

Date: March 28, 2024

Driver Version: 31.0.101.5319 WHQL and 31.0.101.5321 WHQL (24, Q1)

Version Summary:

This document provides information about Intel's **Workstation** Graphics Driver for the Intel® Arc™ Pro A-series GPUs (31.0.101.5319 WHQL) and Built-in Intel® Arc™ Pro GPUs with select Intel® Core™ Ultra H-series Processors (31.0.101.5321 WHQL).

This Intel® Arc™ software package will initiate the installation of the Workstation-focused Intel® Graphics Command Center for the Intel® Arc™ Pro A-series GPUs.

Intel® Graphics Driver package size has temporarily increased due to the inclusion of graphics drivers for the Built-in Intel® Arc™ Pro GPUs with select Intel® Core™ Ultra H-series Processors.

Highlights of this Workstation Driver:

- New ISV application certifications added for Bentley LumenRT* and Bentley iTwin Capture Modeler*.
- New 2024 versions of Autodesk* software added to ISV certifications.
- Enhanced DirectX* API optimizations that help improve performance for compatible individual applications and the SPECviewperf*
 2020 v3.1 benchmark.

This workstation driver release builds upon other recent driver updates that include:

- December 2023 Fixes intermittent system hang issue when exiting Bentley LumenRT*.
- October 2023 Fixes to RFO (Autodesk Revit*) benchmark. Fixes to Adobe After Effects*, Autodesk Maya*, Autodesk VRED* and Blender*.
- June 2023 User experience improvements for Adobe Premiere Pro*, Blackmagic DaVinci Resolve*, Dassault Systèmes CATIA*, and Blender*.

ISV Certifications for Intel® Arc™ Pro A-Series GPUs:

- Autodesk 3ds Max* 2023, 2024
- Autodesk AutoCAD* 2023, 2024
- Autodesk Fusion 360* 2023, 2024
- Autodesk Inventor* 2023, 2024
- Autodesk Maya* 2023, 2024
- Bentley MicroStation* 10.17.00.209
- Bentley iTwin Capture Modeler* 24.0.0.270 (Previously ContextCapture*)
- Bentley LumenRT* 16.17.60.73
- Dassault Systèmes SOLIDWORKS* 2023 SP2
- Nemetschek Vectorworks* 2023, 2024
- PTC Creo* 8, 9 (System Certification Ready)
- Siemens NX* 2027
- Siemens Solid Edge* 2022, 2023

ISV Certifications for Built-in Intel® Arc™ Pro GPUs with select Intel® Core™ Ultra H-series Processors:

- Autodesk 3ds Max* 2023, 2024
- Autodesk Fusion 360* 2023, 2024 (In progress)
- Autodesk Inventor* 2023, 2024 (In progress)
- Autodesk Maya* 2023, 2024
- Bentley MicroStation* 10.17.00.209
- Bentley iTwin Capture Modeler* 24.0.0.270 (Previously ContextCapture*)
- Bentley LumenRT* 16.17.60.73
- Dassault Systèmes SOLIDWORKS* 2023 SP2 (In progress)
- Nemetschek Vectorworks* 2023, 2024 (In progress)
- PTC Creo* 8, 9 (System Certification in progress)

For further information on more ISV certifications, prior application version support and Intel® Arc™ Pro Graphics, please visit: intel.com/support/CertifiedGraphics

Some certifications currently in progress.

Known Issues:

Intel[®] Arc[™] Pro A-Series Discrete GPUs:

- Topaz Video Al* may experience errors when using certain models for video enhancement.
- Blender* application may experience instability on certain low system memory configurations.

Built-in Intel® Arc™ Pro GPUs with select Intel® Core™ Ultra H-series Processors:

- 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.
- Procyon AI* may experience an application crash while running benchmark with precision float32.

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>.

Driver Package Contents:

- Intel® Integrated FirmWare Image (IFWI) Update for Intel® Arc™ Pro A40, Pro A50 and Pro A60 GPUs
- 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 (1.0.854.9)
- Intel® oneAPI Level Zero Loader and Validation Layer
- Intel® Graphics Compute Runtime for oneAPI Level Zero specification

Product Compatibility:

This graphics driver download is valid for the product(s) listed below:

- Intel® Arc™ Pro A40, Pro A50 and Pro A60 Desktop GPUs
- Intel® Arc™ Pro A30M and Pro A60M Mobile GPUs
- Built-in Intel® Arc™ Pro GPUs with select Intel® Core™ Ultra H-series Processors



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 ¹		
DirectX*4	12	11th Generation Intel® Core™ processors and higher		
Vulkan*³	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™ processors and higher		
Intel® oneAPI*5 Level Zero	1.15 ⁵	11th Generation Intel® Core™ processors and higher		
Intel® oneAPI Video Processing Library*6GPU RT	2.9	11th Generation Intel® Core™ processors and higher and Xe Graphics and newer		

Operating System Support:

Intel Craphical		Microsoft Windows® 10 64-bit		
Intel Graphics ¹	October 2023 Update (23H2)	September 2022 Update (22H2)	October 2021 Update (21H2)	October 2022 Update (22H2)
Intel® Arc™ Pro A60, Pro A60M, Pro A40, Pro A50, and Pro A30M GPUs (Codename Alchemist)	✓	✓	√	✓
Intel® Core™ Ultra with Built-in Intel® Arc™ GPUs (Codename Meteor Lake)	✓	√	√	✓
14th Generation Intel Core Processors with Intel UHD Graphics (Codename Raptor Lake Refresh)	✓	✓	√	✓
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)	√	✓	✓	✓
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)	✓	✓	✓	√
11th Generation Intel® Core™ Processors with Intel UHD Graphics (Codename Rocket Lake)	✓	✓	✓	✓

More on Intel Products:

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

- Intel® Arc™ Pro Graphics for Workstations
- Intel[®] Arc[™] Graphics Overview
- Intel® Core™ Ultra Processors Family
- 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

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
 - 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.
- 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 GPU Runtime* release more details below
 - a. Intel® oneAPI Video Processing Library Specification: https://spec.oneapi.io/versions/latest/elements/oneVPL/source/index.html
 - b. <u>Upgrading from Intel® Media SDK to Intel® oneAPI Video Processing Library</u>
- 7. See the Windows Subsystem for Linux Installation Guide for Windows 10 onwards for more details about how to install a supported Linux distribution.

