



AMD FirePro™ S400

SYNCHRONIZATION MODULE

**Precise Synchronization for
Demanding Applications**

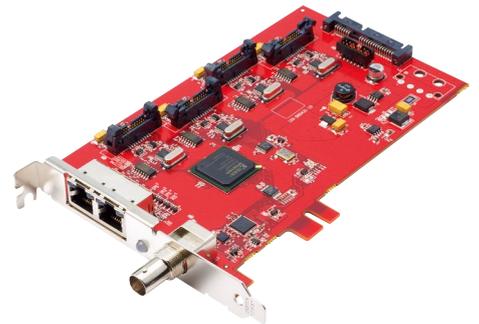
Key Features:

- Single-slot formfactor
- Workstation quality and performance for the highend market
- Support up to 4 GPUs per module
- Field-upgradeable firmware solution
- Optimized for broadcast, video editing, visualization, simulation and rich display applications

The AMD FirePro™ S400 synchronization module allows selected AMD FirePro™ professional graphics cards to be used in demanding applications that require synchronization to external sources (Genlock) or synchronization of 3D rendering of multiple GPUs in different systems (Framelock).

The combination of these capabilities with AMD FirePro™ professional graphics enables an array of advanced design-visualization and digital media display solutions.

Based on a full hardware-dedicated processor design, the AMD FirePro™ S400 helps to ensure clock-accurate synchronization in virtually all scenarios¹. The dedicated processor allows up to four attached GPUs to work together to address the users' rendering needs without compromising sync.



AMD FirePro™ S400 Genlock for broadcast, non-linear editing (NLE) and other video workflows

The AMD FirePro™ S400 permits Genlocking by delivering Output lock (synchronized display output) that is driven by an external reference signal (typically 'house sync'). This allows the output of attached GPUs to be fed into video-centric devices (e.g. monitors used in broadcast applications, or NLE suites).

The BNC connector on the AMD FirePro™ S400 allows for receiving and synchronizing to virtually any video input source, including:

- PAL & NTSC SD video blackburst
- HDTV tri-level sync
- TTL
- Sync signals on SDI

AMD FirePro™ S400 Framelock for simulation, visualization and power walls

The AMD FirePro™ S400 delivers Framelocking by combining Output lock (synchronized display output) and 3D swap lock (simultaneous 3D buffer swapping), ensuring the GPUs in connected systems present their outputs in lock-step.

The two RJ-45 connectors on the module allow for connection of multiple daisy-chained systems (each with up to four AMD FirePro™ GPUs inside).

The BNC connector on the module optionally allows systems to be synchronized (Genlocked) to an external signal, a capability essential for use in powerwalls used in live television broadcasts.



AMD FirePro™ S400

SYNCHRONIZATION MODULE

Innovation and Reliability from a Technology Leader

AMD FirePro™ professional graphics, including the AMD FirePro™ S400 synchronization module, have been engineered to deliver innovation and reliability for a wide range of professional operating environments, including Windows® XP, Windows Vista®, Windows® 7, Windows 8 and Linux®. The unified driver, which supports all AMD FirePro™ professional graphics, helps reduce the total cost of ownership by simplifying installation, deployment and maintenance.

In addition, AMD FirePro™ professional graphics incorporate a unique AutoDetect technology. As users open new 3D applications, or move between them, optimized AMD FirePro™ graphics driver settings are automatically configured for maximum performance, no matter what the user's workflow demands.

For more information, visit www.amd.com/us/products/workstation/graphics/Pages/workstation-graphics.aspx



FEATURES	BENEFITS
Support for up to 4 GPUs per module	Enable high density of workstation GPUs in a system
Field upgradeable	Improved functionality can be deployed after initial installation of the module without opening the host computer
Full hardware-based synchronization	On board logic is dedicated to Genlock and Framelock functionality, helping to ensure accurate and consistent synchronization for all applications
Support for connecting multiple computers and their GPUs together	Allows for multiple channels of 3D-rendered content to be presented simultaneously and in lock-step
Sync to virtually any video source	House sync capability supports PAL & NTSC SD video blackburst, HDTV tri-level, TTL, and even SDI sync.
Serial ATA power connector	Allows power to be provided by a modern power connector, as the older 4-pin IDE connector is becoming obsolete, particularly in newer OEM chassis designs

PRODUCT DETAILS	
Features	<ul style="list-style-type: none"> → Supports up to 4 GPUs per system → Enable three, four or six display configurations with AMD Eyefinity multi-display technology² → House sync support for analog (black burst) and digital (SDI, TTL) → Supports either PCI or PCI Express® slots for mechanical mounting
System Requirements	<ul style="list-style-type: none"> → One or more supported GPUs → Workstation with available PCI or PCIe slot → 350-Watt power supply or greater (assumes fully loaded system) → 512MB of system memory
Graphics Products	<ul style="list-style-type: none"> → AMD FirePro™ W9000, AMD FirePro™ W8000 and AMD FirePro™ W7000 → AMD FirePro™ V7900, AMD FirePro™ V7900 SDI
Warranty and Sup	<ul style="list-style-type: none"> → Three year limited product repair / replacement warranty → Direct toll free phone and email access to dedicated workstation technical support team → Advanced parts replacement option
API and OS Support	<ul style="list-style-type: none"> → Framelock supported in OpenGL → Windows® XP, Windows Vista®, Windows® 7, Windows 8 and Linux® → 32-bit and 64-bit versions of OS support

1. AMD FirePro™ W9000, W8000, W7000, V7900 or V7900 SDI required.

2. 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. Maximum two active adapters supported. See www.amd.com/eyefinityfaq for full details.

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About Sapphire PGS

Sapphire PGS (Professional Graphics Solution) provides various types of professional display solutions for workstation and professional clients. PGS supports full range of 3D professional applications for 3D professional users. For industrial customers, Sapphire PGS integrates all display related graphics application solutions for broadcasting wall, digital signage, medical, surveillance, ATC etc. Sapphire PGS will continuously provide the most appropriate solutions and the best after sales services.

Visit website: www.SapphirePGS.com

