## **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 Mobility<sup>TM</sup> and Integrated Mobility<sup>TM</sup> 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<sup>™</sup> 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<sup>TM</sup> Linux software suite is designed to support the following **ATI** Workstation products:

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

# ATI Mobility<sup>™</sup> and Integrated Mobility<sup>™</sup> Product Family Support

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

ATI Mobility Radeon <sup>TM</sup> X3870	ATI Mobility Radeon <sup>™</sup> X1100
ATI Mobility Radeon <sup>TM</sup> X3850	ATI Mobility Radeon <sup>™</sup> X800
ATI Mobility Radeon <sup>TM</sup> X3830	ATI Mobility Radeon <sup>™</sup> X700
ATI Mobility Radeon <sup>TM</sup> X3430	ATI Mobility Radeon <sup>TM</sup> Xpress 1200 Series
ATI Mobility Radeon <sup>TM</sup> X3400	ATI Mobility Radeon <sup>™</sup> X600
ATI Mobility Radeon <sup>TM</sup> X2600	ATI Mobility Radeon <sup>™</sup> X300
ATI Mobility Radeon <sup>TM</sup> X2400	ATI Mobility Radeon <sup>™</sup> X200
ATI Mobility Radeon <sup>TM</sup> X2300	ATI Mobility Radeon <sup>™</sup> 9800
ATI Mobility Radeon <sup>TM</sup> X1800	ATI Mobility Radeon <sup>™</sup> 9600

ATI Mobility Radeon <sup>TM</sup> X1600	ATI Mobility Radeon <sup>™</sup> 9550
ATI Mobility Radeon <sup>™</sup> X1400	ATI Mobility Radeon <sup>™</sup> 9500
ATI Mobility Radeon <sup>TM</sup> X1300	ATI Mobility Radeon <sup>TM</sup> Xpress 1100 Series
ATI Mobility Radeon <sup>™</sup> X1200	ATI Mobility Radeon <sup>TM</sup> Xpress 200 Series

## **ATI Desktop Product Family Support**

The ATI Catalyst<sup>TM</sup> Linux software suite is designed to support the following **ATI** desktop products:

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

**Note:** The ATI Radeon<sup>TM</sup> HD 3870 X2 series of product is currently not supported by the ATI Catalyst<sup>TM</sup> Linux software suite.



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



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

## **ATI Integrated Product Family Support**

The ATI Catalyst<sup>TM</sup> Linux software suite is designed to support the following **ATI** desktop products:

ATI Radeon <sup>™</sup> HD 3300 Series	ATI Radeon <sup>TM</sup> Xpress 1100 Series
ATI Radeon <sup>™</sup> HD 3200 Series	ATI Radeon <sup>TM</sup> Xpress 200 Series
ATI Radeon <sup>™</sup> 3100 Series	ATI Radeon <sup>TM</sup> X1250 Series
ATI Radeon <sup>™</sup> 3000 Series	ATI Radeon <sup>TM</sup> X1200 Series
ATI Radeon <sup>TM</sup> 2100 Series	AMD 690 Series Chipset
ATI Radeon <sup>TM</sup> Xpress 1150 Series	

## **Operating Systems Distributions Supported**

The latest version of the ATI Catalyst<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> 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 Catalyst<sup>TM</sup> 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 Catalyst<sup>TM</sup> 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<sup>TM</sup> 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 Catalyst<sup>TM</sup> 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 Catalyst<sup>TM</sup> 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 Catalyst<sup>TM</sup> 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 Catalyst<sup>TM</sup> 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<sup>™</sup> 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.