5 REASONS WHY AMD EPYC™ PROCESSORS ARE THE RIGHT CHOICE FOR DATA ANALYTICS

AT A GLANCE

Turn data into meaningful insights fast and efficiently on-premises or in the cloud with solutions powered by AMD EPYC™ Processors. Get the performance and advanced security features you need to analyze data effectively. Leverage strong partnerships between AMD and leading on-prem and cloud data analytics providers.

1 *ACHIEVE MORE, FASTER, ACROSS DATA ANALYTICS WORKLOADS*

Accelerate insights to propel business growth

AMD EPYC CPUs deliver leadership performance to accelerate AI-enhanced Data Analytics queries and reduce time-to-insights. AMD EPYC processors hold 21 world records in OLAP performance and performance per dollar. *

2 *CREATE FAST AND FLEXIBLE DEPLOYMENTS*

Analyze data your way while right-sizing processing power and hosting models

AMD EPYC processors enable consistent results whether on premises or in the cloud, with database optimized instances available from all major cloud providers. In your data center, 4th and 5th Gen AMD EPYC processors power no-compromise, single- and dual-socket servers with leadership performance across critical data workloads.

3 *ADDRESS FUNDAMENTAL DATA AND PRIVACY RISKS SIMPLY*

Help protect stakeholders with advanced security features

Add protective shielding to databases hosted in virtual and cloud environments without having to add costs or code. AMD Infinity Guard, a hardware-based set of advance security features available in AMD EPYC processors, isolates each virtual host to help defend it from many outside and internal threats.[1]

4 *MAXIMIZE YOUR INVESTMENT*

Help reduce data center cost, power, and space

AMD EPYC processors can help reduce overall TCO through leadership energy efficiency capabilities. Help reduce overall cost, power consumption, and precious datacenter floor space with AMD EPYC CPUs featuring leadership energy efficiency and performance.

5 *STRONG ECOSYSTEM SUPPORT THAT ENABLES NEW CAPABILITIES FOR YOUR BUSINESS*

Optimize your current deployment and data center investments

AMD EPYC processors are optimized for leading relational database management solutions. The AMD execution record and long-term product roadmap can help you keep your IT investment on the path of continuous data ingestion, transformation, and innovation.

#1 Achieve more, faster, across multiple workloads

AMD EPYC CPUs deliver leadership performance to accelerate transactions and reduce query turnaround times.

- Microsoft SQL Server®: up to **44% more queries/hr** compared to competing platforms on DSS benchmark, comparing 2x 32c EPYC 9374F vs 2P 32c Intel Xeon 8562Y+. [2]
- Up to **42% faster queries/hr** with Cloudera® CDP using 6-node 1P 96C EPYC 9654 compared to 6-node 2P 56C Xeon 8480+ on TPC-DS Benchmark (3TB). [3]
- Up to **36% faster analytics**, up to **23% fewer instances** (3TB), and up to **12% cost savings** (3TB) for the same MS SQL Server job using AWS EC2 AMD-based m7a instances versus Intel Xeon-based m7i instances on TPROC-H Benchmark. [4]

#2 Create fast and flexible deployments

AMD EPYC processors are compatible out of the box with major x86 application vendors whether on premises or hosted by one of the major cloud providers.

- Get started quickly with database-ready cloud instances including AWS m7a/m6a/r7a/r6a, Microsoft Azure E/D av5/av6/lasv3 instances, or any of the **more than 950 instances available across all the major cloud vendors**.
- On premises, 4th and 5th Gen AMD EPYC processor feature in **more than 350 platforms across all the major OEMs** (Dell/HPE/Lenovo/Supermicro/Cisco) with both single-socket and dual-socket options.

#3 Address fundamental data and privacy risks simply

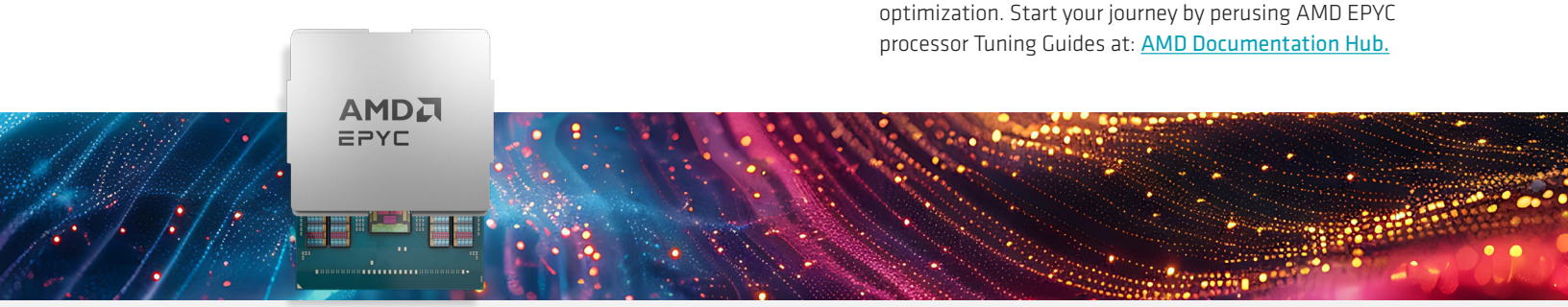
- AMD Infinity Guard provides a modern multi-faceted approach to data center security helping protect your most important asset, your data with zero code change.
- AMD EPYC is also featured as part of the confidential computing instances at leading cloud providers, providing a solution that helps secure data assets on the cloud.

#4 Maximize your investment

- A dual-socket AMD EPYC 9754-powered server, to deliver 20,000 units of integer performance, takes an estimated **39% fewer servers**, **~29% less power** and has a **~33% lower 3-year TCO** than a dualsocket Intel Xeon Platinum 8592+-powered server. SP5TCO-072
- And the 5th Generation AMD EPYC 9965 solution takes an estimated **62% fewer servers**, **~45% less power** and **~44% lower 3-year TCO** compared to dual socket Intel Xeon Platinum 8592+ powered server (391,000 units of integer performance). 9xx5TCO-002A

#5 Strong ecosystem support that enables new capabilities for your business

- AMD EPYC processors are compatible with leading database solutions like Microsoft SQL Server®, MySQL™, Oracle Database, Cloudera®, Apache Spark®, Databricks, MongoDB®, Hadoop®, MariaDB®, IBM DB2, and PostgreSQL®.
- Upgrade to AMD with confidence using a strong set of AMD tools that facilitate your solution evaluation, migration and optimization. Start your journey by perusing AMD EPYC processor Tuning Guides at: AMD Documentation Hub.



* As of December 2024

1 - GD-183A: AMD Infinity Guard features vary by EPYC™ processor generations and /or series. Infinity Guard security features must be enabled by server OEMs and/or Cloud Service Providers to operate. Check with your OEM or provider to confirm support of these features. Learn more about Infinity Guard at https://www.amd.com/en/technologies/infinity-guard.

2 - https://www.amd.com/content/dam/amd/en/documents/epyc-technical-docs/performance-briefs/amd-epyc-9004-pb-extending-mssql-server-oltp-dss-perf-leadership.pdf

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