

GET PEAK PERFORMANCE FOR CLOUD, ENTERPRISE AND AI

WITH AMD EPYC™ 9005 SERIES PROCESSORS

Servers based on AMD EPYC 9005 Series processors offer **leadership performance, density and efficiency** to support today's most demanding data center initiatives.

EXPLOSIVE DATA CENTER GROWTH AHEAD

The global AI hardware market is expanding, with an annual **growth rate of 24.5%**, from \$53.71 billion in 2023 to a projected \$473.53 billion by 2033.¹ CPUs have a key role in AI processing in data centers.²

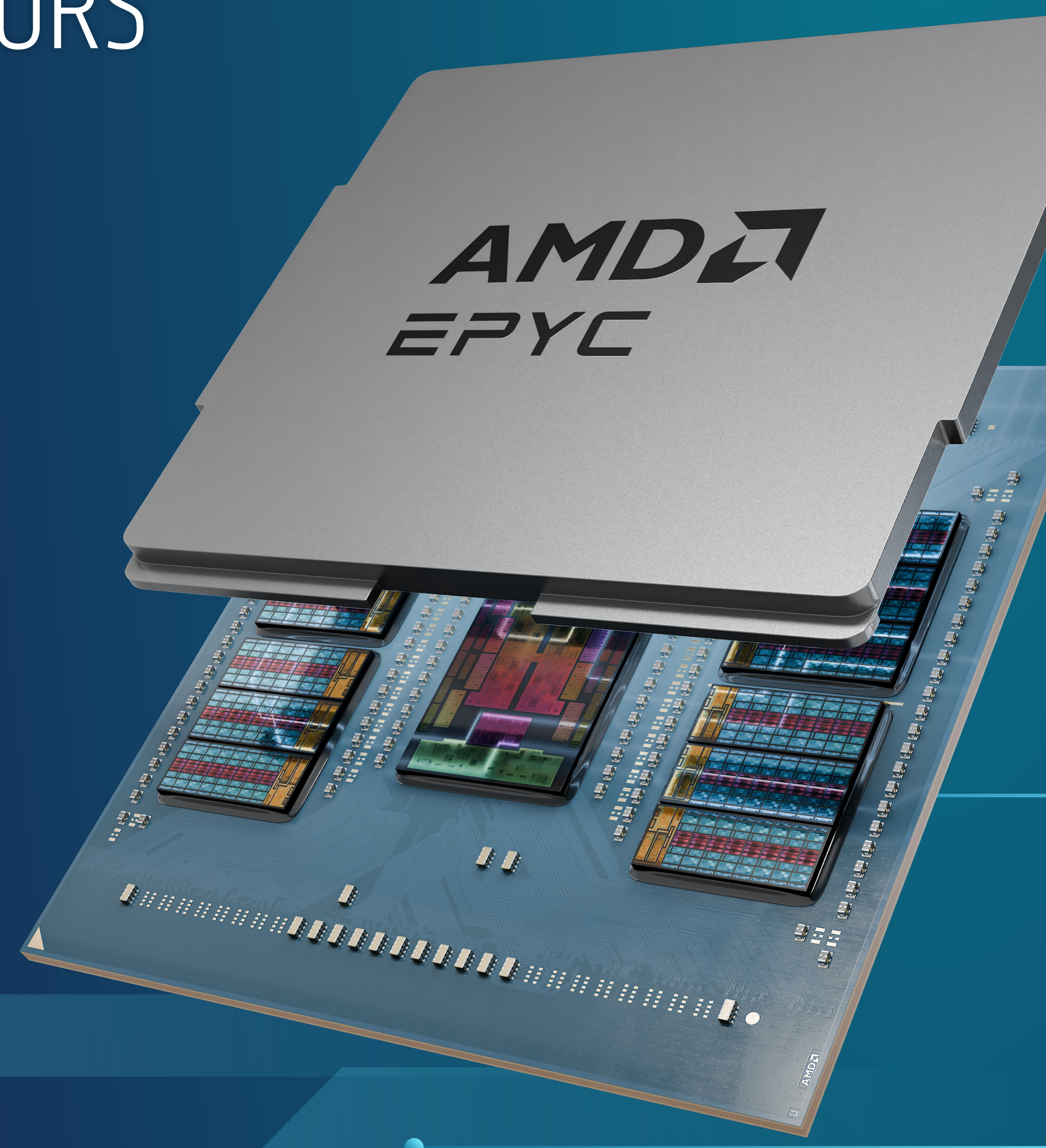
As the demand for more computing performance swiftly expands, data-center efficiency is critical. Electricity consumption from data centers, AI and the cryptocurrency sector could **double by 2026**.³

24.5% per year growth rate

2x electricity consumption by 2026

AMD EPYC™ 9005 SERIES PROCESSORS THE CHOICE FOR ADVANCING AI AND ENTERPRISE APPLICATIONS

Use AMD EPYC 9005 Series-powered servers to drive everything from corporate AI enablement and large-scale hybrid cloud buildouts to business-critical enterprise applications.



PROPEL YOUR AI

↑ Outstanding performance

Built for Optimal AI Performance

AMD EPYC 9005 Series processors are designed to deliver **outstanding performance** with their high-core count and support for high memory and I/O bandwidth. Also, high frequency models excel at optimizing CPU-accelerated system performance by efficiently managing data preparation and post-processing tasks.

~2.7x Inference throughput

Faster than the Competition in AI Inference

Achieve **~2.7x the inference throughput** when running extreme gradient boosting with the Higgs boson data set (XG Boost) on servers with two 192-core AMD EPYC 9965 processors compared to those with two 64-core Intel® Xeon® 8592+ CPUs.^{9xx5-010}

~15% Faster training time

Optimize GPU System Performance as an AI Host Processor

Deliver **~15% faster training time** when hosting 8 GPU accelerators with two high frequency AMD EPYC 9575F CPUs compared to two Intel® Xeon® 8592+ CPUs running Llama 3.1-8B.^{9xx5-015}

SPEED ENTERPRISE APPLICATIONS

2.68x Higher throughput

Leadership Integer Performance

Expect **2.68x higher throughput** when comparing two-socket servers using 192-core AMD EPYC 9965 CPUs to 64-core Intel® Xeon® 8592+ CPUs running SPECrate®2017_int_base.^{9xx5-0028}

2.2x the Multi-JVM critical jOPs

Business Workload Supremacy

Get **2.2x the Multi-JVM critical jOPs** when using two-socket servers based on 192-core AMD EPYC 9965 CPUs vs. 64-core Intel® Xeon® 8592+ CPUs running SPECjbb®2015-MultijVM Benchmark®.^{9xx5-060}

BUILD MORE EFFICIENCY INTO YOUR COMPUTE

UP TO 86% Fewer servers

UP TO 69% Less power

Consolidation and Modernization

Replacing 100 old 2P Intel® Xeon® 8280 CPU-based servers with ~14 new AMD EPYC 9655 CPU-based servers can provide an estimated 39,100 units of integer performance while using **up to 86% fewer servers and 69% less power**. Achieving the same performance level would require 35 2P Intel® Xeon® 8592+ CPU-based servers.^{9xx5-0018}

LEVERAGE A STRONG ECOSYSTEM

x86 Software compatibility

x86 Compatibility

AMD EPYC 9005 Series processors have **x86 software compatibility**, providing easy integration into your existing infrastructure.

↔ Broad applicability

Widespread Industry Adoption

Tailored for various environments including cloud, hyperscale, on-premises and SAAS, AMD EPYC 9005 Series processors enable **broad applicability** across industries.

AMD together we advance_data centers

Learn more at amd.com/epyc or contact your [AMD sales representative](#).

¹ GlobeNewswire, "Artificial Intelligence (AI) in Hardware Market Size to Reach USD 473.53 Bn By 2033," March 6, 2024, <https://www.globenewswire.com/news-release/2024/03/06/2841613/0/en/Artificial-Intelligence-AI-in-Hardware-Market-Size-to-Reach-USD-473-53-Bn-By-2033.html>

² The Futurum Group, "AI Chipset Market Share Analysis, 5-Year Forecast," August 19, 2024, <https://www.businesswire.com/news/home/20240819523529/en/Futurum-Intelligence-Releases-AI-Chipset-Market-Share-Analysis-5-Year-Forecast-Revealing-Vendor-Revenue-and-Growth>

³ International Energy Agency, "Electricity 2024, Analysis and Forecast to 2026," <https://iea.blob.core.windows.net/assets/6b2d6954-2017-408e-bf08-952fdd62118a/Electricity2024-Analysisandforecastto2026.pdf>, page 8.

© 2024 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD arrow, EPYC and combinations thereof, are trademarks of Advanced Micro Devices, Inc. Intel®, the Intel logo and Xeon® are trademarks of Intel Corporation or its subsidiaries. Java® is a registered trademark of Oracle and/or its affiliates. SPEC®, SPEC CPU®, SPECrate®, SPECint®, and SPECpower_ssj® are registered trademarks of the Standard Performance Evaluation Corporation. See www.specc.org for more information. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies. Certain AMD technologies may require third-party enablement or activation. Supported features may vary by operating system. Please confirm with the system manufacturer for specific features. No technology or product can be completely secure.

For details on the claims used in this document, visit amd.com/en/legal/claims/epyc.