HIGHLIGHTS:

- Performance Optimizations for Minecraft Dungeons*, Darksiders Genesis*, Warcraft III: Reforged* on 10th Generation Intel Core processors with Intel® Iris Plus graphics.

GAMING HIGHLIGHTS*:

Leverage your tactical and strategic acumen to conquer daunting challenges in an unforgiving Wild West setting in Desperados III*, explore Western Skyrim and engage in a thrilling new adventure in The Elder Scrolls Online – Greymoor*, battle until you are the last one standing in Shadow Arena*, become a fearsome shark in Maneater*, get ready for a legendary multiplayer experience on Halo 2: Anniversary*, and fight hordes of aliens by yourself or with friends across destructible environments in Deep Rock Galactic* on Intel® Iris Plus graphics or better.

Experience a blend of action and strategy in a sci-fi setting in Disintegration*, make bold, strategic plays and leverage hypernatural powers to emerge victorious in Valorant*, enjoy remastered graphics, music, cinematics and more in Command & Conquer Remastered Collection*, and gear up to experience the pulse-pounding action of Minecraft Dungeons* on Intel® UHD Graphics or better.

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

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

KEY ISSUES FIXED:

- Intermittent hang may be seen when playing Halo 2: Anniversary* Multiplayer, Star Control: Origins* on 10th Generation Intel Core processors with Intel Iris Plus graphics.
- Intermittent crashes may be seen in BeamNG.drive*, Bright Memory* (DX12), Doom Eternal* (Vulkan) on 6th Generation Intel Core processors and higher.
- Screen may flicker for 1 to 3 seconds when resizing the Netflix video playback in Microsoft Edge browser on 10th Generation Intel Core processors with Intel UHD graphics.

This document provides information about Intel Graphics Driver for:

- 10th Generation Intel Core processors with Intel Iris Plus graphics and UHD Graphics.
- 9th Generation Intel Core processors, related Pentium*/Celeron* processors, and Intel Xeon® processors, with Intel UHD Graphics 630.
- 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
CONTENTS OF THE PACKAGE:

- Intel Graphics Driver
- Intel Audio Driver 10.26.0.9 (6th Gen and related Pentium Silver and Celeron processors)
- Intel Audio Driver 10.27.0.9 (7th, 8th, 9th, 10th Gen)
- Intel Audio Driver 11.1.0.16 (10th Gen with Iris Plus Graphics)
- Intel Media SDK Runtime (10.0.0.011)
- Intel Graphics Compute Runtime for OpenCL™ Driver
- Intel Graphics Command Center
- Vulkan* Runtime Installer
- Intel Graphics Installer (1.7.107) *
- OneAPI Level Zero Loader and Validation Layer
- Intel® Graphics Compute Runtime for OneAPI Level Zero specification

Note*
The OneAPI Level Zero Loader relies upon a registry entry to find the path to the Intel® Graphics Compute Runtime driver, which is configured during installation.

A standalone OneAPI Level Zero SDK is not yet available, but the necessary headers and libraries can be downloaded and built from: https://github.com/oneapi-src/level-zero


Note*g
Installer version: 1.7.107. Changes in this installer include:
Intel Display Audio Driver is no longer listed as a component during the Graphics Driver installation in the installation window, but it is being installed in the background and will be visible in the Device Manager.

OPERATING SYSTEM SUPPORT:
On 10th Generation Intel Core, 9th Generation Intel Core, 8th Generation Intel Core, 7th Generation Intel Core, and 6th 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)

KNOWN ISSUES:
- Metro Exodus* (DX12) may fail to launch on 7th Generation Intel Core processors or higher.
- Intermittent crashes may be seen in Tom Clancy's Ghost Recon Breakpoint* (Vulkan), Red Dead Redemption 2* (Vulkan) on 10th Generation Intel Core processors with Intel Iris Plus graphics.
- Intermittent crashes may be seen in Shadow of the Tomb Raider* (DX12), The Surge 2* (Vulkan) on 7th Generation Intel Core processors or higher.
- Crash may be seen while launching Sony Catalyst Production Suite on 10th Generation Intel Core processors.
- Minor graphics anomalies may be observed in Tom Clancy's Rainbow Six Siege* (Vulkan), Battlefield V* (DX12).
- One Piece Pirate Warriors 4* may fail to launch on 10th Generation Intel Core processors with Intel Iris Plus graphics.
**SUPPORTED PRODUCTS:**
**HARDWARE**
All platforms with the following configurations are supported:

<table>
<thead>
<tr>
<th>Intel Graphics¹</th>
<th>DirectX*4</th>
<th>OpenGL*</th>
<th>OpenCL</th>
<th>Vulkan*</th>
<th>Intel Quick Sync Video</th>
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<tbody>
<tr>
<td>10th Generation Intel Core processors with Intel Iris Plus Graphics</td>
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</table>

If you are uncertain of which Intel processor is in your computer, Intel recommends using the [Intel Processor Identification Utility](https://software.intel.com/en-us/intel-processor-identification-utility) or Install the [Intel Driver & Support Assistant](https://www.intel.com/Drivers) (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 10th Generation Intel Core processors, please visit:

- [Intel 10th Generation Core Processors](http://www.intel.com/content/www/us/en/processors/core/core-processor-family.html)
- [Intel Xeon E processor family](http://www.intel.com/content/www/us/en/processors/xeon/xeon-processor-e3-family.html)
- [Intel Graphics](http://www.intel.com/graphics)

Work and play in high resolution with Intel UHD Graphics, Intel Iris Graphics, Intel Iris Plus Graphics, and Intel 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](http://www.intel.com/support/compliance).

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.

*1 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.

*2 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.

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

*4 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.
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](image)

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*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](image)
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