



Overview

GPU Specifications

ATI Radeon™ HD 2400 Series - GPU Specifications

ATI Radeon™ HD 2400 Feature Summary

- ✦ 180 million transistors on 65nm fabrication process
- ✦ 64-bit DDR2/GDDR3 memory interface
- ✦ Unified Superscalar Shader Architecture
 - ✦ 40 stream processing units
 - ✦ Dynamic load balancing and resource allocation for vertex, geometry, and pixel shaders
 - ✦ Common instruction set and texture unit access supported for all types of shaders
 - ✦ Dedicated branch execution units and texture address processors
 - ✦ 128-bit floating point precision for all operations
 - ✦ Command processor for reduced CPU overhead
 - ✦ Shader instruction and constant caches
 - ✦ Up to 16 texture fetches per clock cycle
 - ✦ Up to 128 textures per pixel
 - ✦ Fully associative vertex/texture cache design
 - ✦ DXTC and 3Dc+ texture compression
 - ✦ High resolution texture support (up to 8192 x 8192)
 - ✦ Fully associative texture & Z/stencil cache designs
 - ✦ Early Z test, Re-Z, Z Range optimization, and Fast Z Clear
 - ✦ Lossless Z & stencil compression
 - ✦ 8 render targets (MRTs) with anti-aliasing support
 - ✦ Physics processing support
- ✦ Full support for Microsoft® DirectX® 10
 - ✦ Shader Model 4.0
 - ✦ Geometry Shaders
 - ✦ Stream Output
 - ✦ Integer and Bitwise Operations
 - ✦ Alpha to Coverage
 - ✦ Constant Buffers
 - ✦ State Objects
 - ✦ Texture Arrays
- ✦ Dynamic Geometry Acceleration
 - ✦ Programmable tessellation unit
 - ✦ Accelerated geometry shader path for geometry amplification
 - ✦ Memory read/write cache for improved stream output performance
- ✦ Anti-aliasing features
 - ✦ Multi-sample anti-aliasing (up to 4 samples per pixel)
 - ✦ Custom Filter Anti-Aliasing (CFAA) for improved quality
 - ✦ Adaptive super-sampling and multi-sampling
 - ✦ Temporal anti-aliasing
 - ✦ Gamma correct
 - ✦ Super AA (CrossFire configurations only)
 - ✦ All anti-aliasing features compatible with HDR rendering
- ✦ Texture filtering features
 - ✦ 2x/4x/8x/16x high quality adaptive anisotropic filtering modes (up to 128 taps per pixel)
 - ✦ 128-bit floating point HDR texture filtering
 - ✦ Bicubic filtering
 - ✦ sRGB filtering (gamma/degamma)
 - ✦ Percentage Closer Filtering (PCF)
 - ✦ Depth & stencil texture (DST) format support
 - ✦ Shared exponent HDR (RGBE 9:9:9:5) texture format support
- ✦ CrossFire™ Multi-GPU Technology
 - ✦ Scale up rendering performance and image quality with 2 or more GPUs
 - ✦ Integrated compositing engine
 - ✦ High performance dual channel interconnect
- ✦ ATI Avivo™ HD Video and Display Platform
 - ✦ Dedicated unified video decoder (UVD) for H.264/AVC and VC-1 video formats
 - ✦ High definition (HD) playback of both Blu-ray and HD DVD formats
 - ✦ Hardware MPEG-1, MPEG-2, MPEG-4/DivX video decode acceleration
 - ✦ Motion compensation and iDCT (inverse discrete cosine transform)
 - ✦ Avivo Video Post Processor
 - ✦ Color space conversion
 - ✦ Chroma subsampling format conversion
 - ✦ Horizontal and vertical scaling
 - ✦ Gamma correction
 - ✦ High Quality Video Post Processing
 - ✦ Advanced vector adaptive per-pixel de-interlacing
 - ✦ De-blocking and noise reduction filtering \
 - ✦ Detail enhancement
 - ✦ Inverse telecine (2:2 and 3:2 pull-down correction)
 - ✦ Bad edit correction
 - ✦ Two independent display controllers
 - ✦ Drive two displays simultaneously with independent resolutions, refresh rates, color controls and video overlays for each display
 - ✦ Full 30-bit display processing
 - ✦ Programmable piecewise linear gamma correction, color correction, and color space conversion
 - ✦ Spatial/temporal dithering provides 30-bit color quality on 24-bit and 18-bit displays
 - ✦ High quality pre- and post-scaling engines, with underscan support for all display outputs
 - ✦ Content-adaptive de-flicker filtering for interlaced displays
 - ✦ Fast, glitch-free mode switching
 - ✦ Hardware cursor
 - ✦ Two integrated DVI display outputs
 - ✦ Primary supports 18-, 24-, and 30-bit digital displays at all resolutions up to 1920x1200 (single-link DVI) or 2560x1600 (dual-link DVI)¹
 - ✦ Secondary supports 18-, 24-, and 30-bit digital displays at all resolutions up to 1920x1200 (single-link DVI only)¹
 - ✦ Each includes a dual-link HDCP encoder with on-chip key storage for high resolution playback of protected content²
 - ✦ Two integrated 400 MHz 30-bit RAMDACs
 - ✦ Each supports analog displays connected by VGA at all resolutions up to 2048x1536¹
 - ✦ HDMI output support
 - ✦ Supports all display resolutions up to 1920x1080¹
 - ✦ Integrated HD audio controller with multi-channel (5.1) AC3 support, enabling a plug-and-play cable-less audio solution
 - ✦ Integrated AMD Xilleon™ HDTV encoder
 - ✦ Provides high quality analog TV output (component/S-video/composite)
 - ✦ Supports SDTV and HDTV resolutions
 - ✦ Underscan and overscan compensation
 - ✦ MPEG-2, MPEG-4, DivX, WMV9, VC-1, and H.264/AVC encoding and transcoding
 - ✦ Seamless integration of pixel shaders with video in real time
 - ✦ VGA mode support on all display outputs
- ✦ PCI Express x16 bus interface
- ✦ OpenGL 2.0 support

¹ Some custom resolutions require user configuration

² HDCP support for playback of protected content requires connection to a HDCP capable display

ATI Radeon™ HD 2400 PRO - (additional) Specifications (All versions)

What's in the Box

- ✗ ATI Radeon™ HD 2400 PRO graphics card
- ✗ 24-pin DVI to 15-pin VGA adapter
- ✗ Set-up CD
- ✗ Manual

System Requirements

- ✗ PCI Express® based PC is required with one X16 lane graphics slot available on the motherboard
- ✗ 300 Watt or greater power supply recommended
- ✗ Certified power supplies are recommended.
- ✗ 1GB of system memory
- ✗ Installation software requires CD-ROM drive
- ✗ DVD playback requires DVD drive
- ✗ Blu-ray / HD DVD playback requires Blu-ray / HD DVD drive⁵

Operating Systems Support

- ✗ Windows Vista™ & Vista 64
- ✗ Windows® XP
- ✗ Windows® XP x64 Edition
- ✗ Windows® 2000

Display Support

- ✗ One Dual-Link DVI-I connector for high-resolution digital displays
- ✗ ATI Radeon™ DVI-I to HDMI² with 5.1 audio (adapter)
- ✗ One VGA analog connector
- ✗ HDTV Component (YPrPb) output (adapter)
- ✗ Drive two displays simultaneously with independent resolutions and refresh rates⁴
- ✗ TV output requires HDMI, component, S-video or composite cable (not included)

Display Modes

- ✗ Digital Displays (Connected by DVI)
 - ✗ All Resolutions up to 2560x1600
- ✗ Analog Displays (Connected by VGA)
 - ✗ All resolutions up to 2048x1536
- ✗ TV-out
 - ✗ SDTV (analog): 480i | 525i
 - ✗ HDTV (analog): 1080p | 1080i | 720p | 480p | Custom resolution³
 - ✗ HDTV (digital): 720p | 480p | Custom resolution³
 - ✗ Note: Resolutions are limited by the performance of the attached monitor.



1. Visit ati.com for current warranty statement and conditions

2. May not support all HDMI displays.

3. Some custom resolutions require user configuration

4. Dual VGA monitors require a DVI to VGA adapter, sold separately

5. 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.

Products may not be exactly as shown.