

AMD *AMD Proprietary Linux Release Notes*

This release note provides information on the latest posting of AMD's Proprietary Linux driver. This particular driver updates the software version to 8.573.

The AMD Linux release notes provides information on the following:

- *Web Content*
- *ATI Workstation Product Support*
- *ATI Mobility™ and Integrated Mobility™ Product Family Support*
- *ATI Desktop Product Family Support*
- *Operating Systems Distributions Supported*
- *System Requirements*
- *New Features*
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- *Known Issues*
- *Installing the AMD Proprietary Linux Software Driver*
- *Driver Update Notification*
- *Linux Feedback Program*

Web Content

The ATI Catalyst™ Linux Graphics Driver software suite is available through an installer executable.



Note: Refer to the minimum system requirements listed below to ensure you have downloaded the correct driver package for your system.

ATI Workstation Product Support

The ATI Catalyst™ Linux software suite is designed to support the following **ATI** Workstation products:

ATI FirePro V8700	ATI FireGL™ V3600
ATI FirePro V7750	ATI FireGL™ V3400
ATI FirePro V3700	ATI FireGL™ V3300
ATI FirePro V2260	ATI FireGL™ V3200
ATI FireGL™ V8650	ATI FireGL™ V3100
ATI FireGL™ V8600	ATI FireGL™ X3-256
ATI FireGL™ V7700	ATI FireGL™ X3
ATI FireGL™ V7600	ATI FireGL™ X2-256
ATI FireGL™ V7350	ATI FireGL™ Z1-128
ATI FireGL™ V7300	ATI FireGL™ T2-128
ATI FireGL™ V7200	ATI FireGL™ X1-128
ATI FireGL™ V7100	ATI FireGL™ X1-256p
ATI FireGL™ V5600	ATI FireMV™ 2400
ATI FireGL™ V5200	ATI FireMV™ 2250
ATI FireGL™ V5100	ATI FireMV™ 2200 (Single card PCI-e configuration)
ATI FireGL™ V5000	ATI Mobility FireGL™ V5000
ATI FireGL™ V5000	ATI Mobility FireGL™ T2

ATI Mobility™ and Integrated Mobility™ Product Family Support

The ATI Catalyst™ Linux software suite is designed to support the following **ATI** Mobility™ products:

ATI Mobility Radeon™ X3870	ATI Mobility Radeon™ X1100
ATI Mobility Radeon™ X3850	ATI Mobility Radeon™ X800
ATI Mobility Radeon™ X3830	ATI Mobility Radeon™ X700
ATI Mobility Radeon™ X3430	ATI Mobility Radeon™ Xpress 1200 series

ATI Mobility Radeon™ X3400	ATI Mobility Radeon™ X600
ATI Mobility Radeon™ X2600	ATI Mobility Radeon™ X300
ATI Mobility Radeon™ X2400	ATI Mobility Radeon™ X200
ATI Mobility Radeon™ X2300	ATI Mobility Radeon™ 9800
ATI Mobility Radeon™ X1800	ATI Mobility Radeon™ 9600
ATI Mobility Radeon™ X1600	ATI Mobility Radeon™ 9550
ATI Mobility Radeon™ X1400	ATI Mobility Radeon™ 9500
ATI Mobility Radeon™ X1300	ATI Mobility Radeon™ Xpress 1100 series
ATI Mobility Radeon™ X1200	ATI Mobility Radeon™ Xpress 200 series

ATI Desktop Product Family Support

The ATI Catalyst™ Linux software suite is designed to support the following ATI desktop products:



Note: The ATI Radeon™ HD 3870X2 series of product is currently not supported by the ATI Catalyst™ Linux software suite



Note: All-in-Wonder™ variants based on the above are also supported. However, video capture is not supported.



Note: Software driver support for ATI FireGL™, Integrated, Mobility™ and Desktop products prior to the Radeon™ 9500 is available from www.amd.com

ATI Radeon™ HD 4870 X2 Series	ATI Radeon™ X1650 Series
ATI Radeon™ HD 4800 Series	ATI Radeon™ X1600 Series
ATI Radeon™ HD 4670 Series	ATI Radeon™ X1550 Series
ATI Radeon™ HD 4650 Series	ATI Radeon™ X1300 Series
ATI Radeon™ HD 4600 Series	ATI Radeon™ X1050 Series
ATI Radeon™ HD 4550 Series	ATI Radeon™ X850 Series

ATI Radeon™ HD 4350 Series	ATI Radeon™ X800 Series
ATI Radeon™ HD 3800 Series	ATI Radeon™ X700 Series
ATI Radeon™ HD 3600 Series	ATI Radeon™ X600 Series
ATI Radeon™ HD 3400 Series	ATI Radeon™ X550 Series
ATI Radeon™ HD 2900 Series	ATI Radeon™ X300 Series
ATI Radeon™ HD 2600 Series	ATI Radeon™ 9800 Series
ATI Radeon™ HD 2400 Series	ATI Radeon™ 9700 Series
ATI Radeon™ X1950 Series	ATI Radeon™ 9600 Series
ATI Radeon™ X1900 Series	ATI Radeon™ 9550 Series
ATI Radeon™ X1800 Series	ATI Radeon™ 9500 Series

ATI Integrated Product Family Support

The ATI Catalyst™ Linux software suite is designed to support the following **ATI** desktop products

ATI Radeon™ HD 3300 Series

ATI Radeon™ HD 3200 Series

ATI Radeon™ 3100 Series

ATI Radeon™ 3000 Series

ATI Radeon™ 2100 Series

ATI Radeon™ Xpress 1150 Series

ATI Radeon™ Xpress 1100 Series

ATI Radeon™ Xpress 200 Series

ATI Radeon™ X1250 Series

ATI Radeon™ X1200 Series

AMD 690 Series Chipset

Operating Systems Distributions Supported

The latest version of the ATI Catalyst™ Linux software suite is designed to support the following Linux distributions:

- Red Hat Enterprise Linux suite
- Novell/SuSE product suite
- Ubuntu



Note: The ATI Catalyst™ Linux software suite may install on a number of other Linux distributions. Refer to the Package Generation installation instructions for more information.



Note: AMD has contributed packaging scripts to allow creation of other packages, but does not necessarily test, verify or warrant the reliability. Currently Red Hat Enterprise Linux suite and Novell/SuSE product suite are supported Linux distributions.

System Requirements

Before attempting to install the ATI Catalyst™ Linux software suite, the following software must be installed:

- XOrg 6.8, 6.9, 7.0, 7.1, 7.2, 7.3 or 7.4
- Linux Kernel 2.6 and above
- glibc version 2.2 or 2.3
- POSIX Shared Memory (/dev/shm) support is required for 3D applications

The ATI Catalyst™ Linux software suite no longer provides precompiled Kernel Modules; all installations require GCC compiler and kernel-headers or kernel-source in order to enable 2D and 3D acceleration.

For best performance and ease of use, AMD recommends the following:

- Kernel module build environment
 - Kernel source code include either the Kernel Source or Kernel Headers packages
- The RPM utility should be installed and configured correctly on your system, if you intend to install via RPM packages
- The following packages must be installed in order for the ATI Catalyst™ Linux driver to install and work properly:
 - XFree86-Mesa-libGL
 - libstdc++
 - libgcc
 - XFree86-libs
 - fontconfig
 - freetype
 - zlib
 - gcc

New Features

This section provides information on new features found in this release of the Radeon™ Display Driver. These include the following:

- *Support for New Linux Operating Systems*
- *Full OpenGL™ 3.0 Support*
- *Hybrid CrossFire™ support for Linux*
- *Multiview Support*

Support for New Linux Operating Systems

This release of ATI Catalyst™ Linux introduces support for the following new operating system:

- Ubuntu 8.10 production support

Full OpenGL™ 3.0 Support

This release of ATI Catalyst™ provides full OpenGL™ 3.0 extension support. The following is a list of OpenGL™ 3.0 extensions added in Catalyst 9.1:

- ARB_framebuffer_object
- ARB_half_float_vertex
- ARB_texture_rg
- EXT_texture_array
- EXT_texture_integer
- EXT_transform_feedback
- NV_conditional_render
- WGL/GLX_create_context (for new 3.0 contexts)
- GLSL 1.3
- ARB_color_buffer_float
- ARB_vertex_array_object
- EXT_draw_buffers2

Hybrid CrossFire™ support for Linux

This release of Catalyst™ introduces Hybrid Graphics support. Hybrid Graphics delivers a significant 3D performance boost for systems featuring an AMD 780G/780D integrated graphics motherboard and an ATI Radeon HD 3400 Series or ATI Radeon HD 2400 Series graphics accelerator.

Multiview Support

This release of ATI Catalyst™ Linux enables users to render applications using a multiple GPU configuration with independent displays

- Multiview can be enabled using single or multiple GPU configurations with Xinerama disabled

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- Configuration supported with Catalyst Control Center, under the display property tab.
 - Supported on any combination of the ATI Radeon™ 3000 Series and ATI Radeon™ 2000 Series of graphics cards

Resolved Issues

The following section provide a brief description of resolved issues with the latest version of the ATI Catalyst™ Linux software suite. These include:

- An incorrect error message is no longer returned when applying an unsupported TV geometry in a console terminal. Further details can be found in topic number 737-35212
- Configuring the OS to run in dualhead mode may cause both displays to become shredded and unusable
- Configuring the driver for a secondary adapter using the command “aticonfig --enable-monitor=auto” may cause the system to stop responding
- After running “aticonfig --lscc” the CrossFire™ candidate adapters are listed as “none”
- Linux third instance of xserver may show video corruption when enabled on ATI Radeon HD 3200 Graphics
- Linux Desktop fails to render in SuSE 11 with ATI Radeon HD 3200 Graphics in big desktop mode
- Xserver fails to start on ATI Radeon HD 3200 Graphics
- Vertical sync tearing issues may be noticed with the following Catalyst Control Center settings “Wait for Vertical refresh” and “Off, unless application specifies” have been applied
- Segmentation fault may occur on OpenGL call glTexSubImage2D
- System does not switch to “Optimal Performance” when running on AC power and returning from sleep
- Secondary display will not be set to 640 x 480 on restart of the xserver
- Unable to start dual head mode after installing driver from aticonfig
- Playing back a MPEG2 file in hardware accelerated mode may intermittently stop and outputs error to console window
- Mplayer may stop responding when returning from S3/S4 sleep
- Ubuntu segmentation fault may occur when installing the driver from the aticonfig command line
- Screen corruption may be noticed when starting Nexuiz
- Indirect OpenGL rendering fails when dual-head mode has been enabled
- System may become unresponsive when multi adapter displays are enabled in the reverse order of the adapters
- Some video clips may show stuttering and corruption during playback in mplayer
- No video displayed during playback of H.264 media file on certain Mobile platforms

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- Open GL Linux: AIGLX not enabled by default on Ubuntu 8.10 64bit
 - Running Quake4 on some CrossFire™ systems may cause the system to become unresponsive
 - Moving glxgears window may show some screen corruption
 - Softimage XSI v7.0: Models with over 15 million triangles may load with some screen corruption
 - Texture error may be noticed while playing any media file using Mplayer
 - Catalyst Control Center shows incorrect Bus Capability and Maximum Setting as AGP 12x in CCCLE
 - Bus type is shown as PCI instead of PCI Express 2.0 in the Catalyst Control Center's Information page
 - Catalyst Control Center Information page shows incorrect bus type (PCI as PCIE)
 - Catalyst Control Center may not start after clicking desktop icon or running from terminal window
 - Catalyst Control Center does not load when Xinerama is enabled with three or more displays
 - Catalyst Control Center power play aspects is not available
 - Catalyst Control Center: Anti-Aliasing and Anisotropic filtering pages grayed out for secondary adapter on enabling 'Xinerama'
 - Catalyst Control Center: enabling display with Xinerama may cause 2 x 2 virtual desktops to overlap
 - Catalyst Control Center: Anti-Alias controls are greyed out on ATI FireGL V5600/V3600

Known Issues

The following section provides a brief description of known issues associated with the latest version of ATI Catalyst™ Linux software suite. These issues include:



On Novell's openSUSE, SLED and SLES operating systems running “sax2” or “sax2 -r” on the console overwrites the X.Org configuration file xorg.conf, reverting changes made by running “aticonfig --initial”. As a result subsequent X session may start up using the open source Radeon on X-Vesa graphics drivers instead of the proprietary ATI Linux Graphics Driver.

Solution: Do not use Sax2 when the proprietary Linux Graphics Driver is installed. Instead configure all display parameters using the Catalyst Control Center--Linux Edition or the aticonfig command line interface.

- X-Server unresponsive when installing the driver on some systems with ATI Radeon HD 3200 Graphics

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- Some screen overlay corruption may be observed playing certain AVI files with mplayer when connected using HDMI output
 - Multiview: Some system may stop responding starting X-server after the display configuration is changed in Catalyst Control Center
 - Multiview: System may fail starting XServer in multihead configurations with more than 2 adapters
 - Multiview: When switching between terminals some corruption may be observed on the third adapter connected with a CRT Monitor
 - Screen corruption may be noticed at the Login screen when Compiz "Desktop Effects" has been enabled
 - Viewperf 9.0.3: Reduced performance may be noticed when compared to the previous Catalyst 8.12 release
 - With some ATI adapters the display port monitor may not be detected after being hotplugged
 - Desktop gamma settings are not restored when exit fullscreen Open GL application
 - SUSE 10.3 32bit: The operating system may fail to respond when pressing "Ctrl+alt+F7/F8" to switch session when "fgl_glxgears" is running
 - Some systems may fail to respond when configured with four displays and dual head has been enabled
 - Resuming from sleep the display connected to add-on card remains off in some dual-head mode configurations
 - RHEL 4.6 64 Bit: some system may become unresponsive after killing X-server (ctrl+alt+backspace)
 - Enemy Territory Quake Wars v1.4 demo, system may become unresponsive when game is run
 - Some Open GL applications may cause a segmentation fault with CrossFire™ and dual head enabled
 - Video clips on the secondary display may not render when system is running in clone or big desktop mode
 - Video does not resize or may appear filled with pink/black when changing from a low to high resolution
 - SUSE 10.3 64bit: Connecting a DFP display device as a secondary display device may occasionally result in the secondary display device failing to display an image

Installing the AMD Proprietary Linux Software Driver

Installation information can be found at: www.ati.com/install

Driver Update Notification

To receive driver notifications, add the following RSS feed to your RSS reader:
<http://www.ati.com/online/rss/atilinuxdriver.rss>



Note: In order to receive notifications you will need to have an RSS reader installed.

Linux Feedback Program

The ATI Catalyst™ Linux software suite releases may incorporate suggestions received through the Linux feedback program.

Please refer to <http://apps.ati.com/linuxDfeedback/> to provide us with feedback.