

[comprimato]

The fastest, standard compliant, JPEG2000 software encoder and decoder enabling faster than real-time compression in video processing devices.

Comprimato's unique JPEG2000 software codec leverages the supercomputing power of GPUs and CPUs to speed up video and image compression. The codec helps save infrastructure costs by 70%, while reducing development cycles by 50% and enabling new revenue streams such as Ultra HD video in real-time, High Dynamic Range [HDR] and High Frame Rate [HFR] video.



Mathematically lossless compression

The highest possible image quality is fundamental for the life-like viewing experience. Comprimato provides true lossless compression. Uncompressed image quality with up to 65% bandwidth and storage savings.



High-definition in real time

The Comprimato JPEG2000 Codec is able to compress and decompress Ultra High-Definition video in real time even at 120 frames per second. With lower initial costs, you have a chance to boost your solution to a high demand product and be ready to address the needs of the Ultra High-Definition standards in broadcasting and geospatial imaging.



Saving costs

Comprimato saves costs on hardware and software. You can easily switch from special expensive hardware codecs to our software based, commodity hardware solution. Our API allows for quick integration with your existing code.



No compromise on quality

The JPEG2000 format is a game changing file format, which allows compression of visual data to a 10th of its original size without any visually noticeable difference. The technology provides resolution scalability and supports high color precision and random region extraction, giving its users guaranteed video recognition as well as investment protection over time.



Flexibility and Adaptability

The Comprimato JPEG2000 Codec is a software library which can be integrated into almost any software or hardware. Our experienced team offers full integration as well as post integration support all year long.

Comprimato JPEG2000 software codec performance



Comprimato JPEG2000 codec for 4K 60FPS video contribution

Video parameters:

Resolutions:	4K
Color component sampling:	4:2:2
Bit depth:	12 bit
Quality:	Mathematically lossless quality <small>(broadcast contribution standard quality)</small>

CPU performance:

Xeon Platinum 8168	ENC: 29.72 fps DEC: 35.68 fps
Xeon Gold 6148	ENC: 22.23 fps DEC: 26.61 fps

GPU performance:

Titan X (Pascal)	ENC: 46.27 fps DEC: 93.20 fps
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Comprimato JPEG2000 codec for 8K 120FPS video contribution

Video parameters:

Resolutions:	8K
Color component sampling:	4:2:2
Bit depth:	12 bit
Quality:	Mathematically lossless quality <small>(broadcast contribution standard quality)</small>

CPU performance:

Xeon Platinum 8168	ENC: 7.06 fps DEC: 8.52 fps
Xeon Gold 6148	ENC: 5.41 fps DEC: 6.53 fps

GPU performance:

Titan X (Pascal)	ENC: 9.53 fps DEC: 23.94 fps
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Codec specifications

SUPPORTED PLATFORMS:

- Windows, MacOS, Linux
- both CPU and GPU acceleration

COMPRESSION:

- mathematically lossless
- visually lossless
- lossy

MAXIMUM IMAGE RESOLUTION:

- unlimited

QUALITY LAYERS:

- single layer
- multiple layers

FUNCTIONALITY:

- encoding
- decoding