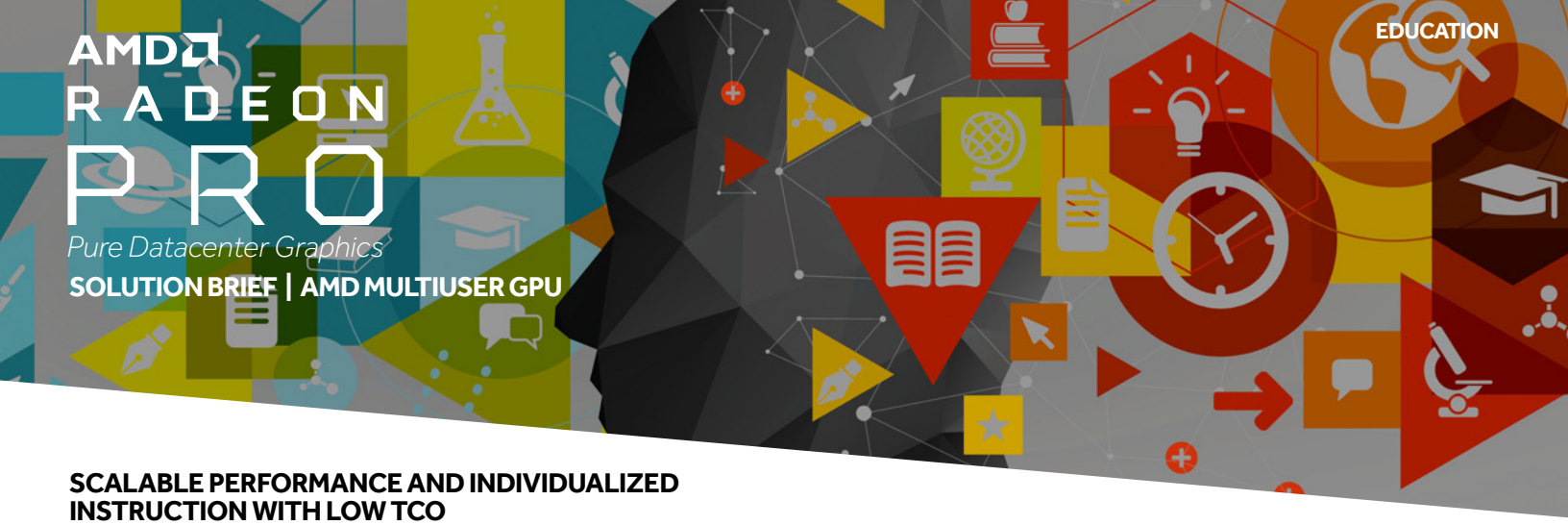
AMD RADEON PRO

Pure Datacenter Graphics

SOLUTION BRIEF | AMD MULTIUSER GPU



SCALABLE PERFORMANCE AND INDIVIDUALIZED INSTRUCTION WITH LOW TCO

VDI powered by AMD Multiuser GPU (MxGPU) technology delivers full GPU acceleration to local and remote users while expanding educational opportunities and reducing costs.

Many schools require graphics-acceleration for uses ranging from streaming video to high-end 3D applications. Meanwhile, users increasingly need education that fits their schedules. This requires remote access to applications and data from a variety of devices. These trends are occurring at a time when public and private educational institutions are facing unprecedented budget and space constraints. IT departments are turning to virtualization to meet these needs; however, most legacy virtual environments lack GPU acceleration, which limits performance.

AMD Multiuser GPU (MxGPU) technology offers the following key benefits to educators:

1. **Performance:** Hardware-based virtualization brings full AMD Radeon™ Pro 2D/3D graphics acceleration to the datacenter using the Single Root I/O Virtualization (SR-IOV) PCIe® virtualization standard. This eliminates proprietary and complex software from the hypervisor while providing a dedicated frame buffer for consistent performance. Each VM uses native AMD drivers with 100% compatibility and access to all GPU graphics and compute functions on the server with no profiles needed.
2. **Remote Access:** Students and faculty are not tied to any specific device or location; virtual desktops and applications are available on virtually any connected desktop, laptop, or mobile device from virtually any location at virtually any time. Flexible permissions allow groups and individuals to access needed resources. Labs can be repurposed as needed to serve multiple classes within minutes.
3. **Cost Effectiveness:** Centralizing compute and GPU resources in the datacenter reduces the need to purchase and maintain individual workstations and/or laptop computers while allowing total access to users on their own devices. Predictable, profile-less GPU assignment simplifies resource allocation and planning with linear scalability and no additional hardware licensing or other fees beyond the hardware purchase.
4. **Personalization:** Allowing students to access course materials at virtually any time from virtually any location allows them to self-pace their learning, which keeps them engaged and can boost their academic performance. Fast learners can move ahead while those needing extra time can resume where they left off at any time.

Full AMD Radeon™ Pro GPU Performance

AMD Multiuser GPU technology enables consistent AMD Radeon Pro GPU acceleration that can meet or exceed traditional workstation graphics cards, allowing students and faculty to run everything from standard office applications to streaming video and high-end 3D applications with complete fidelity. Hardware-based virtualization assures performance through dedicated frame buffers while helping ensure total compatibility by using native drivers. This enriches existing curricula and opens expansion opportunities.

Convenient Remote Access

Users can access individual or pooled virtual desktops from virtually any lab or remote location at virtually any time from virtually any desktop, laptop, or mobile device—including full support for personal devices. Schools can grant access to applications and data to individuals or roles, and can also specify locations and/or schedules. This allows students to access only the resources they need and fast configuration to serve multiple classes/labs on any given day.

Cost Effectiveness

AMD Multiuser GPU technology can help lower costs across the board compared to traditional workstations or laptops. Initial deployment is fast and easy, and future upgrades are as easy as purchasing additional servers and access points. Virtualization also allows centralized management with no need to travel to labs or repair individual devices. Instructors can reserve devices and specific images on a class-by-class basis within minutes, thereby optimizing available lab space. A user experiencing an issue on one device can simply log in to the virtual environment and pick up where they left off

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with no loss of data or productivity. All updates are visible to users on their next login. Further, there are no additional hardware costs to use AMD Multiuser GPU technology beyond purchasing the hardware itself.

Better Education with Personalized Instruction

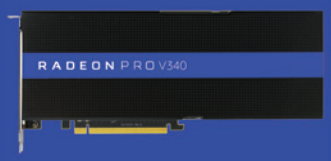
Desktop and application virtualization has the potential to reduce or eliminate set class schedules by allowing students to access the curriculum at any time and work at their own pace. Faster students won't experience the boredom and frustration of having to wait for the slower students, while the slower students can take all the time they need. Further, students can work around their schedules by starting and stopping as needed to fit their other commitments with no loss of progress, thereby motivating them to continue their educations.

Peace of Mind

- Three-year limited product repair/replacement warranty
- Direct toll-free phone (US, Canada) and global email access to dedicated technical support team
- Advanced parts replacement option

For more information, please visit www.amd.com/mxgpu

Specifications

	S7100X	S7150X2	V340
			
Max. Virtual Machines	16	16	32
Max. Power	100W	265W	<300W
Form Factor	PCIe® 3 MXM 3.1	Full height & length PCIe® 3x16	Full height & length PCIe® 3x16
Cooling	Passive	Passive	Passive
Interface	256 bit	256 bit	256 bit
Memory	8GB GDDR5	16GB GDDR5	32GB HBM2
ECC Memory	supported	supported	supported
API Support	DirectX® 11.1, OpenGL® 4.4 and OpenCL™ 2.0		
OS Support	Microsoft® Windows 10, Windows® 7, Windows® Server 2016, Windows® Server 2008 R2 (64-bit only)		
Hypervisor Supt.	VMware® ESXi™ 6.5, 6.0, Citrix® XenServer® 7.4+		
Remote Vis. Supt.	VMware® Horizon® View 7.0+, Citrix® XenDesktop® 7.15+, Citrix® XenApp® 7.15+		

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