

AMD THREADRIPPER PRO

THE ULTIMATE PROFESSIONAL PROCESSOR FOR

Houdini

SIDFX HOUDINI

A complete package for animation, rendering and VFX tools, SideFX Houdini enables artists to deliver world-class visuals powered by a comprehensive set of built-in tools to efficiently accomplish virtually all aspects of production from particle simulation, character animation to custom scripting and rendering. When combined with the full spectrum compute capability of **AMD Ryzen™ Threadripper™ PRO Processors** which feature up to 64 cores to rip through VFX simulation, final frame rendering and iterative look development, artists can get more done in less time. Additionally, AMD Ryzen™ Threadripper™ PRO Processors offer class-leading single threaded performance¹ to help with smooth application viewports, 8 memory channels for unrivaled memory bandwidth² and 128 PCIe 4.0[®] lanes enable support for next-gen GPUs and storage devices.

FULL SPECTRUM PERFORMANCE FOR THE ENTIRE PRODUCTION PIPELINE



SIMULATION & VFX

With SideFX Houdini, artists can leverage a suite of high-level tools to make it easier to achieve production-quality results by streamlining the setup and execution of VFX shots. When combined with the unmatched³ compute capability of the **AMD Ryzen™ Threadripper™ PRO 3995WX Processor** along with its support for massive memory configurations, artists will be able to make more iterations in support of the creative needs of each project.



RENDERING

Houdini has evolved to creating tools that establish an artist driven workflow. With production tools that help artists rapidly iterate and evolve their scenes and a built-in world-class rendering engine, artists can take advantage of the immense compute capability that **AMD Ryzen™ Threadripper™ PRO Processors** have to offer. With up to 64 cores and 128 threads, VFX artists can confidently tackle the most demanding shots in the studio or at their home office.



ANIMATION

Houdini introduces KineFX, a character toolset designed to provide a procedural foundation for retargeting, motion editing, and in future releases, rigging and animation.

Set in the geometry context, these new workflows make rigging a fast, plug-and-play experience with unlimited flexibility and caching capabilities.

AMD Ryzen™ Threadripper™ PRO Processors offer class-leading single threaded performance¹ which helps deliver a seamless viewport experience when evaluating complex animation sequences.

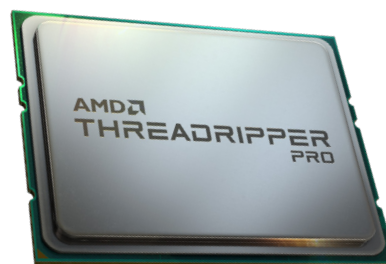
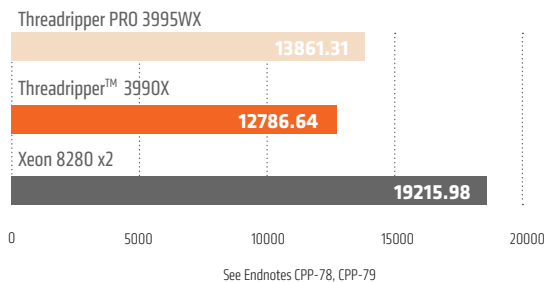
“AMD stepped up to provide a state-of-the-art workstation based on the AMD Ryzen™ Threadripper™ PRO 3995WX processor to help showcase the power of Houdini 18.5. The system exceeded all expectations with 64 cores and 128 threads ripping through design and rendering tasks, while the 8 memory channels in Threadripper PRO contributed to dramatically faster simulation times, faster than we have ever seen on any other workstation hardware platform.”

- Nathaniel Larouche, Lead VFX Artist



ULTIMATE PERFORMANCE FOR VFX ARTISTS

Houdini 18.5 Full Sim 700 Frames (Measured in seconds, slower is better)



BUILT FOR THE WORLD'S MOST DEMANDING CREATIVE PROFESSIONALS

128 PCIe® 4.0 LANES

FOR NEXT-GEN GPUs AND STORAGE

8 MEMORY CHANNELS

TO TACKLE THE MOST DEMANDING PROJECTS

FULL-SPECTRUM COMPUTE CAPABILITY

FOR LIGHTY-THREADED AND MULTI-THREADED TASKS

AMD PRO TECHNOLOGIES

TO HELP WITH DATA PROTECTION AND MANAGEABILITY

TAKE ADVANTAGE OF PCIe® 4.0



With the introduction of PCIe® 4.0 hardware in 2019, AMD enabled artists with double the throughput of PCIe 3.0 products and the ability to use other next-gen PCIe 4.0 enabled hardware such as graphics cards and high-speed SSDs in their workflow.

AMD Ryzen™ Threadripper™ PRO supports PCIe 4.0, to help improve performance and power for content creators by allowing data to move faster to and from host to GPU.

MODEL SPECIFICATIONS

Model	Cores/Threads	Boost¹/Base Frequency	Total Cache	Memory Channels	TDP	AMD PRO Technologies
AMD Ryzen™ Threadripper™ PRO 3995WX	64 / 128	Up to 4.2GHz / 2.7GHz	256MB	8	280W	✓
AMD Ryzen™ Threadripper™ PRO 3975WX	32 / 64	Up to 4.2GHz / 3.5GHz	128MB	8	280W	✓
AMD Ryzen™ Threadripper™ PRO 3955WX	16 / 32	Up to 4.3GHz / 3.9GHz	64MB	8	280W	✓

1. Based on AMD Labs testing as of July 8, 2020, using the Cinebench R20 1T performance benchmark. Results may vary. CPP-71

2. Based on AMD internal analysis June 1, 2020, comparing memory bandwidth specifications of AMD Ryzen™ Threadripper™ PRO to Intel Xeon Scalable 8280. CPP-06

3. Based on AMD performance lab testing on January 27, 2021, using the Houdini Simulation with a workstation configured with an AMD Ryzen™ Threadripper™ PRO 3995WX, NVIDIA GeForce RTX 2070 Super 8GB, 256GB DDR4 RAM, 1TB M.2 NVMe PCIe® Gen4 storage and Windows 10 Pro vs. a similarly configured Dell workstation with dual Intel® Xeon® Platinum 8280 Processors, 384GB DDR4 RAM, 1TB M.2 NVMe PCIe® Gen3 storage, Windows 10 Pro 1909. Results may vary CPP-78

Max boost for AMD Ryzen processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates

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