AMD EPYC

AMD EPYC™ 9004 SERIES PROCESSORS:

ADVANCING

DATA PERFORMANCE AND ENERGY EFFICIENCY

IT'S TIME FOR TRUE DATA CENTER TRANSFORMATION.
Drive exceptional time-to-insight for your business-critical applications with 4th Gen AMD EPYC processors. Based on the AMD "Zen 4" architecture, this new generation of server processors builds on the record-setting performance of 3rd Gen AMD EPYC processors and is optimized to help you achieve remarkable results right out of the box for a wide range of workloads from the enterprise to the cloud.

DATA AGILITY

Organizations are pivoting to data-centric strategies. **91.7% of organizations are increasing investments in Data and AI.**[1]

INFRASTRUCTURE MODERNIZATION

60% of executives say digital transformation is **their most critical growth driver.**[2]

DEMAND RAPID ADVANCES IN ENTERPRISE COMPUTING PERFORMANCE AND EFFICIENCY.

THE COSTS OF **NOT** TRANSFORMING CAN BE GREAT

HOW FLEXIBLE IS YOUR PLATFORM?

You need to deploy a wider variety of compute-intensive applications, but architectures can be rigid. Must you reinvent and reinvest over and over?

ARE YOU EFFICIENT ENOUGH?

What could you gain by achieving more performance in less space, using less power?

ARE YOU READY FOR NEW RISKS?

Security and privacy threats persist, but possible energy constraints, sustainability concerns and supply-chain disruptions also loom large.

ARE CREEPING COSTS HITTING YOUR BUDGET?

It can seem as though any single move you make breeds additional requirements, threatening never-ending cost increases.

AMD EPYC 9004 SERIES PROCESSORS:

THE NEXT GENERATION OF SERVER ARCHITECTURE AND ENERGY-EFFICIENCY, TODAY.

With AMD EPYC 9004 Series processors you can accelerate productivity, modernize your infrastructure and confidently navigate today's business risks, complexities and requirements.

ACCELERATE PRODUCTIVITY

GET MORE FROM YOUR APPLICATIONS

Drive exceptional time-to-insight for your business-critical applications with 4th Gen AMD EPYC processors. Based on AMD "Zen 4" architecture, this new generation of server processors is optimized to help you achieve remarkable results right out of the box for a wide range of workloads from the enterprise to the cloud.

THE WORLD'S HIGHEST PERFORMING x86 SERVER CPU[EPC-018B]

300+ WORLD RECORDS FOR PERFORMANCE ACROSS WIDE RANGE OF WORKLOADS[1]

TRIPLE THE L3 CACHE UP TO 1152 MB. WITH AMD EPYC 9004 PROCESSORS FEATURING 3D V-CACHE™ TECHNOLOGY, FOR IMPACTFUL OUT-OF-THE-BOX PERFORMANCE UPLIFTS FOR TECHNICAL WORKLOADS SUCH AS CFD, EDA AND FEA

UP TO ***128 CORES 256 THREADS 128 LANES OF PCIe® 5.0***

UP TO ***50% MORE MEMORY CHANNELS*** THAN ANY OTHER X86 CPU[EPC-018B]

SCALABLE HIGH-THROUGHPUT, HIGH-THREAD-DENSITY, FLOPS-INTENSIVE PERFORMANCE ON PREMISES OR IN THE CLOUD

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.

AMD EPYC PROCESSORS CAN PROPEL ***FLEXIBLE DIGITAL TRANSFORMATIONS*** AND HELP YOU ADOPT BREAKTHROUGH APPLICATIONS

GET ***~115% MORE CFD 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]

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.

ACCOMMODATE YOUR LEGACY SYSTEMS AND COST MODELS

START FROM WHERE YOU ARE TODAY. ***MAKE FAST IMPROVEMENTS*** AND THEN FURTHER OPTIMIZE AND SCALE YOUR SYSTEMS TO EXPAND YOUR BUSINESS'S CAPABILITIES

CREATE ENERGY-EFFICIENT SOLUTIONS

Discover new ways you can optimize core usage, impact your 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.

ACHIEVE UP TO ***2.7X THE SYSTEM ENERGY EFFICIENCY (OPERATIONS/SECONDS/WATT) WHEN RUNNING SERVER-SIDE JAVA®***[5]
~2.7X THE SPECPOWER_SSJ® 2008 VS. AMPERE (2P 128-CORE EPYC 9754 VS. 2P 128-CORE AMPERE ALTRA MAX CPU)
~1.97X VS. INTEL (2P 128-CORE EPYC 9754 VS. 2P 60-CORE INTEL XEON PLATINUM 8490H CPU)

AMD EPYC PROCESSORS ***POWER THE MOST ENERGY EFFICIENT SERVERS,*** DELIVERING EXCEPTIONAL PERFORMANCE AND HELPING REDUCE ENERGY COSTS[EPC-018B]

CONFIDENTLY NAVIGATE TODAY'S BUSINESS RISKS, COMPLEXITIES AND REQUIREMENTS

Leverage a growing ecosystem of confidential computing that encrypts data in cloud and virtualized environments. Invest with confidence, knowing that AMD teams with suppliers to advance human rights, environmental sustainability and supply chain resilience.

BUILT-IN AT THE SILICON LEVEL, AMD INFINITY GUARD OFFERS THE ADVANCED CAPABILITIES REQUIRED TO HELP ***DEFEND AGAINST INTERNAL AND EXTERNAL THREATS AND KEEP YOUR DATA SAFE***[EPC-018C]

AMD TAKES A COLLABORATIVE APPROACH WITH OUR SUPPLIERS TO PROMOTE CONTINUOUS IMPROVEMENT AND ***DRIVE POSITIVE CHANGE*** ACROSS OUR VALUE CHAIN

AMD EPYC

UNLOCK EXCEPTIONAL PERFORMANCE AND EFFICIENCY FOR YOUR BUSINESS WITH 4TH GEN AMD EPYC PROCESSORS.

TOGETHER WE ADVANCE_DATA CENTER COMPUTING

Learn more at http://amd.com/epyc or contact your AMD sales representative.

©2022 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, AMD EPYC, 3D V-Cache, AMD Infinity Guard, AMD Infinity Fabric, Ryzen and combinations thereof are trademarks of AMD Inc. in the United States and other jurisdictions. Sandra Rogers is a member of the Sandra Software Foundation. AMD, the AMD Arrow logo, and Ryzen are trademarks of AMD Inc. in the United States and other jurisdictions. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. Ubuntu is a registered trademark of Canonical Ltd. in the U.S. and other countries. Windows is a registered trademark of Microsoft Corporation in the U.S. and other jurisdictions. Other names are for informational purposes only and may be trademarks of their respective owners. Intel, the Intel logo, Xeon and Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

1. Gartner 4th Quadrantship Overview Survey 2022, Non-Exempt Primary, January 2, 2022. https://www.newsroom.gartner.com/download/1916/1916cdb8f8f9ec.pdf ⇒
2. "Pulse Pulse Survey, Executive Insights on Digital Transformation, 2022." Wipro. https://www.wipro.com/assets/files/pulse-survey/executive-insights-2022.html
3. 1TB Memory Capacity, Intel Xeon Gold 6330 vs. AMD EPYC 9004 Series Processors, Sandra Rogers is a member of the Sandra Software Foundation. AMD, the AMD Arrow logo, and Ryzen are trademarks of AMD Inc. in the United States and other jurisdictions. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. Ubuntu is a registered trademark of Canonical Ltd. in the U.S. and other countries. Windows is a registered trademark of Microsoft Corporation in the U.S. and other jurisdictions. Other names are for informational purposes only and may be trademarks of their respective owners. Intel, the Intel logo, Xeon and Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.
4. Ansys and Fluentmedia Inventory 2022, Non-Exempt Primary, January 2, 2022. https://www.newsroom.gartner.com/download/1916/1916cdb8f8f9ec.pdf ⇒
5. Pulse Pulse Survey, Executive Insights on Digital Transformation, 2022." Wipro. https://www.wipro.com/assets/files/pulse-survey/executive-insights-2022.html
6. For more and current benchmarks visit: www.amd.com/epyc
7. Intel ARK Xeon 8380 vs AMD EPYC 9004 Series Processors, Sandra Rogers is a member of the Sandra Software Foundation. AMD, the AMD Arrow logo, and Ryzen are trademarks of AMD Inc. in the United States and other jurisdictions. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. Ubuntu is a registered trademark of Canonical Ltd. in the U.S. and other countries. Windows is a registered trademark of Microsoft Corporation in the U.S. and other jurisdictions. Other names are for informational purposes only and may be trademarks of their respective owners. Intel, the Intel logo, Xeon and Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.
8. Ansys and Fluentmedia Inventory 2022, Non-Exempt Primary, January 2, 2022. https://www.newsroom.gartner.com/download/1916/1916cdb8f8f9ec.pdf ⇒
9. Intel ARK Xeon 8380 vs AMD EPYC 9004 Series Processors, Sandra Rogers is a member of the Sandra Software Foundation. AMD, the AMD Arrow logo, and Ryzen are trademarks of AMD Inc. in the United States and other jurisdictions. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. Ubuntu is a registered trademark of Canonical Ltd. in the U.S. and other countries. Windows is a registered trademark of Microsoft Corporation in the U.S. and other jurisdictions. Other names are for informational purposes only and may be trademarks of their respective owners. Intel, the Intel logo, Xeon and Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.