

# RV1109 Multimedia Codec Benchmark

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*Ver. 1.2*

July 07, 2020

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## History

<b>Date</b>	<b>Author</b>	<b>Version</b>	<b>Description</b>
2020.6.9	Herman Chen	1.0	Initialize all descriptions
2020.6.16	Francis Fan	1.1	1.Delete the description of the software codec 2.Correct the name and statement
2020.7.7	Francis Fan	1.2	Correct the codec capabilities

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## Notice

All the data involved in this document will be in accordance with the development progress and possible changes without notice.

The features listed in this document may or may not be present in actual product, and may be subject to the third party further licensing requirements if you want to use them.

Please contact Rockchip for actual product feature configurations and licensing requirements.

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# 1. Image

## 1.1 Image Decoder

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JPEG	
<b>Image Codec</b>	JFIF file format 1.02
<b>Support Image Size</b>	48x48pixels to 8176x8176pixles
<b>Container</b>	JPG, JPEG
<b>Remarks</b>	(1) Not Support Non-interleaved Scan (2) Software support SRGB JPEG (3) Software support Adobe RGB JPEG

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## 1.2 Image Encoder

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JPEG	
<b>Image Codec</b>	JPEG Baseline
<b>Support Image Size</b>	96x32pixels to 8176x8176pixles
<b>Maximum Data Rate<sup>1</sup></b>	90Mpixels/Second
<b>File Format</b>	JFIF file format 1.02
<b>Remarks</b>	

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<sup>1</sup> Ideal case

## 2. Video

### 2.1 Video Decoder

H.264/AVC	
<b>Video Codec</b>	H.264
<b>Supported Image Size</b>	64x64pixels to 3072x1728pixels
<b>Maximum Frame Rate</b>	3072x1728@30fps
<b>Maximum Bit Rate</b>	30Mbps
<b>File Format</b>	AVI, MKV, MP4, MOV, 3GP, TS, FLV
<b>Remarks</b>	<ul style="list-style-type: none"> <li>● Support Field Coding;</li> <li>● Support MBAFF</li> </ul>

  

H.265/HEVC	
<b>Video Codec</b>	H.265
<b>Supported Image Size</b>	64x64pixels to 3072x1728pixels
<b>Maximum Frame Rate</b>	3072x1728@30fps
<b>Maximum Bit Rate</b>	30Mbps
<b>File Format</b>	AVI, MKV, MP4, MOV, 3GP, TS, FLV
<b>Remarks</b>	

  

MOTION JPEG	
<b>Video Codec</b>	MJPEG
<b>Supported Image Size</b>	48x48pixels to 1920x1080pixels
<b>Maximum Frame Rate</b>	30fps
<b>Maximum Bit Rate</b>	38.4Mbps
<b>File Format</b>	AVI
<b>Remarks</b>	<ul style="list-style-type: none"> <li>● 90Mpixel / second</li> </ul>

## 2.2 Video Encoder

H.264/AVC	
<b>Video Codec</b>	H.264
<b>Supported Image Size</b>	144x96pixels to 3072x1728pixels
<b>Maximum Frame Rate</b>	3072x1728P@30fps
<b>Maximum Bit Rate</b>	20Mbps
<b>File Format</b>	MOV, 3GP
<b>Remarks</b>	● Not support MBAFF

  

H.265/HEVC	
<b>Video Codec</b>	H.265
<b>Supported Image Size</b>	144x96pixels to 3072x1728pixels
<b>Maximum Frame Rate</b>	3072x1728@30fps
<b>Maximum Bit Rate</b>	20Mbps
<b>File Format</b>	MOV, 3GP
<b>Remarks</b>	

