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 8.593.

The AMD Linux release notes provide information on the following:

- Web Content
- ATI Workstation Product Support
- ATI MobilityTM and Integrated MobilityTM Product Family Support
- ATI Desktop Product Family Support
- ATI Integrated Product Family Support
- Operating Systems Distributions Supported
- System Requirements
- New Features
- Resolved Issues
- 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 CatalystTM Linux software suite is designed to support the following **ATI** Workstation products:

| ATI FirePro TM 2260 ATI FireGL TM V7200 ATI FirePro TM 2450 ATI FireGL TM V7300 ATI FirePro TM V3700 ATI FireGL TM V7350 ATI FirePro TM V3750 ATI FireGL TM V7600 ATI FirePro TM V5700 ATI FireGL TM V7700 ATI FirePro TM V5700 ATI FireGL TM V7700 ATI FirePro TM V5700 ATI FireGL TM V8600 ATI FirePro TM V7750 ATI FireGL TM V8600 ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X2-256 ATI FireGL TM V3300 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 ATI FireGL TM V3600 ATI FireGL TM X1-128 |
|--|
| ATI FirePro TM V3700 ATI FireGL TM V7350 ATI FirePro TM V3750 ATI FireGL TM V7600 ATI FirePro TM V5700 ATI FireGL TM V7700 ATI FirePro TM V5700 ATI FireGL TM V7700 ATI FirePro TM V7750 ATI FireGL TM V8600 ATI FirePro TM V8700 ATI FireGL TM V8650 ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3300 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FirePro TM V3750 ATI FireGL TM V7600 ATI FirePro TM V5700 ATI FireGL TM V7700 ATI FirePro TM V7750 ATI FireGL TM V8600 ATI FirePro TM V8700 ATI FireGL TM V8650 ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3300 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FirePro TM V5700 ATI FireGL TM V7700 ATI FirePro TM V7750 ATI FireGL TM V8600 ATI FirePro TM V8700 ATI FireGL TM V8650 ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3300 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FirePro TM V7750 ATI FireGL TM V8600 ATI FirePro TM V8700 ATI FireGL TM V8650 ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3300 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FirePro TM V8700 ATI FireGL TM V8650 ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3350 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FireGL TM V3100 ATI FireGL TM X3-256 ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3350 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FireGL TM V3200 ATI FireGL TM X3 ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3350 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FireGL TM V3300 ATI FireGL TM X2-256 ATI FireGL TM V3350 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FireGL TM V3350 ATI FireGL TM Z1-128 ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| ATI FireGL TM V3400 ATI FireGL TM T2-128 |
| |
| ATI FireGL TM V3600 ATI FireGL TM X1-128 |
| |
| ATI FireGL TM V5000 ATI FireGL TM X1-256p |
| ATI FireGL TM V5100 ATI FireMV TM 2250 |
| ATI FireGL TM V5200 ATI FireMV TM 2400 |
| ATI FireGL TM V5600 ATI FireMV TM 2200 (Single card PCI-e configuration) |
| ATI FireGL TM V7100 |

ATI Mobility[™] and Integrated Mobility[™] Product Family Support

The ATI CatalystTM Linux software suite is designed to support the following **ATI** MobilityTM products:

| ATI Mobility Radeon TM X3870 | ATI Mobility Radeon [™] X1100 |
|---|--|
| ATI Mobility Radeon TM X3850 | ATI Mobility Radeon [™] X800 |
| ATI Mobility Radeon TM X3830 | ATI Mobility Radeon [™] X700 |
| ATI Mobility Radeon TM X3430 | ATI Mobility Radeon TM Xpress 1200 Series |
| ATI Mobility Radeon TM X3400 | ATI Mobility Radeon [™] X600 |
| ATI Mobility Radeon TM X2600 | ATI Mobility Radeon [™] X300 |
| ATI Mobility Radeon TM X2400 | ATI Mobility Radeon [™] X200 |
| ATI Mobility Radeon TM X2300 | ATI Mobility Radeon [™] 9800 |
| ATI Mobility Radeon TM X1800 | ATI Mobility Radeon [™] 9600 |

| ATI Mobility Radeon TM X1600 | ATI Mobility Radeon [™] 9550 |
|---|--|
| ATI Mobility Radeon [™] X1400 | ATI Mobility Radeon [™] 9500 |
| ATI Mobility Radeon TM X1300 | ATI Mobility Radeon TM Xpress 1100 Series |
| ATI Mobility Radeon [™] X1200 | ATI Mobility Radeon TM Xpress 200 Series |

ATI Desktop Product Family Support

The ATI CatalystTM Linux software suite is designed to support the following **ATI** desktop products:

| ATI Radeon [™] HD 4870 X2 Series | ATI Radeon [™] X1650 Series |
|---|---------------------------------------|
| ATI Radeon [™] HD 4850 X2 Series | ATI Radeon TM X1600 Series |
| ATI Radeon [™] HD 4800 Series | ATI Radeon [™] X1550 Series |
| ATI Radeon [™] HD 4670 Series | ATI Radeon TM X1300 Series |
| ATI Radeon [™] HD 4650 Series | ATI Radeon [™] X1050 Series |
| ATI Radeon [™] HD 4600 Series | ATI Radeon TM X850 Series |
| ATI Radeon [™] HD 4550 Series | ATI Radeon [™] X800 Series |
| ATI Radeon [™] HD 4350 Series | ATI Radeon TM X700 Series |
| ATI Radeon [™] HD 3800 Series | ATI Radeon [™] X600 Series |
| ATI Radeon [™] HD 3600 Series | ATI Radeon TM X550 Series |
| ATI Radeon TM HD 3400 Series | ATI Radeon TM X300 Series |
| ATI Radeon [™] HD 2900 Series | ATI Radeon [™] 9800 Series |
| ATI Radeon TM HD 2600 Series | ATI Radeon TM 9700 Series |
| ATI Radeon [™] HD 2400 Series | ATI Radeon [™] 9600 Series |
| ATI Radeon TM X1950 Series | ATI Radeon TM 9550 Series |
| ATI Radeon TM X1900 Series | ATI Radeon TM 9500 Series |
| ATI Radeon TM X1800 Series | |
| | |

Note: The ATI RadeonTM HD 3870 X2 series of product is currently not supported by the ATI CatalystTM 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 FireGLTM, Integrated, MobilityTM and Desktop products prior to the RadeonTM 9500 is available from *www.amd.com*.

ATI Integrated Product Family Support

The ATI CatalystTM Linux software suite is designed to support the following **ATI** desktop products:

| ATI Radeon [™] HD 3300 Series | ATI Radeon TM Xpress 1100 Series |
|---|---|
| ATI Radeon [™] HD 3200 Series | ATI Radeon TM Xpress 200 Series |
| ATI Radeon [™] 3100 Series | ATI Radeon TM X1250 Series |
| ATI Radeon [™] 3000 Series | ATI Radeon TM X1200 Series |
| ATI Radeon TM 2100 Series | AMD 690 Series Chipset |
| ATI Radeon TM Xpress 1150 Series | |

Operating Systems Distributions Supported

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

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



Note: The ATI CatalystTM 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 CatalystTM 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 or above
- glibc version 2.2 or 2.3
- POSIX Shared Memory (/dev/shm) support is required for 3D applications

The ATI CatalystTM 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, ATI recommends the following:

- Kernel module build environment
 - o 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 CatalystTM 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 RadeonTM Display Driver. These include the following:

- Support for New Linux Operating Systems
- New AMD Display Library (ADL) SDK
- ATI Catalyst Control Center Linux Edition Display Device property page enhancement
- OpenGL support for Compositing managers

Support for New Linux Operating Systems

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

- RedFlag DT 6.0 sp2 production support
- RedFlag DT 7.0 support (early look)
- SLED and SLES 11 support (early look)

New AMD Display Library (ADL) SDK

- AMD Display Library (ADL) SDK is designed to access display driver functionality for all ATI Radeon graphics accelerators and FirePro graphics accelerators
- The SDK supports Windows XP, Windows Vista and Linux 32 and 64 bit variants
- The SDK can be used from both unmanaged (C/C++) and managed (C#) applications samples are provided within the SDK
- The ADL SDK is available to the public via the Developer relations site

ATI Catalyst Control Center Linux Edition – Display Device property page enhancement

This release of ATI CatalystTM Linux enables users to configure new display settings within the ATI Catalyst Control Center Linux Edition.

- HDTV mode support (720p, 1080i, 1080p, and custom) for digital displays
- Color temperature controls for digital displays
- Hue, Saturation, Brightness, and Contrast color controls for digital displays
- Digital display controls (Overscan support, HDMI settings, DVI settings)

OpenGL support for Compositing managers

• Added support for the use of OpenGL clients under compositing environments such as compiz and kwin as found in Ubuntu and SuSE

Resolved Issues

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

- When X is killed, the desktop background no longer displays :0.1 remains
- Catalyst Control Center: Primary display manager no longer missing on systems with dual head enabled
- TV screen corruption no longer visible when TV standards aspect is set
- Display ports now detects properly with XRANDR for specific ASICs
- Catalyst Control Center: X no longer fails when the resolution is set to less than 1680x1050 through displays manager
- [SUSE11-64] X-Server will start properly when the driver is installed using RPM method
- The external LCD no longer displays garbage when pressing Fn+F4
- The internal LCD will no longer move with touchpad after pressing Fn+F4
- Video playback now functions properly after resuming from S3/S4 hibernation

Known Issues

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

- Resuming from sleep the display connected to add-on card remains off in some dualhead mode configurations
- System may become unresponsive when toggling between virtual terminals in multihead configuration with application running
- With both a DFP and CRT connected using the swap monitor option may cause the following error "KDE Panel The KDE Crash Handler"
- [SUSE 11 64bit] CenterMode may fail to take effect on some ASICs
- Error may occur while setting the TV geometry
- Catalyst Control Center: Default button might not work properly for Warning Dialogue in preferrence page under specific conditions

- Starting X with a second hotplugged display may cause segmentation fault
- TV screen corruption may be visible while starting the X-server on some ASICs
- Stopping X in dual-head mode may cause segmentation fault
- Catalyst Control Center: Gamma values might not be maintained for color channels
- With both DP and CRT connected, starting X-Server in big desktop mode may cause the DP display to go off and on, for every few seconds
- [Ubuntu-8.10] CRT might be shown as connected in single mode DFP connection
- Error may be reported in dmesg running 3D apps for specific systems
- Catalyst Control Center: Incorrect formats are listed in HDTV Support page



Note: 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.

Installing the AMD Proprietary Linux Software Driver

Installation information can be found at: How to Install Your ATI Product.

Driver Update Notification

To receive driver notifications, add the following RSS feed to your RSS reader: http://www2.ati.com/rss/catalyst.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://www.amd.com/us/LinuxCrewSurvey to provide us with feedback.