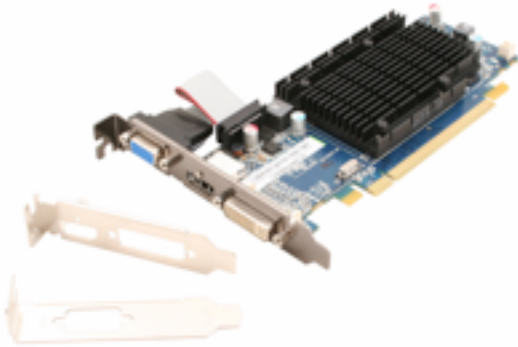




SAPPHIRE GRAPHICS CARDS

ATI
RADEON
World's No. 1
MANUFACTURER

HD5450 HM PCI-E HDMI / DVI-I / VGA W/ 512M DDR3 VRAM



Specification

		Chipset	HD5450 512MB Hyper Memory Enabled
		SKU	11166-08
		ASIC	Cedar Pro
Performance	Graphics Acceleration	process	0,04 μ
		transistor count	292 Mio
		memory options	512 MB
		Core frequency	650
		Memory frequency (eff.)	1334
		Unified shader pipelines	80
		Memory Bus (bit)	64
		memory type	DDR3
		data bus	PCI Express 2.1 x16
		RAMDAC	2x400MHz
		peak memory bandwidth (GB/sec)	10,67
Image quality	3D quality	standard cooling	Passive
		standard slot solution	Single
		external power need	No
		DirectX	DX11 SM5.0
		OpenGL	4,0
		Memory Optimization	Hyper Z HD

	Video quality	Full Screen Anti-Aliasing	Smoothvision HD + Adaptive AA
		HDR (10:10:10:2)	16-bit integer or floating point
		Adaptive De-Interlace	Video Shader HD
		Video acceleration	MPEG-2, MPEG-4, DivX, WMV9, VC-1, and H.264
		FullStream (Video-deblocking)	
display support		VGA	1
		DVI-I	1
		DVI-D	0
		HDMI	1
		Display Port/Mini DP	0
		HDMI compliance / HDCP ready	HDMI 1.3 / yes
		HDMI modes	480p, 720p, 1080i, 1080p
		Dual-Link DVI	1
		native display support	10-bit
		3D Graphics Resolution	2560 x 1600
		TV Out resolution	N/A
	SKU	11166-08	
Power Draw		Min (Idle)	8 W
		Max	25 W
comparison			GT220