



SOLVE TODAY'S REAL PROBLEMS, RIGHT NOW

WITH 4TH GEN AMD EPYC™ PROCESSORS FEATURING AMD 3D V-CACHE™ TECHNOLOGY

DEMAND FOR HPC SOLUTIONS CONTINUES TO GROW...

The global HPC market is expected to grow more than 7.7% annually through 2026 to a total of more than \$59 billion.¹

... BECAUSE HPC IS REVOLUTIONIZING INNOVATION ACROSS INDUSTRIES

Rapid prototyping and simulations facilitated by computer-aided engineering applications are driving faster iteration and testing, enabling reduced costs and waste and improved quality. HPC allows businesses to tackle problems that were previously too time-consuming or resource-intensive to solve, opening new doors to innovation and growth.²

BUT YOU MAY BE FACING HPC CHALLENGES IN THE DATA CENTER

- LIMITS** Some workloads just never seem to get enough performance from each core.
- LATENCY** It can never be too low for high-data-volume applications.
- TIME** Optimizing and rearchitecting takes time.
- RESOURCES** You may be asked to support the same workloads with fewer resources or bigger workloads with the same resources.

NOW YOU CAN SOLVE TODAY'S REAL PROBLEMS, RIGHT NOW WITH AMD 3D V-CACHE TECHNOLOGY.

ACCELERATE PRODUCTIVITY

GET MORE FROM YOUR APPLICATIONS

Give your teams new levels of performance for their technical workloads with innovative processors optimized for memory-intensive, serially dependent workloads.

UP TO
96 CORES
160 PCIe® LANES³
1152MB L3 CACHE

WORLD'S HIGHEST PERFORMING X86 CPU

FOR TECHNICAL COMPUTING^{SP5-165}

FEATURING
12 CHANNEL DDR5

GET TO MARKET FASTER

Deliver advanced capabilities for streamlined design and product development so your solutions reach your customers faster. Do more with your software to find cost-saving opportunities. Provide deep insights to make more informed decisions.

GET
~115% MORE CFD PERFORMANCE

GET
~118% MORE FEA PERFORMANCE

A 2P 96-CORE EPYC 9684X POWERED SERVER DELIVERS

~2.15X THE AVG CFD JOBS/DAY

COMPARED TO 2P 56-CORE XEON PLATINUM 8480+ RUNNING ANSYS® FLUENT® 2022 TEST CASES.⁴

A 2P 96-CORE EPYC 9684X POWERED SERVER DELIVERS

~2.18X THE FEA CRASH SIMULATION JOBS/DAY

COMPARED TO 2P 56-CORE XEON PLATINUM 8480+ RUNNING ANSYS LS-DYNA® TEST CASES.⁵

MODERNIZE YOUR INFRASTRUCTURE

TAKE ADVANTAGE OF x86 COMPATIBILITY

Streamline your data center transformations with AMD EPYC processors that work with your existing x86 software, out of the box.

EXPANSIVE ECOSYSTEM

OF OEM, ODM AND ISV PARTNERS

CREATE ENERGY-EFFICIENT SOLUTIONS AND ADVANCE YOUR SUSTAINABILITY GOALS

Discover new ways you can optimize core usage, enable low TCO and advance your sustainability and corporate responsibility goals. Enable rapid digital transformations while simultaneously delivering efficiency, often by deploying fewer servers to accomplish the same IT jobs.

USE UP TO
43% FEWER SERVERS AND
36% LESS POWER, WITH AN ESTIMATED
38% LOWER 3-YEAR TCO

WHEN YOU CHOOSE 2P SERVERS BASED ON 32-CORE AMD EPYC 9384X OVER INTEL® XEON® PLATINUM 8462Y+ TO DELIVER 1,500 OPENFOAM® GEOMEAN JOBS PER DAY.^{SP5TCO-048}

ARE YOU READY TO UNLOCK EXCEPTIONAL PERFORMANCE AND EFFICIENCY FOR YOUR TECHNICAL COMPUTING WORKLOADS WITH AMD EPYC 9004X PROCESSORS?



TOGETHER WE ADVANCE HIGH PERFORMANCE COMPUTING

Visit amd.com/epyc or contact your AMD sales representative.

©2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD arrow, EPYC, AMD 3D V-Cache, and combinations thereof, are trademarks of Advanced Micro Devices, Inc. ANSYS, FLUENT and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS, Inc. or its subsidiaries in the United States or other countries. LS-DYNA is a registered trademark of Livermore Software Technology Corporation. OPENFOAM® is a registered trademark of OpenCFD Limited, producer and distributor of the OpenFOAM software via www.openfoam.com. PCIe® is a registered trademark of PCI-SIG Corporation. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.

1 Intersect360 Research, May 20, 2022, <https://www.intersect360.com/report/worldwide-hpc-and-ai-training-2021-total-market-size-and-2022-2026-forecast-products-and-services/>

2 Equus, "Demystifying High-Performance Computing: A Guide for Technical Decision Makers", March 30, 2023, <https://www.equus.com/demystifying-high-performance-computing>

3 2P servers built using 4th Gen AMD EPYC processors can support up to 160 PCIe lanes.

4 See <https://www.amd.com/en/system/finance/documents/amd-epyc-9004x-pb-ansys-fluent.pdf>

5 See <https://www.amd.com/en/system/finance/documents/amd-epyc-9004x-pb-ansys-ls-dyna.pdf>