



SAPPHIRE

HD 6450 1GB DDR3 11190-02 Product Specification

| CONFIDENTIAL UNDER NDA |

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PRODUCT OVERVIEW

I. Introduction:

Packed with the latest GPU technologies, the Radeon™ HD 6450 graphics processor is a next-generation visual upgrade that delivers Eyefinity multi-display technology, HDMI 1.4a for stereoscopic (3D) displays as well as 2nd generation support for DirectX 11 for the most versatile solution for everyday computing.

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II. Features:

1. TeraScale 2 Unified Processing Architecture
 - 160 Stream Processing Units
 - 8 Texture Units
 - 16 Z/Stencil ROP Units
 - 4 Color ROP Units
2. **DirectX® 11** capable graphics

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3. **Open GL 4.1** Support
4. **AMD HD3D Technology**
5. AMD Catalyst™ graphics and HD video configuration software
6. **AMD App Acceleration**
 - ◆ OpenCL 1.1 Support
 - ◆ DirectCompute 11
 - ◆ Accelerated video encoding, transcoding, and upscaling^{2,5}
 - UVD 3 dedicated video playback accelerator
 - ◆ MPEG-4 AVC/H.264
 - ◆ VC-1
 - ◆ MPEG-2 (SD & HD)
 - ◆ Multi-View Codec (MVC)
 - ◆ MPEG-4 part 2 (DivX, xVid)
 - ◆ Adobe Flash
 - Enhanced video quality features
 - ◆ Advanced post-processing and scaling
 - ◆ Dynamic contrast enhancement and color correction
 - ◆ Brighter whites processing (blue stretch)
 - ◆ Independent video gamma control
 - ◆ Dynamic video range control
 - Dual-stream 1080p playback support
 - DXVA 1.0 & 2.0 support
7. Integrated HD audio controller
 - Output protected high bit rate 7.1 channel surround sound over HDMI or DisplayPort with no additional cables required
 - Supports AC-3, AAC, Dolby TrueHD and DTS Master Audio formats
8. Cutting-edge integrated display support
 - DisplayPort 1.2
 - i. Max resolution: 2560x1600 per display
 - ii. Multi-Stream Transport
 - iii. 21.6 Gbps bandwidth
 - iv. High bit-rate audio
 - HDMI 1.4a with Stereoscopic 3D Frame Packing Format, Deep Color, xvYCC wide gamut support, and high bit-rate audio

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- i. Max resolution: 1920x1200
 - Dual-link DVI with HDCP
 - i. Max resolution: 2560x1600
 - VGA
 - i. Max resolution: 2048x1536
- 9. **AMD PowerPlay™** power management technology
 - Dynamic power management with low power idle state
- 10. Microsoft Windows 7 Support

III. System Requirements:

- PCI Express® based PC is required with one X16 lane graphics slot available on the motherboard
- 400 Watt or greater power supply recommended (500 Watt for AMD CrossFireX™ technology in dual mode)
- Certified power supplies are recommended. Refer to <http://ati.amd.com/certifiedPSU> for a list of Certified products
- Minimum 1GB of system memory
- Installation software requires CD-ROM drive, a keyboard, a mouse, and a display
- DVD playback requires DVD drive and a DVD
- Blu-ray™ playback requires Blu-ray drive and a Blu-ray disc

IV. Operating System Support:

- Windows XP(32Bit/64Bit) ;
- Windows Vista(32Bit/64Bit)
- Windows Media Center Edition 2005
- **Windows 7(32bit/64bit)**

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V. SKU Specification:

SKU	11190-02
GPU	Radeon HD 6450
Bus Interface	PCI-E 2.1 x16
Memory	1024MB / 64-bit DDR3
Clock Speed	625 MHz Eclk /Effective 1334 MHz Mclk
Cooling System	1 Slot Passive cooler
Bracket	Full Height
Dimension	190(L)x22(W)x94(H) mm
Display Support	SL-DVI-D HDMI VGA
HDCP	Yes
Crossfire Support	Native Software Crossfire
External Power	none
Accessories	Low Profile bracket
Software	Driver CD

VI. Maximum Display Resolution:

- D-Sub(VGA): 2048 x 1536
- DL-DVI-I: 2560 x 1600
- HDMI 1.4a: 4096x2160
- Display Port 1.2 : 4096 x 2160