

THE POWER OF PERSONAL AI WITH AMD RYZEN™ AI

AI is everywhere. It is transforming the way consumers create, interact, work and use technology every day. With AMD Ryzen™ AI¹, PC users can tap into the exciting possibilities that AI brings and experience the power of personal AI at their fingertips.

WHY AMD RYZEN™ AI?

FIRST TO MARKET

AMD was the first to launch a dedicated AI engine in an x86 Windows PC processor²

EXPERTISE

AMD is the only pervasive AI portfolio in the industry, from data center to edge to client

AVAILABILITY

Millions of laptops shipped with AMD Ryzen™ AI inside

PERFORMANCE

AMD can bring more AI-enabling power and faster performance in AI workloads than competitive processors³

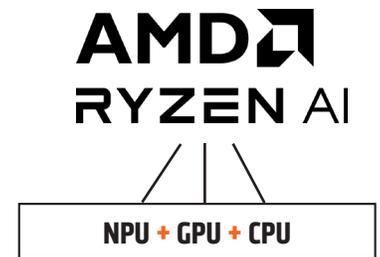
AMD RYZEN™ AI AT A GLANCE

AMD Ryzen™ AI is a combination of powerful AI accelerators that help unlock new levels of performance and efficiency for running AI workloads.

AMD Ryzen™ AI includes:

- ✓ **NPU** : dedicated AI engine optimized for efficient AI processing
- ✓ **GPU** : AMD Radeon™ graphics for high-bandwidth AI performance
- ✓ **CPU** : AMD Ryzen™ processor cores designed for responsive AI acceleration

Together, they can perform up to 39 trillion operations per second (TOPS), **the most you can get** on a consumer Windows x86 processor today⁴!

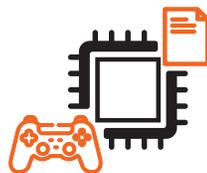


WHY YOU NEED AI IN YOUR LAPTOP

AMD Ryzen™ AI is dedicated to AI workloads, for optimal performance and efficiency.



Unlock new AI experiences to enhance creativity, productivity, entertainment & much more



AI can intelligently balance your computer's workloads to help efficiency and optimize battery life



Personal AI processing may help lower or eliminate future application subscription costs



Keep your personal data at your fingertips by running AI workloads locally on your PC

A NEW WORLD OF AI-DRIVEN EXPERIENCES

Over **100+ AI Experiences** enabled for AMD Ryzen™ AI compatible PCs from Microsoft, Adobe, Topaz Labs, Davinci and more

ENHANCE COLLABORATION

Experience more engaging video calls with AI-enhanced eye gaze correction and background effects.

CUT THROUGH THE CLUTTER

Use AI to summarize and respond to emails, create professional looking presentations, and get more time back in your day.

CREATE IN A WHOLE NEW WAY

Generate AI-inspired visuals just by asking for it, or enhance and de-noise images and video with the help of AI.

PERSONALIZE ENTERTAINMENT

Make AI personal, like generating a travel itinerary perfectly tailored to your preferences and timeline.

LEADERSHIP AI PERFORMANCE

UP TO **79% FASTER**
AT AI COMPUTER VISION MODELS WITH YOLOV8
 Ryzen™ 7 8840U vs. Core Ultra 7 155H³

UP TO **85% FASTER**
AT AI VIDEO EDITING WITH DAVINCI RESOLVE
 Ryzen™ 7 8840U vs. Core Ultra 7 155H³

UP TO **28% FASTER**
AT TEXT TO IMAGE PROMPTS WITH STABLE DIFFUSION
 Ryzen™ 7 8840U vs. Core Ultra 7 155H³

EFFICIENT PROCESSING OF AI WORKLOADS

AMD Ryzen™ AI is designed for incredibly efficient processing of AI workloads, to help save power and extend battery life.

up to **2X LONGER BATTERY LIFE** while video conferencing with Ryzen™ AI + Windows Studio Effects vs running Nvidia Broadcast⁵ using a Ryzen™ 9 7940HS processor and RTX 4070 graphics

VIDEO CONFERENCING

Eye Gaze Correction + Background Blur



GET A PC THAT IS AI READY FOR THE FUTURE OF COMPUTING

AMD Ryzen™ AI is available on select AMD Ryzen™ processors²:

AMD Ryzen™ 8040 Series: Ryzen™ 9 8945HS, Ryzen™ 7 8845HS, Ryzen™ 7 8840HS, Ryzen™ 7 8840U, Ryzen™ 5 8645HS, Ryzen™ 5 8640HS, Ryzen™ 5 8640U

AMD Ryzen™ 7040 Series: Ryzen™ 9 7940HS, Ryzen™ 7 7840HS, Ryzen™ 7 7840U, Ryzen™ 5 7640HS, Ryzen™ 5 7640U

AMD Ryzen™ 8000G Series: Ryzen™ 7 8700G, Ryzen™ 5 8600G

1. GD-220b Ryzen™ AI is defined as the combination of a dedicated AI engine, AMD Radeon™ graphics engine, and Ryzen processor cores that enable AI capabilities. OEM and ISV enablement is required, and certain AI features may not yet be optimized for Ryzen AI processors. Ryzen AI is compatible with: (a) AMD Ryzen 7040 and 8040 Series processors except Ryzen 5 7540U, Ryzen 5 8540U, Ryzen 3 7440U, and Ryzen 3 8440U processors; and (b) all AMD Ryzen 8000G Series desktop processors except the Ryzen 5 8500G/GE and Ryzen 3 8300G/GE. Please check with your system manufacturer for feature availability prior to purchase.
 2. PAK-3. AMD has the first dedicated AI engine on an x86 Windows processor, where "dedicated AI engine" is defined as an AI engine that has no function other than to process AI inference models, and is part of the x86 processor die. The only other provider of Windows x86 processors is Intel. Intel's newest Windows x86 processors are 13th gen and consist of Core i9, Core i7, Core i5, and Core i3 models as listed here: <https://www.intel.com/content/www/us/en/products/details/processors/core.html>. None of those processor models have a dedicated AI engine, nor do previous generation processors from Intel.
 3. HWK-32 Testing as of Dec. 2023 by AMD Performance Labs on a test system configured with a Ryzen 7 8840U, integrated Radeon 780M graphics, 16GB DDR5 RAM, Samsung 980 Pro 1TB NVMe, and Windows 11 Pro vs. a similarly configured system with an Intel Core Ultra 7 155H on an MSI Prestige 16 AI notebook, with integrated Iris Arc Graphics, 32GB DDR5 RAM, 1TB SSD, and Windows 11 22H2 to test performance on using the following AI models: MobileNetV3, ESRGAN, Yolov8, DeepLabv3, StableDiffusion1.5 (Olive), DaVinci Resolve - HD to UHD 2x Enhanced, Procyon AI Benchmark - Float16, Procyon AI Benchmark - Float32. System manufacturers may vary configurations, yielding different results.
 4. HWK-35 As of Feb. 2024, based on reported TOP5 specifications for AMD Ryzen™ 8040 Series processors vs competitive Intel Core Ultra processors.
 5. PAK-5) Based on testing by AMD as of 6/5/2023. Battery life results evaluated by operation of a simulated nine-participant Microsoft Teams video conference using a Ryzen 7940HS processor with Ryzen AI and integrated Radeon graphics with Windows Studio Effects vs. NVIDIA Broadcast for AI-enhanced background blur and eye gaze correction features with NVIDIA GeForce RTX 4070 discrete graphics. AMD/NVIDIA systems run from power level 100% to > 5%, @150nits brightness and power mode set to "power efficiency." System configurations: Razer Blade 14" laptop, AMD Ryzen 9 7940HS processor with Ryzen AI, integrated AMD Radeon Graphics (2240.03.24 driver), 16GB (8GBx2) LPDDR5, 1TB SSD storage; Windows 11 Home 22H1, NVIDIA GeForce RTX 4070 graphics (528.52 driver) with NVIDIA Broadcast. System manufacturers may vary configurations, yielding different results. Results may vary.
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