX 8M Mini	-	60 Mbps	144 x 96	1920 x 1080	30 fps (1920 x 1080)	Y	-
	MPEG4	i.MX 6	SP	12 Mbps	64 x 64	1280 x 720	30 fps (1920 x 1080)	N	-
	H.263	i.MX 6	P3	8 Mbps	64 x 64	1280 x 720	30 fps (1920 x 1080)	N	-

5.3 Audio decoder

Table 5. Audio decoder

	Platform	Feature/ Profile	Feature/ Profile	Channel	Sample rate (kHz)	Bit rate (kbps)	Comment
Software Audio Decoder	i.MX All	MP3	MPEG-1 (Layer-1/ Layer-2/ Layer-3)	stereo/mono	8-448	8-448	-

Table 5. Audio decoder...continued

	Platform	Feature/ Profile	Feature/ Profile	Channel	Sample rate (kHz)	Bit rate (kbps)	Comment
			MPEG-2 (Layer-1/ Layer-2/ Layer-3) MPEG-2.5 (Layer-3)				
		AACLC	MPEG-2 AACLC MPEG-4 AACLC	<=5.1	8-96	8-368	Use the default AAC decoder of the Android OS.
		HE-AAC	HE-AAC V1 HE-AAC V2	stereo/mono	8-96	Mono: 8-384 stereo: 16- 768	Use the default AAC decoder of the Android OS.
		WMA STD	L1 @ QL1	stereo/mono	44.1	64-161	-
			L2 @ QL1		<= 48	<= 161	-
			L3 @ QL1		<= 48	<= 385	-
		WMA Pro	M0a @ QL2	stereo/mono	<= 48	48-192	-
			M0b @ QL2	stereo/mono	<= 48	<= 192	-
			M1 @ QL2	<= 5.1	<= 48	<= 384	-
			M2 @ QL2	<= 5.1	<= 96	<= 768	-
			WMA Pro	<= 7.1	<= 96	<= 1500	-
		WMA Lossless	N1	stereo/mono	<= 48	<= 3000	-
			N2	<=5.1	<= 96	<= 3000	-
			N3	<=7.1	<= 96	<= 3000	-
		RA	cook	stereo/mono	8, 11.025, 22. 05, 44.1	-	-

5.4 Audio encoder

Use Android OS default audio encoders.

6 License-Restricted Codecs

For information about receiving the restricted codec packages, contact an NXP representative.

6.1 Package list

The following features are supplementary to standard codec release packages.

Table 6. License limited codecs

Package name	Feature
fsl_ms_codec.tar.gz	• Demuxer: ASF • Video Decoder: WMV • Audio Codec: WMA
fsl_real_dec.tar.gz	• Demuxer: RM • Audio Decoder: RA

6.2 How to install the license limited codecs

See the readme file for each package.

7 Limitations of This Release

- Complex Profile of WMV9 is not supported
- Multimedia files that do not have index table may not be searchable
- Corrupted multimedia files may not be searchable and may have an incorrect duration

8 Known Issues

None.

9 Note About the Source Code in the Document

Example code shown in this document has the following copyright and BSD-3-Clause license:

Copyright 2026 NXP Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

10 Revision History

Revision history

Document ID	Release date	Description
RN00202 v.android-16.0.0_2.0.0	24 July 2026	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus, i.MX 95 GA release, and i.MX 952 Beta release.
RN00202 v.android-16.0.0_1.4.0	1 April 2026	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus, and i.MX 95 GA release.
RN00202 v.android-16.0.0_1.2.0	6 January 2026	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus, and i.MX 95 GA release.
RN00202 v.android-16.0.0_1.0.0	28 October 2025	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus GA release, and i.MX 95 Beta release.
RN00202 v.android-15.0.0_2.0.0	24 July 2025	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus GA release, i.MX 95 19x19 EVK Beta release, and i.MX 95 15x15 EVK Alpha release.
RN00202 v.android-15.0.0_1.2.0	11 April 2025	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus GA release, i.MX 95 Beta release.
RN00202 v.android-15.0.0_1.0.0	24 January 2025	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus GA release, i.MX 95 Beta release.
RN00202 v.android-14.0.0_2.2.0	18 October 2024	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus GA release, i.MX 95 (A1 15x15) Alpha release, and i.MX 95 (A1 19x19) Beta release.
RN00202 v.android-14.0.0_2.0.0	9 August 2024	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8ULP, i.MX 8QuadMax, i.MX 8QuadXPlus GA release, and i.MX 95 Alpha release. Updated the document ID.
IMXACRN v.android-14.0.0_1.2.0	19 April 2024	i.MX 8ULP EVK, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-14.0.0_1.0.0	6 February 2024	i.MX 8ULP EVK, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-13.0.0_2.2.0	24 October 2023	i.MX 8ULP EVK, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-13.0.0_2.2.0	07/2023	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-13.0.0_1.2.0	03/2023	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.

Revision history...continued

Document ID	Release date	Description
IMXACRN v.android-13.0.0_1.0.0	01/2023	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-12.1.0_1.0.0	10/2022	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-12.0.0_2.0.0	07/2022	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, and i.MX 8M Quad GA release.
IMXACRN v.android-12.0.0_1.0.0	03/2022	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, and i.MX 8M Quad GA release.
IMXACRN v.android-11.0.0_2.6.0	01/2022	i.MX 8ULP EVK Beta release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, and i.MX 8M Quad GA release.
IMXACRN v.android-11.0.0_2.4.0	10/2021	i.MX 8ULP EVK Alpha release, i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, and i.MX 8M Quad GA release.
IMXACRN v.android-11.0.0_2.2.0	07/2021	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, and i.MX 8M Quad GA release.
IMXACRN v.android-11.0.0_1.2.1	06/2021	i.MX 8M Plus EVK GA release.
IMXACRN v.android-11.0.0_2.0.0	04/2021	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, and i.MX 8M Quad GA release.
IMXACRN v.android-11.0.0_1.2.0	03/2021	i.MX 8M Plus EVK GA release.
IMXACRN v.android-11.0.0_1.1.0-AUTO	01/2021	i.MX 8QuadXPlus/8QuadMax MEK GA release
IMXACRN v.android-11.0.0_1.0.0	12/2020	i.MX 8M Plus EVK Beta release, and all the other i.MX 8 GA release.
IMXACRN v.android-10.0.0_2.3.0	07/2020	i.MX 8M Plus EVK Beta1 release, and all the other i.MX 8 GA release.
IMXACRN v.android-10.0.0_2.0.0	05/2020	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.android-10.0.0_2.1.0	04/2020	i.MX 8M Plus Alpha and i.MX 8QuadXPlus Beta release.
IMXACRN v.android-10.0.0_1.0.0	03/2020	Deleted the Android 10 image.
IMXACRN v.android-10.0.0_1.0.0	02/2020	i.MX 8M Mini, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
IMXACRN v.P9.0.0_2.0.0-ga	08/2019	Updated the location of the SCFW porting kit.
IMXACRN v.P9.0.0_2.0.0-ga	04/2019	i.MX 8M, i.MX 8QuadMax, i.MX 8QuadXPlus GA release.
IMXACRN v.P9.0.0_1.0.0-ga	01/2019	i.MX 8M, i.MX 8QuadMax, i.MX 8QuadXPlus GA release.
IMXACRN v.P9.0.0_1.0.0-beta	11/2018	Initial release

Legal information

Definitions

Draft — A draft status on a document indicates that the content is still under internal review and subject to formal approval, which may result in modifications or additions. NXP Semiconductors does not give any representations or warranties as to the accuracy or completeness of information included in a draft version of a document and shall have no liability for the consequences of use of such information.

Disclaimers

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. NXP Semiconductors takes no responsibility for the content in this document if provided by an information source outside of NXP Semiconductors.

In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms and conditions of commercial sale of NXP Semiconductors.

Right to make changes — NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

Suitability for use — NXP Semiconductors products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of an NXP Semiconductors product can reasonably be expected to result in personal injury, death or severe property or environmental damage. NXP Semiconductors and its suppliers accept no liability for inclusion and/or use of NXP Semiconductors products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Applications — Applications that are described herein for any of these products are for illustrative purposes only. NXP Semiconductors makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Customers are responsible for the design and operation of their applications and products using NXP Semiconductors products, and NXP Semiconductors accepts no liability for any assistance with applications or customer product design. It is customer's sole responsibility to determine whether the NXP Semiconductors product is suitable and fit for the customer's applications and products planned, as well as for the planned application and use of customer's third party customer(s). Customers should provide appropriate design and operating safeguards to minimize the risks associated with their applications and products.

NXP Semiconductors does not accept any liability related to any default, damage, costs or problem which is based on any weakness or default in the customer's applications or products, or the application or use by customer's third party customer(s). Customer is responsible for doing all necessary testing for the customer's applications and products using NXP Semiconductors products in order to avoid a default of the applications and the products or of the application or use by customer's third party customer(s). NXP does not accept any liability in this respect.

Terms and conditions of commercial sale — NXP Semiconductors products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.nxp.com/profile/terms>, unless otherwise agreed in a valid written individual agreement. In case an individual agreement is concluded only the terms and conditions of the respective agreement shall apply. NXP Semiconductors hereby expressly objects to applying the customer's general terms and conditions with regard to the purchase of NXP Semiconductors products by customer.

Export control — This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from competent authorities.

Suitability for use in non-automotive qualified products — Unless this document expressly states that this specific NXP Semiconductors product is automotive qualified, the product is not suitable for automotive use. It is neither qualified nor tested in accordance with automotive testing or application requirements. NXP Semiconductors accepts no liability for inclusion and/or use of non-automotive qualified products in automotive equipment or applications.

In the event that customer uses the product for design-in and use in automotive applications to automotive specifications and standards, customer (a) shall use the product without NXP Semiconductors' warranty of the product for such automotive applications, use and specifications, and (b) whenever customer uses the product for automotive applications beyond NXP Semiconductors' specifications such use shall be solely at customer's own risk, and (c) customer fully indemnifies NXP Semiconductors for any liability, damages or failed product claims resulting from customer design and use of the product for automotive applications beyond NXP Semiconductors' standard warranty and NXP Semiconductors' product specifications.

HTML publications — An HTML version, if available, of this document is provided as a courtesy. Definitive information is contained in the applicable document in PDF format. If there is a discrepancy between the HTML document and the PDF document, the PDF document has priority.

Translations — A non-English (translated) version of a document, including the legal information in that document, is for reference only. The English version shall prevail in case of any discrepancy between the translated and English versions.

Security — Customer understands that all NXP products may be subject to unidentified vulnerabilities or may support established security standards or specifications with known limitations. Customer is responsible for the design and operation of its applications and products throughout their lifecycles to reduce the effect of these vulnerabilities on customer's applications and products. Customer's responsibility also extends to other open and/or proprietary technologies supported by NXP products for use in customer's applications. NXP accepts no liability for any vulnerability. Customer should regularly check security updates from NXP and follow up appropriately. Customer shall select products with security features that best meet rules, regulations, and standards of the intended application and make the ultimate design decisions regarding its products and is solely responsible for compliance with all legal, regulatory, and security related requirements concerning its products, regardless of any information or support that may be provided by NXP.

NXP has a Product Security Incident Response Team (PSIRT) (reachable at PSIRT@nxp.com) that manages the investigation, reporting, and solution release to security vulnerabilities of NXP products.

NXP B.V. — NXP B.V. is not an operating company and it does not distribute or sell products.

Trademarks

Notice: All referenced brands, product names, service names, and trademarks are the property of their respective owners.

NXP — wordmark and logo are trademarks of NXP B.V.

Contents

1	Release Description	2
2	Supported Hardware SoCs/Boards	2
3	What's New	2
4	Enhanced Features	2
4.1	Local playback	2
4.1.1	Enhanced and extended formats and codecs	2
4.2	Streaming playback	4
4.3	Audio pass through streaming	4
5	Codec Specification	5
5.1	Video decoder for i.MX with VPU hardware	5
5.2	Video encoder for i.MX with VPU hardware	8
5.3	Audio decoder	8
5.4	Audio encoder	9
6	License-Restricted Codecs	9
6.1	Package list	9
6.2	How to install the license limited codecs	10
7	Limitations of This Release	10
8	Known Issues	10
9	Note About the Source Code in the Document	10
10	Revision History	11
	Legal information	13

Please be aware that important notices concerning this document and the product(s) described herein, have been included in section 'Legal information'.