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# AMD FirePro<sup>™</sup>S-Series for Virtualization

**Pure Virtualized Graphics** 

#### Enhancements from Hardware Virtualization:

- Security: Guest memory isolation is enforced by a hardware protection mechanism
- Support for SR-IOV FLR (Function Level Reset) preventing a rogue guest from crashing the entire system
- Full support of IOMMU/VT-d system I/O virtualization standards

The AMD FirePro<sup>™</sup> family of hardware-virtualized GPUs with Multiuser GPU (MxGPU) technology delivers a simple, secure and cost effective solution for high performance virtual workstations.

# **Keeping IT Simple**

**Easy to Set Up, Easy to Use:** The AMD Multiuser GPU works with hypervisors to provide ease of installation. IT managers and system administrators setting up a central server within an enterprise environment can easily implement and configure the AMD Multiuser GPU.

**Simplified Product Maintenance and Support:** Easy to scale to meet the needs of a growing enterprise, supporting up to 16 users on the AMD FirePro<sup>™</sup> S7150, and up to 32 on the AMD FirePro<sup>™</sup> S7150 x2 depending on workload. Simply add them and go, users don't have to worry about entering into a technology license or paying any fees.

# **Keeping Data Secure**

**AMD Multiuser GPU Technology:** Unlike software virtualization, AMD's hardware-based virtualization solution makes it even more difficult for a hacker to break in at the hardware level. For organizations that highly value security, the new AMD Multiuser GPU is a clear option to go with for their virtualized workstation needs.

# **Delivering the Most Value for Your Investment**

**Outstanding Performance Per Dollar:** With users not having to worry about entering into a technology license or paying any fees, enterprises get the full economic benefit of VDI with AMD FirePro S7150 or S7150 x2 Server GPUs.

**Full-featured, Virtual GPU:** By utilizing the native AMD drivers in the virtual environment, Multiuser GPUs provide seamless access to OpenGL, DirectX<sup>®</sup> and OpenCL acceleration, giving the user a true desktop experience when they run their applications. Whatever a user was able to do on a desktop machine, they can now do in a virtualized environment using our new MxGPU technology.



# **Detailed Features Listing**

#### AMD Multiuser GPU technology

Enable consistent, predictable and secure performance from your virtualized workstation with the world's first hardwarebased virtualized GPU solution, the AMD Multiuser GPU. This new virtualization solution from AMD can enable users to have workstation-class experiences with full ISV certifications, and workstation-class performance.

## Error Correcting Code (ECC) Memory

Helps ensure the accuracy of your computations by correcting any single or double bit error as a result of naturally occurring background radiation.

#### OpenCL<sup>™</sup> 2.0 Support in Virtual Environment

Helps professionals tap into the parallel computing power of modern GPUs and multicore CPUs to accelerate compute-intensive tasks in leading CAD/CAM/CAE and Media & Entertainment applications that support OpenCL. The AMD FirePro S7150 and S7150 x2 server GPUs supports OpenCL<sup>™</sup> 2.0, allowing developers to take advantage of new features that give GPUs more freedom to do the work they are designed to do.

## **Energy Efficient Design**

AMD FirePro S7150 and S7150 x2 GPUs support unique power monitoring and management technologies, and have a maximum power consumption of 150 and 265 watts, respectively. AMD PowerTune<sup>1</sup> technology dynamically optimizes GPU power usage.

#### AMD PowerTune

AMD PowerTune Technology is an intelligent power management system that monitors both GPU activity and power draw. AMD PowerTune optimizes the GPU to deliver low power draw when GPU workloads do not demand full activity and delivers the optimal clock speed to ensure the highest possible performance within the GPU's power budget for high intensity workloads.<sup>1</sup>

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	AMD FirePro <sup>™</sup> S7150 Server GPU	AMD FirePro <sup>™</sup> S7150 x2 Server GPU
Number of Concurrent Users Supported	Up to 16	Up to 32
Memory	8 GB GDDR5	16 GB GDDR5 (2 x 8GB)
Memory Bandwidth	256 bit	
Supported Hypervisor	VMware® ESXi™ 6.0	
Guest OS Support	Microsoft <sup>®</sup> Windows 8.1 and Windows <sup>®</sup> 7	
OS Support	Microsoft® Windows 8.1, Windows® 7, and Linux® (32- or 64-bit)	
API Support	DirectX <sup>®</sup> 11.1, OpenGL <sup>®</sup> 4.4, OpenCL <sup>™</sup> 2.0	

1. AMD PowerTune technology offered by certain AMD FirePro<sup>™</sup> products is designed to intelligently manage GPU power consumption in response to certain GPU load conditions. Not all products feature all technologies – check with your component or system manufacturer for specific model capabilities. GD-35

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