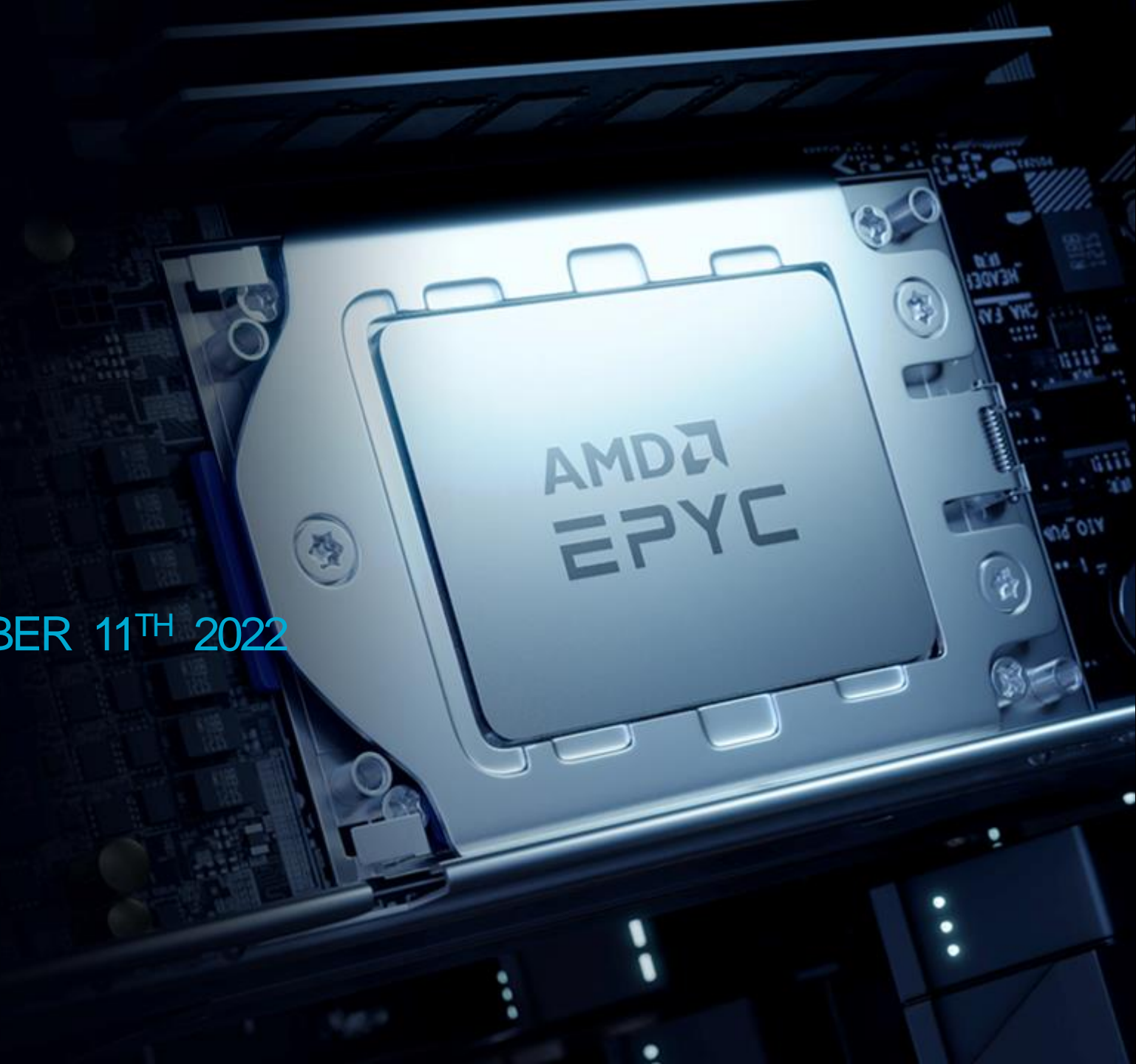




AMD DATA CENTER SOLUTIONS

OPENINFRA ISTANBUL – OCTOBER 11TH 2022

Cagatay Kilic
Server Components Sales Manager



CAUTIONARY STATEMENT

This document contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) including, but not limited to the features, functionality, availability, timing, deployment, and expected benefits of AMD future products, including AMD EPYCTM Server Processors, which are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are commonly identified by words such as "would," "may," "expects," "believes," "plans," "intends," "projects" and other terms with similar meaning. Investors are cautioned that the forward-looking statements in this presentation are based on current beliefs, assumptions and expectations, speak only as of the date of this document and involve risks and uncertainties that could cause actual results to differ materially from current expectations. Such statements are subject to certain known and unknown risks and uncertainties, many of which are difficult to predict and generally beyond AMD's control, that could cause actual results and other future events to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Investors are urged to review in detail the risks and uncertainties in AMD's Securities and Exchange Commission filings, including but not limited to AMD's most recent reports on Forms 10-K and 10-Q.

AMD DATA CENTER FOCUS

DELIVERING DIFFERENTIATION ACROSS THE INDUSTRY



HPC

AMD
EPYC



Enterprise/IT

AMD
INSTINCT



Cloud

XILINX
ALVEO™



**Machine
Intelligence**

XILINX
VERSAL™



**Virtualization &
Cloud Gaming**

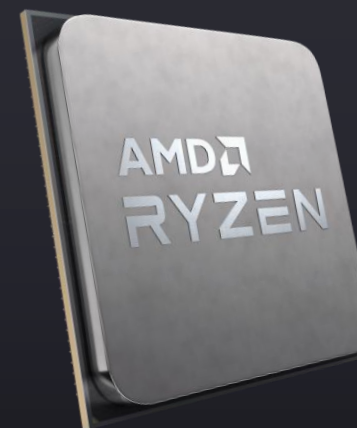
AMD
PENSANDO

CURRENT AMD CPU CHOICES



AMD EPYC™ CPUs

For General Purpose Computing, Cloud and HPC
Numerous Performance World Records
1-2P, 8-64 cores, Specialty SKUs with Large L3, High Freq

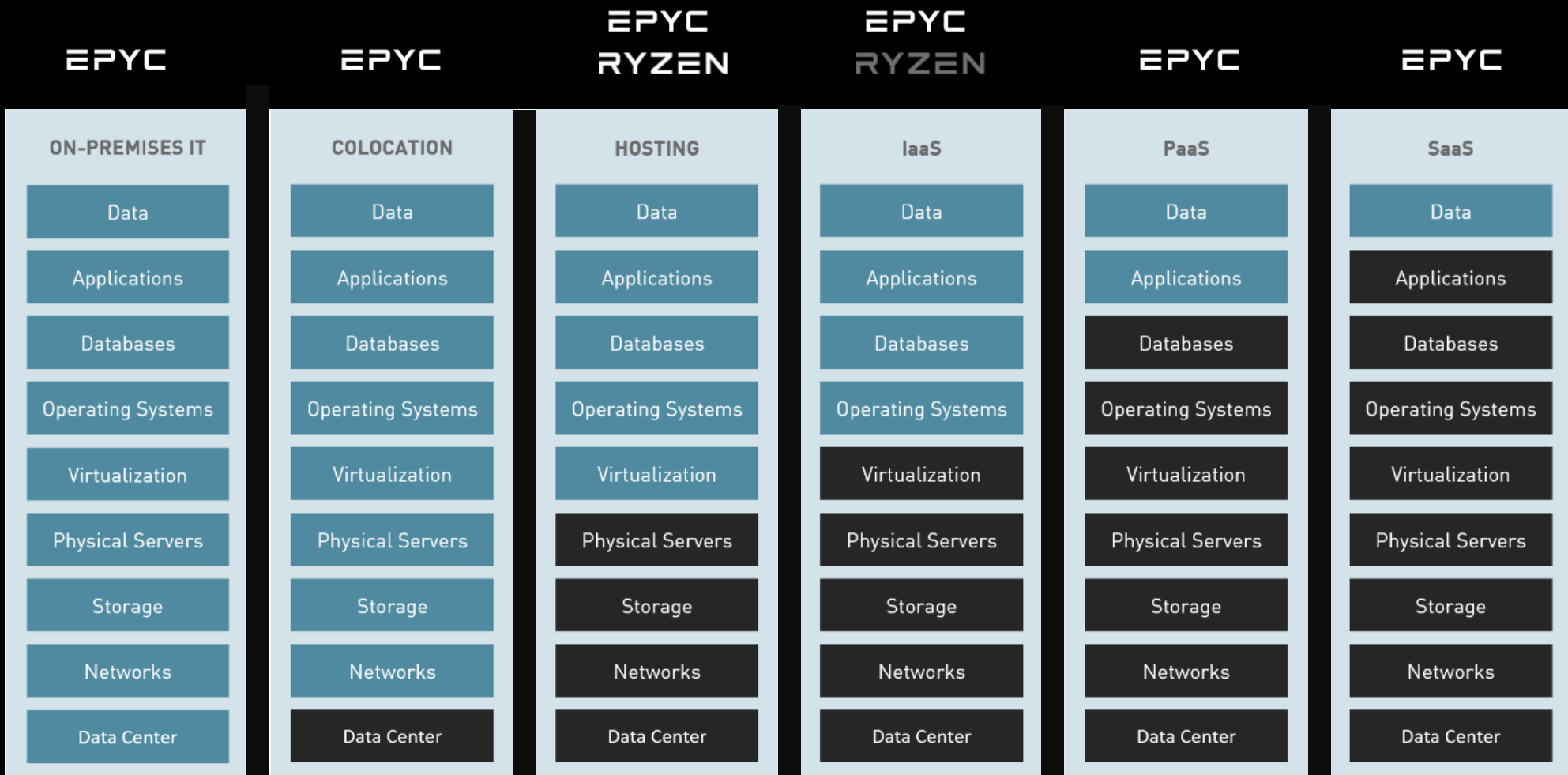


AMD RYZEN™ CPUs

Client Class Processor with DRAM ECC & BMC
Used by Dedicated and VPS hosters
1P only, 6-16 cores, Higher Frequencies, Lower \$ per core

CLOUD LANDSCAPE: CPU MAPPING

AMD CPU OPTIONS FROM 6 TO 64 CORES



MANAGED BY CUSTOMER



MANAGED BY XSP

DIGITAL TRANSFORMATION

MINIMIZE RISK SUSTAINABILITY DATA DRIVEN INFRASTRUCTURE MODERNIZATION INCREASE PRODUCTIVITY REDUCE COST HYBRID CLOUD

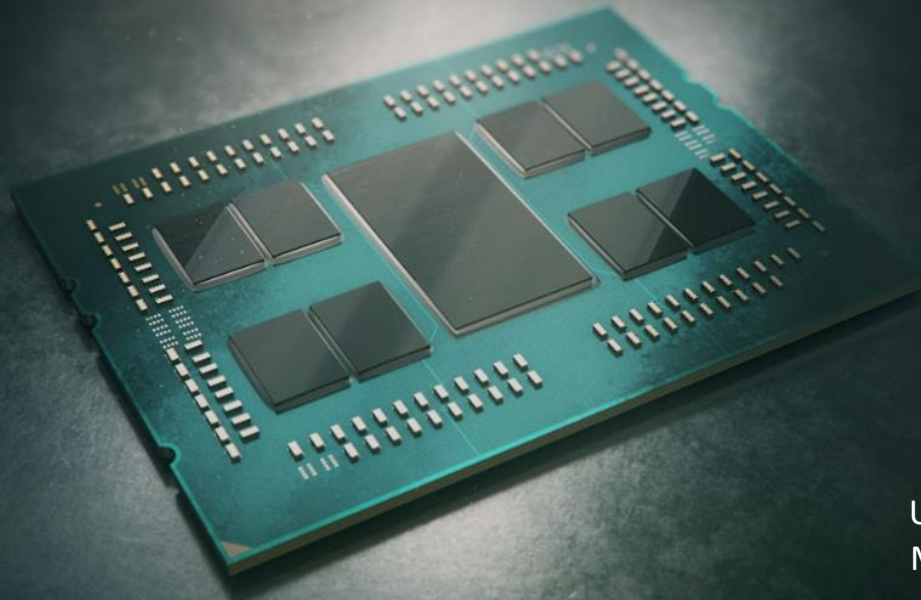
AMD
EPYC

250+ Performance and Efficiency Records
Energy Efficient Design
Innovative Security Features
Optimized Silicon for Workloads

Purpose Built Platforms
Core Density to Maximize Consolidation
Certified Solutions
500+ Public Cloud Instances

KEY FEATURES DIFFERENTIATION

THIRD GENERATION AMD EPYC™ PROCESSORS



Up to **64**
Cores per Socket

Zen3
Microarchitecture

128
Lanes of PCI-E® Gen 4

Up to **768**
Megabytes of L3 Cache

Secure
Processor on IOD die

Leadership Density and Throughput
For large-scale virtualization, HPC, dense computing

Leadership core performance
Key for single-threaded apps or to maximize per-core licensing

Leadership I/O bandwidth
Enables highly efficient and powerful I/O configurations

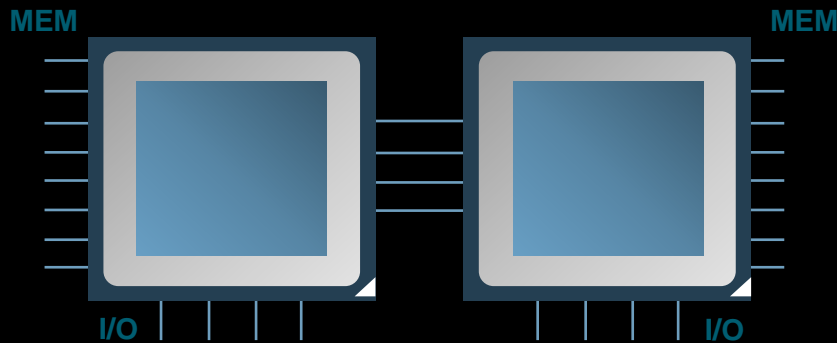
Leadership x86 L3 cache; Up to 96MB / Core
Can enable super-linear scaling of EDA and CFD apps
Improved performance through reduction of cache misses

Leadership AMD Infinity Guard Features*
Security features supported by mainstream Linux® distros, VMware®, GCP, and Azure

* AMD Infinity Guard features vary by EPYC™ Processor generations. 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>.

IT'S TIME TO THINK DIFFERENTLY

REACH EFFICIENCY WITHOUT COMPROMISE



Why do people buy dual socket servers?

- Compute requirements
- IO or memory footprint
- It's what they've always bought, so why change?
- Incorrect belief that a dual socket server provides redundancy

AMD EPYC™ processors: change the way you think about single-socket servers:

- Dual-socket performance and feature set with a single CPU*
- Power efficiency
- Reduced memory latency without cross-CPU traffic
- Infrastructure cost efficiency
- Compute efficiency



REDUCTION IN FOOTPRINT

2P SOCKET CONSOLIDATION

**CHANGING
ECONOMICS:**

1S AMD EPYC™

**1 CPU –
16-cores total**
AMD EPYC™ 73F3 CPU



**2 CPUs –
16-cores total**
INTEL® XEON® GOLD 6334

1 SOCKET AMD EPYC™ 73F3 OUTPERFORMS
2 SOCKET INTEL XEON GOLD 6334 ON SPECrate®2017 INTEGER

1.19x THE PERFORMANCE

1.50x PERFORMANCE / CPU \$

1.64x PERFORMANCE / WATT

FEWER SERVERS, LOWER TCO, LOWER ENERGY CONSUMPTION

1,200 VIRTUAL MACHINES (VMS) SCENARIO

INTEL®



15 x 2-socket
Platinum 8380 CPU
(40 core)

AMD



10 x 2-socket
EPYC™ 7713 CPU
(64 core)

AMD EPYC CPUs THE CLEAR WINNER

33% ^{up to} Fewer servers needed

41% ^{up to} Lower TCO over 3 years

32% ^{up to} Less energy consumed

Estimated environmental benefit of:

28 Acres of US forest annually
(carbon sequestered equivalent)

Numbers are estimates. TCO based on the hardware and related OpEx to support the 1200 VMs in this analysis.; see MLNTCO-021



ESTIMATED BENEFITS OF AMD EPYC™ VS INTEL® XEON® PROCESSOR BASED SERVERS IN DELIVERY OF 640 VMS*

INTEL®

Intel Xeon
Infrastructure
~\$508,389
Annual Total Cost

20 2-Socket Servers
Intel® Gold 16c 6346

AMD

AMD EPYC
Infrastructure
~\$449,118
Annual Total Cost

20 2-Socket Servers
AMD EPYC 16c 7313

Equivalent number of Servers, Cores and Licenses

11% More Performance Per-Core

~19% Power/Cooling Cost Savings

~11% Annual Cost Savings

ONLINE CALCULATORS FOR TCO & GHG EMISSIONS

PUBLIC VERSION: WWW.AMD.COM/EN/PROCESSORS/EPYC-TOOLS



AMD EPYC™ Bare Metal and Greenhouse Gas Emissions TCO Estimation Tool

Envision the potential Greenhouse Gas (GHG) Emissions and TCO savings AMD EPYC™ can deliver for your server environment. Compare by core/server/rack count, performance or budget for 3, 4, or 5 year time frames.

Server Platforms	Intel Xeon Gold 6334	AMD EPYC 7313P	AMD Fewer Servers
Total Server	20	20	0
Conversion of server power consumed to CO₂e estimates inclusive of a PUE of 1.7 and for a 3 year TCO analysis.			
Total 4 year CO ₂ e Emissions - kgCO ₂ e	Intel Xeon Gold 6334		AMD EPYC 7313P
	570,693		318,059
Total Solution kWh for 4 years	AMD Saving in kWh (estimated)		252,633
Total 4 year CO ₂ e Emissions - kgCO ₂ e	450,847		251,267
Estimated MTCO ₂ e for 4 years	450.85		251.27
	AMD EPYC MTCO ₂ e Savings estimates		199.58
Use Phase: Greenhouse Gas Equivalency Savings Results with AMD EPYC Powered Servers(est) (based on United States data) *			
Emissions Avoided - USA Passenger Cars Not Driven for 1 year			43
Emissions Avoided - USA Homes' electricity use for 1 year			25
Emissions Avoided - USA Trash Bags of Waste Recycled vs. Landfill			8,642
Emissions Avoided - Pounds of Coal Not Burned in USA			220,735
Emissions Avoided - Barrels of Oil Not Consumed in USA			459
Carbon Sequestered - Tree Seedlings Grown for 10 years in USA			3,293
Carbon Sequestered - Acres of USA Forests in 1 year			239

BUDGET : 3 YEAR TCO COMPARISON

64C AMD EPYC™ CPU SOLUTION IS LOWER BY ~ 36%

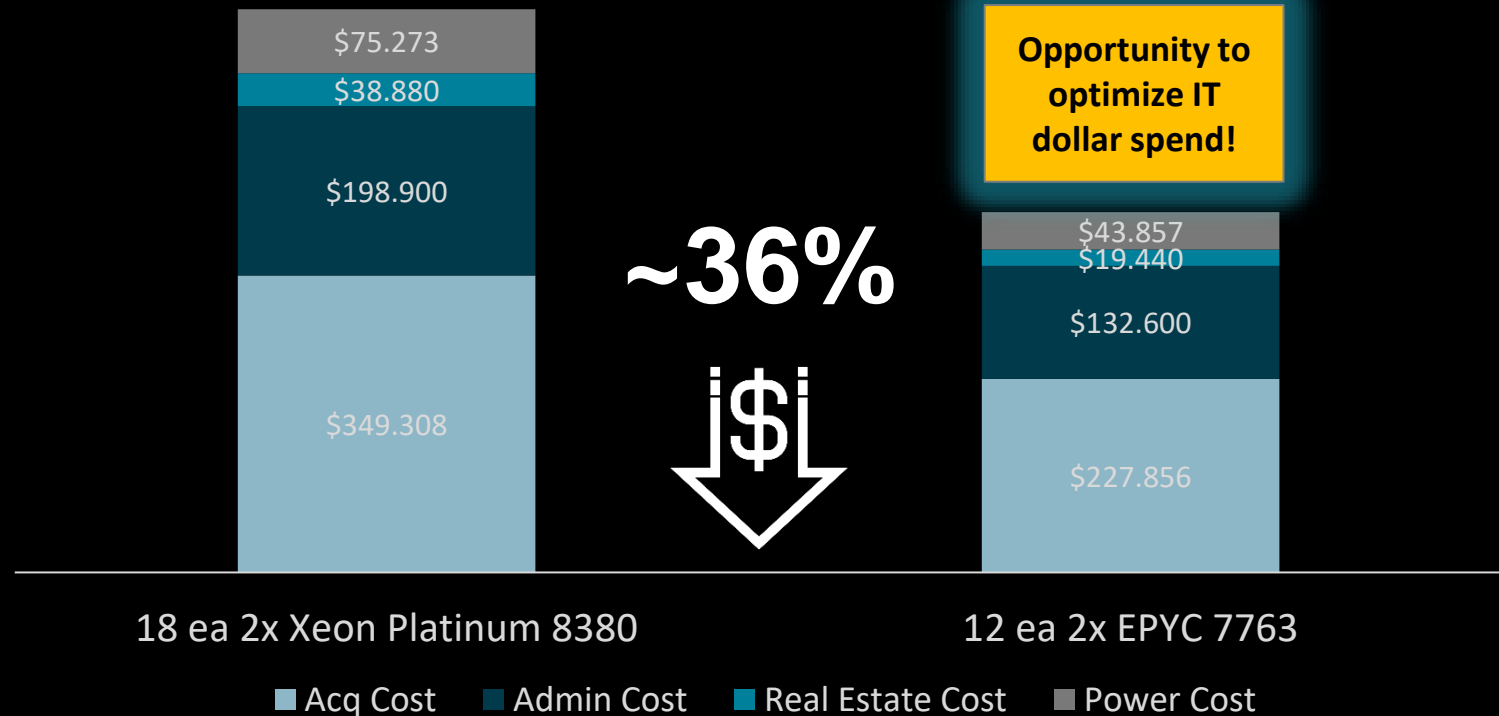
~34%
lower server cost

~50%
less space

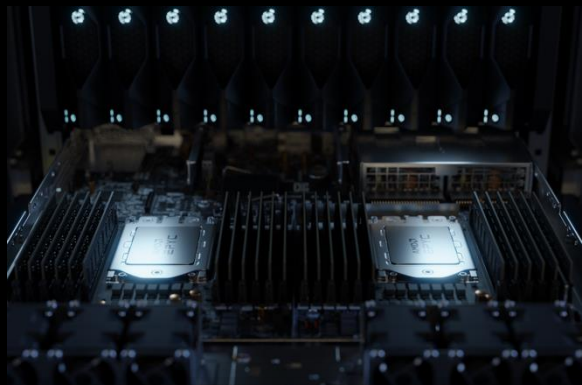
~42%
less power*

~33%
lower admin costs

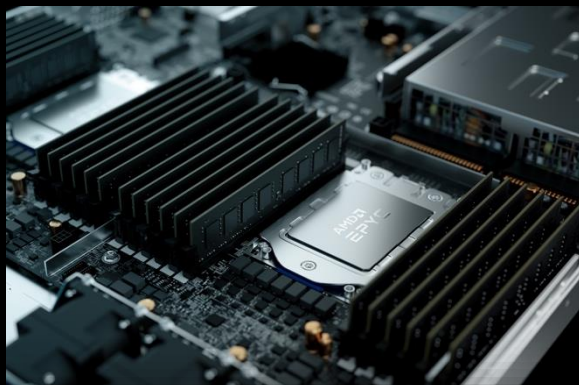
3-YEAR TCO ESTIMATE – COMPARABLE PERFORMANCE
(~10,000 EST. SPECrate® 2017_INT_BASE SCORE TOTAL: LOWER IS BETTER)



THE NEXT ERA OF LEADERSHIP



Highest Performing
General Purpose Silicon



Optimized Silicon for
Diverse Workloads



Full Stack Solutions

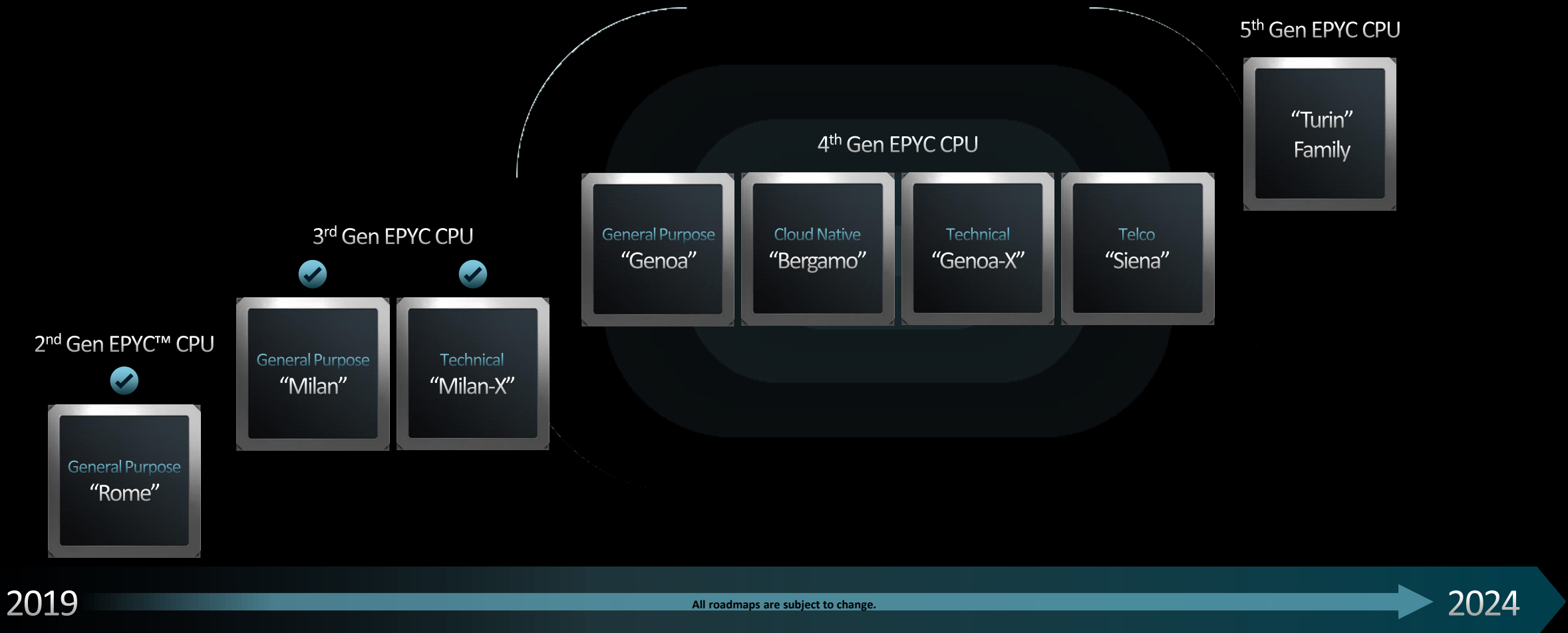


Ecosystem Scale
and Partnerships

Accelerating Customer Time To Value

SERVER CPU ROADMAP

ENTERING THE ERA OF WORKLOAD OPTIMIZED SILICON



AMD EPYC

- UNDENIABLE PERFORMANCE
- DELIVERING OUTSTANDING BUSINESS VALUE
- STRONG ECOSYSTEM SUPPORT
- STRONG ROADMAP FOR THE FUTURE



together we advance_data centers