# Release Notes

**DRIVER VERSION: 15.45.21.4821**
(Windows Driver Store Version 21.20.16.4821)

**DATE: October 17, 2017**

## SUMMARY:

Maintenance driver release.

Other Intel® products may benefit from these optimizations as well. Visit gameplay.intel.com for recommended game settings for many of your favorite PC games.

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

- 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:

| | |
|---|---|
| PC Game: The Elder Scrolls V: Skyrim Special Edition - Sporadic no sound coming from Intel Display Audio | Windows 10® |
| PC Game: Sporadic Game crash observed while playing Quake | Windows 10® |
| PC Game: Black screen seen on starting DOTA 2 online game when run in Open GL mode | Windows 10® |
| Sporadic BSOD / TDR seen during Miracast scenario and change in color settings | Windows 10® |
| System hang with black screen seen sporadically while performing Lid Close = Do Nothing with PSR enable | Windows 10® |
| Sporadically HDCP function does not work correctly via USB type-C after Standby | Windows 10® |
| For some DP to VGA converter firmware cannot be flashed over AUX channel by CUI SDK | Windows 10® |
| Very Sporadic System hand in Stress test (S3/S4) scenario | Windows 10® |

| | |
|---|---|
| Sporadic video lag observed after setting External Monitor only with HDMI Monitor (Hybrid Gfx specific) | Windows 10® |
| Sporadic HDCP fail after unplug HDMI2.0 monitor (via LSPCON) | Windows 10® |
| DP Eye Diagram failures on Desktop (with increased trace-lengths) | Windows 10® |
| With 180 display rotation enabled, sporadic visual anomaly when video is played in maximized mode | Windows 10® |

## SUPPORTED PRODUCTS:

### HARDWARE

All platforms with the following configurations are supported:

| Intel® Graphics[1] | DirectX*[2] | OpenGL* | OpenCL* | Vulkan* | Intel® Quick Sync Video |
|---|---|---|---|---|---|
| 6th Generation Intel® Core™ processors with Intel® Iris™ Pro Graphics 580 | 12 | 4.4 | 2.0 | 1.0.31 | Yes |
| 6th Generation Intel® Core™ processors with Intel® Iris™ Graphics 540/550 | 12 | 4.4 | 2.0 | 1.0.31 | Yes |
| 6th Generation Intel® Core™ processors with Intel® HD Graphics 520/530 | 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 6th 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

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

- Sporadic BSOD while game play Just Cause 3
- Sporadic flicker on DP 4k + MST Daisy chain

## More on Intel® Core™ processors

http://www.intel.com/graphics

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.