



A Guide to Certified Graphics Hardware and Drivers

Graphics cards have always been known as an important Workstation or PC component to help deliver high levels of software viewport and computational performance. For many end users Independent Software Vendor (ISV) graphics certifications are also required to help ensure their critical software runs as expected, as well as the graphics hardware supports specialized product features within the software.

Intel has proudly worked hand-in-hand with hundreds of software companies over the years, and this unmatched experience goes into our professional Intel® Arc™ Pro series GPUs.

This document aims to explain some key certification considerations.

intel.com/support/CertifiedGraphics



This document is valid for the products listed below:

- Select Intel® Core™ Ultra H Processors with Built-In Intel® Arc™ Pro GPUs. (Built-In*)
- Intel® Arc™ Pro A60 Graphics
- Intel® Arc™ Pro A60M Graphics (Mobile)
- Intel® Arc™ Pro A50 Graphics
- Intel® Arc™ Pro A40 Graphics
- Intel® Arc™ Pro A30M Graphics (Mobile)



Certified Graphics Hardware and Drivers

Let's start with what a certification is. Ultimately, it's about confidence in the GPU for critical workloads as deadlines can be missed if the hardware is not right for the software workload, causing it to under perform. By working with the Independent Software Vendor (ISV), we help ensure that all comprehensive testing has been completed and the GPU is approved for the software, with the ISV having final sign off on any tests and validation runs.

It's important to note that the graphics driver package is central to this process. An ISV will provide recommendations on GPU specifications and features, but without a robust and optimized driver the hardware is rarely suitable. The ISV will normally approve a baseline driver version number for use with their software version. As new ISV application releases and major updates appear, the whole certification process typically restarts.

To this point Intel provides a quarterly driver release cadence for their workstation range of GPUs, bringing optimizations and software enhancements to a broad range of evolving tools.

The Two Types of ISV Certifications

There are two key types of ISV certification. The most common is graphics card component certifications (for the GPU and driver only) with the second certification type focusing on a complete system level configuration. An ISV will normally choose what type of certification is relevant to their software, and both types of certifications can be found listed on intel.com/support/CertifiedGraphics.

At Intel, our focus is to help ensure consistency and that the entire workstation GPU range receives the same level of ISV certification support, including mobile and built-in GPUs.

Are Consumer GPUs Certified?

Normally consumer (or gaming) cards are not certified by an ISV for use with their software. The time and resources needed to run a rigorous testing process can be extensive, and to ensure the correct GPUs receive the highest levels of validation the ISV will usually focus on workstation-grade GPUs. This is where choosing the right GPU for the software task is important. Consumer cards are optimized for gaming and casual creator experiences, while workstation graphics are optimized for specialized software and a broad range of changing industry features with varying API languages.

What about Built-In GPUs?

Select Intel® Core™ Ultra H Processors come with Built-In Intel® Arc™ Pro GPUs* offering enhanced graphics capabilities to traditional integrated processors, including AI and ray tracing GPU acceleration. As a result of the increased raw performance they are also able to receive ISV certifications.

Why Isn't all Software ISV Certified?

Not all software is GPU demanding, and to this extent some ISV partners prefer not to adopt a certification program. For example, often providing recommended and minimum hardware specifications is enough to address many potential end user issues. Hardware certifications can also be linked to ISV support programs. In this scenario the ISV needs to be able to support a broad range of hardware considerations, but also limit risk to their customers by providing hardware requirements helping to ensure advanced software functionality is supported. While not all software vendors (ISVs) participate in a certification program, Intel aims to offer a Intel-led validation program for common tasks and functionality across many third-party software applications.

The Significance of Driver Release Notes

Each new Intel quarterly public graphics driver release is the culmination of extensive engineering efforts, bug fixes and rigorous validation testing. This is typically completed in conjunction with the support of the ISV, and is focused on performance, balanced with stability and reliability advances.

A major change summary is included in the package release notes.

intel.com/support/CertifiedGraphics



Intel works closely with ISVs (Independent Software Vendors) to help ensure compatibility between the specialized software and Intel's high-performance workstation GPUs. The rigorous certification processes help bring many benefits, including enhanced graphics stability and reliability.

We recommend using a common driver across all products, and using the newest driver for the latest and greatest feature enhancements and bug fixes.

Common Certifications Include

ISV Application	Built-In GPU*	Mobile GPU	Desktop GPU
	Select Intel® Core™ Ultra H Processors with Built-In Intel® Arc™ Pro	Intel® Arc™ Pro A30M and A60M)	Intel® Arc™ Pro A40, A50 and A60
Autodesk AutoCAD ®		✓	✓
Autodesk Fusion360 ®	✓	✓	✓
Autodesk 3ds Max ®	✓	✓	✓
Autodesk Maya ®	✓	✓	✓
Autodesk Inventor ®	✓	✓	✓
Bentley MicroStation ®	✓	✓	✓
Dassault Systèmes SOLIDWORKS ®	✓	✓	✓
Nemetschek Vectorworks ®	✓	✓	✓
PTC Creo ® (System Certification Ready)	✓	✓	✓
Siemens NX ™	✓	✓	✓
Siemens Solid Edge ®	✓	✓	✓

* Some certifications currently in progress.

NOTE: An extensive list of applications can be found online at intel.com/support/CertifiedGraphics

No computer system can be absolutely secure. ISV certification and Intel-led validation does not confirm it is free from functional or security issues.
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*Intel® Arc™ Pro GPUs and Intel® Arc™ Pro workstation graphics driver support only available on select Intel® Core™ Ultra H-series processor-powered systems with at least 16GB of system memory in a dual-channel configuration. OEM enablement required; check with OEM or retailer for system configuration details.