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Software Development Kit (Video Editor SDK) benchmarks for reference purposes

The below mentioned numbers are for benchmarking and reference purposes. The Contractor does not guarantee the reproducibility of any performance and quality benchmarks.

iOS

| iOS phones classification | Camera resolution and fps rate, export videos |
|--|---|
| Low end performance devices: iphone devices 6 and 6+ | 480p, 30 fps |
| Middle performance devices: iphone devices from 6s to SE | 720p, 30 fps |
| High end performance devices:iphone devices from 7 to 13 | 1080p, 30 fps |

Android

The Video Editor SDK is compatible with ARM processors i.e. arm64-v8a if Face AR SDK is used. x86, x86-64 are not supported yet.

| Android phones classification | Camera resolution and fps rate, export videos |
|-------------------------------|---|
| Low end performance devices | 360p, 30 fps |
| Middle performance devices | 720p, 30 fps |
| High end performance devices | 1080p, 30 fps |

Software performance benchmarks, stability and reliability are affected by:

- light conditions,
- environment temperature,
- phone temperature,
- OS version,
- installed drivers, patches,
- installed system updates,
- software installed in the device,
- battery and device age,
- battery charge level,
- quality and speed of internet connection,
- coding and decoding errors or missing and/or corrupted parts of the media files,
- application opened in the background, etc.

There are possible discrepancies in Video Editor SDK performance.

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Nothing contained in this description guarantees the Software merchantability for the emulator.

Video Editor SDK can be used on the devices meeting the following requirements:

(a) iOS Devices as follows:

iPhone 7

Xcode 16

Swift 6

iOS 15.0

(b) Android Devices as follows:

Java 17+

Kotlin 1.7+

Android Studio 4+

1.42.0 Android 8.0 or higher

OpenGL ES 3.0

Banuba is entitled to recommend new devices to be used with the Software within the framework of Maintenance Release. Customer acknowledges and agrees that new devices may differ from the devices recommended hereinabove.

Banuba Software does not support the following devices and Banuba does not guarantee the functioning of Video Editor SDK in any way on these devices:

• Kernel architecture ARMv7I, CPUs with 4x cores

Android phones classification:

| Device class, based on performance | Examples of typical model | Specifications. How we detect which class the device belongs to | |
|------------------------------------|--|---|--|
| Low end performance devices | Huawei Honor 8A Huawei Honor 8S Huawei Honor 7A Samsung Galaxy J2 Core Samsung Galaxy J5(2016) Xiaomi Redmi 6A Xiaomi Redmi 4X Xiaomi Redmi 5A Meizu PRO 6 other low level or low performance devices | CPUs with 4x cores, such as Exynos 7570 Quad (14 nm) Qualcomm MSM8916 Snapdragon 410 (28 nm) Qualcomm MSM8940 Snapdragon 435 Mediatek MT6761 Helio A22 (12 nm) devices based on GPU PowerVR GE8320 | |

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|---|---|--|
| Middle performance devices | Яндекс.Телефон Ниаwei Honor 10 Lite Ниаwei Honor 10I Ниаwei Honor 7С Ниаwei Honor 8X Ниаwei Honor 9 Lite Ниаwei Honor 9X Redmi Note 8 Pro Samsung Galaxy A5 (2017) Samsung A505FM (A50) Samsung A505FN (A50) Samsung A515F (A51) Samsung Galaxy A8 Xiaomi Redmi 5 Plus Xiaomi Redmi 7A Xiaomi Redmi 8 | |
| High end performance devices | Honor View 20 Huawei Mate 20 Google Pixel 2XL Google Pixel 2 Google Pixel 3 Huawei Honor 10 LG V30+ Samsung Galaxy S10 5G Samsung Galaxy S20 Ultra Samsung Galaxy Note 10 Plus Samsung Galaxy Note 10 Plus Samsung Galaxy S9 Vivo S6 5G Xiaomi Redmi Note 7 Xiaomi Redmi Note 8T Xiaomi Mi 10 Pro Oppo Find X2 Pro Vivo NEX Dual Display OnePlus 7 Pro OnePlus 6 Oppo RX17 Pro Sony Xperia XZ2 Premium | CPUs with 8x cores, such as Exynos 8895 Exynos 9810 Exynos 9820 Exynos 980 Exynos 990 HiSilicon Kirin 970 HiSilicon Kirin 980 HiSilicon Kirin 980 HiSilicon Kirin 990 Qualcomm Snapdragon 820/821 Qualcomm Snapdragon 835 GPU Adreno 610-685 |
| Blacklist devices Contractor does not support the following | Huawei Y5 lite Samsung Galaxy A5 (2016) Samsung Galaxy J1 | devices with GPU PowerVR GE8100 Kernel Architecture not ARMv8-64 CPU Exynos 7580 |

| devices and does not guarantee the functioning of the Video Editor or its modules (CAM, VE, etc) in any way on these devices. | Kernel Architecture ARMv8I-32 v less than 4 cores |
|--|---|
| Customer is advised to blacklist these phones and restrict the functionality of its Product to viewing only features | |

The Software bugs and crashes fixing on iOS and Android devices, **not mentioned hereinabove**, is subject to a separate written agreement between the Parties.

List of permissions

User has to provide the following permissions to the Customer's Product, containing Video Editor SDK

| | iOS | Android | Functionality |
|---|-----|---------|---|
| Permission to use camera | yes | yes | Camera |
| Permission to use microphone | yes | yes | Sound recording functionality |
| Permission to read/write files from device | yes | yes | Slideshow functionality, editing of earlier recorded videos, export and saving of the audio and video files |

Slideshow supported file types

The Video Editor SDK supports the following media formats.

| | Image | Video | Audio |
|---------|--|--|------------------|
| iOS | formats supported by iOS (formats that iOS displays in the native gallery) | formats supported by iOS (formats that iOS displays in the native gallery) | .mp3, .wav, .aac |
| Android | .jpg .Gif (static) .heic (from Android 10 and higher) .raf | .mp4 .mov .m4a | |

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List of Third-Party Software

| iOS | Native libraries |
|---------|--|
| | Foundation AV Foundation UI Kit AV Kit AV Kit Core media Core video Core graphics GL Kit Photos OpenGLES MetalKit SystemConfiguration os.log GLProgram MediaPlayer Accelerate |
| Android | Koin to configure Video Editor SDK for your Product. <u>ExoPlayer</u> <u>Glide</u> <u>Kotlin and Kotlin Coroutines</u> - org.jetbrains.kotlinx:kotlinx-coroutines-core AndroidX libraries Lottie library Firebase libraries Squareup libraries(moshi, okhttp3, retrofit2) |