A New Era of Professional Graphics

Intel® Arc™ Pro A50 GPU

With built-in ray tracing hardware, graphics acceleration, and machine learning capabilities, the Intel® Arc™ Pro A50 GPU unites fluid viewports, the latest in visual technologies, and rich content creation in a condensed low-profile, dual slot form factor.

- Ray Tracing Hardware Acceleration
- Dedicated AI Acceleration
- AV1 Hardware Encode and Decode Support
- 6GB High Speed Memory
- Software Certifications
- Up to 4x Displays, with Audio and Dolby Vision® Support
- Dual Slot, Small Form Factor
- Premium Components
- 3-Year Warranty

Intel.com/ArcProA50
A New Era of Professional Graphics

Intel for many professional users equates to years of extensive trust and outstanding reliability, and this latest range of professional graphics continue to build on that. It’s likely you have been using Intel Integrated graphics for years, which makes moving to more powerful, dedicated graphics from Intel a wise and easy choice.

This isn’t just a new range of GPU’s, it’s bringing competition and innovation back to your favorite software tools.

### Key Features

- **Up To 5 TFLOPS**
  - Peak FP32 Throughput\(^1\)
- **6GB GDDR6**
  - High-Speed Memory
- **192 GB/s**
  - Memory Bandwidth
- **8x RAY TRACING**
  - Dedicated Units
- **4x OUTPUTS**
  - Supported at 5K, 60Hz

### General Performance\(^2\) Guide

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D CAD</td>
<td></td>
</tr>
<tr>
<td>3D Design</td>
<td></td>
</tr>
<tr>
<td>Office Productivity</td>
<td></td>
</tr>
<tr>
<td>Video Conferencing</td>
<td></td>
</tr>
<tr>
<td>Image Editing</td>
<td></td>
</tr>
<tr>
<td>Video Editing</td>
<td></td>
</tr>
<tr>
<td>Real-time Rendering</td>
<td></td>
</tr>
</tbody>
</table>

### Intel GPU Architecture

- Xe-HPG microarchitecture is engineered from the ground-up to deliver high performance, efficiency, and scalability for creators and professional workloads.
  - New Xe-cores with built-in XMX AI capabilities
  - Advanced 3D acceleration hardware
  - Ray tracing units

### Specifications

#### PERFORMANCE
- **Peak FP32 Throughput\(^1\)**
  - Up to 5.02 TFLOPS (Single Precision)
- **Xe-cores**
  - 8 Xe-HPG
- **XMX Engines**
  - 128
- **Ray Tracing (RT) Units**
  - 8
- **PCIe® Support**
  - Gen 4.0 x16 (x8 Electrical), with 3.0 Backwards Compatibility

#### MEMORY
- **Dedicated Memory**
  - 6GB of GDDR6
- **Bandwidth**
  - 192 GB/s
- **Interface**
  - 96-bit

#### DISPLAY
- **Outputs**
  - 4x mini-DisplayPort 2.0 Ready, with Audio Support and Latching Mechanism
- **Display and Resolution Support**
  - Up to 2@ 7680x4320 (8K UHD, 60Hz)
  - 1@ 5120x4400 (5K Ultrawide, WUHD, 240Hz)
  - 2@ 5120x2880 (5K UHD, 120Hz)
  - 4@ 3840x2160 (4K UHD, 60Hz)
- **API Support**
  - DirectX® 12 Ultimate, oneAPI, OpenCL™ 3.0, OpenGL® 4.6, OpenVINO™, Vulkan® 1.3

#### HARDWARE ACCELERATION
- **Full Encode and Decode**
  - AV1, HEVC, H.264, VP9
- **Ray Tracing**
  - Yes
- **AI Engine**
  - Yes
- **VR Ready**
  - Yes

#### POWER
- **Consumption**
  - 75w Peak Total Board Power
- **Connector**
  - No Connector Required

#### GENERAL
- **Form Factor**
  - Dual Slot, Low Profile. (Half Height, Half Length.)
- **Dimensions**
  - 168mm x 69mm / 6.7" x 2.7"
- **OS Support**
  - Microsoft Windows® 10 and 11, Linux® Ubuntu
- **Warranty**
  - 3-year Limited

---

\(^1\) This table is intended to offer helpful guidance on wide-ranging typical experiences and performances within various workflows and tasks for the graphics card(s) compared to other Intel graphics cards. It is not intended to replace thorough performance benchmarks for specific tasks, software or workloads. Performance may vary.

\(^2\) This table is intended to offer helpful guidance on wide-ranging typical experiences and performances within various workflows and tasks for the graphics card(s) compared to other Intel graphics cards. It is not intended to replace thorough performance benchmarks for specific tasks, software or workloads. Performance may vary.