AMD FirePro™ V7900 SDI Professional Graphics

POWERFUL GPU ACCELERATION FOR THE AMD FIREPRO™ SDI-LINK PLATFORM

Key Messages:

> **For use with AMD FirePro™ SDI-Link**

> **Supports computing APIs including OpenCL 1.1™, OpenGL 4.2 and DirectX® 11**

> **Powerful 2D and 3D acceleration with 1280 stream processors**

> **Less than 150 watt, single-slot form factor**

> **256-bit memory interface with 160GB/s bandwidth**

AMD FirePro™ SDI-Link platform compatibility provides:

> **AMD DirectGMA technology for ultra-low-latency, synchronized data transfer between AMD FirePro™ professional graphics card memory and other PCIe devices**

> **Robust support for leading-edge SDI signal standards including "3G SDI" via SDI I/O hardware compatibility and certification[1]**

> **Superior price/performance and value for OEMs, integrators and end-users**

> **Highly scalable and configurable for advanced configurations and applications**

The world's first GPU to support AMD FirePro™ SDI-Link, the AMD FirePro™ V7900 SDI professional graphics card provides powerful 2D and 3D acceleration for live broadcast and real-time professional video production environments.

Through AMD FirePro™ SDI-Link, AMD and broadcast technology partners, including AJA, Bluefish444, BlackMagic, DELTACAST, DVS and Matrox, are enabling an ecosystem of new possibilities. OEMs and other technology developers can now build ultra-low-latency solutions that leverage GPU acceleration and comprehensive serial digital interface (SDI) signal compatibility through the use of AMD FirePro™ V7900 SDI professional graphics cards and SDI-Link-certified, third-party SDI I/O cards.

When used to build integrated solutions for real-time broadcast and video pipelines, AMD FirePro™ V7900 SDI professional graphics cards, along with related SDI-Link platform components, are designed to help transcend the limitations of the past.

Utilizing AMD DirectGMA technology, AMD FirePro™ V7900 SDI professional graphics cards provide massively parallel image processing capacity for on-air/live broadcast graphics, 2D/3D virtual sets, real-time video production/post-production, on-set 3D previz, real-time signal/stream transcoding and other "latency-sensitive" applications.

With 1280 stream processors, 2GB of GDDR5 memory and support for industry standard APIs, such as OpenCL™ 1.1 and OpenGL 4.2, the AMD FirePro™ V7900 SDI professional graphics card ushers in a new era of advanced GPU functionality and is a critical component for AMD FirePro™ SDI-Link-powered solutions.

AMD FIREPRO™ V7900 SDI — FOR USE WITH AMD FIREPRO™ SDI-LINK

FEATURES	BENEFITS
Unified Shader Architecture	Intelligent management of computation resources enables real-time rendering of complex and realistic images
AutoDetect Technology	As a user moves between applications, or opens new ones, the graphics driver settings are automatically configured for maximum performance
Framelock/Genlock[2]	Ensures accurate and consistent video synchronization to external sources or multiple GPUs in different systems
GeometryBoost Technology	Unleash your creativity with a hardware architecture that provides ultra-high geometry performance and ensures smooth handling of complex models
Full 30-bit Display Pipeline	Enables a palette of more than 1.07 billion color values for more accurate color reproduction and superior visual fidelity as compared to 24-bit products[2]
Full Shader Model 5.0 Support	Helps create more complex geometry and scenes without taxing the CPU
DirectX® 11 and OpenGL® 4.2 Advanced Features	Enables optimal performance in leading applications
OpenCL™ 1.1	Industry standard API – Open, multiplatform development platform for enabling broad adoption of heterogeneous computing

PRODUCT SPECIFICATIONS	
GPU	
Stream Processors	1280
Memory Interface	256-bit
Memory	
Size/Type	2GB GDDR5
Bandwidth (GB/s)	160
Display Outputs	
Display Port	4 standard
Max Resolution	2560 x 1600
API/Feature/OS Support	
DirectX®	11.0
OpenGL®	4.2
Shader Model	5.0
AMD Eyefinity Multi-Display Technology Support	Yes
ATI FirePro™ S400 Synchronization Module Support (for Framelock/Genlock)	Yes
Stream Computing	Yes (OpenCL™ 1.1)
OS Support	Microsoft® Windows® 7, Microsoft® Windows® XP, Microsoft® Windows® Vista and Linux® (32-bit or 64-bit)
Thermal/Power/Form Factor	
Max Power	<150 W
Slot(s)	1
Form Factor	Full Height / Full Length
Bus Interface	PCI Express® 2.1 x16
Additional Details	
System Requirements	> 512MB of system memory > 1 x PCIe AUX connector (6-pin) > Available PCIe® lane > Microsoft® Windows® 7, Microsoft® Windows® XP, Microsoft® Windows® Vista or Linux® (32-bit or 64-bit)
Retail Package Contents	> AMD FirePro™ V7900 SDI Professional Graphics > Quick Start Reference Guide > 4 x DP to DVI (single link active) adapter > 1 x Stereoscopic bracket > AMD CrossFire™ Pro connector
Warranty and Support	Three year limited product repair/replacement warranty. Direct toll free phone and e-mail access to dedicated workstation technical support team. Advanced parts replacement option.
Regulatory Compliance	FCC, CE, C-Tick, BSMI, KCC, UL, VCCI, RoHS and WEEE

1 Depending on third-party SDI card used.

2 Requires ATI FirePro™ S400 synchronization module.

AMD