

HANDBRAKE

Video Encoding. Without the Brakes On.



New to HandBrake?

HandBrake is a free and open-source, multi-platform video encoder with support for a wide array of common video formats, including many of those used by video professionals worldwide.

HandBrake's selection of easy to use, tailored presets enable one-click setup of all the settings necessary for converting video from one format to another. It can even reduce file size in the process, while preserving visual quality. And if more customization is needed, it's easy to make the desired changes and save a new preset for future use.

handbrake.fr

“ Using AMD Professional GPUs based on the AMD RDNA 2 architecture, video professionals can leverage AMD VCN encoders in HandBrake to encode production quality 4K and 8K video with real-time performance – or better. ”

Bradley Sepos,
HandBrake Team

Accelerated Encoding with AMD VCN

Today's AMD graphic cards come with dedicated video encoding and decoding hardware cores called AMD VCN (Video Core Next), that enable effective hardware acceleration at very high speeds. The latest VCN revision available in graphics cards based on the AMD RDNA™ 2 graphics architecture, supports H.264 (MPEG-4 AVC) and H.265 (HEVC) encoding and decoding as well as several other popular video formats², including AV1 decoding.

With encoding acceleration for H.264 and H.265 videos supported at hardware level, graphics cards such as the high-performing AMD Radeon™ PRO W6800 and W6600 are great choices for supercharging your typical encoding workloads.

Faster Encoding

HandBrake has a number of modern hardware acceleration settings to make this time consuming process more efficient. The software is flexible, so that even if running on basic systems, HandBrake can be used in software-only encoding mode and the preset tailored to your output needs. Although a viable option for modest systems, HandBrake benefits greatly from the advanced acceleration provided by compatible modern GPU and CPU hardware, with considerable time saved. Up-to-date graphics hardware helps ensure HandBrake features and functionality are leveraged to their full potential.

Resource Intensive

Video encoding uses advanced mathematical algorithms to make smaller files while maintaining a level of visual quality, known to be one of the most resource intensive activities for computers.

Software video encoders perform their computing on a system's CPU, achieving good compression ratios, but at the expense of long processing times. AMD GPUs utilize specialized hardware with independent memory storage to accelerate these processes, while freeing CPU and memory resources for other tasks, such as image processing filters and audio encoding.

HandBrake supports accelerated hardware encoding on AMD Professional GPUs, including full hardware implementations of the H.264/AVC and H.265/HEVC codecs used in video production, broadcasting, and delivery over the internet.



AV1*
HEVC
H.264
VP9

Codec
Acceleration
Support²

Crush Demanding
Content with Dedicated
4K Encode and 8K
Decode Support.

*AV1 Decode-only.



Professional Graphics for Exceptional Performance with Reliability, Stability and Software Certifications at its Core.

Powerful, Precise Presets

Using AMD VCN in HandBrake is as easy as one click with HandBrake's presets system. And with its advanced queuing system and support for multiple simultaneous encodes, HandBrake excels at managing even the heaviest of workloads. With AMD Radeon PRO graphics accelerating all stages of your large format video processing tasks, your video project will be ready to make impact in no time.



Removing Common Bottlenecks

The AMD professional graphics architecture enables high bandwidth performance at low power and low latency, helping to remove data bottlenecks. With a global cache that is seen by the entire graphics core, capturing 'Temporal Reuse' (optimized, iterative same data reuse) it helps data to be accessed virtually instantaneously.

This established architecture is the basis for the graphics that power the leading, visually rich next-generation gaming consoles.



Learn more about VR capabilities of Radeon PRO Graphics at amd.com/PRO-VR

Light to Medium Workloads



RADEON PRO W5700 GRAPHICS

FIRST GENERATION AMD RDNA ARCHITECTURE
8 GB of Fast GDDR6 Memory.
Six Display Outputs. 8K Support.
USB-C Output Ready.

amd.com/RadeonPROW5700

Medium to Heavy Workloads



RADEON PRO W6600 GRAPHICS

LATEST AMD RDNA 2 GPU FOR COMPLEX TASKS
8 GB of High Performance GDDR6 Memory.
Four Display Outputs. 8K, HDR Support.
Available for Mobile Systems.

amd.com/RadeonPROW6600

Heavy to Extreme Workloads



RADEON PRO W6800 GRAPHICS

THE GPU TO CRUSH AI AND VIDEO INTENSE PROJECTS
Gigantic 32 GB of GDDR6 Memory.
Error Correction Code (ECC) Support.
Six Display Outputs. 8K, HDR Support.

amd.com/RadeonPROW6800

Additional Performance Power

Choosing the right CPU means addressing the bottlenecks of your most common workflow tasks. AMD Ryzen™ Threadripper™ PRO processors offer powerful single and multithreaded performance, along with support for up to 2TB of memory.

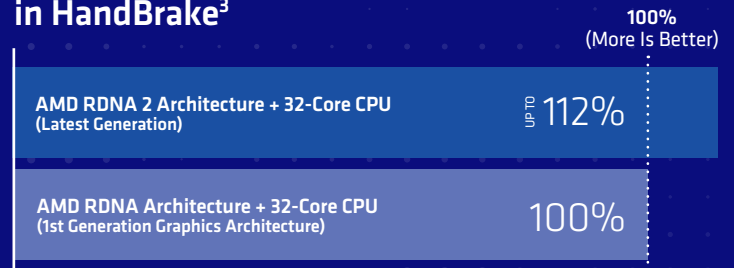


amd.com/Workstation

Realworld Performance

Engineered from the ground up, the award-winning AMD RDNA 2 graphics architecture found within the latest Radeon PRO W6000 graphics family introduces significant GPU advancements for your entire production pipeline, in the form of an enhanced Compute Unit, new visual pipeline, and all new AMD Infinity Cache. Combined, these advanced AMD technologies help remove common GPU and system bottlenecks for your range of software needs. These significant progressions support higher software resolutions, incorporating superior performance and power efficiency. The established AMD RDNA 2 architecture helps deliver the enhanced, but affordable, encoding performance you can see within the opposite bar chart.

Relative GPU Encoding Acceleration in HandBrake³



To learn more about AMD professional graphics visit: amd.com/RadeonPRO

¹Learn More at <https://handbrake.fr/docs/en/latest/technical/performance.html>

²Video codec acceleration (including at least the HEVC (H.265), H.264, VP9, and AV1 codecs) is subject to and not operable without inclusion/installation of compatible media players. GD-176

³Testing as of April 15, 2021 by AMD Performance Labs on a test system comprised of an AMD Threadripper PRO 3975WX, with AMD Radeon™ PRO W5700 / AMD Radeon™ PRO W6600 pre-production sample. Benchmark Application: HandBrake 1.3.3. Performance may vary based on factors including driver version and system configuration. RPW-371

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