DRIVER VERSION: 31.0.101.4952 Non-WHQL
DATE: November 1, 2023

**GAMING HIGHLIGHTS:**

Intel® Game On Driver support on Intel® Arc™ A-series Graphics for:

- The Talos Principle 2*
- Robocop: Rogue City*
- Star Ocean II R*
- Call of Duty: Modern Warfare III*
- Like a Dragon Gaiden: The Man Who Erased His Name*

Game performance improvements versus Intel® 31.0.101.4900 software driver for:

- The Talos Principle 2 (DX12)
  - Up to 19% average FPS uplift at 1440p with High settings
- Returnal (DX12)
  - Up to 53% average FPS uplift at 1080p with Epic Ray Tracing settings

Game performance improvements versus Intel® 31.0.101.4887 software driver for:

- Guild Wars 2 (DX11)
  - Up to 53% average FPS uplift at 1080p with Ultra settings
- Halo: The Master Chief Collection (DX11)
  - Up to 750% average FPS uplift at 1080p with Enhanced settings
- Sid Meier's Civilization V (DX11)
  - Up to 6% average FPS uplift at 1080p with High settings
- Total War: Warhammer (DX11)
  - Up to 10% average FPS uplift at 1080p with Ultra settings
- Lost Ark (DX11)
  - Up to 15% average FPS uplift at 1080p with Very High settings
- Warhammer: Vermintide 2 (DX11)
  - Up to 16% average FPS uplift at 1080p with Extreme settings
- Sniper Elite 3 (DX11)
  - Up to 37% average FPS uplift at 1080p with Ultra settings
- World War Z (DX11)
  - Up to 113% average FPS uplift at 1080p with Ultra settings
- Euro Truck Simulator 2 (DX11)
  - Up to 27% average FPS uplift at 1080p with Ultra settings
- Yakuza 0 (DX11)
  - Up to 154% average FPS uplift at 1080p with Ultra settings
- Call of Duty: Infinite Warfare (DX11)
  - Up to 20% average FPS uplift at 1080p with Ultra settings
- Alien: Isolation (DX11)
  - Up to 9% average FPS uplift at 1080p with Ultra settings
• Far Cry Primal (DX11)
  ○ Up to 14% average FPS uplift at 1080p with Ultra settings

• Far Cry 5 (DX11)
  ○ Up to 14% average FPS uplift at 1080p with Ultra settings

• Far Cry New Dawn (DX11)
  ○ Up to 11% average FPS uplift at 1080p with Ultra settings

**KNOWN ISSUES:**

**Intel® Arc™ Graphics Products:**
- Ghostrunner 2* (DX11) may experience sporadic application crash during gameplay.
- Total War: PHARAOH* (DX11) may exhibit corruption after changing resolution in game on certain displays.
- Starfield* (DX12) may exhibit corruption when using Dynamic Resolution Scaling. A workaround is to change the Render Resolution Scale slider value.
- Dead by Daylight* (DX11) may experience an application crash during gameplay.
- Topaz Video AI* may experience errors when using some models for video enhancement.

**Intel® Iris™ Xe MAX Graphics Products:**
- Driver installation may not complete successfully on certain notebook systems with both Intel® Iris™ Xe + Iris™ Xe MAX devices. A system reboot and re-installation of the graphics driver may be required for successful installation.

**INTEL® ARC™ CONTROL KNOWN ISSUES:**
- Using Arc Control Studio capture with certain games may incorrectly generate multiple video files.
- The “Connector” type in the Display page may incorrectly show DP* when using an HDMI* display connection.
- May observe “stream has already ended” pop-up after the power events with Capture/Highlights/Broadcast toggle on.
- Arc Control may not retain overall application settings in Overlay mode after system reboot. A workaround is to use Desktop mode of Arc Control.

**Intel® Arc™ Control Performance Tuning (BETA):**
- Intel® Arc™ Control Performance Tuning is currently in Beta. As such, performance and features may behave unexpectedly. Intel® will continue to refine the Performance Tuning software in future releases.

**NOTES:**
- Take your system lighting to the next level with Intel® Arc™ RGB Controller. Intel® Arc™ RGB Controller was custom designed to allow users to harness 90 individually addressable LEDs on Intel® Arc™ A770 Graphics Limited Edition cards. Intel® Arc™ RGB Controller is available for download [here](#).
  ○ Intel® and Cooler Master* collaborated on the creation of this software.
  ○ For more information on how to enable the RGB lighting for your Intel® Arc™ A770 Graphics Limited Edition card, see the [Intel® Arc™ A-Series Graphics – Desktop Quick Start Guide](#).
CONTENTS OF THE PACKAGE:

- Intel® Graphics Driver
- Intel® Media SDK Runtime (21.0.1.35)
- Intel® oneVPL GPU Runtime (21.0.2.9)
- Intel® Graphics Compute Runtime for OpenCL® Driver
- Vulkan*3 Runtime Installer
- Intel® Graphics Driver Installer (1.0.820.6)
- oneAPI Level Zero Loader and Validation Layer
- Intel® Graphics Compute Runtime for OneAPI Level Zero specification
- Intel® Arc™ Control installer (1.73.5335.2)
- Intel® Driver Support Assistant

OPERATING SYSTEM SUPPORT:

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<tr>
<td>14th Generation Intel Core Processors with Intel UHD Graphics (Codename Raptor Lake Refresh)</td>
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<td>Intel Iris Xe Discrete Graphics (Codename DG1)</td>
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SUPPORTED APIs:

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<tr>
<th>API</th>
<th>Version</th>
<th>Intel Graphics¹</th>
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<tbody>
<tr>
<td>DirectX*</td>
<td>12</td>
<td>11th Generation Intel® Core™ processors and higher</td>
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<tr>
<td>Vulkan*</td>
<td>1.3</td>
<td>11th Generation Intel® Core™ processors and higher</td>
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<tr>
<td>OpenGL*</td>
<td>4.6</td>
<td>11th Generation Intel® Core™ processors and higher</td>
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<tr>
<td>OpenCL*</td>
<td>3.0</td>
<td>11th Generation Intel® Core™ processors and higher</td>
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<tr>
<td>Intel® oneAPI® Level Zero</td>
<td>1.14⁵</td>
<td>11th Generation Intel® Core™ processors and higher</td>
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<tr>
<td>Intel® oneAPI Video Processing Library* GPU RT</td>
<td>2.9</td>
<td>11th Generation Intel® Core™ processors and higher and Xe® Graphics and newer</td>
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If you are uncertain of which Intel processor is in your computer, Intel recommends using the or [Intel Driver & Support Assistant](https://www.intel.com/content/www/us/en/support/home/index.htm) to identify your Intel processor.

**Note:**

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. Are you still experiencing an error preventing the driver update? Look here for [why and a solution](https://www.intel.com/content/www/us/en/support/home/index.htm). 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](https://www.intel.com/content/www/us/en/support/home/index.htm). 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* 1.3 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.

5. Intel® oneAPI Level Zero version is supported on 6th generation Intel® Core™ processors and above. Note that Intel® Atom processors are not supported.

6. [Intel® oneAPI Video Processing Library](https://www.intel.com/content/www/us/en/support/home/index.htm) GPU Runtime* release – more details below
   a. Intel® OneAPI Video Processing Library Specification:
   b. [Upgrading from Intel® Media SDK to Intel® oneAPI Video Processing Library](https://www.intel.com/content/www/us/en/support/home/index.htm)

7. See the [Windows Subsystem for Linux Installation Guide](https://www.intel.com/content/www/us/en/support/home/index.htm) for Windows 10 onwards for more details about how to install a supported Linux distribution.

Notices & Disclaimers

Performance varies by use, configuration and other factors. Learn more on the Performance Index site.

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. No product or component can be absolutely secure. Your costs and results may vary. Intel technologies may require enabled hardware, software or service activation.

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More on Intel Products

For more information on Intel Processors and Intel Graphics, please visit:

Intel® Arc™ Graphics
14th Gen Intel® Core™ Desktop Processors
13th Gen Intel® Core™ Processor Family
12th Gen Intel® Core™ Processors
Intel® Core™ Processor Family
Intel® Xeon® E Processors
Intel® 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.