

AMD Radeon[™] Graphics – Quick Reference Guide AMD Radeon[™] HD 6000M Series Graphics.



			Key Selling Points
	Takeaways	Features	Benefits
		AMD's 2 nd generation DirectX [®] 11-Capable GPUs	Enter a new era of visual realism and dynamic interactivity with DirectX [®] 11 support, including features like HDR Texture Compression, DirectCompute 11, Shader Model 5.0 and enhanced Tessellation.
Get Armed	Enjoy out-of-this-world mobile gaming		Bring the virtual world to life with Stereoscopic 3D and experience a new level of interactive gaming.
at Ar	DirectX [®] 11-Capable GPUs.	2 nd generation AMD Eyefinity technology ²	Enjoy a tactical advantage over your opponents through expanded field of view and discover the joy of panoramic gaming.
Ğ		DisplayPort™ 1.2	DisplayPort [™] 1.2 offers expanded options for multi-monitor configurations, display selection, DisplayPort audio features and ultra-high bandwidth for immersive Stereoscopic 3D experience.
		GDDR5 High-Performance Memory	Support for large textures, anti-aliasing and anisotropic filtering, for better overall image quality and performance.
Get Immersed		Blu-ray [™] 3D with AMD HD3D technology ¹¹	Enjoy mind blowing Blu-ray [™] 3D blockbusters with unrivalled visual details and high definition audio.
	Turn your notebook into an advanced HD entertainment platform with a muriad	MPEG-4 part 2 (DivX7, Xvid) and MVC Support	Enjoy incredible video playback quality in Blu-ray movies and other HD content including support for DivX, Xvid, MVC and MPEG4-part 2 formats with advanced video enhancements.
	of cutting-edge features offered by the AMD Radeon™ HD 6000M series.	2 nd generation AMD Eyefinity technology ²	Expand your visual workspace and productivity and put all the information you need, right before your eyes. Declare an end to wasted time through unnecessary scrolling and alt-tabbing!
ō		HDMI 1.4a ⁶	Connect your notebook to 3D-capable HDTV for "theater-class" entertainment with breathtaking auditory details offered by Dolby [®] TrueHD and DTS-HD MasterAudio [™] high-definition audio
		AMD EyeSpeed Technology ⁵	Improve application performance with new GPU-accelerated features in Internet Explorer® 9, Mozilla Firefox® and Microsoft® Office 2010 for an outstanding visual computing experience.
Get Amazed	Tap into the massive parallel processing	UVD 3.0	Dedicated GPU video playback accelerator enables users to get the most out of Blu-ray™ 3D movies, other HD video formats, and online video, while enjoying video quality improvements such as advanced post-processing and scaling, dynamic contrast enhancement, color correction and more.
	power of the GPU with AMD EyeSpeed technology.	Premium Windows ® 7 Experience	Enjoy premium Windows® 7 graphics experience through superior video playback, high-definition up-scaling and drag-and-drop transcoding or transfer media files to your portable devices. ¹²
		DirectCompute 11	Helps improve PC performance by having the GPU take on some or all of a DirectX [®] 11-enabled application's processing load, freeing up the computer's main processor to take on additional tasks.

AMD HD3D

AMD **Accelerated** Parallel Processing

Tap into the massive parallel processing power of

AMD Eyefinity

SUPPORTS
Microsoft* DirectX*11

AMD XGP[™] Technology -External Graphics Platform AMD Switchable
Graphics technology

Reach a new level of interactive gaming with AMD HD3D technology and play your favourite games in stereoscopic 3D over HDMI 1.4a for incredibly rich, true-to-life gameplay.

Don't just watch it, become a part of it with AMD HD3D technology and marvel in premium HD entertainment features while viewing Blu-ray 3D movies and other 3D videos and photos.

the AMD Radeon HD 6000M series GPUs and make everyday tasks a breeze with AMD EyeSpeed technology.

Accelerate everyday applications from Microsoft® Office 2010 to deliver breathtaking PowerPoint® presentations with astounding visual effects that will instantly captivate your audience, to a smooth multimedia rich online experience in Internet Explorer® 9 and Mozilla Firefox®.

Enjoy new features, functionality and improved performance in top media, entertainment and

productivity applications made possible by AMD

Accelerated Parallel Processing technology.

AMD Eyefinity technology enables support for multiple displays on select AMD Radeon™ HD 6000 series GPUs. ² Get the complete

Windows® 7 Experience
with DirectX®11 for a visually
dynamic and powerful
computing experience.
Unlock striking visual
effects and dynamic
interactivity with DirectX®
11 support, including
features like HDR
Texture Compression,
DirectCompute 11, Shader
Model 5.0 and Tessellation.

AMD's multi-GPU technology designed to bring enhanced scalability and performance to the notebook PC. AMD CrossFireX™ technology enables two discrete graphics processors to work together to improve system performance with compatible motherboard chipset.¹

AMD CrossFireX

Bring mobile gaming to a new level with AMD XGP™ technology - providing simple notebook scalability for the first time ever. This is AMD's external PCI Express® 2.0 graphics platform, designed to enable "enthusiast-class" performance, true multimedia upgradeability and multiple connectivity options revolutionizing GPU performance on a notebook.

With AMD Switchable
Graphics technology you
can tailor your graphics to
your individual performance
needs. Switch between
power-saving integrated
graphics when on the road
or high-powered discrete
graphics when plugged in
for long battery life when
you need it and maximum
performance when you
want it.



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				Feature Overview														_			Feature Overv	view															
	Key Technologies															Graphic	es	Video																			
ACCELERATED AUGUSTIAN TO THE PRODUCT MODEL Product Family Segment Product Model			Manufacturing Process	Designed for DirectX® 11 (SM 5.0)		DXII: Tessellation	DXII: Shader Model 5.0 DXII: Multi-threading	DX11: HDR Texture Compression	DX11: Order Independent Transparency	DXII: Render Post-Processing DXII: Depth of Field	PCI Express [®] 2.0 support	AMD Cross FireX" Technology AMD Eyefinity Technology (# of	monitors supported by the GPU)?	AMD PowerPlay Technology AMD Switchable Graphics Technology	AMD EyeSpeed Technology ⁵	Vari-Bright" Technology	AMD HD3D Technology"	Stream Processing Units	Memory Type Supported	Memory Bus Width	Memory Size (max.)	Memory Clock	aPU Clock	Transistors	Blu-ray™ 3D Support (MVC)	Accelerated Video Transcoding with AMD Accelerated Parallel Processing Technology [§]	Unified Video Decoder (UVD)	HDMI Compliant: Version	Dolby® TrueHD and DTS HD Master Audio™ Support over HDMI (7.1)°	Built in HDMI Surround Sound (HDCP)?	to 8 o	Dual-Link DVI with HDCP* DisplayPort** Version	DisplayPort" over HD Audio	DisplayPort" Support	Max. Resolution Analog (VGA)	Max. Resolution Digital Driver and System Control	
	Enthusiast	HD 6970M	40nm	•	Enha	anced	• •	•	•	•	•	•		• •	•	•	• 8	960	GDDR5	256-bit	up to 2 GB (GDDR5)	3.6 Gbps	680 MHz	1.7 Billion	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
	Enthusiast	HD 6950M	40nm	•	Enha	anced	• •	•	•	•	•	•		• •	•	•	• 8	960	GDDR5	256-bit	up to 2 GB (GDDR5)	3.6 Gbps	580 MHz	1.7 Billion	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
	Enthusiast	HD 6870M	40nm	•	•	•	• •	•	•	•	•	•		• •	•	•	• 8	800	GDDR5	128-bit	up to 1 GB (GDDR5)	4.0 Gbps	675 MHz	1.04 Billion		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
	Enthusiast	UD 005014	40nm	•		•	• •	•	•	•	•	•		• •	•	•	• 8	800	GDDR5	128-bit	up to 1 GB (GDDR5)	3.6 Gbps	575 MHz	1.04 Billion		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
	Enthusiast	HD 6850M	40nm	•	•	•	• •	•	•	•	•	•		•	•	•	• 8	800	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	675 MHz	1.04 Billion		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
	Enthusiast	HD 6830M	40nm	•	•	•	• •	•	•	•	•	•	. (• •	•	•	• 8	800	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	575 MHz	1.04 Billion		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
	Performance	HD 6770M	40nm	•	Enha	anced	• •	•	•	•	•	4		•	•	•	• 4	480	GDDR5	128-bit	up to 1GB (GDDR5)	3.6 Gbps	725 MHz	715 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
	Performance	HD 6750M	40nm	•	Enha	anced	• •	•	•	•	•		5	•	•	•	• 4	480	GDDR5	128-bit	up to 1GB (GDDR5)	3.2 Gbps	600 MHz	715 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
	Performance	HD 6730M	40nm	•	Enha	anced	• •	•	•	•	•	- 1		•	•	•	• 4	480	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	725 MHz	715 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
Ø	Performance	HD 6650M	40nm	•	Enha	anced	• •	•	•	•	•		•	•	•	•	• 4	480	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	600 MHz	715 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
AMD Radeon [™] HD 6000M Series	Performance	HD 6630M	40nm	•	Enha	anced	• •	•	•	•	•			•	•	•	• 4	480	DDR3	128-bit	up to 2 GB (DDR3)	800 MHz	485 MHz	715 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	6			
de o	Performance	HD 6570M	40nm	•	•	•	• •	•	•	•	•			• •	•	•	• 4	400	GDDR5	128-bit	up to 1 GB (GDDR5)	3.6 Gbps	650 MHz	626 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
Rac Olv	Performance	HD 65/0M	40nm	•		•	• •	•	•	•	•		(• •	•	•	• 4	400	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	650 MHz	626 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
0 0 0 0	Performance	HD 6550M	40nm	•		•	• •	•	•	•	•			• •	•	•	• 4	400	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	600 MHz	626 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	6			
A A B	Performance	HD 6530M	40nm	•		•	• •	•	•	•	•			• •	•	•	• 4	400	DDR3	128-bit	up to 2 GB (DDR3)	900 MHz	500 MHz	626 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	6		<u></u>	
- I	Mainstream		40nm	•	Enha	anced	• •	•	•		•			•	•	•	•	160	GDDR5	64-bit	up to 512 MB (GDDR5)	3.2 Gbps	750 MHz	370 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	4		ente	
	Mainstream	HD 6490M	40nm	•	Enha	anced	• •	•	•	•	•			•	•	•	•	160	GDDR5	64-bit	up to 512 MB (GDDR5)	3.2 Gbps	700 Mhz	370 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	4	336	900	
	Mainstream		40nm	•	Enha	anced	• •	•	•	•	•			•	•	•	•	160	GDDR5	64-bit	up to 1 GB (DDR3)	900 MHz	800 Mhz	370 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	4 0	X S	x 16 Sonti	
	Mainstream		40nm	•	Enha	anced	• •	•	•	•	•		20 (•	•	•	•	160	DDR3	64-bit	up to 1 GB (DDR3)	900 MHz	750 Mhz	370 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	4	2048 ×1536	2560 × 1600 Catalyst™ Control Cente	
	Mainstream	HD 6470M	40nm	•	Enha	anced	• •	•	•	•	•	1		•	•	•	•	160	DDR3	64-bit	up to 1 GB (DDR3)	900 MHz	700 Mhz	370 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	4	Cu	2 talys	
	Mainstream	HD 6450M	40nm	•	Enha	anced	• •	•	•	•	•		‡ (•	•	•	•	160	DDR3	64-bit	up to 1 GB (DDR3)	800 MHz	600 MHz	370 Million	•	•	UVD 3	1.4a	•	7.1	•	1.2	•	4		Ca	
	Mainstream	HD 6430M	40nm	•	Enha	anced		•	•		•	1	<u> </u>	•	•	•	•	160	DDR3	64-bit	up to 1 GB (DDR3)	800 MHz	480 Mhz	370 Million		•	UVD 3	1.4a	•	7.1	•	1.2	•	4			
	Mainstream	HD 6370M	40nm	•		•	• •	•	•	•	•			•	•	•	•	80	DDR3	64-bit	up to 512 MB (DDR3)	900 MHz	750 MHz	242 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	4			
	Mainstream	HD 6350M	40nm	•		•	• •	•	•	•	•			•	•	•	•	80	DDR3	64-bit	up to 512 MB (DDR3)	800 MHz	675 Mhz	242 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	4			
	Mainstream	HD 6330M	40nm	•		•	• •	•	•		•			•	•	•	•	80	DDR3	64-bit	up to 512 MB (DDR3)	800 MHz	500 Mhz	242 Million		•	UVD 2	1.4a	•	7.1	•	1.1	•	4			
	Enthusiast	HD 5870	40nm	•				•	•		•	•			•		8	800	GDDR5	128-bit	up to 1 GB (GDDR5)	up to 4.0 Gbps	700 MHz	1.04 Billion		•	UVD 2	1.3a	•	7.1	•	1.1	•	4			
Σ	Enthusiast	HD 5850	40nm			•	• •	•	•	•	•	•	۸ſ		•		8	800	(G) DDR3/GDDR5	128-bit	up to 2 GB (GDDR3) up to 1 GB (GDDR5)	900 MHz (GDDR3) up to 4.0 Gbps (GDDR5)	625 MHz	1.04 Billion		•	UVD 2	1.3a	•	7.1	•	1.1	•	4			
on s	Enthusiast	HD 5830	40nm	•			• •	•	•		•	•	200		•		8		(G) DDR3/GDDR5	128-bit	up to 2 GB (GDDR3) up to 1 GB (GDDR5)	800 MHz (GDDR3), up to 4.0 Gbps (GDDR5)	500 MHz	1.04 Billion		•	UVD 2	1.3a	•	7.1	•	1.1	•	4			
ATI Mobility Radeon"" HD 5000 Series	Performance	HD 5770	40nm			•	• •	•	•	•	•		2		•			400	GDDR5	128-bit	up to 1 GB (GDDR5)	up to 4.0 Glops (GDDRS)	650 MHz	626 Million		•	UVD 2		•	7.1	•	1.1	•	4			
	Performance	HD 5750	40nm			•	• •	•	•	•	•		000		•		4	400	GDDR5	128-bit	up to 1 GB	up to 3.2 Gbps	550 MHz	626 Million		•	UVD 2	1.3a	•	7.1	•	1.1	•	4			
	Performance	HD 5730	40nm			•	• •	•	•	•	•		5		•			400	(G) DDR3	128-bit	up to 2GB	800 MHz	650 MHz	626 Million		•	UVD 2	1.3a	•	7.1	•	1.1	•	4			
	Performance-Thin	HD 5650	40nm			•	•	•	•		•				•		4	400	(G) DDR3	128-bit	up to 2GB	800 MHz	450/550 MHz	626 Million		•	UVD 2	1.3a	•	7.1	•	1.1	•	4			
	Mainstream	HD 5470	40nm				•	•	•		•		up to 4 monitors		•	•				(G) DDR3/GDDR5	64-bit	up to 1 GB (GDDR3) up to 512 MB (GDDR5)	800 MHz (GDDR3).	750 MHz	242 Million		•	UVD 2	1.3a	•	7.1	•	1.1	•	4		
	Mainstream	HD 5450	40nm					•	•		•	to 4		•				80	(G) DDR3	64-bit	up to 512 MB (GDDR5)	up to 3.2 Gbps (GDDR5) 800 MHz	675 MHz	242 Million		•	UVD 2		•	7.1	•	1.1	•	4			
	Mainstream	HD 5430	40nm									9	e O		+-			80	(G) DDR3	64-bit	up to 1 GB	800 MHz	550 MHz	242 Million			UVD 2		_		-						
		1.5 0-00	. 31111				•			_	-				_				(2) 2010	2.00			1411 12					50	-								

The following footnote is a standard requirement for any AMD Radeon™ graphics

messaging:
NOTE: Additional hardware (e.g. Blu-ray drive, Stereo 3D hardware/software, HD or
10-bit monitor, TV tuner) and/or software (e.g. multimedia applications) are required for the full enablement of some features. Not all features may be supported on all

ion in a trail en laboration in ion is office feeders. Not an resourch in largue supported or an accomponents or systems - check with your components or systems manufacturer for specific model capabilities and supported technologies.

LA complete AMD CrossFrexM System includes AMID Radeon^{1M} Graphics, a motherboard with a compatible AMID or intel® Chipset, AMID CrossFrieX Certified memory and an AMD CrossFireX Certified power supply.

2. AMD Eyefinity technology works with games that support non-standard aspect ratios, which is required for spanning across multiple displays. To enable more

than two displays additional papels with native Display PortTM connectors and/or than two displays, abottional panies with native bisplayPort™ conflectors, and/or DisplayPort™ compliant active adapters to convert your monitor's native input to your cards DisplayPort™ or Mini-DisplayPort™ connector(s), are required. AMD Eyelinity technology can support up to 6 displays using a single enabled AMD Radeon™ GPU

with Windows Vistagio or Windows 97 operating systems—the number of displays may very by system does pred up to a book of the production platforms that include a broad set of capabilities offered by certain AMD RadeonTM HD GPUs. Not all products have all features and full enablement of some capabilities and may require complementary products.

4. Requires application support for AND Accelerated Parallel Processing (APP) technology, AMD Accelerated Parallel Processing technology works with applications designed to take advantage of its GPU acceleration capabilities.
5. AMD EyeSpeed technology is a set of technologies available on AMD Radeon™ Li 0000M series and highest GPUs and is designed to improve video quality and enhance application performance. It il enablement of some features enquires support for AMD Accelerated Parallel Processing (APP) technology, and/or AMDs Universal Video Decoder (UVD), AMD Accelerated Parallel Processing technology, works with applications designed to take advantage of its GPU acceleration capabilities. UVD 3 available with AMD Pacadom *Hu Discolow/GPUS MORE SOME ACCELERS agraphics available vita NAD Pacadom *Hu Discolow/GPUS MORE SOME ACCELERS agraphics available vita NAD Pacadom *Hu Discolow/GPUS MORE SOME ACCELERS agraphics available vita NAD Pacadom *Hu Discolow/GPUS MORE SOME ACCELERS agraphics available vita NAD Pacadom *Hu Discolow/GPUS MORE SOME ACCELERS agraphics available vita NAD Pacadom *Hu Discolow/GPUS MORE SOME ACCELERS 6. Dolby® TrueHD and DTS HD Master Audio™ are available through HDMI 1.3a and

Requires application support for AMD Accelerated Parallel Processing (APP)

7. Playing HDCP content requires additional HDCP ready components, including but not limited to an HDCP ready monitor, Blu-ray or HD DVD disc drive, multimedia application and computer operating system.

8. Dual-inix capable with one HDCP key only.

9. Enhanced Tesesalation available with AMD Raddon^M HD

6900M/6700M/6600M/6400M Series GPUs.

10. Blu-rayI^M 3D playback support available with AMD RadeonTM HD
6900M/6700M/6600M/6400M Series GPUs with the exception of AMD RadeonTM 1943UM.

It AMD HD3D is a technology designed to enable stereoscopic 3D support in games, movies and/or photos. 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, games) 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

12. Upscaling subject to available monitor resolution

iz Oppositing soutpet, or a variable in a finite resolution.

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