Compact,
Reliable and
Expertly Optimized

intel ARC PRO B50 GPU

For Professional Workstations & AI

Expertly optimized, reliable, and compact, the **Intel® Arc™ Pro B50 GPU** delivers improved performance with large amounts of dedicated memory, graphics power, and ISV certifications — ideal for both routine and ambitious projects.

- 16GB High Speed Memory
- Dedicated AI Acceleration Through XMX engines
- Ray Tracing Hardware Acceleration
- Power Efficient at up to 70W
- Independent Software Vendor (ISV) Certifications
- Dual Slot, Small Form Factor
- Premium Components
- 3-Year Warranty
- Up to 4x Displays

16GB

intel.com/ArcPro

intel ARC GRAPHICS

Tackle Bigger Projects with 16GB of Memory

Tailored for modern professional projects like AI, generative design, 3D simulations, ray tracing, and editing, it's built to help boost the quality and speed of your software, with support for AI-driven innovation, enhancing creativity and design.

Equipped with a specialized, robust driver for software like AutoCAD, Solidworks, Maya, and Photoshop, it helps ensure reliable acceleration. The dual-slot, half-length, half-height GPU is designed for professional workstations, featuring dedicated hardware for AI, Ray Tracing, and Media Encoding. It supports up to four HDR displays via mini-DP 2.1 connectors.

It's perfect for today's professional users.

This GPU is Optimized to Offer Great Performance in Tasks Like:

- 2D & 3D Design and Engineering projects, including Visualization.
- AI Inference tasks.
- 3D Content Creation, as well as 2D Image and Video Projects.

If you require a single slot GPU explore the Intel® Arc™ Pro A60 GPU or A40 GPU, for more memory explore the Intel® Arc™ Pro B60 GPU available in various partner board form factors.

Key Features

16GB GDDR6
High-Speed Memory

70W POWER DRAW

224 GB/s
Memory Bandwidth

16x RAY TRACING & AI
Xᵉ Cores

4x OUTPUTS
Supported at 5K, 60Hz

Intel® Arc™ Pro B50 GPU

Specifications

PERFORMANCE	GPU Peak TOPS (Int8)[1]	170 TOPS
	Peak FP32 Throughput[2]	Up to 10.65 TFLOPS (Single Precision)
	Xᵉ-cores	16 Xᵉ-HPG
	XMX Engines	128
	Ray Tracing (RT) Units	16
	PCIe® Support	Gen 5.0 x16 (x8 Electrical), with 4.0 Backwards Compatibility
MEMORY	Dedicated Memory	16GB of GDDR6
	Bandwidth	224 GB/s
	Interface	128-bit
DISPLAY	Outputs	4x mini-DisplayPort 2.1 Ready
	Display and Resolution Support	Up to 2@ 7680x4320 (8K UHD, 60Hz) 1@ 5120x1440 (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	XMX AI Engines	Yes
	Ray Tracing	Yes
	Full Encode and Decode	AV1, HEVC, H.264, VP9
POWER	Consumption	70W Total Board Power
	Connector	No Connector Required
GENERAL	Form Factor	Dual Slot, Low Profile. (Half Height, Half Length.)
	Dimensions	168mm x 69mm / 6.6" x 2.7"
	OS Support	Microsoft Windows® 11 and 10 Linux® Ubuntu
	Warranty	3-year Limited

[1] GPU Peak TOPS (trillions of operations per second) represents the peak throughput when running XMX workloads with INT8 datatype and dense models. Performance may vary based on configuration.
[2] As defined by maximum clock frequency and peak single precision operations throughput. Performance may vary.