

# AMD EPYC™ 4004 SERIES PROCESSORS

## ATTRACTIVELY PRICED SOLUTIONS FOR GROWING BUSINESSES

### AT A GLANCE

When you need high performance at an affordable price, AMD EPYC™ 4004 Series processors are designed for you. These processors provide a wide range of performance, scalability, and efficiency that contribute to creating fast and practical solutions. Whether you are a small business, dedicated hosting provider, or a business technology provider, use EPYC 4004 processors to power turn-key, easy-to-use, and easily managed server solutions.



#### NEWEST MEMBER OF THE 4TH GEN AMD EPYC PROCESSOR FAMILY

AMD EPYC 4004 series processors leverage our hybrid, multi-chip architecture and 'Zen 4' CPU die to scale down to as few as four cores. With 4–16 cores, these CPUs can reach up to a sizzling 5.7 GHz,<sup>[EPYC-018](#)</sup> aided by thermal design flexibility. Integrated with up to two eight-core CPU dies and an I/O die tailored to the needs of small business and dedicated hosters, they offer balanced performance. Each processor supports two DDR5-5200 channels, up to 28 PCIe® Gen 5 lanes, four USB Type C® ports, and an AMD Secure Processor. Built with the AM5 Type 2 form factor, it supports server management and is expandable with four chip-set options.



#### ATTRACTIVELY PRICED FOR LOW SYSTEM ACQUISITION COST

##### ***Deploy high-value, essential server solutions for growing businesses***

Whether you are a small business, a hosting company providing dedicated servers, or a system integrator deploying integrated appliances, the AMD EPYC™ 4004 Series can help you meet your business goals. Whether you care most about overall system price or cost per core, choosing the EPYC 4004 Series will help you deliver compelling results compared to the competition. For example, a 16-core server powered with a single AMD EPYC 4584PX enables you to fully use your base 16-core Microsoft Windows server license while delivering 67% more integer performance per estimated system dollar than servers with an 8-core Intel Xeon E-2488.<sup>[E4K-003A](#)</sup>



#### DESIGNED FOR FAST AND PRACTICAL SOLUTIONS

##### ***Provides the full range of features for everyday processing needs.***

When you need a practical solution, choosing the EPYC 4004 Series gives you a wide range of performance, scalability, and efficiency needed by servers designed for everyday and all-day processing needs. From 4–16 cores, every CPU in the product line delivers the performance you can expect from our 'Zen 4' processor cores along with the I/O capacity and memory bandwidth to balance the system on chip's performance. The Phoronix Test Suite consists of more than 450 workloads. They score servers with a single 16-core EPYC 4564P CPU or a single 8-core EPYC 4364P at 57% or 15% faster, respectively, than servers with a single Xeon E-2488 CPU.<sup>[E4K-013](#)</sup>



#### DEPENDABLE AND EASY TO USE

##### ***Upgrade to the EPYC 4004 Series for easy-to-use, compatible server solutions .***

By choosing the established EPYC brand for enterprises, you can be confident in using the EPYC 4004 Series as the foundation for your growing business, hosting facility, or server appliance development. You can choose from a variety of solutions from key system vendors with a multi-year CPU lifecycle support from AMD. We engage with our partners with server design and BMC validation, software RAID, and chipset support. We've tested and validated the EPYC 4004 Series with the leading server operating systems, including Microsoft Windows® Server 2022, Red Hat® Enterprise Linux 9.3 and 9.4, SUSE® Linux® Enterprise Server 15 SP5, and Ubuntu® 22.04.

# AMD EPYC™ 4004 SERIES PROCESSORS

MODEL	CORES	THREADS	BASE FREQ. (GHZ)	UP TO MAX BOOST FREQ. (GHZ) <sup>A</sup>	TDP (W)	L3 CACHE (MB)	DDR5 CHANNELS	UP TO MAX DDR5 MT/S (1DPC)	PCIe® GEN 5 LANES	2P/1P
4564P	16	32	4.50	5.70	170	64	2	5200	28	1P
4464P	12	24	3.70	5.40	65	64	2	5200	28	1P
4364P	8	16	4.50	5.40	105	32	2	5200	28	1P
4344P	8	16	3.80	5.30	65	32	2	5200	28	1P
4244P	6	12	3.80	5.10	65	32	2	5200	28	1P
4124P	4	8	3.80	5.10	65	16	2	5200	28	1P
PROCESSORS WITH 3D V-CACHE										
4584PX	16	32	4.20	5.70	120	128	2	5200	28	1P
4484PX	12	24	4.40	5.60	120	128	2	5200	28	1P

A. Maximum boost for AMD EPYC processors is the maximum frequency achievable by any single core on the processor under normal operating conditions for server systems. EPYC-18.

## FOOTNOTES

For details on the footnotes used in this document, click on the links or visit [amd.com/en/legal/claims/epyc.html](https://amd.com/en/legal/claims/epyc.html)

© 2024 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, EPYC, Infinity Guard, and combinations thereof are trademarks of Advanced Micro Devices, Inc. in the United States and/or other jurisdictions. DisplayPort is a trademark owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. Java is a registered trademark of Oracle and/or its affiliates. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries. PCIe® is a registered trademark of PCI-SIG Corporation. Red Hat is a registered trademark of Red Hat, Inc. in the U.S. and other countries. SUSE is a registered trademark of SUSE LLC in the United States and other countries. Ubuntu is a registered trademark of Canonical Ltd. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. Windows is a registered trademark of Microsoft Corporation in the US and/or other countries. Other names are for informational purposes only and may be trademarks of their respective owners.

LE-90601-00 05/24