High Performance Game Streaming

SOLUTION OVERVIEW | CLOUD GAMING

AMD Radeon™ Sky Series graphics and AMD RapidFire technology deliver low latency, high performance gaming experiences from the cloud to any device.

Target Market:

→ Cloud gaming service providers
→ Telecommunications providers
→ On-demand media content providers
→ Large data center service providers

Games:

→ Casual
→ Mainstream
→ Advanced (AAA)

Challenges:

→ High density performance (more streams, less hardware)
→ Minimized latency and high game frame rates
→ Maximize existing cloud infrastructure and resources

Solution:

AMD Radeon™ Sky Series graphics are designed to support up to six independent HD game streams (720p), with little to no latency at up to 30 frames per second, allowing cloud gaming providers to deliver high quality gaming experiences to any device the gamer chooses – desktop, TV, tablet, notebook or smartphone.

Platform Partners:

→ CiiNOW
→ G-Cluster
→ Otoy
→ Ubitus

Cloud gaming is soaring to new heights. Designed for powering intense and high quality 3D games from the cloud, AMD Radeon™ Sky Series graphics cards feature AMD's award-winning Graphics Core Next Architecture for spectacular gaming performance and power efficiency. Equipped with the latest technologies, such as PCI Express® 3.0 support, DirectX® 11.1 support, AMD RapidFire technology, and the incredibly efficient AMD ZeroCore Power and AMD PowerTune technologies, the sky's the limit for cloud gaming.

High Density Performance

Each graphics card in the AMD Radeon™ Sky Series family is capable of supporting up to six simultaneous game streams at once.[1] With AMD Radeon™ Sky Series cloud gaming service providers can maximize existing infrastructure and resources to support even more simultaneous game streams, from casual games to AAA titles.

High Quality Graphics

With AMD Radeon™ Sky Series graphics, quality is never compromised for quantity. Each one of six simultaneous game streams can support up to 30 frames per second.[1] In addition to latency-fee streaming, users can play their favorite games at full HD resolution (720p) without impacting game performance.

AMD RapidFire Technology

When it comes to AMD Radeon™ Sky series graphics for cloud gaming, our secret sauce is AMD RapidFire technology. It's a combination of software and hardware that enables a superior cloud gaming solution and experience.

First, AMD RapidFire technology offers service providers a unique and simple cloud gaming software API that enables easy integration that helps shorten development time while providing access and versatility to key elements of AMD technology for the cloud. This allows providers to enhance the overall cloud gaming experience for gamers, and aligns with AMD's commitment to industry standard APIs, like OpenCL™, DirectX® and OpenGL. An industry standard API for cloud gaming can help to unite the industry around one platform and drive continued innovations that benefit the industry at large.

Another key element of AMD RapidFire technology is the Video Compression Engine (VCE). It enables lightning compression and transmission, optimizing total network bandwidth to ensure every gamer has a seamless, low latency experience.

Last but not least, with AMD RapidFire technology AMD is working to improve virtualization capabilities that will provide greater density and more simultaneous game streams from a single server.

AMD Radeon™ Advantage

Raise the settings, increase the resolution and play your favorite games. Gamers streaming from the cloud can achieve the full AMD Radeon™ gaming experience they've come to know and love on their desktops on any device they choose, from anywhere.

All AMD Radeon™ graphics cards based on AMD's new Graphics Core Next Architecture support DirectX® 11.1 today, including AMD Radeon™ Sky Series graphics, for an unrivaled gamine experience on the latest games. Our graphics cards support all 10 of the key technologies featured in DirectX 11.1, unlike competing cards that only support four of the 10 key technologies included in the standard.

AMD Radeon™ Sky Series Graphics are backed by the same AMD Catalyst™ drivers found on discrete AMD Radeon™ HD graphics cards. Gaming providers will receive regular driver updates and could see double digit performance improvements over a product's lifetime. With each driver release new games and features are supported, helping game performance get better and better for users.
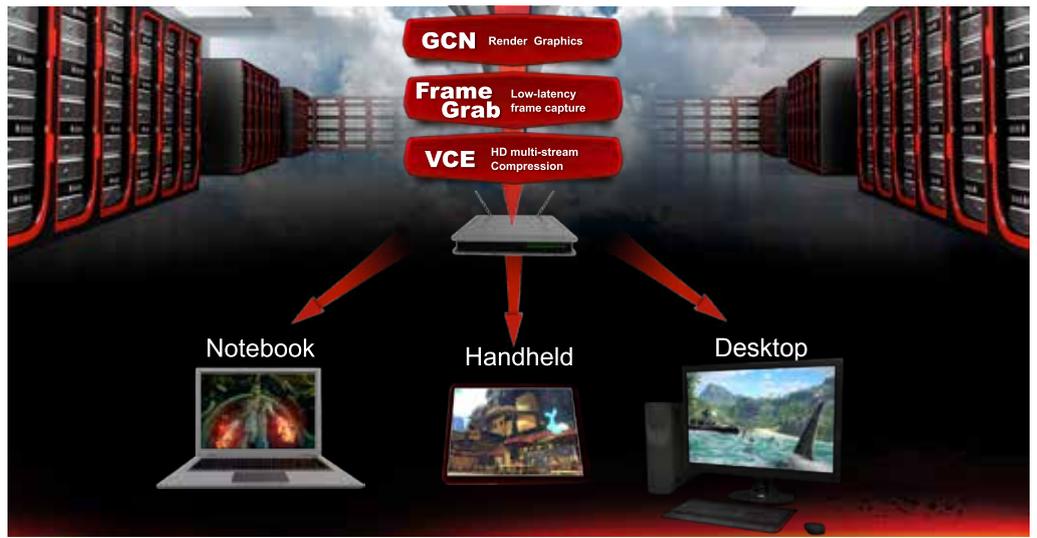
Energy Efficient Design.

AMD Radeon™ Sky Series cloud gaming cards feature intelligent power monitoring and management technologies. AMD PowerTune technology enables higher clock speeds and better game performance, and AMD ZeroCore Power technology allows the GPU to consume virtually no power when in idle state.[2]

	Form Factor	Thermal Solution	Core Clock Speed	Memory	Memory Interface	Memory Bandwidth	Max Power	Bus Interface	DirectX®	AMD RapidFire Technology	AMD PowerTune Technology[2]	AMD ZeroCore Power Technology[2]
AMD Radeon™ Sky 900	Full Height/ Full Length, Dual-slot	Passive	825 Mhz	6GB GDDR5 (3GB/GPU)	384-bit	480 GB/s	300W	PCIe® 3.0, x16	11.1	Yes	Yes	No
AMD Radeon™ Sky 700	Full Height/ Full Length, Dual-slot	Passive	900 Mhz	6GB GDDR5	384-bit	264 GB/s	225W	PCIe® 3.0, x16	11.1	Yes	Yes	Yes
AMD Radeon™ Sky 500	Full Height/ Full Length, Single-slot	Passive	950 Mhz	4GB GDDR5	256-bit	154 GB/s	150W	PCIe® 3.0, x16	11.1	Yes	Yes	Yes

Committed to Gaming

AMD is committed to several options that will enable ubiquitous gaming across multiple platforms. To further reinforce its position as an industry-leading graphics provider, AMD plans to focus on four critical areas as part of its Unified Gaming Strategy.
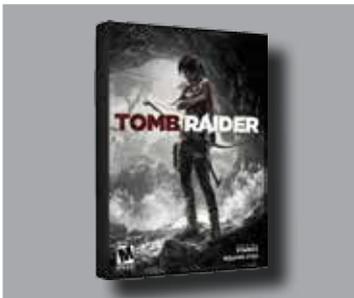
Continue ground-breaking work with game developers to ensure the greatest games are optimized to play on the greatest hardware, AMD Radeon™ graphics

Collaborate with console developers to evolve and improve the console experience for both gamers and game developers

Extend the limits of online gaming through technology partnerships with companies like CiiNOW, enabling game publishers, retailers and telecom carriers to tap into the growing online video game market, ultimately providing greater choice for casual to advanced gamers

Deliver cutting-edge graphics technology that ultimately sets the foundation for driving the best gaming experiences, regardless of the platform