

AMD PROFESSIONAL GRAPHICS INNOVATION IN SOFTWARE QUALITY





ENGINEERED FOR RELIABILITY AND PERFORMANCE

Innovative AMD Catalyst™ Pro driver architecture and ongoing test improvements enable AMD professional graphics cards to deliver unprecedented quality

Robust driver architecture

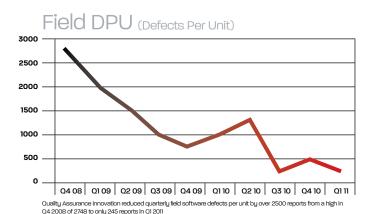
At AMD, our customers drive our innovations. The demands placed on professional graphics tools by a variety of end users inspire us to create unique and purpose-built products that meet or exceed our industry's rigorous standards. Because professional graphics applications are so different, and the requirements so demanding, AMD develops professional graphics products for highly-specific end user and market segments.

Thanks to an innovative modular driver architecture, AMD professional graphics maximize and improve performance in several ways. The modular character of the driver architecture makes it easy to implement new features and performance enhancements, allowing for robust testing at a subcomponent level to ensure proper functionality and product stability. The AMD Catalyst™ Pro driver code can be changed frequently, and new releases shared quickly, without sacrificing quality.

AMD FirePro™ professional graphics empower professionals in the Financial, Engineering, Digital Content Creation and Scientific fields through application performance leadership, with the assurance of reliability and innovation.

Quality certified software

Every new AMD professional graphics product receives four full rounds of quality testing, ensuring robust, reliable hardware and software are shipped for each new product's introduction. Each round of testing tightens the overall quality, with a focus on new functionality, stability, and application compatibility. When complete, each new product is ready to enter the ISV certification process, ensuring that the applications function and perform the way each software vendor intends.





"Our customers expect optimal performance and stability when using our products. When using Autodesk software with AMD FirePro products based on AMD's quality assurance process and certification, and AMD certified hardware, customers are able to complete critical tasks with speed and efficiency."

AMY BUNSZEL
VICE PRESIDENT, AUTOCAD PRODUCTS, AUTODESK

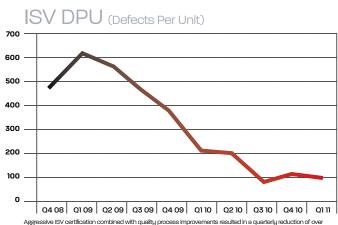
Sustaining AMD Catalyst™ Pro driver quality

AMD implements an extensive quality assurance program that is designed to ensure top driver reliability and stability. This aggressive program imposes stringent internal testing on code changes and new driver releases. All new features go through an extensive bimonthly qualification process. Each and every AMD FirePro™ professional graphics production web release driver undergoes a minimum of sixteen consecutive weeks of testing conducted by three dedicated quality groups. Our commitment to our customer is that we will not release a production driver without this very high level of scrutiny.

AMD quality groups perform both manual and automated testing using the most stressful applications our engineers are able to create, plus many challenging ones from our ISV partners and OEM customers. ISV test suites are incorporated as part of AMD's internal testing to ascertain the stability of the driver with specific graphics applications. New test suites are constantly being added to the testing process. In addition to stress test applications, we also perform workflow testing with all major professional applications, always making sure that we are certification-ready for existing applications. The end result is a highly robust AMD Catalyst™ Pro driver and very positive feedback from our customers.

AMD continuously tracks customer feedback to help ensure our continual process improvements are meeting and exceeding expectations. Since our product touches so many applications and hardware configurations, when problems arise we have robust mechanisms in place to close issues quickly and deliver driver updates. This is why you will see series of AMD Catalyst™ Pro driver versions such as 8.773.1, 8.773.1.1, and 8.773.1.2.

Continual quality process improvements have contributed to a significant decrease in ISV reported software issues. This reduction in problems experienced by our technology partners has enabled them to focus their resources on improved functionality versus problem resolution when developing for AMD professional graphics.



Aggressive is vicerulication combined with quality process improvements resulted in a quarterly reduction of over 500 ISV defects per unit since 01 2009 "Dassault Systèmes SolidWorks Corp. can depend on AMD's engineering support and ongoing dedicated resources to ensure that customers receive best performance and reliability when combined with AMD Professional Graphics products. AMD's outstanding support ensures reliable certification, providing end users with a quality experience for superior results."

RON BATES

SENIOR MANAGER, GRAPHICAL APPLICATIONS, DS SOLIDWORKS CORP.

ISV Certifications are critical to solution stability

The certification of AMD FirePro™ professional graphics solutions assures professional engineers, designers and animators that the AMD FirePro™ professional graphics line delivers a stable and high performance workstation graphics environment on both Windows® and Linux® platforms.

AMD FirePro[™] professional graphics are certified for:

- > Engineering and Design (CAD/CAE/AEC)
- > Digital Content Creation (DCC) & Digital Media
- > Geographical Information Systems (GIS) & Visualization
- > Life Sciences
- > Oil & Gas

Below is a listing of ISVs that AMD certifies its products with as of the release of this paper. For a complete listing of AMD FirePro™ professional graphics certified applications see www.amd.com/us/certifiedapplications

> Accelrys > Missler

> Adobe > MSC.Software

> Altair Engineering > NEMETSCHEK

> ANSYS > PTC

> Autodesk > REDWAY3D S.A.S

> Bentley > Robert McNeel & Assoc.

> BETA CAE Systems S.A. > Schlumberger

> CEI > Side Effects Software

> Esri > SpaceClaim

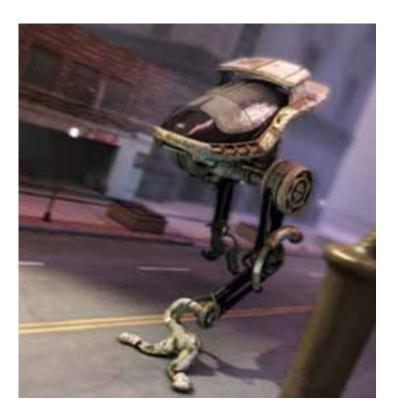
> The Foundry > VizRT

> Luxology

Professional applications are extremely demanding on computer systems and they're especially tough on graphics subsystems. That's why AMD works with ISVs to help ensure applications are performing at their peak. ISV applications expose performance bottlenecks and their developers then suggest optimization updates to the graphics drivers. Finally, the software vendors certify that their applications run effectively on a designated graphics card. The process varies according to the kind of program being tested. With mechanical CAD programs, for example, vendors run a script of several thousand individual tests that check the program's commands. The automated script is designed to exercise all of the software's functions, to simulate as many features as possible, test processing speed, and put the graphics card through all its paces.

To perform further manual testing, software engineers push the system's endurance over a long period of time, performing multiple simultaneous tasks, dishing out whatever idiosyncratic punishment the software vendor feels is important. Each ISV handles its testing process differently, setting its own requirements for compatibility. This makes the evaluation process different from familiar workstation reviews or independent party analyses, where hardware might be ranked by performance. Instead, ISV certification is about the reliable function and real-life performance level of the application itself, whereas benchmarking measures card performance alone. Basically, if you want certification, you need an ISV to run your application through its full functionality.

In addition to being tested with a growing number of ISV applications, AMD Catalyst™ Pro drivers also support a broad range of hardware and processor platforms, including both AMD- and Intel-based platforms.



On-site engineering resources available for ISVs

Rest assured that AMD works proactively with the leading software vendors on upcoming application versions well in advance of their production releases in order to further improve the way AMD graphics for workstations performs with key graphics applications. AMD makes its engineers available to work on-site with ISVs on testing, implementation and new features. This affords AMD yet another opportunity to improve the reliability and performance of its graphics products and to help ensure that they support the features and capabilities that users need.

Advanced driver features ensuring optimal performance and reliability

Some of our most exciting advances have been made working with users and industries that demand more than traditional consumer and mainstream graphics. With our customers as our first source of inspiration, we've developed groundbreaking products for gamechanging results.

In order to support the widest range of professional applications, graphics drivers must include all of the optimization paths required for all programs. In the past, users configured their graphics drivers by choosing the appropriate optimization path with the application running. But that meant whenever the user switched to another application (or rebooted), the optimization had to be reconfigured manually.

AMD FirePro™ professional graphics drivers include a feature called AutoDetect. This feature lets the graphics driver automatically determine the profiles of running applications and configure the graphics driver settings, thereby optimizing the applications' performance in real time. As the user switches between applications, the optimization settings are adjusted for the active, running application. The process is completely automated, with no user intervention required.

Performance, Reliability, and Support

AMD FirePro™ professional graphics solutions are designed for professionals who demand the highest quality, reliability and application performance in their profession. Our products are fueled by the combination of leading-edge GPU technology, driver software, comprehensive ISV certifications, and high performance across industry segments. Ideal for CAD, DCC and simulation markets, AMD FirePro™ professional graphics deliver industry-leading features and price performance and are tested and optimized for major professional applications. And of course, we provide direct customer access to a dedicated professional-class technical support team.

Contact your country/regional AMD representative or go to www.amd.com/firepro



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