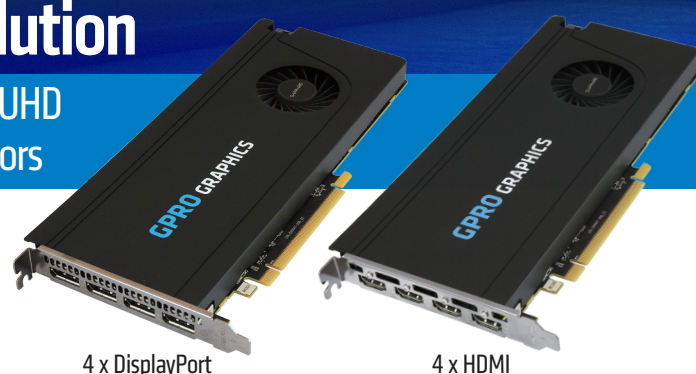


GPRO 8200 Series Graphics Solution

Leading-Edge Solution to Deliver Digital Signage, 4K UHD Resolution and HD Multimedia into Commercial Sectors



Key Features:

- 14nm FinFET, 4th GCN architecture
- 8 GB GDDR5 Frame Buffer
- 256-bit memory interface
- 211 GB/s memory bandwidth
- Four DisplayPort 1.4 outputs, up to 5K resolution @60Hz or Four HDMI 2.0 outputs, up to 4K resolution @60Hz
- Up to 4x4K resolution displays @60Hz & @30Hz
- Support HDMI 2.0 with 4x4K resolution displays @60Hz (DisplayPort Version)
- HEVC (H.265) Video Encoding Acceleration Technology⁵
- HEVC (H.265) Video Decode Acceleration Technology (UVD)⁵
- AMD Eyefinity multi-display technology¹
- AMD XConnect™ Technology²
- <140W maximum power consumption
- SAPPHIRE's Vapor Chamber cooling technology
- OpenCL 2.2, DirectX 12, OpenGL 4.5, Vulkan™ API support
- PCIe 3.0 compliant, x16 bus interface
- Planned minimum 3-year life cycle
- Limited 3-year warranty
- Microsoft® Windows® 10, 8.1, 7, and Linux (64-bit) support

The SAPPHIRE 8200 series have been designed to deliver solutions in a variety of commercial sectors. Equipped with 8GB GDDR5 of high speed memory, a single slot low power consumption design, and support for quad 4K UHD resolutions at 60Hz, the GPRO 8200 meets the requirements of professionals in the Digital Signage, HD Multimedia and Medical Spaces. It features SAPPHIRE's award winning Vapor Chamber cooling Technology with two-ball bearing fan, which provides a stable and reliable graphics solution that is capable of meeting exacting commercial standards.

The GPRO 8200 series comes equipped with the latest Displayport and HDMI 2.0 technology, they are capable of delivering quad 4K UHD display resolutions at both 60Hz and 30Hz for multi-displays solutions. Moreover, the GPRO 8200 series support HEVC (H.265) encode and decode standards and Ultra HD multimedia engines, that obtain the ultimate in video quality for those who require professional standard quality video playback, editing and transcoding used in the broadcast and digital signage segments.

The GPRO 8200 commercial graphics solutions have been engineered to provide innovation and reliability for a wide range of commercial operating environments. With 3 years limited warranty and planned minimum 3 years life-cycle, SAPPHIRE delivers intelligent solutions to commercial spaces with the GPRO range of professional Graphics Solutions.

GPRO 8200 Graphics Card

Features	Benefits
14nm FinFET, 4 th GCN Architecture	14nm FinFET GPUs deliver a remarkable generational jump in power efficiency. It is designed for fluid frame rates in graphics, VR and multimedia applications running on compelling small form-factor thin and light computer designs
AMD Eyefinity Multidisplay Technology ¹	Enables highly immersive and powerful multitasking experiences across multiple displays. Each GPRO 8200 graphics card is capable of driving up to four displays at 4K resolutions. ¹
AMD XConnect™ Technology ²	With AMD XConnect™ technology ² , external GPU enclosures configured with AMD Graphics can easily connect and disconnect to a compatible ultrathin notebook or 2-in-1 over Thunderbolt™ 3 at any time.
AMD VCE (Video Codec Engine)	VCE is AMD's dedicated fixed-function H.264/AVC video coding engine. One of its primary advantages is that it allows offloading the huge video compression workload to such a co-processor, leaving most of the CPU cycles available for other types of processing. Besides, it exhibits the advantages that come with fixed-function hardware implementations such as the increased throughput and reduced power consumption.
AMD UVD (Unified Video Decoder)	The HD content became popular with the rise of Blu-ray and HD-DVD. It came with huge amounts of data to be compressed, which led to the development of computationally extensive standards such as H.264 and VC-1. UVD is a dedicated hardware video decoding block that facilitates the full, bit-accurate decoding of VC-1 or H.264.
Virtual Super Resolution (VSR)	VSR allows users to render at higher resolutions and then rescales them down to a lower native display resolution. Using this, you can get quality that rivals up to 4K, even on a 1080p display.
AMD LiquidVR™ Technology ³	The AMD LiquidVR™ ³ technology is by no means limited to games – the benefits are applicable to a broad spectrum of VR applications, including interactive cinema, education, simulation, telepresence, social media, medical, real estate e-commerce and much more.
AMD FreeSync™ Technology ⁴	No stuttering. No tearing. AMD FreeSync™ ⁴ technology allows a compatible graphics card and monitor to dynamically change frame rates for the optimum display quality without tearing or stuttering.
AMD TrueAudio technology	AMD TrueAudio technology is all about giving sound engineers the freedom to follow their imaginations and the power to make their video sound as convincing as they look.
Frame Rate Target Control (FRTC)	Frame Rate Target Control caps performance not only in 3D rendered in-game scenes, but also in splash screens, loading screens and menus, where frame rates can often run needlessly into the hundreds of fps.
Optional Accessories for the GPRO 8200 Displayport version (Additional cables can be purchased separately)	DP to HDMI 1.4 Active Dongle DP to HDMI 2.0 Active Dongle DP to DVI Active Dongle DP to DVI Passive Dongle

1. AMD Eyefinity technology supports up to six DisplayPort™ monitors on an enabled graphics card. Supported display quantity, type, and resolution vary by model and board design; confirm specifications with manufacturer before purchase. To enable more than two displays, or multiple displays from a single output, additional hardware such as DisplayPort-ready monitors or DisplayPort 1.2 MST-enabled hubs may be required. A maximum of two active adapters is recommended for consumer systems. See <http://www.amd.com/eyefinityfaq> for full details.

2. Not all notebooks or 2-in-1s feature AMD XConnect™ technology, and not all external graphics (eGPU) enclosures are pre-configured with an AMD Radeon™ graphics card and/or feature user upgradability. Base system's software package and BIOS must be configured to support AMD XConnect™ technology. System must have Thunderbolt™ 3 connection. Check with your manufacturer for full specifications and capabilities.

3. Users will need to obtain a VR headset compatible with AMD's GPU technologies and AMD LiquidVR™ technology. See <http://www.amd.com/liquidvr> for more information.

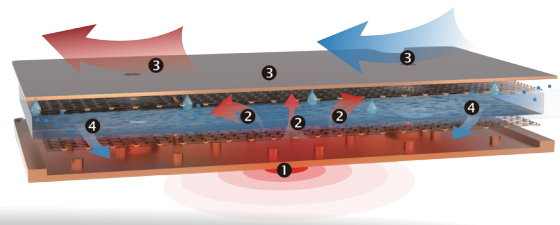
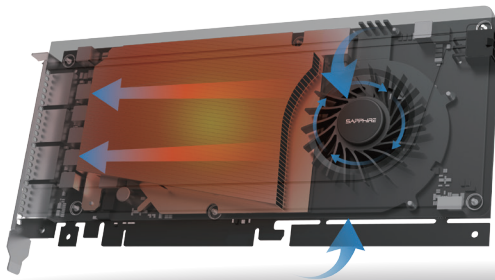
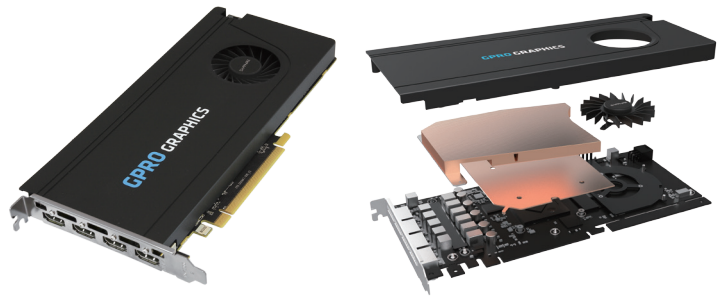
4. AMD FreeSync™ technology is designed to eliminate stuttering and/or tearing in games and videos by locking a display's refresh rate to the framerate of the graphics card. Check with your component or system manufacturer for specific capabilities. AMD FreeSync™ technology compatible monitor, AMD Graphics with DisplayPort™ Adaptive-Sync required. AMD Catalyst™ 15.2 Beta (or newer) required. Adaptive refresh rates vary by display; check with your monitor manufacturer for specific capabilities. A list of supported hardware and compatible monitors is available at <http://www.amd.com/freesync>.

5. HEVC acceleration is subject to inclusion/installation of compatible HEVC players

SAPPHIRE's Vapor Chamber Cooling Technology

Quiet, Cool and Reliable

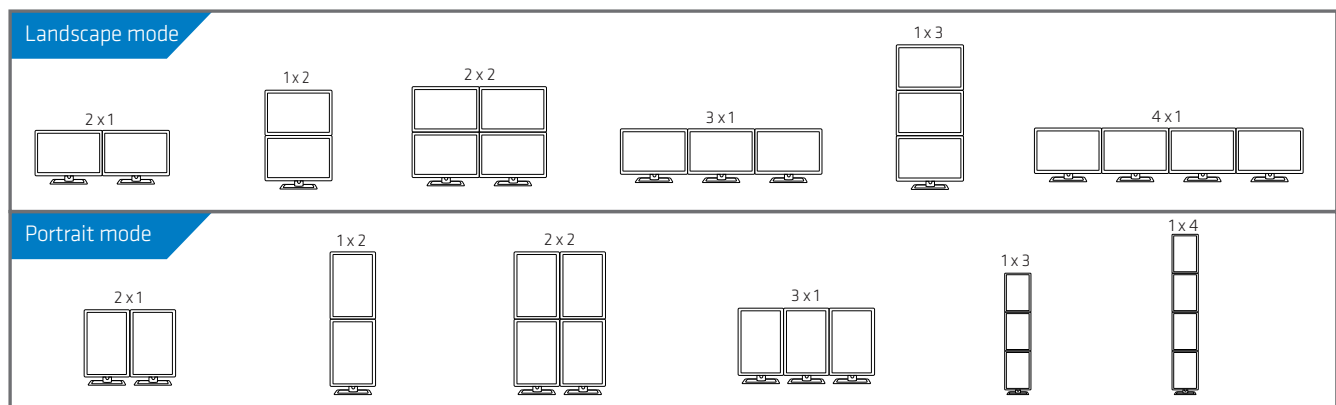
Vapor Chamber Technology is based on the same principles as heat pipe technology, but benefits from a large flat vapor chamber instead of the traditional linear pipe design. A liquid coolant is vaporized on a hot surface, with the resulting vapor condensed on a cold surface before the liquid is returned on a hot surface. The recirculation process is controlled by a wick system. SAPPHIRE implements this innovative cooling technology across different product lines including with the SAPPHIRE GPRO 8200 commercial graphics solution, which delivers quiet, reliable and stable products to end users.



How does Vapor Chamber Cooling Technology work?

1. Heat source heats Vaporization Wicks.
2. Working fluid is easily vaporized due to the extreme low pressure
3. The vapor passes through the vacuum until it meets the Condensing Wick - adjacent to the cooled surface - and turns back to a liquid state.
4. The liquid is then absorbed by the Transportation Wick through a capillary process and moves back towards the Vaporization Wick.
5. The recycled liquid is then reheated and re-vaporized by the Vaporization Wick and the process is then repeated.

GPRO 8200 Eyefinity Configurations



SAPPHIRE PGS (Professional Graphics Solutions) is a business unit within SAPPHIRE Technology for Professional solutions. It provides various types of professional solutions for workstation and professional clients. SAPPHIRE PGS supports the full range of 3D professional applications for professional users. For industrial customers, SAPPHIRE PGS integrates display related graphics application solutions for broadcasting, digital signage, medical, surveillance, ATC (Air Traffic Control) and other markets. SAPPHIRE PGS is focused on providing our customers with highly appropriate solutions and outstanding pre and after sales consultancy and services.

For more information, please visit : www.SapphirePGS.com

Feature, performance and product specifications may vary by operating environment and are subject to change without notice. Products may not be exactly as shown.

SAPPHIRE
Professional Graphics Solutions