AMD EPYC

INNOVATE
OUT TO THE EDGE
WITH AMD EPYC™ 8004 PROCESSORS

AMD EPYC™ 8004 processors—offering optimal performance, energy efficiency and built-in security capabilities—are the right choice for intelligent edge, cloud service and telco deployments.

A NEW ERA FOR SERVER-BASED COMPUTING

TECHNOLOGIES SUCH AS AI/ML, 5G, AUTONOMOUS SYSTEMS AND IOT ARE QUICKLY CHANGING THE WAYS WE LIVE AND WORK.

By 2030, the 5G economy is expected to contribute $1.4-$1.7 TRILLION IN U.S. ECONOMIC GROWTH, and create 3.8-4.6 MILLION JOBS.[1]

The US edge computing market is expected to grow MORE THAN 33% ANNUALLY 2023-2032.[2]

53% OF BUSINESSES already apply AI to improve production processes, while 51% ARE ADOPTING AI FOR PROCESS AUTOMATION.[3]

GETTING THE MOST FROM THESE TECHNOLOGIES DEMANDS FOCUS ON:

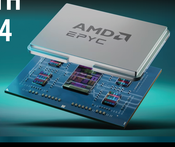
COSTS
Optimize your acquisition and ongoing OpEx costs.

LATENCY
Speed results for 5G, autonomous systems, cloud, intelligent edge, telco and IoT.

RESOURCES
Manage the typical challenges for diverse edge deployments: space, power, location, device size and temperature control.

SECURITY
Protect your data at rest, in transit and in use.

DELIVER PERFORMANCE AT THE EDGE WITH AMD EPYC™ 8004 PROCESSORS



ENABLE HIGH PRODUCTIVITY

GET MORE PERFORMANCE AT THE EDGE

~ 76% BETTER PERFORMANCE/ SYSTEM WATT
AT THE IOT EDGE GATEWAY[PS-005]

APACHE KOTOB: 1P 8-CORE AMD EPYC 8024P
VS. 1P 8-CORE INTEL® XEON® BRONZE 3408U

PROPEL AI/ML EXCELLENCE

~ 1.6X TOTAL THROUGHPUT PERFORMANCE/8KW RACK
WHEN RUNNING FIVE COMMON AI/ML WORKLOADS[PS-006]

1P SERVERS POWERED BY 64-CORE AMD EPYC 8534PN VS.
52-CORE INTEL® XEON® PLATINUM 8470N

MODERNIZE SIMPLY WITH COST-EFFECTIVE, INNOVATIVE DESIGNS

TAKE IT TO THE NEXT LEVEL

UP TO
64 PURPOSE-BUILT, ENERGY-EFFICIENT X86 'ZEN 4C' CORES
SIMULTANEOUS MULTITHREADING CAPABILITIES AND UP TO 128MB L3 CACHE PER CPU BRING BRING **HIGH COMPUTE DENSITY TO EDGE** DEPLOYMENTS

SPEED YOUR WAY TO SOLUTIONS

6 DDR5 MEMORY CHANNELS AND
96 PCIE® GEN 5 LANES PER CPU
STREAMLINE APPLICATION DATA PROCESSING AND DELIVER FAST TIME-TO-RESULTS ON TARGETED WORKLOADS

KEEP YOUR COOL

CREATE LOW POWER AIR-COOLED SYSTEMS
THAT RUN QUIETLY ENOUGH TO BE DEPLOYED INTO NON-TRADITIONAL DATA CENTER ENVIRONMENTS SUCH AS BRANCH OFFICES OR RETAIL LOCATIONS

CREATE ENERGY EFFICIENT SOLUTIONS

ACHIEVE THE SAME PERFORMANCE WITH LESS POWER

CONSUME ***49% LESS POWER*** AT 100% TARGET LOAD RUNNING SPECPOWER_SSJ® 2008

1P SERVERS POWERED BY 64-CORE AMD EPYC 8534P VS
52-CORE INTEL® XEON® PLATINUM 8470N

ENJOY EXCELLENT ENERGY EFFICIENCY

32% LOWER AVERAGE SYSTEM WATTAGE ON SPECRATE® 2017_INT_BASE

1P SERVERS POWERED BY 64-CORE AMD EPYC 8534PN
VS 52-CORE INTEL® XEON® PLATINUM 8470N

COMPUTE WITH CONFIDENCE

TAKE A LAYERED APPROACH

THE POWERFUL ***MODERN, MULTILAYERED AMD INFINITY GUARD***[4] SECURITY FEATURE SET HELPS DECREASE POTENTIAL ATTACK SURFACES AS SOFTWARE IS BOOTED, EXECUTED AND PROCESSES YOUR DATA, AND IS ACCESSIBLE BY ALL THE MAJOR HYPERVISOR VENDORS

AMD EPYC

ADVANCE YOUR EDGE WITH AMD EPYC™ 8004 SERIES PROCESSORS.

TOGETHER WE ADVANCE_EDGE COMPUTING

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For details on the claims cited in this document, visit amd.com/en/claims/epyc8.

1 Boston Consulting Group, "Accelerating the 5G Economy in the US," April 17, 2021, https://www.bcg.com/publications/2021/accelerating-the-5g-economy-in-the-us.

2 Providence Research, "Edge Computing Market," July 2021, https://www.providenceresearch.com/edge-computing-market.

3 Forbes Advisor, "From Businesses Are Using Artificial Intelligence In 2021," April 14, 2021https://www.forbes.com/advisor/business/software/ai-in-business/.

4 AMD Infinity Guard features vary by EPYC processor generation. 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 18-455.