



AMD FIREPRO™ PROFESSIONAL GRAPHICS FOR CAD/CAE AND M&E

Certified and optimized for performance and reliability

The AMD FirePro™ Graphics Advantage

AMD FirePro™ professional graphics are specifically catered to those who desire cutting-edge features, exceptional performance and outstanding reliability. In order to achieve this goal, all AMD FirePro professional graphics products are subjected to more specialized, application-based testing than their consumer counterparts, to ensure the best user experience possible.

AMD FIREPRO GRAPHICS CARDS



AMD FirePro™ W7100

Delivers 8GB of memory, application performance and special features that media and entertainment and design and engineering professionals need to take their projects to the next level.



AMD FirePro™ W5100

Delivers optimized application and multidisplay performance for midrange users. With 4GB of ultrafast GDDR5 memory, users can tackle complex models, assemblies, data sets or advanced visual effects with ease.



AMD FirePro™ W2100

Professional graphics starts here. Do more with your workstation thanks to a 67% increase in CAD performance over the previous card generation.¹ Experience the performance and quality of professional graphics.

Optimized Catalyst™ Pro Drivers

AMD FirePro professional graphics driver versions are released several times each year and include performance and feature improvements. Every version undergoes a minimum of 16 consecutive weeks of testing conducted by three dedicated quality groups. AMD quality groups perform both manual and automated testing using the most stressful scenarios our engineers are able to create, plus many challenging ones from our ISV partners and OEM customers. AMD Graphics Core Next (GCN) GPU architecture based on 28 nm technology, is designed to effortlessly balance GPU compute and 3D workloads quickly and efficiently on AMD FirePro graphics cards.

Certified Applications

Consumer graphics are great for gaming, home and small office environments, but none of them have application certifications that provide you with confidence in the card's performance and reliability. The AMD FirePro professional graphics family is certified on more than 100 different applications for improved performance and reliability, including many of the most popular design and engineering and media and entertainment applications.

Applications include:

AutoCAD
CATIA
Creo






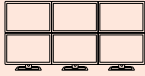
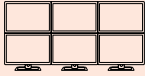

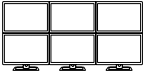

Inventor
Maya
Siemens NX

SolidWorks
3ds Max
and many more

For a complete list of certified applications please visit:

<http://support.amd.com/en-us/download/workstation/certified>



		NEW				
						
		AMD FIREPRO™ W7100	AMD FIREPRO™ W5100	AMD FIREPRO™ W2100	AMD FIREPRO™ W7000	AMD FIREPRO™ V3900
Displays	MAXIMUM RESOLUTION PER DISPLAY OUTPUT	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160
	NUMBER OF DISPLAY OUTPUTS	4	4	2	4	2
	TOTAL 4K DISPLAYS (30HZ)	4	4	2	4	1
	MAX DISPLAY OUTPUTS WITH AMD EYEFINITY AND DISPLAYPORT 1.2A ^{2,3}					
Performance	SINGLE-PRECISION COMPUTE [GFLOPS]	3300	1430	403	2400	624
	DOUBLE-PRECISION COMPUTE [GFLOPS]	206	89	25	152	N/A
	GCN STREAM PROCESSORS	1792	768	320	1280	N/A
	MEMORY	8GB GDDR5	4GB GDDR5	2GB DDR3	4GB GDDR5	1GB DDR3
	MEMORY BANDWIDTH (GB/S)	160	96	28.8	154	28.8
	MAXIMUM POWER	<150W	<75W	26W	<150W	50W
	PCIe®	3.0	3.0	3.0	3.0	2.0
Features	OS - 32-BIT & 64-BIT SUPPORT	WINDOWS 8.1, WINDOWS 7, WINDOWS VISTA, LINUX				
	AMD CROSSFIRE™ PRO	•	•	•	•	
	OPENCL™	2.0 ⁴	2.0 ⁴	1.2	1.2	1.2
	OPENGL	4.4	4.4	4.4	4.4	4.4
	DIRECTX®	12	12	12	12	11
	SHADER MODEL	5	5	5	5	5
	GEOMETRYBOOST	•	•		•	
	AMD POWERTUNE	•	•	•	•	
	AMD ZEROCORE POWER	•	•	•	•	
	3D STEREOSCOPIC	•	•	•	•	•
	FRAMELOCK/GENLOCK ⁵	•			•	
	FREESYNC ⁶	•	•			
WARRANTY	3 YR.	3 YR.	3 YR.	3 YR.	3 YR.	
AVAILABLE ON THESE HP MODELS	HP Z840 HP Z640 HP Z440 HP Z230	HP Z840 HP Z640 HP Z440 HP Z230	HP Z840 HP Z640 HP Z440 HP Z230 HP Z230 SFF	HP Z820 HP Z620 HP Z420 HP Z230	HP Z820 HP Z620 HP Z420 HP Z230 HP Z230 SFF	



The Power to Create – Without Constraint

Keep yourself productive in the field by taking advantage of HP mobile workstations that are powered by AMD FirePro graphics. Get the same innovations, benefits and quality of AMD FirePro desktop discrete graphics in a small, portable form factor. Bring your presentations, complex models and simulations directly to your clients, your jobsite or local coffee shop, and have the power to create – without constraint.

AMD FIREPRO™ BENEFITS AND TECHNOLOGIES

AMD Graphics Core Next (GCN) Architecture:⁷ AMD's Graphics Core Next architecture is designed to effortlessly balance GPU compute and 3D workloads efficiently, and brings you the best technologies AMD has to offer into the mobile workstation space. Get the same technologies that are already found on our AMD FirePro desktop graphics including AMD Eyefinity technology, AMD HD3D[®] technology and support for OpenGL, OpenCL™, DirectX[®] and AMD Mantle APIs.

Energy-efficient Design: AMD FirePro graphics support unique power monitoring and management technologies, such as AMD Enduro™, AMD PowerTune and AMD ZeroCore Power technologies to help deliver great battery life to your mobile workstation.^{9,10}



HP ZBook 17 G2



HP ZBook 15 G2

Expand Your Creative Abilities

- AMD FirePro™ M6100 professional graphics
- HP Dreamcolor Panel available (17.3" diagonal)
- Up to 3.2TB storage and 32GB of memory

Perform on the Go

- AMD FirePro™ M5100 professional graphics
- QHD+ Panel available (15.6" diagonal)
- Up to 2.2TB storage and 32GB of memory



	AMD FIREPRO™ M6100	AMD FIREPRO™ M5100
SINGLE-PRECISION COMPUTE [GFLOPS]	1971	992
DOUBLE-PRECISION COMPUTE [GFLOPS]	123	62
GCN STREAM PROCESSORS	896	640
GRAPHICS MEMORY	2GB GDDR5	2GB GDDR5
MEMORY BANDWIDTH (GB/s)	96	72
PCIe	3.0 x16	3.0 x16
OPENGL	4.4	4.4
OPENCL™	1.2	1.2
DIRECTX [®]	12	12
AMD MANTLE	•	•
AMD EYEFINITY	•	•
AMD ENDURO™	•	•
AMD APP ACCELERATION	•	•
AMD POWERTUNE	•	•
AMD ZEROCORE POWER	•	•
AMD HD3D PRO	•	•

HP ZBook 14 – World’s First Workstation Ultrabook™*

Deliver your best work on the go using a sleek, ISV-certified mobile workstation Ultrabook™ with impressive performance and 3D graphics capability to handle demanding workloads. AMD FirePro™ professional graphics are compliant with the latest industry standards enabling you to take full advantage of their rich features. AMD professional graphics are especially tuned to enable outstanding performance for many major CAD and digital media applications.



HP ZBook 14

- AMD FirePro™ M4100 professional graphics
- LED-backlit HD display (14" diagonal)
- Up to 16GB system memory

	AMD FIREPRO™ M4100
SINGLE-PRECISION COMPUTE [GFLOPS]	512
DOUBLE-PRECISION COMPUTE [GFLOPS]	32
GCN STREAM PROCESSORS	384
GRAPHICS MEMORY	1GB GDDR5
MEMORY BANDWIDTH (GB/s)	64
PCIe	3.0
OPENGL	4.4
OPENCL™	1.2
DIRECTX®	12
AMD MANTLE	•
AMD EYEFINITY	
AMD ENDURO™	•
AMD APP ACCELERATION	•
AMD POWERTUNE	•
AMD ZEROCORE POWER	•
AMD HD3D PRO	•

Certified Applications Include:

Adobe
 Adobe Premiere Pro CC
 Adobe Creative Cloud
 After Effects CC
 Creative Suite
 Encore
 Photoshop CC

Autodesk
 Inventor 2014
 Inventor 2015

Avid
 Media Composer

Bentley
 MicroStation V8i (SELECTseries 3)

Dassault Systemés
 Dassault Systemés

HSMWorks
 MSC Software
 PTC
 Siemens PLM Software

HSMWorks
 HSMWorks 2013
 HSMWorks 2014

MSC Software
 Patran 2013
 SimXpert 2013
 Mentat 2013

PTC
 Creo 2.0
 Creo Elements Direct 18.1


Siemens PLM Software
 NX 8 and 8.5
 Solid Edge ST6
 Technomatix 9.1.2
 Teamcenter Visualization 2007
 (8.1 and 8.0 supported)

*Not all configurations qualify as a mobile workstation Ultrabook™






See More. Do More.

The following information is based on the average use and is intended as a guideline. Individual workflows and application usage must be taken into consideration when selecting a professional graphics card.

		GOOD	BETTER	BEST
		 AMD FIREPRO™ W2100 Great for: <ul style="list-style-type: none"> • Small to medium models • Low-complexity parts • Moderate real-time visualization • Basic simulation performance 	 AMD FIREPRO™ W5100 Great for: <ul style="list-style-type: none"> • Medium models • Moderately complex parts • Moderate real-time visualization • Moderate simulation performance 	 AMD FIREPRO™ W7100 Great for: <ul style="list-style-type: none"> • Medium to large models • Highly tessellated parts • Advanced real-time visualization • Advanced simulation performance
SOFTWARE MANUFACTURER	APPLICATION			
Adobe	After Effects		•	•
	Photoshop		•	•
	Premiere Pro		•	•
Altair Engineering	HyperWorks	•	•	•
	ANSYS Mechanical		•	•
	Fluent		•	•
	WORKBENCH		•	•
ArchiCAD	Graphisoft	•	•	•
Assimilate	Scratch			•
Autodesk	3ds Max		•	•
	AutoCAD	•	•	•
	Inventor	•	•	•
	Maya		•	•
	Moldflow		•	•
	Revit	•	•	•
	Vred			•
	Bentley Systems	MicroStation	•	•
Beta CAE Systems	ANSA		•	•
CEI Inc.	EnSight		•	•
CGTech	Vericut	•	•	•
Chaos Group	V-Ray			•
COMSOL	COMSOL Multiphysics			•

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SOFTWARE MANUFACTURER	APPLICATION			
Dassault Systèmes	3DVIA Composer	•	•	•
	CATIA	•	•	•
	DELMIA	•	•	•
	SIMULIA Abaqus	•	•	•
	SolidWorks	•	•	•
Esri	ArcGIS	•	•	•
eyeon	FUSION	•	•	•
IMSI/Design	TurboCAD V19	•	•	•
IronCAD	IronCAD	•	•	•
Mathworks	MATLAB	•	•	•
Missler Software	TopSolid	•	•	•
MSC.Software	Patran	•	•	•
	SimXpert	•	•	•
Nemetschek	Allplan	•	•	•
OPTIS	THEIA-RT	•	•	•
PTC	Creo	•	•	•
Robert McNeel & Assoc.	Rhinoceros	•	•	•
Side Effects	Houdini	•	•	•
SIEMENS PLM Software	Femap	•	•	•
	NX	•	•	•
	Solid Edge	•	•	•
	Teamcenter (Visualization)	•	•	•
	Technomatix	•	•	•

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SOFTWARE MANUFACTURER	APPLICATION			
SpaceClaim	SpaceClaim	•	•	•
The Foundry	Mari			•
	Modo	•	•	•
	Nuke			•
Vero Software	Edgecam	•	•	•
	VISI	•	•	•

For a complete list of certified applications please visit:
<http://support.amd.com/en-us/download/workstation/certified>

Footnotes:

1. AMD FirePro™ W2100 outperforms AMD FirePro™ V3900 on the SPECviewperf 12 CAD application viewsets, including Creo-01 (67%), Catia-04, SNX-02 and SW-03. AMD lab test system configuration: Intel E5-1660 3.3GHz, 16GB RAM, Win7 64bit, AMD 14.30 beta.
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. Mixed monitors of different resolutions are supported by select AMD FirePro™ professional graphics cards. 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 HYPERLINK "<http://www.amd.com/eyefinityfaq>" www.amd.com/eyefinityfaq for full details.
3. Resolution will vary as more displays are added, MST hub or daisy chaining monitor required to support more than one display per output.
4. AMD plans to release OpenCL 2.0 drivers for enabled AMD FirePro W5100, W7100, W8100 and W9100 graphics cards in Q4 2014; conformance testing is planned at that time. Previous generation AMD FirePro products may not support OpenCL 2.0.
5. S400 Sync Card required.
6. FreeSync is an AMD technology designed to reduce or eliminate screen tears in games and videos by allowing the monitor's refresh rate to be controlled by and synchronized to the graphics card. Requires DisplayPort 1.2a compliant monitors that support DisplayPort Adaptive-Sync and an AMD FirePro W5100, W7100, W8100 or W9100 graphics card with forthcoming FreeSync-enabled driver. Support for use with multiple monitors planned. Confirm supported technologies with system manufacturer before purchase.
7. The GCN Architecture and its associated features (AMD Enduro™, AMD ZeroCore Power technology, DDM Audio, and 28nm production) are exclusive to the AMD FirePro™ W4170M, M4100, M5100 and M6100 mobile professional graphics. Not all technologies are supported in all system configurations—check with your system manufacturer for specific model capabilities.
8. AMD HD3D is a technology designed to enable stereoscopic 3D support in software applications such as Computer Aided Design and Digital Content Creation. Additional hardware (e.g. 3D enabled panels, 3D-enabled glasses/emitter, Blu-ray 3D drive) and/or software (e.g. Blu-ray 3D discs, 3D middleware, software applications) are required for the enablement of stereoscopic 3D. Not all features may be supported on all components or systems - check with your component or system manufacturer for specific model capabilities and supported technologies.
9. AMD Enduro™ technology automatically turns off the AMD FirePro™ discrete GPU for non-intensive applications to help maximize battery life for more time unplugged, and requires either an AMD A-Series APU or an Intel processor, plus an AMD FirePro™ discrete graphics card and is available on Windows® 7 and Windows 8 Standard and Professional editions. Linux OS supports manual switching which requires restart of X-Server to switch between graphics solutions. With AMD Enduro™ technology, full enablement of all discrete graphics video and display features may not be supported on all systems. Always check with your system manufacturer for specific mode capabilities and supported technologies.
10. AMD PowerTune and AMD ZeroCore Power are technologies offered by certain AMD FirePro™ products, which are designed to intelligently manage GPU power consumption in response to certain GPU load conditions. Not all products feature all technologies – check with your component or system manufacturer for specific model capabilities.

