

**Date:** February 26, 2024

Driver Version: 31.0.101.5333 WHQL

## **Gaming Highlights:**

Intel® Game On Driver support on Intel® Arc™ A-series Graphics and Intel® Core™ Ultra with built-in Intel® Arc™ GPUs for:

- Last Epoch\*
- Sea of Thieves\* DirectX\* 12 Update

Game performance improvements on Intel® Core™ Ultra with built-in Intel® Arc™ GPUs versus Intel® 31.0.101.5252 software driver for8:

- Assassin's Creed Syndicate\* (DXII)
  - o Up to 65% average FPS uplift at 1080p with Medium settings
- Call of Duty: Infinite Warfare\* (DX11)
  - o Up to 17% average FPS uplift at 1080p with Normal settings
- Divinity Original Sin 2\* (DX11)
  - o Up to 25% average FPS uplift at 1080p with Medium settings
- Far Cry 5\* (DX11)
  - o Up to 8% average FPS uplift at 1080p with Normal settings
- Halo: The Master Chief Collection\* (DX11)
  - o Up to 19% average FPS uplift at 1080p with Original settings
- It Takes Two\* (DX11)
  - o Up to 24% average FPS uplift at 1080p with Medium settings
- Just Cause 3\* (DX11)
  - o Up to 18% average FPS uplift at 1080p with Medium settings
- Just Cause 4\* (DXII)
  - o Up to 155% average FPS uplift at 1080p with Medium settings
- Palworld\* (DX11)
  - o Up to 14% average FPS uplift at 1080p with Medium settings
- Rise of the Tomb Raider\* (DX11)
  - o Up to 9% average FPS uplift at 1080p with Medium settings
- Rust\* (DX11)
  - o Up to 9% average FPS uplift at 1080p with Medium settings
- SCUM\* (DXII)
  - o Up to 6% average FPS uplift at 1080p with Medium settings
- Sid Meier's Civilization VI\* (DX11)
  - o Up to 27% average FPS uplift at 1080p with Medium settings
- Snowrunner\* (DXII)
  - o Up to 49% average FPS uplift at 1080p with Medium settings
- Warframe\* (DX11)
  - o Up to 7% average FPS uplift at 1080p with Medium settings
- XCOM 2\* (DX11)
  - o Up to 8% average FPS uplift at 1080p with Medium settings

#### **Known Issues:**

#### Intel® Arc™ A-Series Graphics Products:

Topaz Video Al\* may experience errors when using some models for video enhancement.

#### Intel® Core™ Ultra with built-in Intel® Arc™ GPUs:

- Diablo 4\* (DX12) may exhibit corruption on the terrain during gameplay.
- Uncharted: Legacy of Thieves Collection\* (DX12) may experience application crash after loading into gameplay.
- Autodesk Maya\* may experience an application crash while running SPECAPC\* benchmark.
- Blender\* may experience an application crash while rendering some scenes on certain system memory configurations.
- Topaz Video Al\* may experience errors when using some models for video enhancements.
- Serif Affinity Photo 2\* may experience an application crash while running benchmark.
- Procyon Al\* may experience an application crash while running benchmark with precision float32.

#### Intel® Core™ Processor (12th-14th Generation) Products:

Dragon Quest X Online\* (DX9) may experience sporadic application crash during gameplay.

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>.

## Intel® Arc™ Control Known Issues:

- The "Connector" type in the Display page may incorrectly show DP\* when using an HDMI\* display connection.
- Arc Control Studio capture recording file may become corrupted when the mouse cursor is enabled during HDR capture.

#### 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 to download here.
  - o Supported on Intel® Arc™ A770 Graphics Limited Edition on Windows®10 and Windows®11.
  - o Intel® and Cooler Master\* collaborated on the creation of this software.
  - o 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.



# **Driver Package Contents:**

- Intel® Graphics Driver
- Intel® Media SDK Runtime (21.0.1.35)
- Intel® oneVPL GPU Runtime (21.0.2.10)
- Intel® Graphics Compute Runtime for OpenCL\* Driver
- Vulkan\*3 Runtime Installer
- Intel® Graphics Driver Installer (1.0.854.9)
- oneAPI Level Zero Loader and Validation Layer
- Intel® Graphics Compute Runtime for OneAPI Level Zero specification
- Intel® Arc™ Control installer (1.75.5430.1)
- Intel® Driver Support Assistant

# **Supported APIs:**

If you are uncertain of which Intel® processor is in your computer, Intel recommends using the Intel® Driver & Support Assistant to identify your Intel processor.

API	Version	Intel Graphics <sup>1</sup>		
DirectX*4	12	11th Generation Intel® Core™ processors and higher		
Vulkan* <sup>3</sup>	1.3	11th Generation Intel® Core™ processors and higher		
OpenGL*	4.6	11th Generation Intel® Core™ processors and higher		
OpenCL*	3.0	11th Generation Intel® Core <sup>™</sup> processors and higher		
Intel® oneAPI*5Level Zero	1.155	11th Generation Intel® Core <sup>™</sup> processors and higher		
Intel® oneAPI Video Processing Library*6GPU RT	2.10	11th Generation Intel® Core™ processors and higher and Xe Graphics and newer		



# **Operating System Support:**

Intel Graphics <sup>1</sup>	Microsoft Windows® 11 64- bit October 2023 Update (23H2)	Microsoft Windows® 11 64- bit September 2022 Update (22H2)	Microsoft Windows® 11 64-bit October 2021 Update (21H2)	Microsoft Windows® 10 64-bit October 2022 Update (22H2)
Intel® Core™ Ultra with built-in Intel® Arc™ GPUs and Intel® Graphics (Codename Meteor Lake)	✓	<b>√</b>	<b>✓</b>	✓
Intel® Arc™ A770, A750, A580, A380, A310, A770M, A730M, A570M, A550M, A530M, A370M and A350M Graphics (Codename Alchemist)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
14th Generation Intel Core Processors with Intel UHD Graphics (Codename Raptor Lake Refresh)	<b>✓</b>	<b>√</b>	✓	<b>√</b>
13th Generation Intel Core Processors with Intel UHD Graphics (Codename Raptor Lake-S, Raptor Lake-HX, Raptor Lake-H, Raptor Lake-P, Raptor Lake-U)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
12th Generation Intel Core Processors with Intel Iris Xe Graphics and Intel UHD Graphics (Codename Alder Lake-H, Alder Lake-P, Alder Lake-U, Alder Lake-S, Alder Lake-HX, Alder Lake-N)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
11th Generation Intel Core Processors with Intel Iris Xe Graphics and Intel UHD Graphics (Codename Tiger Lake, Tiger Lake–H, Rocket Lake)	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
Intel Iris X <sup>e</sup> Discrete Graphics (Codename DG1)	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>

## **More on Intel Products:**

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

- Intel® Core™ Ultra Processors Family
- Intel® Arc<sup>™</sup> Graphics Overview
- Intel® Arc™ Pro Graphics for Workstations
- 14th Gen Intel® Core™ Desktop Processors
- 13th Gen Intel® Core™ Processor Family
- <u>12th Gen Intel® Core™ Processors</u>
- Intel® Core™ Processor Family
- Intel® Xeon® E Processors
- Intel® Graphics

## **Notes & Disclaimers:**

No product or component can be absolutely secure.

Your costs and results may vary.

Intel technologies may require enabled hardware, software or service activation.

- 1. Intel Labs conducts independent testing of supported software on Intel platforms to ensure compatibility. Please refer to software vendor 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. 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 <u>reported directly to Intel</u>. 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 6<sup>th</sup> generation Intel® Core™ processors and above. Note that Intel® Atom processors are not supported.
- 6. Intel® oneAPI Video Processing Library GPU Runtime\* release more details below
  - $a. \quad Intel {}^{@}\ one API\ Video\ Processing\ Library\ Specification: $\underline{https://spec.oneapi.io/versions/latest/elements/oneVPL/source/index.html}$$
  - b. Upgrading from Intel® Media SDK to Intel® oneAPI Video Processing Library
- 7. See the <u>Windows Subsystem for Linux Installation Guide</u> for Windows 10 onwards for more details about how to install a supported Linux distribution.
- 8. Game performance testing from Intel as of February 23rd, 2024, using the following configuration: MSI Prestige 16 AI Evo B1MG-005US laptop Intel® Core™ Ultra 7 155H, 32GB LPDDR5 @ 6400MHz, OS: Microsoft Windows 11 Pro 22631.3155, Intel® Arc™ Graphics, Graphics Driver: 31.0.101.5252 WHQL, 31.0.101.5333 WHQL, Motherboard BIOS: E15A1IMS.109. MSI Center user scenario Extreme Performance. Performance may vary.

