

# Release Notes

BETA VERSION: 27.20.100.9021

DATE: November 13, 2020

## HIGHLIGHTS:

- **Launch driver for Halo: The Master Chief Collection\***

## GAMING HIGHLIGHTS<sup>\*1</sup>:

- Gear up to save the universe from powerful foes armed with destructive technology in **Halo: The Master Chief Collection\*** on Iris® Xe graphics or better.

Get a front row pass to gaming deals, contests, betas, and more with [Intel Software Gaming Access](#).

\*2 Are you still experiencing an error preventing the driver update? Look here for [why and a solution](#).

## KEY ISSUES FIXED:

- Red Dead Redemption 2 Application window automatically flickering and resizing during launch.

This document provides information about Intel Graphics Driver for:

- 11th Generation Intel® Core™ Processors with Intel® Iris® Xe Graphics (Tiger Lake)
- 10<sup>th</sup> Generation Intel® Core™ processors with Intel Iris Plus graphics (Ice Lake)
- 10<sup>th</sup> Generation Intel® Core™ processors with Intel UHD Graphics (Comet Lake)
- 9<sup>th</sup> Generation Intel® Core™ processors, related Pentium®/Celeron® processors, and Intel Xeon® processors, with Intel UHD Graphics 630
- 8<sup>th</sup> 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.
- 7<sup>th</sup> 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.
- 6<sup>th</sup> Generation Intel® Core™, 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
- Intel® Core™ Processors with Intel® Hybrid Technology (Lakefield)

## CONTENTS OF THE PACKAGE:

- Intel Graphics Driver
- Intel Audio Driver 10.26.0.9 (6<sup>th</sup> Gen and related Pentium Silver and Celeron processors)
- Intel Audio Driver 10.27.0.9 (7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup> Gen)
- Intel Audio Driver 11.1.0.17 (10<sup>th</sup> Gen with Iris Plus Graphics)
- Intel Audio Driver 11.2.0.4 (Intel® Core™ Processors with Intel® Hybrid Technology)
- Intel Media SDK Runtime (10.0.0.042)
- Intel Graphics Compute Runtime for OpenCL™ Driver
- Intel Graphics Command Center
- Vulkan\*<sup>3</sup> Runtime Installer
- Intel Graphics Installer (1.7.125)
- OneAPI Level Zero Loader and Validation Layer
- Intel® Graphics Compute Runtime for OneAPI Level Zero specification

## OPERATING SYSTEM SUPPORT:

On 11th Generation Intel Core, 10<sup>th</sup> Generation Intel Core, 9<sup>th</sup> Generation Intel Core, 8<sup>th</sup> Generation Intel Core, 7<sup>th</sup> Generation Intel Core, and 6<sup>th</sup> Generation Intel Core processors, Intel Xeon processors for mobile workstations and related Pentium/Celeron processors:

- Microsoft Windows® 10-64 - Fall Creators Update (1709)
- Microsoft Windows® 10-64 - April 2018 Update (1803)
- Microsoft Windows® 10-64 - October 2018 Update (1809)
- Microsoft Windows® 10-64 - May 2019 Update (1903)
- Microsoft Windows® 10-64 - November 2019 Update (1909)
- Microsoft Windows® 10-64 - May 2020 Update (2004)
- Microsoft Windows® 10-64 - October 2020 Update (20H2)

## KNOWN ISSUES:

- Iris Xe Graphics: Intermittent crash or hang may be seen Hunt: Showdown, Tom Clancy's Rainbow Six Siege\* (DX11), Dark Souls III, Tom Clancy's The Division 2\* (DX12), Horizon Zero Dawn\* (DX12), Baldur's Gate 3 (Vulkan), Assassin's creed Valhalla\* (DX12), Dirt 5\* (DX12), Watch Dogs: (Legion), Tom Clancy's Ghost Recon Breakpoint\* (DX11), Call of Duty: Modern Warfare\* (DX12), Call of Duty: Black Ops Cold War\* (DX12).
- Iris Xe Graphics: Minor graphic anomalies may be seen in Shadow of the Tomb Raider\* (DX12) (when Tessellation is ON), Hitman 2\* (DX12), Battlefield V\* (DX12), Red Dead Redemption 2\* (Vulkan), World of Warcraft\*(DX12), Star Wars Battlefront 2\* (DX12).
- Iris Plus Graphics and higher: Minor graphics anomalies may be observed in Mount & Blade II: Bannerlord\* (DX11), Baldur's Gate 3 (Vulkan), Yakuza Like a Dragon, Microsoft Flight Simulator\*.
- Flicker may be observed on external monitor with HDR enabled during system shut down (Iris Xe Graphics).
- Panel Self Refresh may be disabled while unplugging or plugging AC power during video playback (Iris Xe Graphics).
- Minor Graphic Anomalies may be seen in ARK: Survival Evolved\* (DX11) and Call of Duty: Modern Warfare\* (DX12) when Image Sharpening enabled in Intel Graphics Command Center on Iris Xe graphics.

## SUPPORTED PRODUCTS:

### HARDWARE

All platforms with the following configurations are supported:

Intel Graphics <sup>1</sup>	DirectX*4	OpenGL*	OpenCL	Vulkan*	Intel Quick Sync Video
11 <sup>th</sup> Generation Intel Core processors with Intel® Iris® Xe Graphics	12	4.6	3.0 <sup>1</sup>	1..2	Yes
10 <sup>th</sup> Generation Intel Core processors with Intel Iris Plus Graphics	12	4.6	2.1	1..2	Yes
10 <sup>th</sup> Generation Intel Core processors with Intel UHD Graphics	12	4.6	2.1	1.2	Yes
9 <sup>th</sup> Generation Intel Core processors with Intel UHD Graphics 630	12	4.6	2.1	1.2	Yes
8 <sup>th</sup> Generation Intel Core processors with Intel Iris Plus Graphics 655	12	4.6	2.1	1.2	Yes
8 <sup>th</sup> Generation Intel Core processors with Intel UHD Graphics 610/620/630/P630	12	4.6	2.1	1.2	Yes
7 <sup>th</sup> Generation Intel Core processors with Intel Iris Plus Graphics 640/650	12	4.6	2.1	1.2	Yes
7 <sup>th</sup> Generation Intel Core processors with Intel HD Graphics 610/615/620/630	12	4.6	2.1	1.2	Yes
Intel Xeon processor E3-1500M v5 family with Intel HD Graphics P630	12	4.6	2.1	1.2	Yes
Pentium Processors with Intel HD Graphics 610	12	4.6	2.1	1.2	Yes
6 <sup>th</sup> Generation Intel Core processors with Intel Iris Pro Graphics 580	12	4.6	2.0	1.2	Yes
6 <sup>th</sup> Generation Intel Core processors with Intel Iris Graphics 540/550	12	4.6	2.0	1.2	Yes
6 <sup>th</sup> Generation Intel Core processors with Intel HD Graphics 520/530	12	4.6	2.0	1.2	Yes
Intel Xeon processor E3-1500M v5 family with Intel HD Graphics P530	12	4.6	2.0	1.2	Yes
Intel Xeon processor E3-1500M v5 family with Intel Iris Pro Graphics P580	12	4.6	2.0	1.2	Yes
Intel Core M processors with Intel HD Graphics 515	12	4.6	2.0	1.2	Yes
Pentium and Celeron processors with Intel HD Graphics 500/505/510	12	4.6	1.2	1.2	Yes
Pentium and Celeron processors with Intel UHD Graphics 600/605	12	4.6	1.2	1.2	Yes
Intel® Core™ Processors with Intel® Hybrid Technology	12	4.6	2.1	1.2	Yes

Note<sup>1</sup>: "Product is based on a published Khronos Specification and has been submitted to, and expected to pass, the Khronos Conformance Process. Current conformance status can be found at [www.khronos.org/conformance](http://www.khronos.org/conformance)."

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.

## More on Intel Core Processors

For more information on the Intel Core processor family, Intel Xeon E processor family, and 11<sup>th</sup> Generation Intel Core processors, please visit:

[Intel 11th 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>

Be sure to check out [gameplay.intel.com](http://gameplay.intel.com), where you'll find recommended in-game settings for your Intel Graphics system for many more of your favorite games.

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](#).

Intel, the Intel logo, Celeron, Intel Core, Iris, Pentium and Xeon are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

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

\*<sup>1</sup> Intel Labs conducts independent testing of supported titles on Intel platforms to ensure playability. Please refer to publisher system requirements to ensure compatibility with your system.

\*<sup>2</sup> Graphics Driver Smart Installer Enhancement allows end-users to upgrade systems with OEM DCH drivers to newer Intel generic DCH drivers. OEM customizations are preserved during this upgrade process, in accordance with Microsoft\* DCH driver design principles (refer to Microsoft documentation, "Extension INF Publishing Whitepaper" to learn more). The installer will continue to restrict OEM non-DCH to Intel Generic non-DCH upgrades as well as OEM non-DCH to Intel Generic DCH driver upgrades. End-users will continue to be referred to OEM websites.

WARNING: Installing this Intel generic graphics driver will overwrite your Computer Manufacturer (OEM) customized driver. OEM drivers are handpicked, customized, and validated to resolve platform-specific issues, enable features and enhancements, and improve system stability. The generic driver's intention is to temporarily test new features, game enhancements, or check if an issue is resolved. Once testing is complete Intel advises reinstalling the OEM driver until they validate it and release their own version.

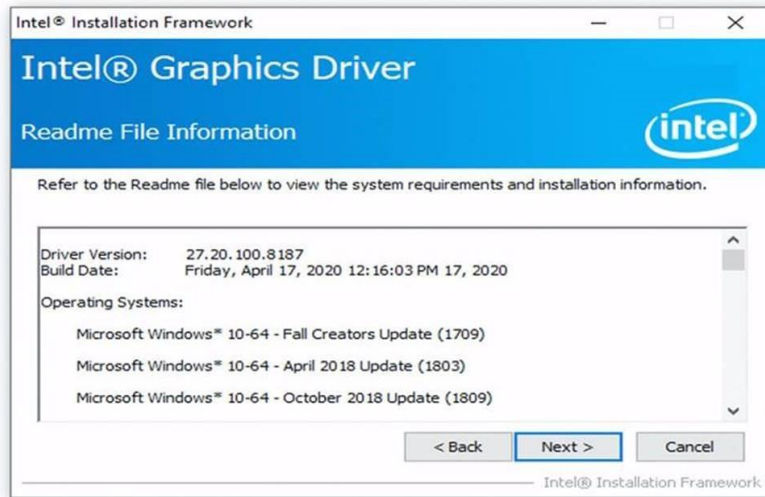
Any graphics issues found using Intel generic graphics drivers should be [reported directly to Intel](#). Corporate customers should always use OEM drivers and report all issues through the vendor they purchased the platforms and support through.

\*<sup>3</sup> Product is conformant with the Vulkan\* 1.2 specification. Vulkan\* and the Vulkan\* logo are registered trademarks of the Khronos Group Inc\*.

\*<sup>4</sup> In the Intel Graphics Command Center (System > Driver), the 'Microsoft DirectX\* version refers to the operating system's 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.

\*5 Starting with driver 27.20.100.8190, there will no longer be an Intel Graphics Driver entry in Add or Remove Programs as recommended by Microsoft. Additionally, Graphics and Audio drivers must be uninstalled separately and only from Device Manager, as shown in the screenshots below.

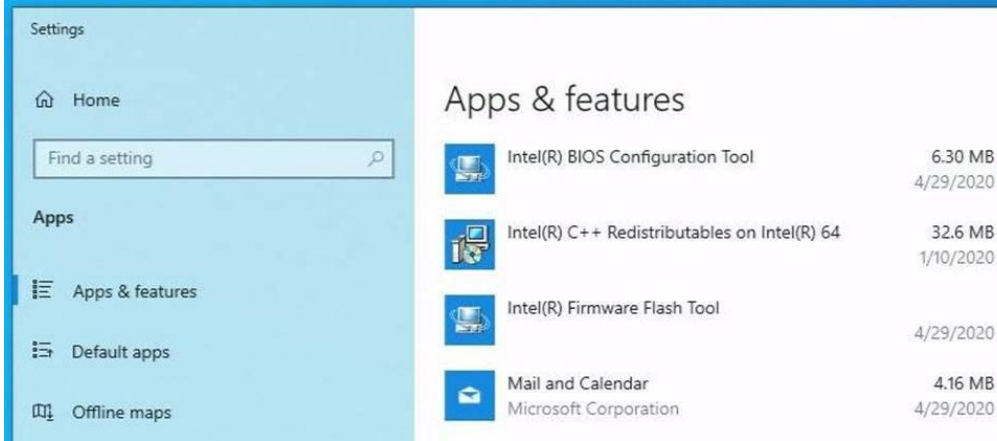
## Installation Process



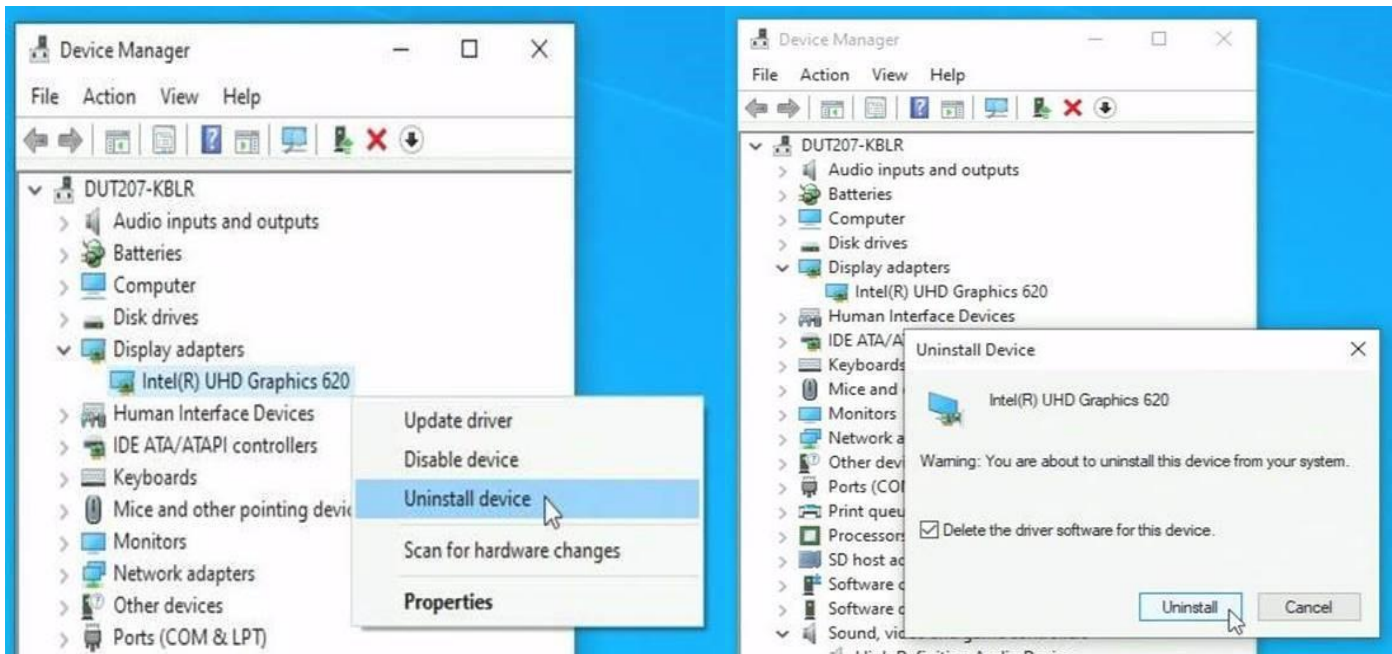
## Intel Graphics and Display Audio Drivers Installed



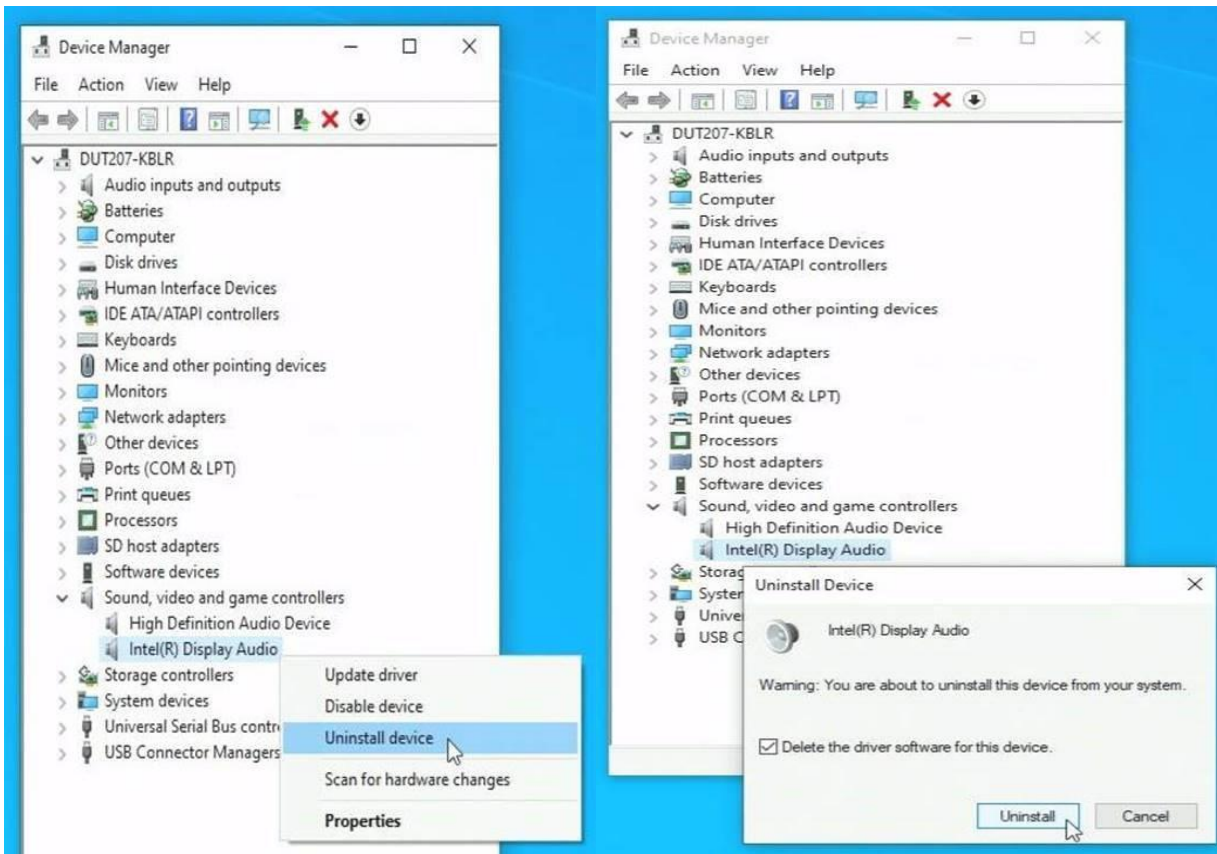
## Intel Graphics drivers from 27.20.100.8190 do not create "Add or remove programs" entry



## Uninstalling Intel Graphics Driver



## Uninstalling Intel Display Audio Driver



## Intel Graphics and Display Audio Drivers Uninstalled

