The Importance of Software Certifications

Graphics Certifications explained

AMD

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Built on Trust

Professional workstation users have long-trusted their demanding workflows to application-certified workstation and hardware components. Software certification is a collaborative, ongoing process of driver development and rigorous testing between AMD and Independent Software Vendors (ISVs). It is designed to ensure that professional users can extract the best possible performance, stability and reliability for those mission-critical deadlines.

Built on Experience

With over 20 years of certification experience, the AMD labs aim to ensure a first-time-pass for all Radeon™ PRO professional GPUs by meeting today's modern software demands. During this initial rigorous certification process, which can last between 2 to 12 weeks, the emphasis is placed on manual reporting and error finding.

Importantly, certification covers both the graphics hardware and the professional driver that accompanies it. The ultimate goal is for AMD professional GPUs, known as Radeon™ PRO, to become fully ISV certified for a range of generational graphics cards, not just the latest series.

The Core Process

AMD has a dedicated team of engineers that works closely with software vendors to help ensure that the new software tools they are developing work seamlessly with our hardware. AMD can also tailor its graphics drivers to support new versions of professional applications. The goal of this tight collaboration is to have graphics hardware and drivers that are fully compliant with new application versions upon release, without the need for hotfixes from either the ISV or AMD.

Our Rigorous Technique

When both ISV application and driver are ready, testing can begin. AMD uses a comprehensive 'six-wave' test workflow designed to balance exceptional performance, stability, and reliability.

AMD commissions artists to create scenes typical of those used in real-world production pipelines for its team to use in manual testing, with the intention of matching today's real-world workflows. Finally, the graphics card and driver are passed to the software developer, who carries out its own exhaustive tests before the GPU can be certified for use with its applications.

For further peace of mind, AMD has also commissioned independent audits of driver quality, testing its drivers and hardware against those of other vendors, to help ensure the stability you demand.
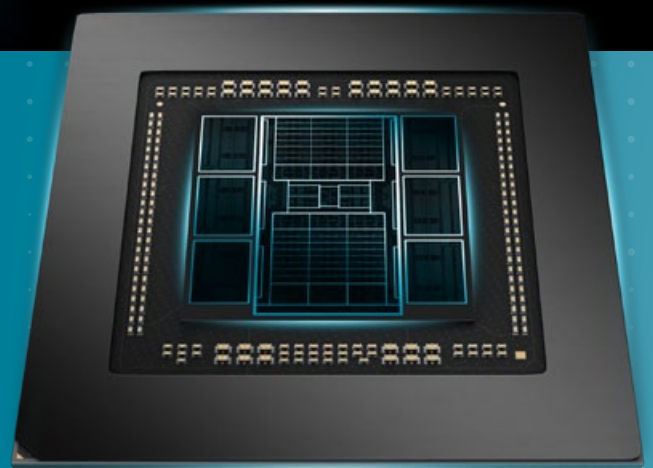
AMD RDNA™ 3 graphics processor of the high performing AMD Radeon™ PRO W7800 GPU

AMD RADEON PRO

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

Certifications Don't Stop

After the launch of a new graphics driver, this certification process does not stop. The AMD lab continues to work with end customers and ISVs on what then becomes a rolling certification process. The focus of this process remains firmly aimed at professional tools and professional GPUs only. This also applies to seeding ISV development teams who will often receive the professional series ahead of GPU launches, ultimately giving you the confidence to take on new workflows.

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The AMD 'Day Zero' Program

At AMD we continue to accelerate our focus on application certifications in order to improve the customer experience. Typically, ISV certifications happen when new hardware is introduced, not when new drivers are introduced. Because of our stability and predictability, all of our Radeon™ PRO graphics drivers are designed to be certification ready. The "Day Zero" program means that many ISV applications are certified before we post our drivers for download. AMD releases major version updates of its drivers for its professional graphics cards quarterly, each one the product of a six-month process of development, testing and quality control. With the Day Zero initiative, users can enjoy the latest updates and performance enhancements, while also having the benefit of certification from the moment they install the drivers.

Examples of most current AMD Radeon™ PRO W7000 Series Professional Graphics Cards

AMD Radeon™ PRO W7900 Graphics

- Extreme workloads
- 48GB GDDR6
- 4x Displays (3x DisplayPort 2.1 & 1x Enhanced Mini-DisplayPort 2.1)

AMD Radeon™ PRO W7800 Graphics

- Heavy workloads
- 32GB GDDR6
- 4x Displays (3x DisplayPort 2.1 & 1x Enhanced Mini-DisplayPort 2.1)

AMD Radeon™ PRO W7600 Graphics

- Medium workloads
- 8GB GDDR6
- 4x Displays (4x DisplayPort 2.1)

AMD Radeon™ PRO W7500 Graphics

- Light workloads
- 8GB GDDR6
- 4x Displays (4x DisplayPort 2.1)

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

Created for the Professional User

To receive the best possible user experience and ISV certified status for professional software, the GPU and driver is key.

Although in some occasions, the software is certified to the entire workstation, either desktop or mobile, instead of just the GPU. In these occasions, AMD will work closely with leading workstation vendors, including Dell®, HP® and Lenovo®, to integrate Radeon™ PRO graphics into their systems, becoming the key component for helping to secure a certification.

[1] Learn more at www.amd.com/en/technologies/remote-workstation

Your Professional Software

The certified status of a GPU remains key when choosing a new GPU for your software, but you should also ensure a GPU supports the correct software language (API) for accurate viewports. Most professional software demand OpenGL®, DirectX® or Vulkan® support to correctly display the viewports and interface. In the case of CAD tools for example, some lines (particularly hidden lines) will be missing from models if the GPU does not support the correct API. The AMD Radeon™ PRO W7000 and W6000 series graphics cards support up to OpenGL® 4.6, OpenCL™ 2.2, DirectX® 12 Ultimate, and Vulkan® 1.3 for added peace of mind.

Find the current list of certified applications at: **amd.com/Certified**