

AMD EPYC™ 4005 SERIES PROCESSORS

AFFORDABLE SERVER SOLUTIONS FOR GROWING BUSINESSES

AT A GLANCE

AMD EPYC™ 4005 Series processors empower small businesses and hosting providers with advanced technology in energy-efficient and affordable systems. Delivering high performance at an attractive price, these processors offer scalability and efficiency for building fast, practical solutions. Whether you're a small business, dedicated hosting provider, or technology provider, AMD EPYC 4005 processors power turn-key, easy-to-use, and manageable server solutions, propelling business growth and success in the AI era.



NEWEST MEMBER OF THE 5TH GEN AMD EPYC PROCESSOR FAMILY

AMD EPYC 4005 series processors leverage our hybrid, multi-chip architecture and "Zen 5" CPU die to scale down to as few as six cores. With 6–16 cores, these CPUs can reach up to a sizzling 5.7 GHz,^{[EPYC-018](#)} 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 hosts, they offer balanced performance. Each processor supports two DDR5-5600 channels, up to 28 PCIe® Gen 5 lanes, and an AMD Secure Processor. Built with the AM5 Type 2 form factor, it supports server management and is expandable with five 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, AMD EPYC™ 4005 Series CPUs can help you meet your business goals. Whether you care most about overall system price or cost per core, choosing AMD EPYC 4005 Series CPUs will help you deliver compelling results compared to the competition. For example, a 16-core server powered with a single AMD EPYC 4565P CPU enables you to fully use your base 16-core Microsoft Windows Server® license while delivering 98% more integer performance per estimated system dollar than servers with an 8-core Intel Xeon 6369P.^{[E4K-028](#)}



DESIGNED FOR FAST, EFFICIENT, AND PRACTICAL SOLUTIONS

Provides the full range of features for everyday processing needs

When you need a practical solution, choosing AMD EPYC 4005 Series CPUs gives you a wide range of performance, scalability, and efficiency needed by servers designed for everyday and all-day processing needs. From 6–16 cores, every CPU in the product line delivers the performance you can expect from our "Zen 5" 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 AMD EPYC 4565P CPU or a single 8-core EPYC 4345P at ~83% and ~38% faster, respectively, than servers with a single 8-core Intel Xeon E-6369P CPU.^{[E4K-021](#)}



DEPENDABLE AND EASY TO USE

Upgrade to AMD EPYC 4005 Series CPUs for easy-to-use, compatible server solutions

By choosing the established AMD EPYC brand for enterprises, you can be confident in using AMD EPYC 4005 Series CPUs 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 server 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 AMD EPYC 4005 Series CPUs with the leading server operating systems, including Microsoft Windows Server 2022 & 2025, Red Hat® Enterprise Linux 10 & 9.4, SUSE® Linux® Enterprise Server 15 SP6, and Ubuntu® 22.04 & 22.04.5.

MODEL	CORES	THREADS	BASE FREQ. (GHZ)	UP TO MAX BOOST FREQ. (GHZ)*	TDP (W)	L3 CACHE (MB)	DDR5 CHANNELS	UP TO MAX DDR5 MT/S (1DPC)	PCIe® GEN 5 LANES	2P/1P
4565P	16	32	4.30	5.70	170	64	2	5600	28	1P
4545P	16	32	3.00	5.40	65	64	2	5600	28	1P
4465P	12	24	3.40	5.40	65	64	2	5600	28	1P
4345P	8	16	3.80	5.30	65	32	2	5600	28	1P
4245	6	12	3.90	5.10	65	32	2	5600	28	1P
PROCESSORS WITH 3D V-CACHE™ TECHNOLOGY										
4585PX	16	32	4.30	5.70	170	128	2	5600	28	1P

* 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

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