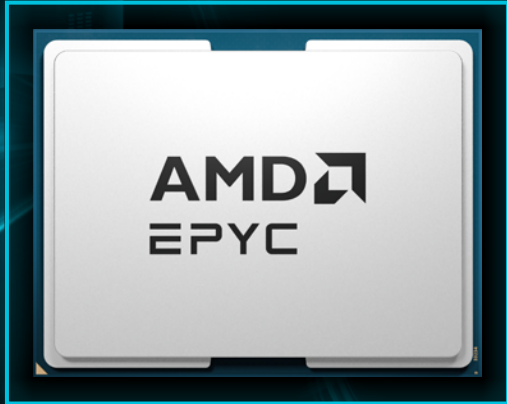


AMD EPYC™ 8005 SERVER CPUs

SINGLE SOCKET. TRIPLE THREAT.

Get big performance in a low-power, small-footprint design for the edge.



LEADERSHIP PERFORMANCE PER WATT, PER DOLLAR FOR THE EDGE — ALL IN ONE SOCKET

Help unlock the potential to consolidate servers, reduce power consumption, and lower total cost with 48% better performance per CPU watt, per CPU dollar. ^{8xx5-004}

Comparing single-socket servers built with 84-core AMD EPYC™ 8635P Server CPU vs. 72-core Intel® Xeon® 6776P-B CPU.

OPTIMIZED FOR CONSTRAINED ENVIRONMENTS

Deploy dense, single-socket systems where space and power are at a premium.

FAST, LOW-RISK MODERNIZATION WITH x86

Deploy, qualify, and support without rewriting or recompiling software.



REVOLUTIONARY CONSOLIDATION FOR TELCO

Deploy 100% software vRAN with cores to spare for AI and automation.

“By combining AMD’s processing technology with Samsung’s commercially proven vRAN software, we are accelerating the industry’s transition to AI-ready, cloud-native networks. This powerful combination delivers the performance, flexibility, and scalability operators need to evolve toward fully software-driven infrastructures.”

—Michael Kim, Vice President and Head of vRAN Software R&D Group Networks Business, Samsung Electronics

IN-STORE INTELLIGENCE FOR THE RETAIL EDGE

Remake store operations, smart camera systems, and automated assistants with AI.

“With AMD EPYC 8005 Server CPUs, our platform runs entirely at the edge – delivering high performance in a small footprint. That means less reliance on GPUs and the cloud – just efficient, cost-effective TCO and scalable AI running directly where the data is generated.”

—Will Kelso, President, WobotAI



RIGHT-SIZED COMPUTE FOR DENSE CLOUD STORAGE NODES

Six DDR5-6400 memory channels and 96 PCIe® Gen 5 lanes support robust storage requirements within a cost-optimized bill of materials (BOM).

MAJOR PERFORMANCE AND EFFICIENCY GAINS OVER THE PREVIOUS GENERATION

Top of stack

40% higher integer performance ^{8xx5-012}

9.5% higher performance per watt ^{8xx5-006}

Per core

30% higher performance ^{8xx5-016}

6.4% higher performance per watt ^{8xx5-007}

Compares 84-core AMD EPYC 8635P and 64-core AMD EPYC™ 8535P Server CPUs with previous generation 64-core AMD EPYC™ 8534P Server CPUs.



UNMATCHED x86 PERFORMANCE EFFICIENCY FOR THE EDGE

52% higher top-of-stack integer performance per CPU W ^{8xx5-004}

Compares 84-core AMD EPYC 8635P Server CPU with 72-core Intel Xeon® 6 6776P-B.

91% higher integer performance at 10W lower TDP ^{8xx5-015}

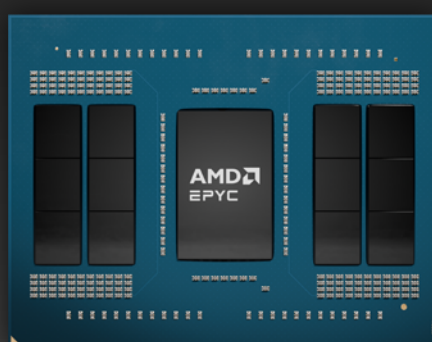
Compares 84-core AMD EPYC 8635P Server CPU with 40-core Intel® Xeon® 6 6776P-B.

AMD EPYC 8005 SERVER CPUs – KEY SPECIFICATIONS

Low-power, small-footprint, single-socket design

8 to 84 high-performance AMD “Zen 5” cores

70 to 225 watt configurable TDP



6 channels of 6400 MT/s DDR5 ECC

96 lanes of PCIe Gen 5

x86 stack with full-width AVX-512

AMD EPYC™ 8005 SERVER CPUs

BIG PERFORMANCE. LOW POWER. SMALL FOOTPRINT. SINGLE SOCKET. TRIPLE THREAT.

Unlock the power of AMD across edge, telco, and cloud storage with single-socket CPUs designed for power- and space-constrained environments.

[Learn More](#)

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