

Release Notes

DRIVER VERSION: 15.60.2.4901

(Windows Driver Store Version 23.20.16.4901)

DATE: December 29, 2017

HIGHLIGHTS:

- **Intel® Graphics Control Panel Now Showcases Latest Games**
- **Okami HD* Launch Driver**

Check out the updated graphics control panel! It now showcases the latest optimized games for Intel® Graphics.

Calling all Jedi* masters and Sith* lords! [Star Wars™ Battlefront™ II*](#) and many other games such as [Mass Effect Andromeda*](#), [Battlefield 1*](#), [Rise of the Tomb Raider*](#), [F1 2016*](#) get improved load times, performance optimizations, and enhanced playability using DirectX11*.

Enjoy an extreme off-road gaming experience with [Spintires: Mudrunner*](#), create the ultimate soccer club in [Football Manager 2018*](#), play your cards in [Hand of Fate 2*](#), and immerse yourself in the [World of Final Fantasy*](#) on processors with Intel® HD Graphics 620 or better.

Battle for control over the magical vortex while enjoying performance optimizations and playability improvements in [Total War: WARHAMMER II*](#). Put the pedal to the metal while playing [Need for Speed: Payback*](#), enter the Lego* universe in [Lego Marvel Super Heroes 2*](#), and enjoy playing [Black Mirror*](#) and [SEVEN: The Days Long Gone*](#) on Intel® Iris® Pro Graphics.

This new driver also introduces many other improvements:

- Increased accuracy in reporting Frames Per Second when in *Balanced* or *Power Saving* mode
- Significant increase in MSAA performance when using DX12* or Vulkan*
- Enhanced performance in HEVC/H.265 video playback on Intel® 7th Gen Core processors or higher
- Improvements in the Intel® Media SDK (MSDK), leading to better encoding quality across dependent media apps such as PowerDirector*, MAGIX*, etc.

Check out gameplay.intel.com, where you'll find recommended game settings for many of your favorite PC games.

Install the [Intel® Driver & Support Assistant](#) (previously called Intel® Driver Update Utility), which now automatically checks for drivers on a regular basis and can provide notifications when new drivers are available.

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

- 8th Generation Intel® Core processors with Intel® UHD Graphics 610, 620, 630.
- 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 (10.24.00.01)
- Intel® Media SDK Runtime
- Intel® OpenCL* Driver
- Intel® Graphics Control Panel
- Vulkan* Runtime Installer

Operating System Support

On 8th Generation Intel® Core processors, 7th Generation Intel® Core processors, 6th Generation Intel® Core and Intel® Mobile Xeon processors and related Pentium/Celeron:

- Microsoft Windows® 10 64-bit

NEW FEATURES:

DX11* shader caching feature: Provides load time and playability improvements across multiple games
Updated control panel to showcase the latest games optimized for Intel® Graphics
DX11* performance improvements, improving CPU usage

KEY ISSUES FIXED:

Intermittent crashes or hangs may occur in The Surge*, Rise of the Tomb Raider*, SOMA*, SiSoft Sandra Benchmark*, Handbrake* (during AVC/HEVC transcode), or during playback of 3D video
Graphics anomalies may be observed in Civilization 6* (DX11*), Forza 7* (DX12*), Talos Principle* (DX12*), and in Sony Catalyst Edit* during playback of video clips
Intermittent crashes may be observed if 2 or more virtual displays are active
Screen flickering may be observed when system resumes from standby
After waking from sleep while connected to a KVM* switch, display may appear blank
The Windows 10* Camera* application may crash when attempting to capture an image on some 7 th Generation Intel® Core processors

SUPPORTED PRODUCTS:

HARDWARE

All platforms with the following configurations are supported:

Intel® Graphics ¹	DirectX* ²	OpenGL*	OpenCL*	Vulkan*	Intel® Quick Sync Video
8th Generation Intel® Core™ processors with Intel® UHD Graphics 610/620/630	12	4.5	2.1	1.0.62.0	Yes
7th Generation Intel® Core™ processors with Intel® Iris® Plus Graphics 640/650	12	4.5	2.1	1.0.62.0	Yes

7th Generation Intel® Core™ processors with Intel® HD Graphics 610/615/620/630	12	4.5	2.1	1.0.62.0	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P630	12	4.5	2.1	1.0.62.0	Yes
Pentium Processors with Intel® HD Graphics 610	12	4.5	2.1	1.0.62.0	Yes
6th Generation Intel® Core™ processors with Intel® Iris® Pro Graphics 580	12	4.5	2.0	1.0.62.0	Yes
6th Generation Intel® Core™ processors with Intel® Iris® Graphics 540/550	12	4.5	2.0	1.0.62.0	Yes
6th Generation Intel® Core™ processors with Intel® HD Graphics 520/530	12	4.5	2.0	1.0.62.0	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P530	12	4.5	2.0	1.0.62.0	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® Iris Pro Graphics P580	12	4.5	2.0	1.0.62.0	Yes
Intel® Core™ M processors with Intel® HD Graphics 515	12	4.5	2.0	1.0.62.0	Yes
Pentium® and Celeron® Processors with Intel® HD Graphics 500/505	12	4.5	1.2	1.0.62.0	Yes
Pentium Processors with Intel® HD Graphics 510	12	4.5	1.2	1.0.62.0	Yes

Note:

1. If you are uncertain of which Intel® processor is in your computer, Intel® recommends using the [Intel Processor Identification Utility](#) or Install the [Intel® Driver & Support Assistant](#) (previously called 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

- Graphics anomalies may be observed in Titanfall® 2 (6th Gen Intel® Core™ Only), Paragon*, Elex*, Wolfenstein II: The New Colossus*, Assassin's Creed® Origins, Star Wars™ Battlefront II, and other games
- Intermittent crashes or hangs may occur in Forza Motorsport 7* (if run on systems with less than 12GB RAM), Tom Clancy's: The Division* (DX12*), The Guild 3*, The Evil Within 2* (when changing resolutions), DaVinci Resolve*, and other games or applications

More on Intel® Core™ processors

For more information on the Intel® Core™ processor family, Intel® Xeon® processor E3 family, and 8th Generation Intel® Core processors, please visit:

[Intel® 8th 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® UHD 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.