

# AI DEVELOPMENT WITH PYTORCH ON YOUR DESKTOP

Advanced by AMD Radeon™ GPUs and AMD ROCm™ Software

**AMD** × **PyTorch**  
together we advance\_

AI researchers and developers using PyTorch with Machine Learning (ML) models and algorithms can now leverage AMD ROCm™ starting with version 5.7 on Ubuntu® Linux® to tap into the parallel computing power of select AMD Radeon™ GPUs.

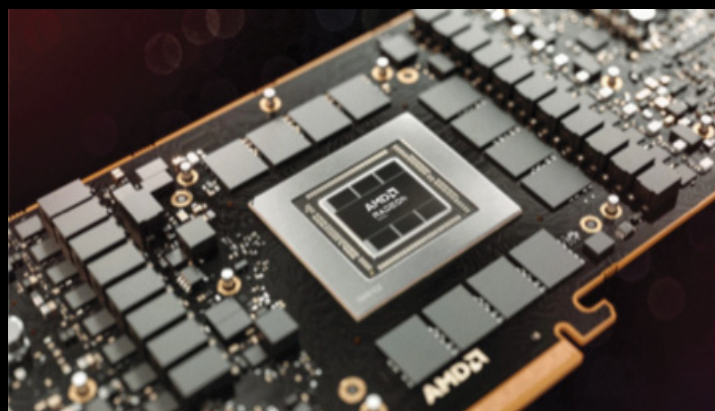
## Accelerate AI on Your Desktop

AI researchers and engineers are looking for effective solutions to develop and train their ML-powered applications. A local PC or workstation system equipped with a high-end AMD Radeon RX 7000 Series GPU presents a capable solution to address the growing workflow challenges thanks to large GPU memory sizes of up to 48GB on the Radeon PRO W7900.



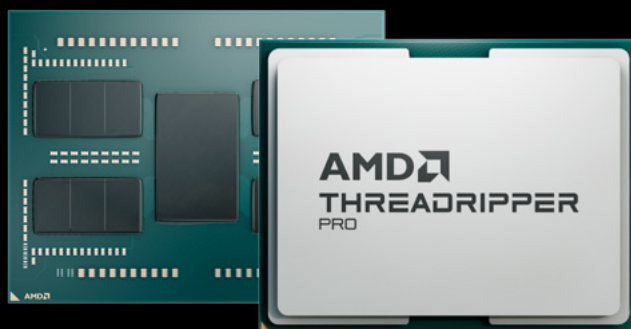
## AMD RDNA™ 3 Architecture-Based GPUs for More AI Performance

AMD Radeon RX 7000 Series GPUs, built on the RDNA™ 3 GPU architecture, now come with up to 192 AI accelerators and feature more than 2x higher AI performance per Compute Unit (CU) compared to the previous generation¹.



## AMD Ryzen™ Threadripper™ PRO Processors

The AMD Ryzen™ Threadripper™ PRO 7000 WX-Series processors expand on the prior generation's unrivaled performance and superior platform features for the workstation market. Built on the leading 5nm "Zen 4" architecture, this generation dominates the competition in demanding professional applications and complex multitasking workloads.



Learn more: [amd.com/ThreadripperPRO](https://amd.com/ThreadripperPRO)



**Professional Graphics for Exceptional  
Performance with Reliability, Stability  
and Software Certifications at its Core.**



## AMD ROCm Open Software Stack for AI

AMD ROCm software offers a suite of optimizations for a wide range of AI workloads, including Large Language Models (LLMs) and image recognition. It supports the broader AI software ecosystem including open frameworks, models, and tools, and gives developers the freedom to customize and tailor their GPU software for their own needs while collaborating with a community of other developers.

## Unleashing GPU Power for Machine Learning Development

Whether you are developing generative AI applications like large language or diffusion models or building the next generation of computer vision solutions with object detection models, AMD Radeon GPUs are a powerful local alternative to cloud-based ML development solutions. Build an effective ML development desktop by combining qualified AMD Radeon GPUs with powerful Ryzen processors and generate breakthrough results.



## Recommended AMD Radeon GPUs for Machine Learning Development with PyTorch® and AMD ROCm software



### AMD Radeon™ RX 7900 XT GPU

- 20GB GDDR6 memory
- Up to 800GB/s memory bandwidth
- 168 AI accelerators (84 CUs)
- 276mm length / 2.5 slots
- 315W TBP (2x 8-pin)



### AMD Radeon™ RX 7900 XTX GPU

- 24GB GDDR6 memory
- Up to 960GB/s memory bandwidth
- 192 AI accelerators (96 CUs)
- 287mm length / 2.5 slots
- 355W TBP (2x 8-pin)



### AMD Radeon™ PRO W7900

- 48GB GDDR6 memory
- Up to 864GB/s memory bandwidth
- 192 AI accelerators (96 CUs)
- 280mm length / 3 slots
- 295W TBP (2x 8-pin)

To learn more about AMD professional graphics visit: [amd.com/RadeonPRO](https://amd.com/RadeonPRO)

\* Based on AMD internal measurements, November 2022, comparing the Radeon RX 7900 XTX at 2.5GHz boost clock with 96 CUs issuing 2X the Bfloat16 math operations per clocks vs. the RX 6900 XT GPU at 2.25 GHz boost clock and 80 CUs issue 1X the Bfloat16 math operations per clock. RX-821

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Radeon™ AI technology is compatible with all AMD Radeon 7000 Series graphics cards and newer. Please check with your system manufacturer for feature availability prior to purchase. GD-232.

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