

Overview

AMD FirePro W7100 8GB Graphics



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J3G93AA

INTRODUCTION

The AMD FirePro™ W7100 workstation graphics delivers great performance, superb visual quality, and outstanding multi-display capabilities. It is an excellent high-end solution for professionals who work with advanced visualization, complex models, large data sets, video editing and production.

The AMD FirePro W7100 features AMD Eyefinity technology support for up to 4 directly attached independent monitors from a single graphics card. Also, the AMD FirePro W7100 is backed by 8GB of ultra-fast GDDR5 memory.

PERFORMANCE AND FEATURES

- AMD Graphics Core Next (GCN) architecture designed to effortlessly balance GPU compute and 3D workloads efficiently
- Blazing compute performance powered by latest AMD GCN architecture yielding up to 3.0 TFLOPS of peak single precision and up to 200 GFLOPS peak double precision
- Optimized and certified for leading workstation ISV applications. The AMD FirePro™ professional graphics family is certified on more than 100 different applications for reliable performance.
- GeometryBoost technology with dual primitive engines
- Four (4) native display DisplayPort 1.2a (with Adaptive-Sync) outputs with 4K resolution support
- AMD Eyefinity technology (see Note 1) support managing up to 6 displays seamlessly as though they were one display
- New Ultra HD Media Engine with more than 8x decode and 3x encode performance than the prior generation and

Overview

dedicated Audio DSP's enabling low power decode of two streams H.264 4K resolution at 60Hz content and 4K encoding

- AMD PowerTune and AMD ZeroCore Power technologies that allow for state of the art dynamic power management of the GPU
- 8GB of high speed GDDR5 memory
- PCI Express® 3.0 compliant

COMPATIBILITY

The AMD FirePro W7100 is supported on the following HP Z Workstations:

- Z230 CMT, Z440, Z640, Z840

SERVICE AND SUPPORT

The AMD FirePro W7100 has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.

Technical Specifications

TECHNICAL SPECIFICATIONS

Form Factor	Full height, single slot (9.5" X 4.376")
Graphics Controller	AMD FirePro W7100 graphics GPU: 1792 Stream Processors organized into 28 Compute Units Power: <75 Watts Cooling: Active
Bus Type	PCI Express® x16, Generation 3.0
Memory	8GB GDDR5 memory Memory Bandwidth: up to 176 GB/s Memory Width: 256 bit
Connectors	4x Display Port 1.2a connectors with HBR2 and MST support. Factory Configured: No video cable adapter included After market option kit: No video cable adapter included Additional DisplayPort-to-VGA or DisplayPort-to-DVI adapters are available as Factory Configuration or Option Kit accessories.
Maximum Resolution	DisplayPort: - 4096x2160 @24bpp 60Hz Dual Link DVI: - 2560x1600 (requires DP to DL-DVI adapter) Single Link DVI: - 1920x1200 (requires DP to DVI adapter) VGA: - 1920x1200 (requires DP to VGA adapter)
Image Quality Features	Advanced support for 8-bit, 10-bit, and 16-bit per RGB color component. High bandwidth scaler for high quality up and downscaling
Display Output	Max number of monitors supported using DisplayPort 1.2a: - 4 direct attached monitors - 6 using DP 1.2a with MST and HBR2 enabled monitors Monitor chaining from a single DisplayPort (subject to a max of 6 total monitors across all outputs, requires use of DisplayPort enabled monitors supporting MST and HBR2): - one 4096x2160 display - two 2560x1600 displays - four 1920x1200 displays
Shading Architecture	Shader Model 5.0
Supported Graphics APIs	OpenGL 4.4 OpenCL 1.2 and 2.0

Technical Specifications

DirectX 11.2 / 12
AMD Mantle

Available Graphics Drivers

Windows 8.1 / 8 (64-bit and 32-bit)
Windows® 7 (64-bit and 32-bit)
Linux

HP qualified drivers may be preloaded or available from the HP support Web site:
<http://welcome.hp.com/country/us/en/support.html>

Notes

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. See www.amd.com/eyefinityfaq for full details.
 2. OpenGL 4.4 support available with driver 14.301.xxx or later.
 3. OpenCL 2.0 support planned in driver updates for early 2015.
 4. Configurations of a single FirePro W7100 graphics card in HP Z440 Workstation require the HP Z440 Fan and Front Card Guide Kit, configurable from the factory (CTO PN: G8T99AV) or as an Aftermarket Option (AMO PN: J9P80AA).
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Summary of Changes

Date of change:	Version History:		Description of change:
May 1, 2015	From v1 to v2	Changed	Note 4 of Technical Specifications.

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