

Release Notes

DRIVER VERSION: 15.36.31.4414 & 15.36.31.64.4414

DATE: May 13, 2016

SUMMARY:

Maintenance driver release with miscellaneous bug fixes.

This document provides information about Intel's Graphics Driver for:

- 4th Generation Intel® Core™ Processors with Intel HD graphics, Intel Iris™ graphics and Intel Iris Pro graphics and select Pentium®/ Celeron® Processors with Intel® HD graphics for Microsoft Windows* 8.1, Microsoft Windows* 8 and Microsoft Windows* 7 operating systems.

NOTABLE FEATURES:

Display Scaling Option is Now "Sticky" User Preference

Scaling support in control panel has been changed to improve user experience. Previously, the set of scaling options available to the user was tied to the currently selected resolution and any change to the resolution caused the user selected scaling option to be lost. In the new implementation, the user selected scaling option is orthogonal to the current resolution and expresses the user's preference/intent for scaling behavior, regardless of the current resolution. The driver will remember this scaling preference and apply it for future display mode sets performed either in the graphics control panel OR via OS control panel.

Forced Application Scaling

The control panel also offers a new "forced application scaling" option where the user selected scaling option above for desktop will also be applied for full screen applications (generally games or media players), overriding whatever scaling mode the application and/or DirectX runtime/Operating System specify. This is intended to allow users to force "Stretch Full Screen" or "Maintain Aspect Ratio" scaling to address problems reported by users with games running in "Centered" scaling mode - particularly DirectX10 and 11 games and/or on Windows 8/8.1. Centered mode gives a bad user experience when running games as significantly lower than native resolution (e.g. to improve frame rate) on displays with very high resolutions.

Intel has identified several root causes for this behavior:

- a) Some games request "[Unspecified](#)" scaling to the DirectX runtime upon full screen mode set. On Windows 8 and 8.1, for touch enabled systems, Windows converts this to "centered" scaling in the mode set call into the display driver. Microsoft has acknowledged this issue (CSS case 115021712411905/MSBU bug 5500783); the forced scaling option provided in this driver is a workaround for this Win8/8.1 operating system issue.
- b) Several games explicitly request "Centered" scaling. Intel has reached out to the game developers to educate them to request "Stretched" scaling instead and several games (such as Call of Duty: Advanced Warfare) have been patched to correct this behavior, but other applications may still have this issue.

In both cases, the new forced application scaling option provides a solution to allow the user to specify their preferred scaling mode.

This option is not enabled by default because it technically means that the graphics driver is not honoring operating system requests for mode sets and would cause WHCK test failures during driver certification. However, Intel strongly recommends users set this option when playing games at non-native resolutions, especially on Windows 8/8.1, especially for DirectX10/11 games.

Dedicated Memory Reporting

The graphics driver now reports some amount of fictitious “dedicated” graphics memory to the operating system (128MB by default) to work around applications issues in a number of games. These games incorrectly look for some amount of “dedicated” graphics memory because they weren’t coded with the unified memory architecture for processor graphics.

The amount reported can be modified or disabled if desired by changing the following registry value:

HKEY_LOCAL_MACHINE\Software\Intel\GMM, create a REG_DWORD value named “DedicatedSegmentSize”. The value is interpreted as number of MB to report (0-512MB). A value of 0 disables reporting the dummy memory segment. If the registry key/value is not found, the driver will report the default 128MB.

CONTENTS OF THE PACKAGE:

- Intel® Iris™, Iris™ Pro and HD Graphics Driver
- Intel® Display Audio Driver
- Intel® Media SDK Runtime
- Intel® OpenCL* Driver
- Intel® Graphics Control Panel

KEY ISSUES FIXED:

- Driver returns non-null pointer when running OGL test
- Noise observed in audio while playing music with screen switched off.
- System in clone mode freezes when cold booting and attempting to set extended mode
- Blue Screen or application error may be seen on system with panel connected via HDMI to DVI cable and while running a script to change display configuration from single to clone mode
- Issue is fixed by disabling shader cache for Unigine Heaven application.
- May crash when playing Just Cause 3*
- Anti-aliasing corruption running Autodesk Revit 2015*
- Corruption playing GRID™ Autosport*

SUPPORTED PRODUCTS:

SOFTWARE

This driver supports 64-bit and 32-bit variants of operating systems -

- Microsoft Windows* 8.1
- Microsoft Windows* 7

HARDWARE

All platforms with the following configurations are supported:

Intel® Graphics ¹	DirectX ^{2*}	OpenGL [*]	OpenCL [*]	Intel® Quick Sync Video	Intel® Wireless Display	Intel® Insider™	InTru™ 3D	Intel® Clear Video HD Technology
4th Generation Intel® Core™ Processors with Intel® Iris™ Pro Graphics 5200	11.2	4.3	1.2	Yes	Yes ^{3,4}	Yes	Yes	Yes
4th Generation Intel® Core™ Processors with Intel® Iris™ Graphics 5100	11.2	4.3	1.2	Yes	Yes ^{3,4}	Yes	Yes	Yes
4th Generation Intel® Core™ Processors with Intel® HD Graphics 5000/4600/4400/4200	11.2	4.3	1.2	Yes	Yes ^{3,4}	Yes	Yes	Yes
Intel® Pentium® Processor 3558U/3560M/3561Y/G3220/G3220T/G3240/G3240T/G3250/G3250T/G3258/G3320TE/G3420/G3420T/G3430/G3440/G3440T/G3450/ G3450T/G3460 with Intel® HD Graphics	11.2	4.3	1.2	Yes	No	No	No	No
Intel® Pentium® Processor 3550M/3556U/3560Y with Intel® HD Graphics	11.2	4.3	1.2	No	No	No	No	No
Intel® Celeron® Processor 2957U/2961Y/2970M/2981U/G1820/G1820T/G1820TE / G1830/ G1840/G1840T/G1850 with Intel® HD Graphics	11.2	4.3	1.2	Yes	No	No	No	No
Intel® Celeron® Processor 2000E/2002E/2950M/2955U/2980U with Intel® HD Graphics	11.2	4.3	1.2	No	No	No	No	No

Note:

1. If you are uncertain which Intel processor is in your computer, Intel recommends using the [Intel Processor Identification Utility](#) or [Intel Driver Update Utility](#) to identify your Intel processor.
2. In the Intel® Iris™ and HD Graphics Control Panel (under Options > Options menu > Information Center), the 'Installed DirectX* version' refers to the operating system's DirectX version. The Information Center's 'Supported DirectX* Version' refers to the Intel Graphics Driver's supported DirectX version. The DirectX 11.2 API is supported but some optional features may not be available. Applications using the DirectX 11.2 API should query for feature support before using specific hardware features.
3. The Intel® Wireless Display software application is available only for Microsoft Windows 7 and Windows 8 operating systems.
4. Intel Wireless Display native Miracast* support under Windows 8.1 is now supported through the operating system's Charms menu. For more information, see the [Miracast FAQ](#).

KNOWN ISSUES:

- Doom 3 - Corruption is seen in the main menu and in the intro of the game
- Two active taskbars sometimes seen when hot unplugging DP monitor in extended mode
- Corruption seen on Outlook 2013 reports
- Hitman™ Absolution game stops after cinematic when quality settings are high
- Green corruption seen with Overlay + YUV +xvYcc/YCbCr enabled on HDMI
- Metal Gear Solid V The Phantom Pain- Corruption on water
- Angry Birds - Corruption is seen During Maximizing & Minimizing
- Overlay application does not work when opening it in dual display configuration with a tiled display and eDP

For more information go to <http://www.intel.com/performance>

We continuously strive to improve the quality of our products to better serve our users and appreciate [feedback](#) on any issues you discover and suggestions for future driver releases. If you have an issue to submit, ***please follow the guidance/process in this sticky*** [Default level information for reporting Graphics issues](#).

*Other names and brands may be claimed as the property of others.