Release Notes

DRIVER VERSION: 25.20.100.6444

DATE: November 28th, 2018

HIGHLIGHTS:

- Automatic Game Tuning Feature Updates
- Intel's First Windows* DCH Driver
- Launch Driver Games
 - Artifact*
 - Farming Simulator 2019*

Introducing Intel's Windows DCH Driver. Intel and Microsoft have worked together to make this transition as seamless as possible. There shouldn't be any impact to your everyday experience. We recommend getting the graphics driver updates directly from your computer manufacturer. Updates for your Intel® Graphics driver can also be downloaded automatically and installed through Windows Update. Alternatively, you could use the Intel® Driver and Support Assistant (iDSA) tool to automatically scan your computer for the latest Graphics driver from Intel. For more information on Intel® Graphics Controllers supported.

This Windows DCH driver requires an internet connection for Windows to automatically download the Intel Graphics Control Panel from the Microsoft* Store.

Earlier this year, Intel[®] introduced a feature in the Graphics Control Panel to automatically tune game settings for Intel[®] Graphics on 6th Gen Core Processors or higher (including 8th Gen Core Processors with Radeon RX Vega M Graphics). Today, we are adding new capabilities and supporting more games!

What's new?

- "Rescan" button to detect newly installed games without having to restart the system
- 12 newly supported games

Supported Games	New Additions		
 <u>American Truck Simulator</u>* <u>Battlefield 1</u>* <u>Battlefield 4</u>* <u>Call of Duty WWII</u>* <u>Destiny 2</u>* <u>DOTA 2</u>* <u>Grand Theft Auto V</u>* <u>League of Legends</u>* <u>Overwatch</u>* <u>World of Tanks</u>* 	 Fallout 4* Far Cry 5* FIFA 18* Paladins* Path of Exile* The Sims 4* Smite* Borderlands 2* Euro Truck Simulator 2* PLAYERUNKNOWN'S BATTLEGROUNDS* Rocket League* The Witcher 3* 		

Gear up for a card game battle across three boards in <u>Artifact</u>*, experience spells and swords where heroes collide for the Eternal Throne in <u>Eternal Card Game</u>, or become the next <u>Farming Simulator 2019</u>* champion on Intel[®] UHD Graphics 620 or better.

Get ready for intense combat driving in **Grip Combat Racing** with Intel[®] Iris Pro Graphics or better.

Be sure to check out <u>gameplay.intel.com</u>, where you'll find recommended game settings for many more of your favorite PC games.

Get a front row pass to gaming deals, contests, betas, and more with Intel® Software Gaming Access.

Recently, Intel[®] Graphics Compiler switched from SPIR* to SPIR-V* as an intermediate representation for OpenCL[™] workloads. This shows our commitment to support Khronos* open standards. To know more about the benefits of using SPIR-V in OpenCL, <u>learn more</u>.

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:

- 9th Generation Intel[®] Core processors, related Pentium[®]/Celeron[®] Processors, and Intel[®] Xeon processors, with Intel[®] UHD Graphics 630.
- 8th Generation Intel[®] Core processors, related Pentium[®]/ Celeron[®] Processors, and Intel[®] Xeon processors, with Intel[®] Iris[®] Plus Graphics 655 and Intel[®] UHD Graphics 610, 620, 630, P630.
- 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 and Intel[®] UHD Graphics 600, 605 Pentium[®]/Celeron[®] Intel UHD 600, 605

CONTENTS OF THE PACKAGE:

- Intel[®] Graphics Driver
- Intel[®] Display Audio Driver (10.26.00.03)
- Intel[®] Media SDK Runtime
- Intel[®] OpenCL* Driver
- Intel[®] Graphics Control Panel
- Vulkan* Runtime Installer (1.1.82.1)

Operating System Support

On 9th Generation Intel[®] Core processors, 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:

Automatic Game Tuning Feature Updates.

Reduces RAM consumption when using OpenGL.

Improves battery life when using Display Refresh Rate Switching (DRRS) on supported monitors.

Vulkan Driver Stability Improvements.

KEY ISSUES FIXED:

Minor graphics anomalies may be observed in <u>NBA 2K19</u>*, FIFA 19* (DX12), <u>Assassin's Creed: Origins</u>*.

Intermittent crashes or hangs may occur in <u>Call of Duty: Infinite Warfare</u>*, FIFA 19* (DX12), <u>World of Warcraft: Battle</u> for Azeroth* (DX12)

Windows Advanced Display Settings may show incorrect bit-depth on some primary monitors which leads to inaccurate colors.

Custom Resolution 980 x 588 @ 60 Hz may not get added in capable resolutions.

Three or more virtual displays may not be supported in Extended Configuration (ED) mode.

Intermittent crashes or hangs may occur when using Miracast* in extended mode on Intel® Pentium® Silver and Intel® Celeron® Processors

Minor performance regression may be observed in 100.6373 in <u>Battlefield IV</u>* and <u>Dragon Age Inquisition</u>*.

SUPPORTED PRODUCTS:

HARDWARE

All platforms with the following configurations are supported:

Intel® Graphics ¹	DirectX* ²	OpenGL*	OpenCL*	Vulkan*	<u>Intel®</u> <u>Quick</u> <u>Sync</u> <u>Video</u>
9 th Generation Intel® Core™ processors with Intel® UHD Graphics 630	12	4.5	2.1	1.1.89	Yes
8 th Generation Intel® Core™ processors with Intel® Iris® Plus Graphics 655	12	4.5	2.1	1.1.89	Yes
8 th Generation Intel® Core™ processors with Intel® UHD Graphics 610/620/630/P630	12	4.5	2.1	1.1.89	Yes
7 th Generation Intel® Core™ processors with Intel® Iris® Plus Graphics 640/650	12	4.5	2.1	1.1.89	Yes
7 th Generation Intel [®] Core [™] processors with Intel [®] HD Graphics 610/615/620/630	12	4.5	2.1	1.1.89	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P630	12	4.5	2.1	1.1.89	Yes
Pentium Processors with Intel® HD Graphics 610	12	4.5	2.1	1.1.89	Yes
6 th Generation Intel® Core™ processors with Intel® Iris® Pro Graphics 580	12	4.5	2.0	1.1.89	Yes
6 th Generation Intel® Core™ processors with Intel® Iris® Graphics 540/550	12	4.5	2.0	1.1.89	Yes
6 th Generation Intel® Core [™] processors with Intel® HD Graphics 520/530	12	4.5	2.0	1.1.89	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® HD Graphics P530	12	4.5	2.0	1.1.89	Yes
Intel® Xeon® processor E3-1500M v5 family with Intel® Iris Pro Graphics P580	12	4.5	2.0	1.1.89	Yes
Intel® Core™ M processors with Intel® HD Graphics 515	12	4.5	2.0	1.1.89	Yes
Pentium® and Celeron® Processors with Intel® HD Graphics 500/505/510	12	4.5	1.2	1.1.89	Yes
Pentium [®] and Celeron [®] Processors with Intel [®] UHD Graphics 600/605	12	4.5	1.2	1.1.89	Yes

Note:

- If you are uncertain of which Intel[®] processor is in your computer, Intel[®] recommends using the <u>Intel Processor</u> <u>Identification Utility</u> or Install the <u>Intel[®] Driver & Support Assistant</u> (previously called Intel[®] Driver Update Utility) to identify your Intel[®] processor.
- 2. In the Intel® Iris®, UHD, 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

- Intermittent crashes or hangs may occur in Assassins Creed: Odyssey*, Battlefield V*, Call of Duty Black Ops IV*, and other games.
- Minor graphics anomalies may be observed in Project Cars 2* (with Anti-aliasing enabled), and other games.
- The optimization checkbox for gaming tuning in the Graphics Control Panel does not refresh after restoring settings in some systems.

More on Intel[®] Core[™] processors

For more information on the Intel[®] Core[™] processor family, Intel[®] Xeon[®] processor E3 family, and 9th Generation Intel[®] Core processors, please visit:

Intel® 9th 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 <u>feedback</u> on any issues you discover and suggestions for future driver releases. If you have an issue to submit, **please follow the guidance found here** <u>Default level information for reporting Graphics issues</u>.

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