

# Release Notes

**DRIVER VERSION: 15.45.18.4664**

(Windows Driver Store Version 21.20.16.4664)

**DATE: May 5, 2017**

## SUMMARY:

Enjoy performance optimizations and playability improvements on processors with Intel® Iris™ Pro Graphics on the games, Warhammer® 40,000: Dawn of War III\* and [Titanfall 2](#)\*!

Run, jump, and blast your way through these April game releases on Intel® Iris™ Pro Graphics:

- Outlast 2\*
- Little Nightmares\*
- Yooka-Laylee\*
- Full Throttle Remastered\*
- FlatOut 4: Total Insanity™
- Expeditions: Viking\*

This driver also:

- provides system security and stability enhancements
- optimizes memory usage, thereby improving the stability of applications
- adds regional language localization to third-party display EDID overrides, which enable custom resolution support for internal and external panels
- adds Vulkan™ version details to the information section of the Intel® HD Graphics Control Panel
- fixes a previous access denied error on some Steam\* folders.

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

- 7th Generation Intel® Core processors, related Pentium®/ Celeron® Processors, and Intel® Xeon processors with Intel® Iris™ Plus Graphics 640, 650 and Intel® HD Graphics 610, 615, 620, 630, P630.
- 6th Generation Intel® Core processors, Intel Core™ M, and related Pentium® processors with Intel® Iris™ Graphics 540, Intel® Iris™ Graphics 550, Intel® Iris™ Pro Graphics 580, and Intel® HD Graphics 510, 515, 520, 530.
- Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P530
- Pentium®/ Celeron® Processors with Intel® HD Graphics 500, 505

## CONTENTS OF THE PACKAGE:

- Intel® Graphics Driver
- Intel® Display Audio Driver
- Intel® Media SDK Runtime
- Intel® OpenCL\* Driver
- Intel® Graphics Control Panel
- Vulkan™ Runtime Installer

## KEY ISSUES FIXED:

Access to Steam* folders may be denied	Windows 10®, Windows 8.1*, Windows 7*
Applications move to the primary monitor after system wakes from sleep when third-party display EDID overrides are enabled	Windows 10®, Windows 8.1*, Windows 7*
Increased power consumption when playing Netflix* content in 4K on the Edge* Browser	Windows 10®
Unsupported resolutions appear in the display properties window, after setting the display to clone mode from collage mode	Windows 8.1*, Windows 7*
Screen flickering may be observed when scrolling through a browser, while it is streaming a video	Windows 10®
Some graphics anomalies may be observed in Unreal Tournament* Pre-Alpha, Doom® (Vulkan mode), SolidWorks® 2017	Windows 10®, Windows 8.1*, Windows 7*
Stability issues observed while using Miracast*	Windows 10®
'NV_DX_Interop' causing memory leaks (reported on the Intel Game Developer Forum)	Windows 10®, Windows 8.1*, Windows 7*
Display may flicker while Hyper-V is enabled	Windows 10®, Windows 8.1*
Crash/hang observed in OneShot*, Creo 4* Beta	Windows 10®, Windows 8.1*, Windows 7*

## SUPPORTED PRODUCTS:

### HARDWARE

All platforms with the following configurations are supported:

Intel® Graphics <sup>1</sup>	DirectX* <sup>2</sup>	OpenGL*	OpenCL*	Vulkan*	<a href="#">Intel® Quick Sync Video</a>
<b>7th Generation Intel® Core™ processors with Intel® Iris™ Plus Graphics 640/650</b>	12	4.4	2.1	1.0.31	Yes
<b>7th Generation Intel® Core™ processors with Intel® HD Graphics 610/615/620/630</b>	12	4.4	2.1	1.0.31	Yes
<b>Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P630</b>	12	4.4	2.1	1.0.31	Yes
<b>Pentium Processors with Intel® HD Graphics 610</b>	12	4.4	2.1	1.0.31	Yes
<b>6th Generation Intel® Core™ processors with Intel® Iris™ Pro Graphics 580</b>	12	4.4	2.0	1.0.31	Yes
<b>6th Generation Intel® Core™ processors with Intel® Iris™ Graphics 540/550</b>	12	4.4	2.0	1.0.31	Yes
<b>6th Generation Intel® Core™ processors with Intel® HD Graphics 520/530</b>	12	4.4	2.0	1.0.31	Yes

Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P530	12	4.4	2.0	1.0.31	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® Iris Pro Graphics P580	12	4.4	2.0	1.0.31	Yes
Intel® Core™ M processors with Intel® HD Graphics 515	12	4.4	2.0	1.0.31	Yes
Pentium® and Celeron® Processors with Intel® HD Graphics 500/505	12	4.2	1.2	1.0.31	Yes
Pentium Processors with Intel® HD Graphics 510	12	4.4	1.2	1.0.31	Yes

## SOFTWARE

On 7<sup>th</sup> Generation Intel Core processors and related Pentium/Celeron:

- Microsoft Windows 10® 64-bit

On 6<sup>th</sup> Generation Intel Core and Intel Mobile Xeon processors and related Pentium/Celeron:

- Microsoft Windows 10® 64-bit
- Microsoft Windows 8.1\* 64-bit
- Microsoft Windows 7\* 64-bit, 32-bit

On Intel® Atom® Processors and related Pentium/Celeron (Apollo Lake):

- Microsoft Windows\* 10-64-bit only

Note:

1. If you are uncertain of 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 12 API is supported but some optional features may not be available. Applications using the DirectX 12 API should query for feature support before using specific hardware features. Please note that DirectX12 is only supported on Windows 10 and DirectX11.3 support is also available on supported Microsoft\* operating systems.

## KNOWN ISSUES

- Video stuttering may be observed within certain cut-scenes in Battlefield™ 1.
- Long load times may be observed in Star Wars™ Battlefront, Mass Effect™: Andromeda, Rise of the Tomb Raider™
- Graphics anomalies may be observed in Euro Truck Simulator 2\*, Fallout® 4, Guild Wars™ 2, Deus Ex™: Mankind Divided, Assassin's Creed® Syndicate, AutoCAD™ 2017
- Intermittent crashes or hangs may occur in Tom Clancy's The Division™, Batman: The Telltale Series\*
- Abnormal behavior observed in PowerDVD® on 3D content playback in Windows 10®
- Loss of audio may be observed in The Elder Scrolls V: Skyrim Special Edition\* when connecting a NUC to an external monitor via HDMI/DP
- Audio issues may be observed when operating a USB type-c display in 'second screen only' mode

More on Intel® Core™ processors

For more information on the Intel® Core™ processor family, Intel® Xeon® processor E3 family, and 7<sup>th</sup> Generation Intel® Core processors, please visit:

[Intel® 7<sup>th</sup> Generation Core Processors](#)

<http://www.intel.com/content/www/us/en/processors/core/core-processor-family.html>

<http://www.intel.com/content/www/us/en/processors/xeon/xeon-processor-e3-family.html>

<http://www.intel.com/graphics>

*Work and play in high resolution with Intel® HD Graphics, Iris™ Graphics, Iris™ Plus Graphics, and Iris™ Pro Graphics. Watch captivating 4K Ultra HD (UHD) video on up to three screens, edit photos and videos like a pro, and immerse yourself in vividly rendered, seamless 3D gameplay - all with the added power boost of an Intel® Core™ processor. Intel® Graphics bring stunning visuals to thinner and lighter portable devices, like laptops, 2 in 1s, and desktop computers.*

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 found here** [Default level information for reporting Graphics issues](#).

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