V11.20

CAUTIONARY STATEMENT

This presentation contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) such as AMD's vision, mission and focus; the proposed transaction with Xilinx, Inc. including expectations, benefits and plans of the proposed transaction; total addressable markets; AMD's technology roadmaps; the features, functionality, performance, availability, timing and expected benefits of future AMD products; AMD's data center growth and as the new data center leader; AMD's product and commercial momentum; and AMD's PC innovation, 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 presentation 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. Material factors that could cause actual results to differ materially from current expectations include, without limitation, the following: Intel Corporation's dominance of the microprocessor market and its aggressive business practices; the ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; expected manufacturing yields for AMD's products; the availability of essential equipment, materials or manufacturing processes; AMD's ability to introduce products on a timely basis with features and performance levels that provide value to its customers; global economic uncertainty; the loss of a significant customer; AMD's ability to generate revenue from its semi-custom SoC products; the impact of the COVID-19 pandemic on AMD's business, financial condition and results of operations; political, legal, economic risks and natural disasters; the impact of government actions and regulations such as export administration regulations, tariffs and trade protection measures; the impact of acquisitions, joint ventures and/or investments on AMD's business, including the announced acquisition of Xilinx, Inc., and the failure to integrate acquired businesses; AMD's ability to complete the Xilinx merger; the impact of the announcement and pendency of the Xilinx merger on AMD's business; potential security vulnerabilities; potential IT outages, data loss, data breaches and cyber-attacks; uncertainties involving the ordering and shipment of AMD's products; quarterly and seasonal sales patterns; the restrictions imposed by agreements governing AMD's notes and the revolving credit facility; the competitive markets in which AMD's products are sold; market conditions of the industries in which AMD products are sold; AMD's reliance on third-party intellectual property to design and introduce new products in a timely manner; AMD's reliance on third-party companies for the design, manufacture and supply of motherboards, software and other computer platform components; AMD's reliance on Microsoft Corporation and other software vendors' support to design and develop software to run on AMD's products; AMD's reliance on third-party distributors and add-in-board partners; the potential dilutive effect if the 2.125% Convertible Senior Notes due 2026 are converted; future impairments of goodwill and technology license purchases; AMD's ability to attract and retain qualified personnel; AMD's ability to generate sufficient revenue and operating cash flow or obtain external financing for research and development or other strategic investments; AMD's indebtedness; AMD's ability to generate sufficient cash to service its debt obligations or meet its working capital requirements; AMD's ability to repurchase its outstanding debt in the event of a change of control; the cyclical nature of the semiconductor industry; the impact of modification or interruption of AMD's internal business processes and information systems; compatibility of AMD's products with some or all industry-standard software and hardware; costs related to defective products; the efficiency of AMD's supply chain; AMD's ability to rely on third party supply-chain logistics functions; AMD's stock price volatility; worldwide political conditions; unfavorable currency exchange rate fluctuations; AMD's ability to effectively control the sales of its products on the gray market; AMD's ability to adequately protect its technology or other intellectual property; current and future claims and litigation; potential tax liabilities; and the impact of environmental laws, conflict minerals-related provisions and other laws or regulations. 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 Quarterly Report on Form 10-Q for the quarter ended September 26, 2020. AMD does not assume, and hereby disclaims, any obligation to update forward-looking statements made in this presentation, except as may be required by law.

NON-GAAP FINANCIAL MEASURES In this presentation, in addition to GAAP financial results, AMD has provided non-GAAP financial measures including non-GAAP gross margin, and non-GAAP earnings per share. AMD uses a normalized tax rate in its computation of the non-GAAP income tax provision to provide better consistency across the reporting periods. For fiscal 2020, AMD uses a projected non-GAAP tax rate, which excludes the direct tax impacts of pre-tax non-GAAP adjustments, of approximately 3%, reflecting currently available information. AMD is providing these financial measures because it believes this non-GAAP presentation makes it easier for investors to compare its operating results for current and historical periods and also because AMD believes it assists investors in comparing AMD's performance across reporting periods on a consistent basis by excluding items that it does not believe are indicative of its core operating performance. The non-GAAP financial measures disclosed in this presentation should be viewed in addition to and not as a substitute for or superior to AMD's reported results prepared in accordance with GAAP and should be read only in conjunction with AMD's Consolidated Financial Statements prepared in accordance with GAAP. These non-GAAP financial measures referenced are reconciled to their most directly comparable GAAP financial measures in the Appendices at the end of this presentation.

No Offer or Solicitation

This communication is not intended to and shall not constitute an offer to buy or sell or the solicitation of an offer to buy or sell any securities, or a solicitation of any vote or approval, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Additional Information about the Acquisition and Where to Find It

In connection with the proposed transaction, Advanced Micro Devices, Inc. (AMD) intends to file with the SEC a registration statement on Form S-4 that will include a joint proxy statement of AMD and Xilinx, Inc. (Xilinx) and that also will constitute a prospectus with respect to shares of AMD's common stock to be issued in the proposed transaction (the "joint proxy statement/prospectus"). Each of AMD and Xilinx may also file other relevant documents with the SEC regarding the proposed transaction. This document is not a substitute for the joint proxy statement/prospectus or any other document that AMD or Xilinx may file with the SEC. The definitive joint proxy statement/prospectus (if and when available) will be mailed to stockholders of AMD and Xilinx. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE JOINT PROXY STATEMENT/PROSPECTUS AND ANY OTHER RELEVANT DOCUMENTS THAT ARE OR WILL BE FILED WITH THE SEC, AS WELL AS ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION AND RELATED MATTERS. Investors and security holders will be able to obtain free copies of the joint proxy statement/prospectus (if and when available) and other documents containing important information about AMD, Xilinx and the proposed transaction, once such documents are filed with the SEC through the website maintained by the SEC at www.sec.gov. Copies of the documents filed with the SEC by AMD will be available free of charge on AMD's website at ir.AMD.com or by contacting AMD's Corporate Secretary by email at Corporate.Secretary@AMD.com. Copies of the documents filed with the SEC by Xilinx will be available free of charge on Xilinx's website at investor.Xilinx.com or by contacting Xilinx's Investor Relations department by email at ir@xilinx.com.

Participants in the Solicitation

AMD, Xilinx and certain of their respective directors and executive officers may be deemed to be participants in the solicitation of proxies in respect of the proposed transaction. Information about the directors and executive officers of AMD, including a description of their direct or indirect interests, by security holdings or otherwise, is set forth in AMD's proxy statement for its 2020 annual meeting of stockholders, which was filed with the SEC on March 26, 2020. Information about the directors and executive officers of Xilinx, including a description of their direct or indirect interests, by security holdings or otherwise, is set forth in Xilinx's proxy statement for its 2020 annual meeting of stockholders, which was filed with the SEC on June 19, 2020. Other information regarding the participants in the proxy solicitations and a description of their direct and indirect interests, by security holdings or otherwise, will be contained in the joint proxy statement/prospectus and other relevant materials to be filed with the SEC regarding the proposed transaction. You may obtain free copies of these documents using the sources indicated above.

OUR VISION

High-performance computing is transforming our lives

OUR MISSION

Build great products that accelerate next generation computing experiences

OUR FOCUS

HIGH-PERFORMANCE COMPUTING SOLUTIONS

Supercomputing

Cloud, Hyperscale & Virtualization

AI & Analytics Everywhere

Visualization

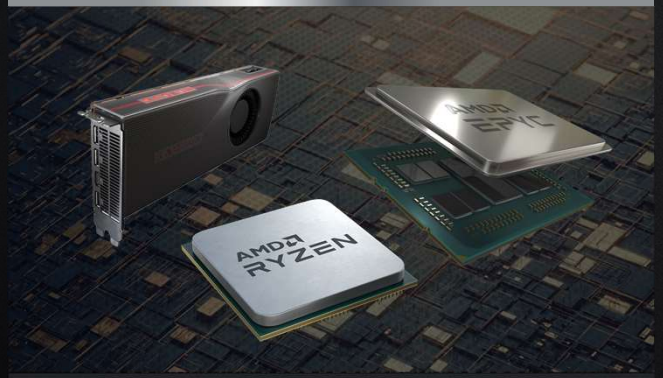
Gaming

Smarter Client Devices

AMD IS A LEADING TECHNOLOGY COMPANY

12,000+ Employees

Working around the world, headquartered in Santa Clara, California



Building the Best

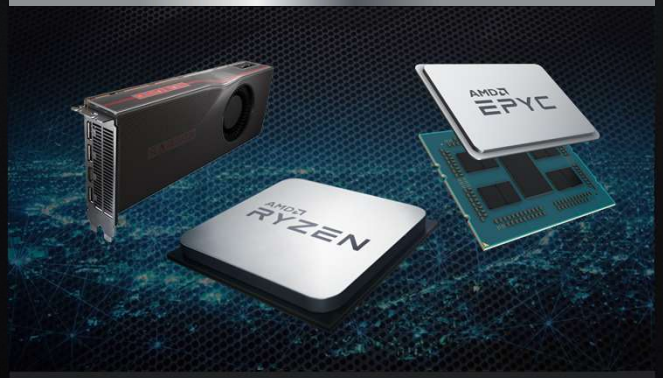
Developing high-performance compute technologies that move us forward

Transforming the World

Non-stop innovation for the world's creators, researchers, inventors and explorers

NASDAQ: AMD

OUR CULTURE OF INNOVATION



Innovate

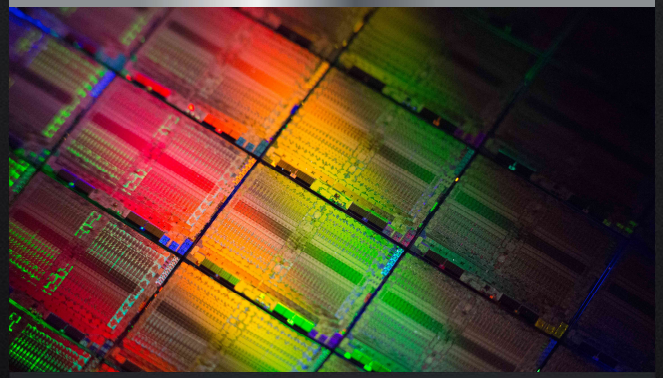
We build products that transform the world

From research, education and healthcare to business and entertainment

Lead

Everyone has a voice

Our leaders drive growth and innovation through a diverse mix of perspectives and backgrounds



Execute

We are laser focused on innovation and execution

We challenge the status quo and we deliver on our commitments

CORPORATE RESPONSIBILITY AT AMD

People

Creating a culture that drives innovation by fostering diversity, equality and belonging

Planet

Steadfast commitment to environmental stewardship and contributing to our local communities

Purpose

Responsibly developing cutting-edge technologies that enable a more just and sustainable world

GREATER TECHNOLOGY FOR THE GREATER GOOD

MAKING THE WORLD A BETTER PLACE

Fortune	Fortune	Bloomberg	Forbes + Just Capital	Human Rights Campaign
Companies that Change the World	**Most Admired Companies**	**Gender-Equality Index**	**America's Most Just Companies**	**Corporate Equality Index**
2020	2020	2019, 2020	2018-2021	2017-2020

WHERE THE BEST MINDS DO THEIR BEST WORK

OUR MARKET OPPORTUNITY

Data Center

$35B TAM

PCs

$32B TAM

Gaming

$12B TAM

$79B TAM

AMD 2023 internal estimates.

AMD TECHNOLOGIES & ARCHITECTURE ROADMAPS

AMD IS THE ONLY COMPANY IN THE WORLD WITH BOTH

HIGH-PERFORMANCE COMPUTE

AMD RYZEN

AMD EPYC

AND

HIGH-PERFORMANCE GRAPHICS

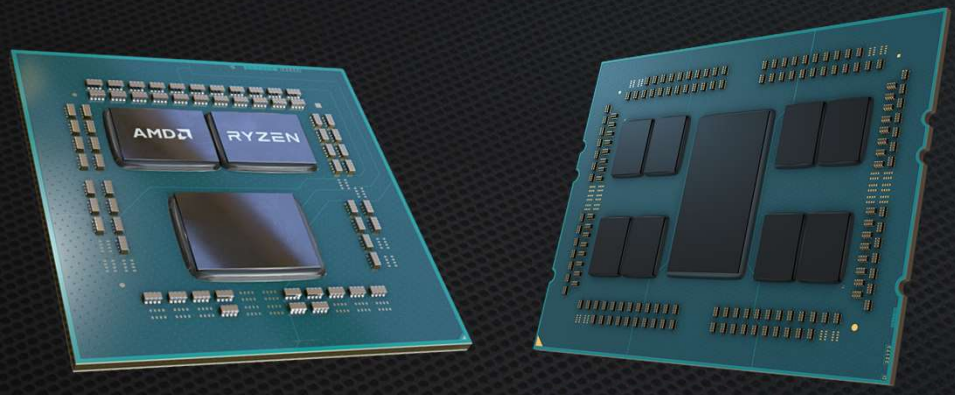
AMD RADEON

AMD RADEON INSTINCT

AND THE EXPERTISE TO COMBINE THEM INTO CUSTOM SOLUTIONS

“ZEN 2” CORE ARCHITECTURE

FASTER, COOLER,
WITH LOWER POWER CONSUMPTION
FOR SERVERS, LAPTOPS AND DESKTOPS



World’s first high-performance x86 **7nm CPU**	Revolutionary **Chiplet Design** delivers more cores at the same power	Average **15% IPC Uplift,** higher in some server workloads	Breakthrough **2nd Gen Infinity Architecture** interconnect

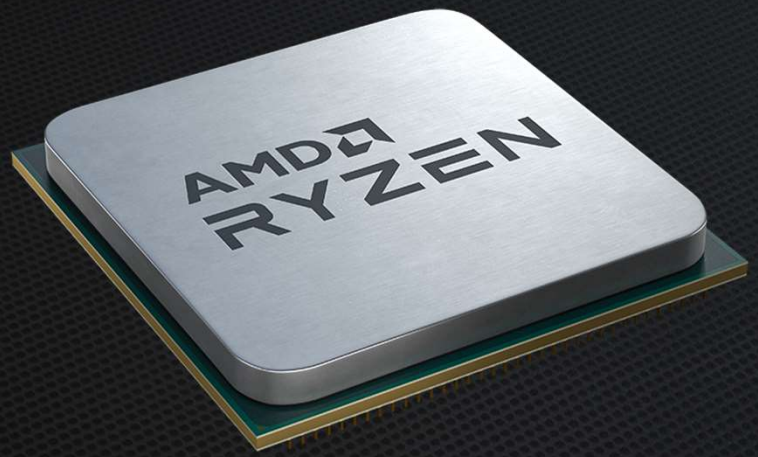
See endnote RZ3-34

AMD

“ZEN 3” CORE ARCHITECTURE

LEADERSHIP SINGLE-THREAD, MULTI-THREAD AND GAMING PERFORMANCE

AVAILABLE NOW IN AMD RYZEN™ 5000 SERIES DESKTOP CPUS



19% IPC Increase
The largest generational increase since AMD introduced “Zen” in 2017

Up to
2.8X More
performance-per-watt versus the competition

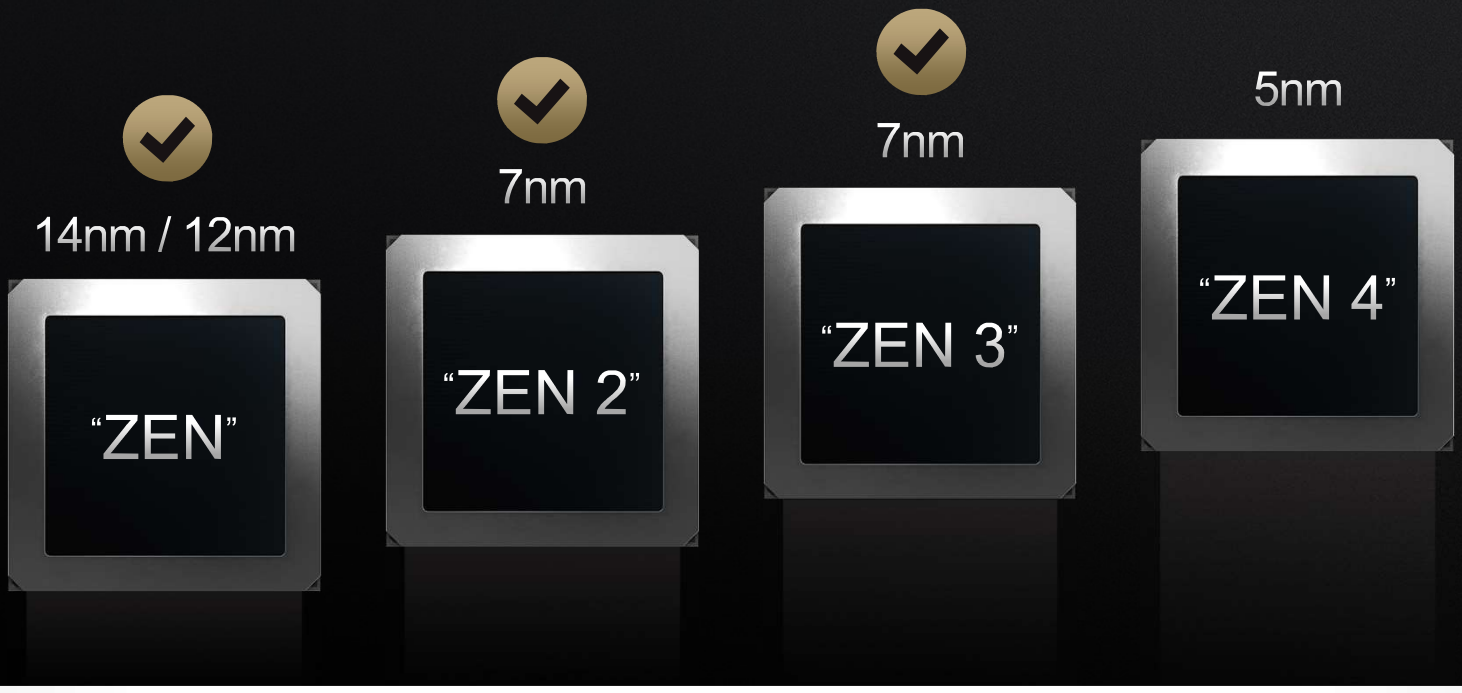
Up to
24% better power efficiency
over “Zen 2”

Highest
single-thread performance for PC gamers

See endnotes R5k-003, R5K-007, R5K-012, R5K-004

COMPUTE ARCHITECTURE ROADMAP

SUSTAINED HIGH-PERFORMANCE LEADERSHIP



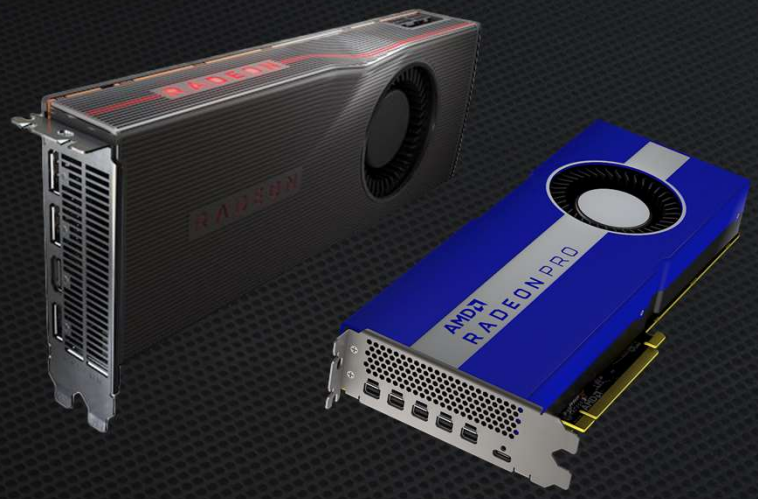
Roadmaps subject to change

AMD

AMD RDNA™ GRAPHICS ARCHITECTURE

HIGH-PERFORMANCE DESIGN

FOR PC, CONSOLE, CLOUD AND MOBILE



Performance
for diverse gaming and workstation workloads

Efficiency
+50% performance-per-watt improvement

Features
to enhance gaming experiences

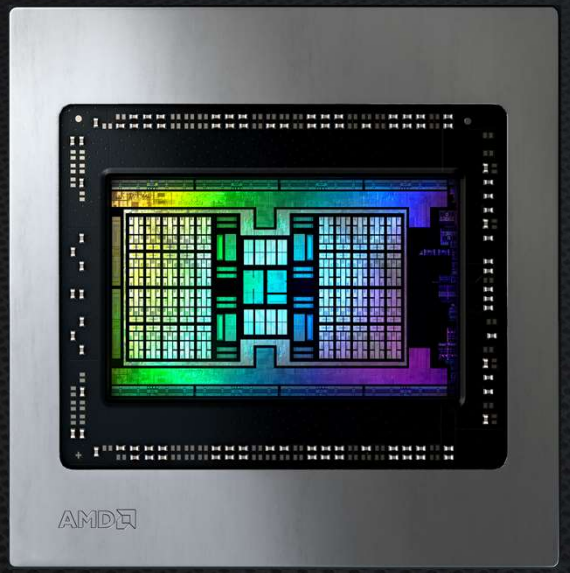
Scalability
from mobile to cloud

See Endnotes RX-325 and RX-362. Data Based on AMD Internal Testing 6/1/2019

AMD RDNA™ 2 GRAPHICS ARCHITECTURE

DRIVING GAMING PERFORMANCE LEADERSHIP

AVAILABLE SOON IN AMD RADEON™ RX 6000 SERIES DESKTOP GPUs



Performance

2X performance compared to AMD Radeon RX 5700 XT

Power

50% generational performance-per-watt improvement goal

Features

Deliver DX12 Ultimate experience for every gamer with raytracing, variable rate shading and more

See Endnotes RX-558, RX-537

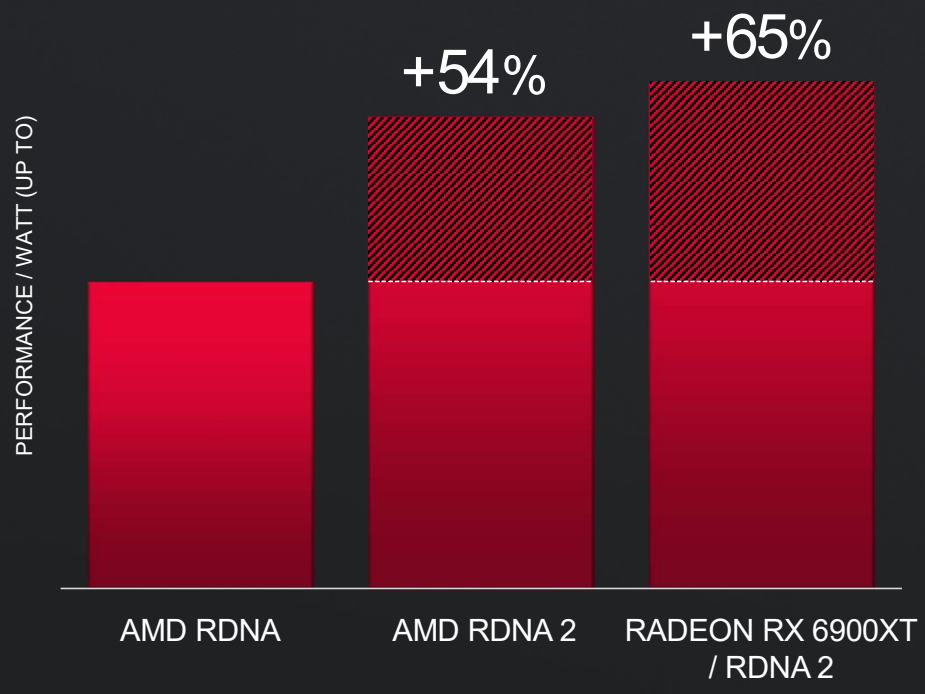
AMD RDNA™ 2 PERF/WATT IMPROVEMENT

BUILDING ON PROVEN CPU DESIGN METHODOLOGY

Design frequency increase through high-speed design

Power efficiency improvement with holistic design optimization

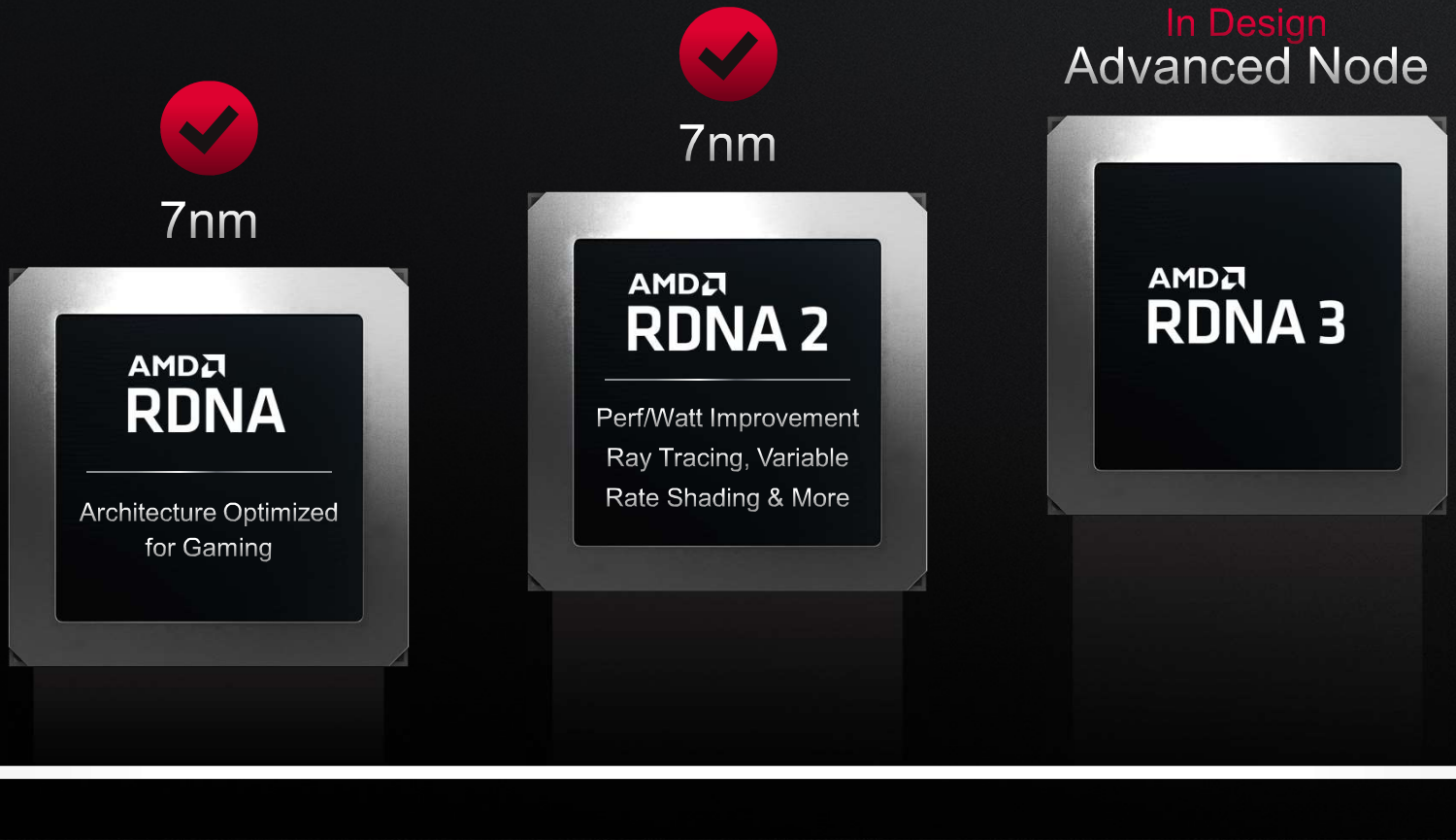
Performance per clock enhancement via new Infinity Cache



See Endnotes RX-549, RX-554. Improvement Based on AMD Internal Estimate.

GAMING GPU ARCHITECTURE ROADMAP

CONTINUOUS PERFORMANCE, INNOVATION AND EFFICIENCY GAINS



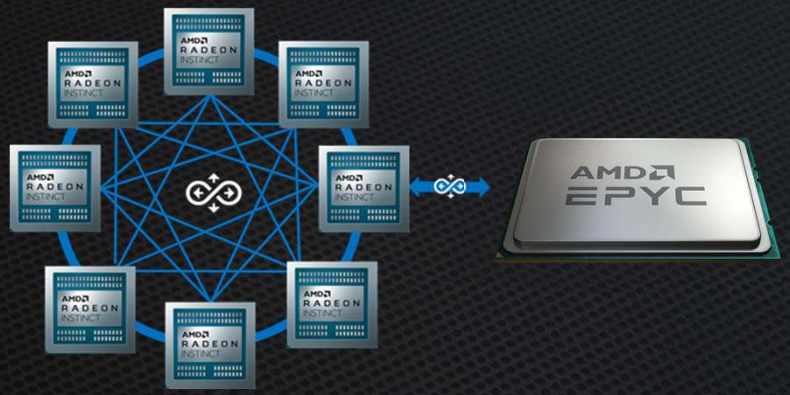
Roadmaps subject to change

AMD

COMING SOON

AMD CDNA ARCHITECTURE

GPU COMPUTE DNA
FOR THE DATA CENTER



Performance
Accelerate ML/HPC with Compute/Tensor OPS

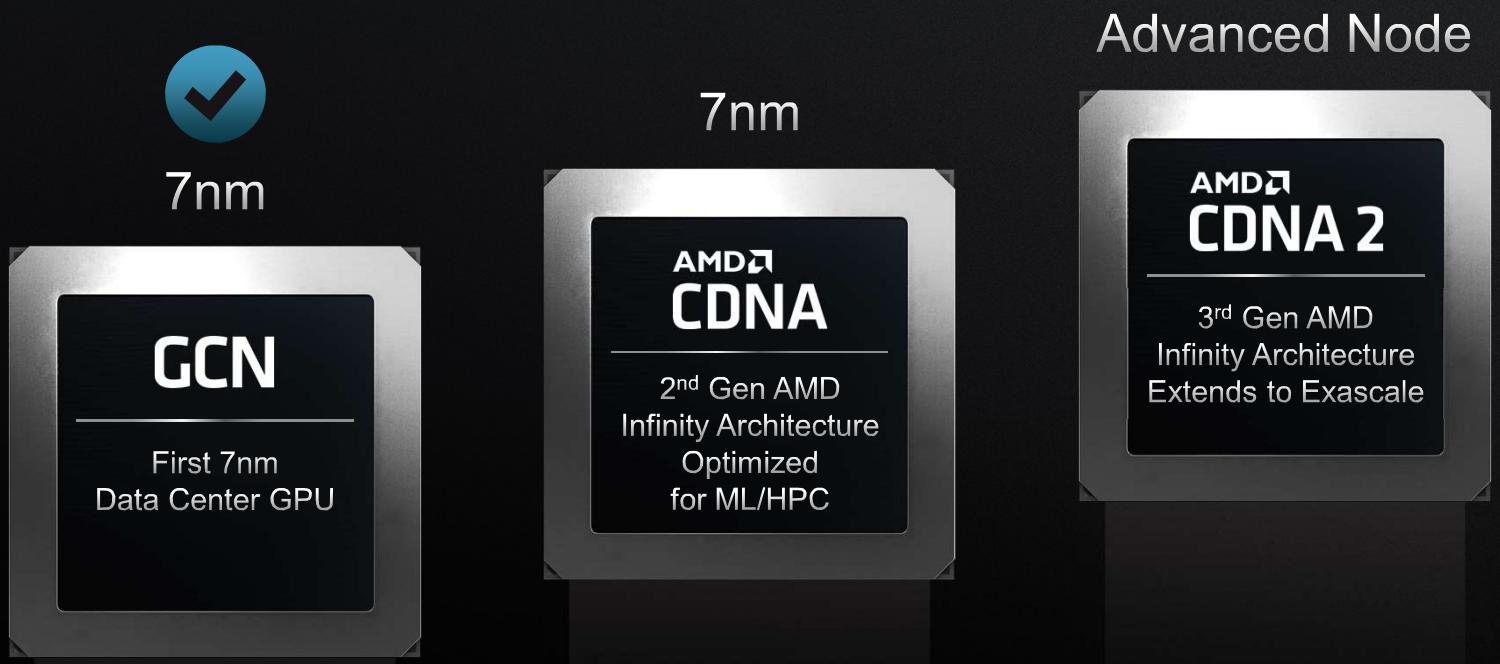
Efficiency
Designed for improved Perf-per-Watt

Features
Enhance Enterprise RAS, Security and Virtualization

Scalability
Scale Performance with AMD Infinity Architecture

COMPUTE GPU ARCHITECTURE ROADMAP

COMPUTE DNA FOR THE DATA CENTER

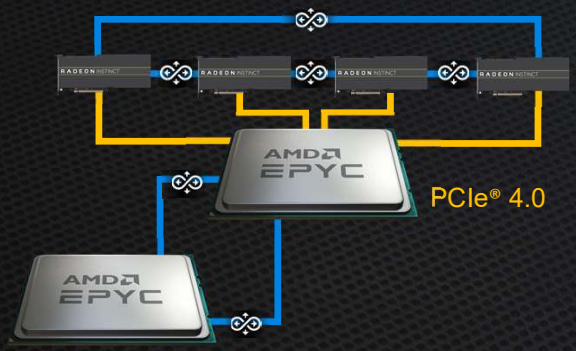


Roadmaps subject to change

AMD

AMD INFINITY ARCHITECTURE

SCALABLE INTERCONNECT TECHNOLOGY
FOR AMD CPUs AND GPUs

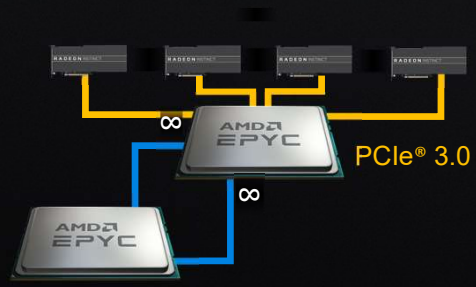


4/8-WAY GPU CONNECTIVITY

2nd Gen
AMD Infinity Architecture

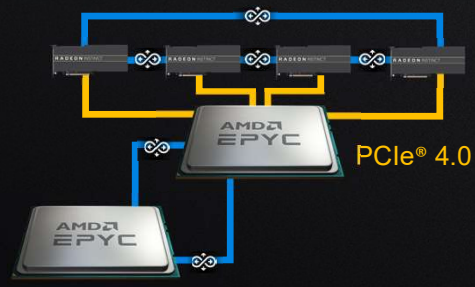
Leveraged across AMD product line from notebook to server	Optimization for multi-processor performance and scalability	Enables revolutionary chiplet design	Delivers efficiency, performance, throughput and security features

AMD INFINITY ARCHITECTURE ROADMAP



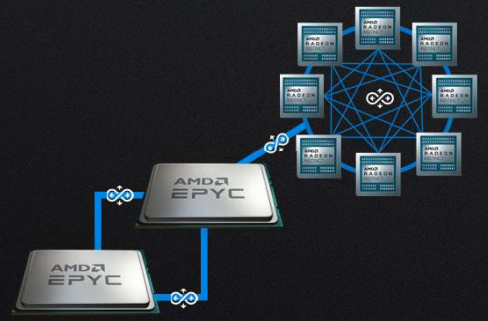
CPU CONNECTIVITY

1st Gen
AMD Infinity Fabric™



4/8-WAY GPU CONNECTIVITY

2nd Gen
AMD Infinity Architecture



UP TO 8-WAY GPU WITH COHERENT CONNECTIVITY

3rd Gen
AMD Infinity Architecture

2017 — 2022

Roadmaps subject to change

AMD

AMD PRODUCTS

AMD DATA CENTER FOCUS

DELIVERING CPU AND GPU DIFFERENTIATION

HPC

Enterprise/IT

Cloud

Machine Intelligence

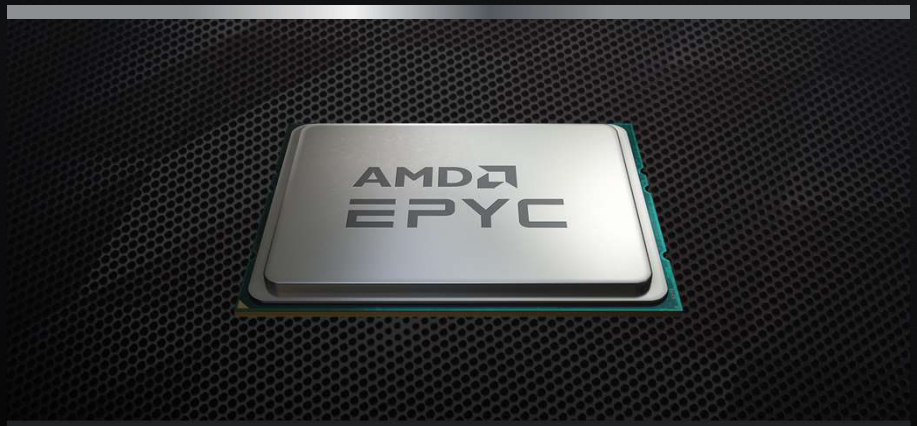
Virtualization & Cloud Gaming

AMD EPYC

AMD RADEON INSTINCT

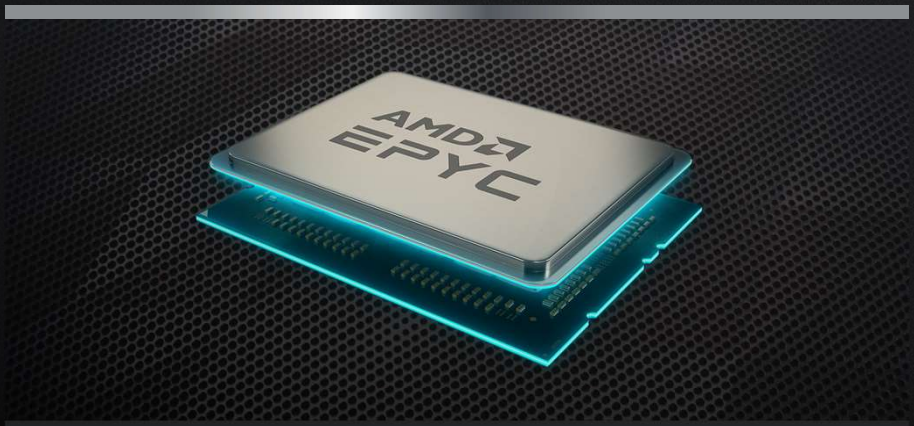
AMD EPYC™ LINEUP

A NEW ERA IN THE DATA CENTER



1st Gen EPYC™ Processors

"Zen" Architecture

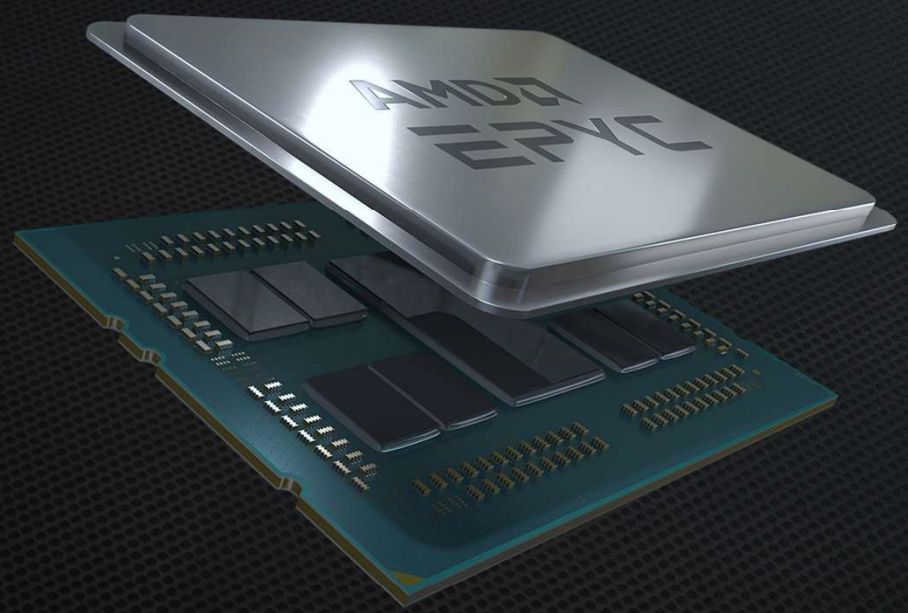


2nd Gen EPYC™ Processors

"Zen 2" Architecture

THE NEW STANDARD
FOR THE MODERN DATA CENTER

2ND GEN AMD EPYC™ PROCESSOR



RECORD-SHATTERING PERFORMANCE
Highest Performance x86 Server Processor*

BREAKTHROUGH ARCHITECTURE
Chiplet Design, “Zen 2” Core, Infinity Fabric™

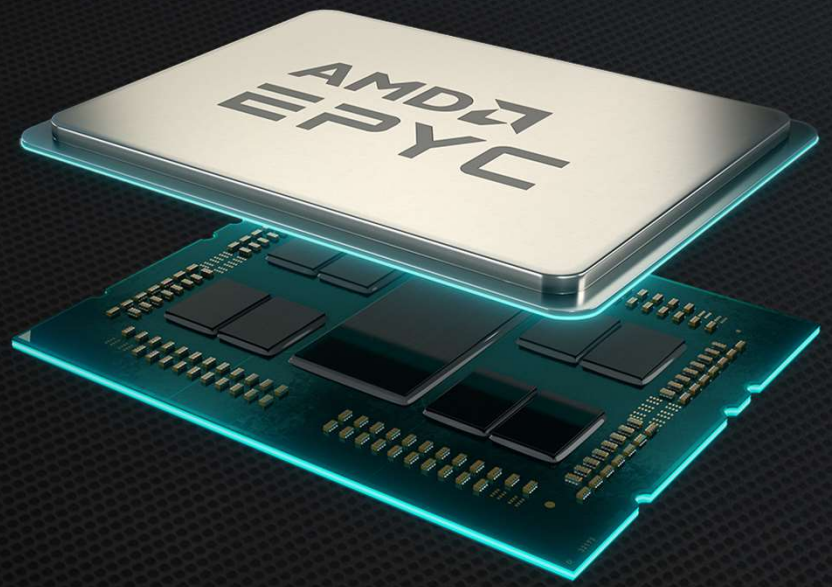
DISRUPTIVE TCO
Higher Performance Drives Lower CapEx and OpEx

170+	128 OR HIGHER	Up to 50%	Advanced Security Features
World Records and Counting	PCIe® 4.0 Lanes**	Lower TCO	

See endnotes ROM-169, ROM-557. *EPYC 7702 - see endnote ROM-517. **A motherboard designed for 2nd Gen EPYC processors is required to enable all available functionality

BALANCED ARCHITECTURE
FOR THE HEART OF THE ENTERPRISE

AMD EPYC™ 7FX2 PROCESSORS



- HYPER-CONVERGED INFRASTRUCTURE
- COMMERCIAL HPC APPLICATIONS
- RELATIONAL DATABASES

High base and boost frequencies	Low latency access to critical data with large L3 cache	Industry leading **8** DDR4-3200 memory channels	Up to **128** PCIe® 4.0 Lanes**

See endnotes EPYC-18, ROM-169, ROM-557. *EPYC 7702 - see endnote ROM-517. **A motherboard designed for 2nd Gen EPYC processors is required to enable all available functionality

GOOGLE CLOUD CONFIDENTIAL VIRTUAL MACHINES

POWERED BY AMD EPYC™ + AMD SECURE ENCRYPTED VIRTUALIZATION

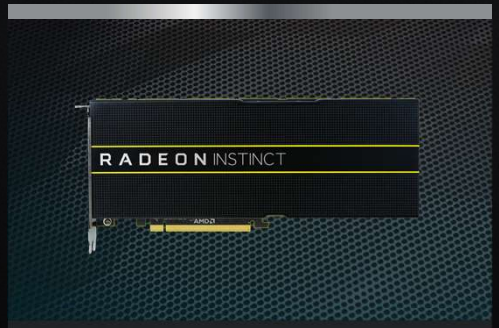
First VMs enabled by advanced security technology only available from AMD

2nd Gen AMD EPYC Processors enable encryption of data-in-use

Based on the existing N2D family of VMs for Google Compute Engine

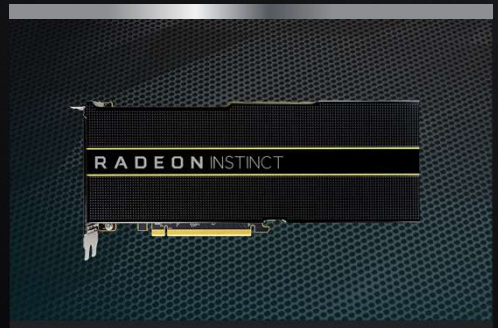
AMD DATA CENTER GPU LINEUP

A NEW ERA IN THE DATA CENTER



Radeon™ Instinct MI25 Accelerator

1st generation 14nm "Vega" architecture

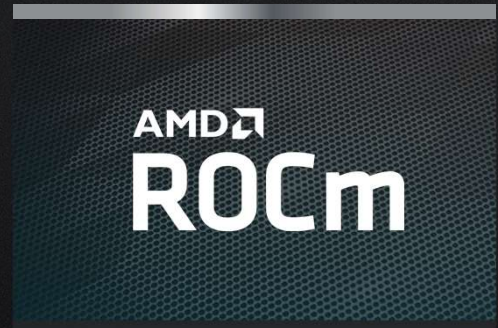


Radeon™ Instinct MI50 Accelerator

2nd generation "Vega" architecture

Customer-Oriented Data Center Solutions

Strategic development with lead customers



ROCm™ Software

Top-to-bottom open ecosystem commitment

WORLD-CLASS **GPU ACCELERATOR TECHNOLOGIES**
OPEN **SOFTWARE ECOSYSTEM** PLATFORM

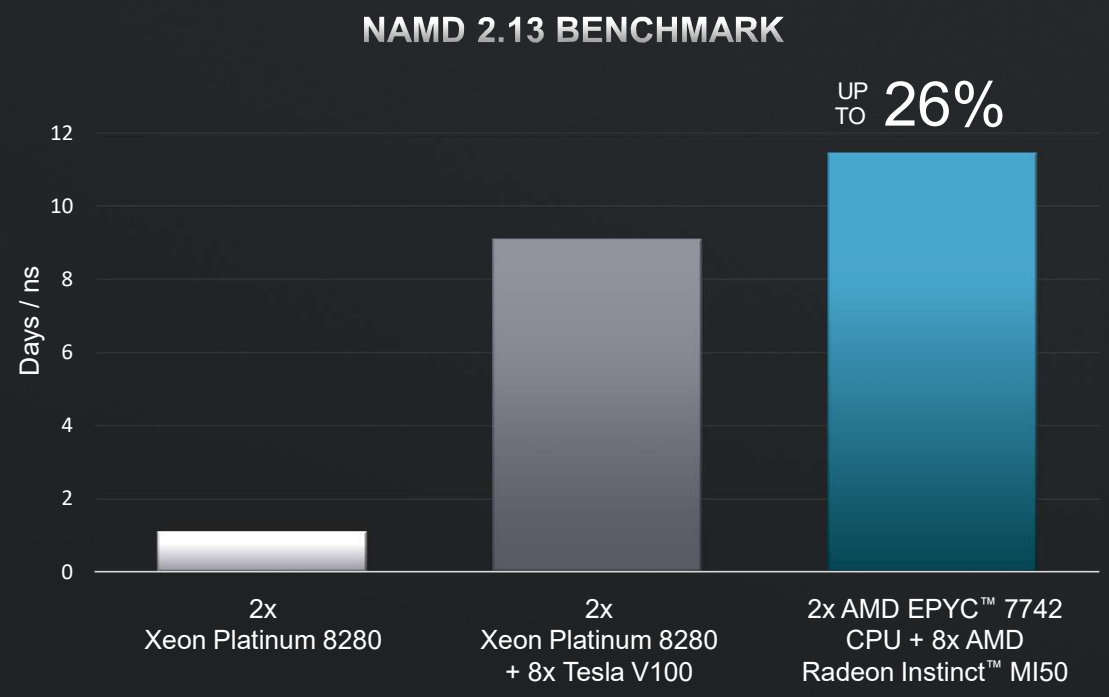
AMD CPU + GPU SOFTWARE ADVANTAGES

DRIVING HIGH-PERFORMANCE COMPUTING LEADERSHIP

Fully Integrated CPU and GPU Systems and Unified Tools

Infinity Architecture for Bandwidth and Coherency

Open Source Software Optimized for Performance



See endnote RIV-20

AMD

DATA CENTER GROWTH

DELIVERING LEADERSHIP COMPUTE AND GRAPHICS DIFFERENTIATION

Supercomputing

Leading the Exascale Era

Consistently Winning Top Deployments

SDSC SAN DIEGO SUPERCOMPUTER CENTER · ECMWF · HLRS · INDIANA UNIVERSITY

Microsoft Azure

aws · Google

Cloud

Expanding Deployments with Top 10 Providers

Doubled in 2019

150+ Instances

Expected in 2020

Enterprise

Large-scale Enterprise Deployments with Growing Pipeline

Doubled in 2019

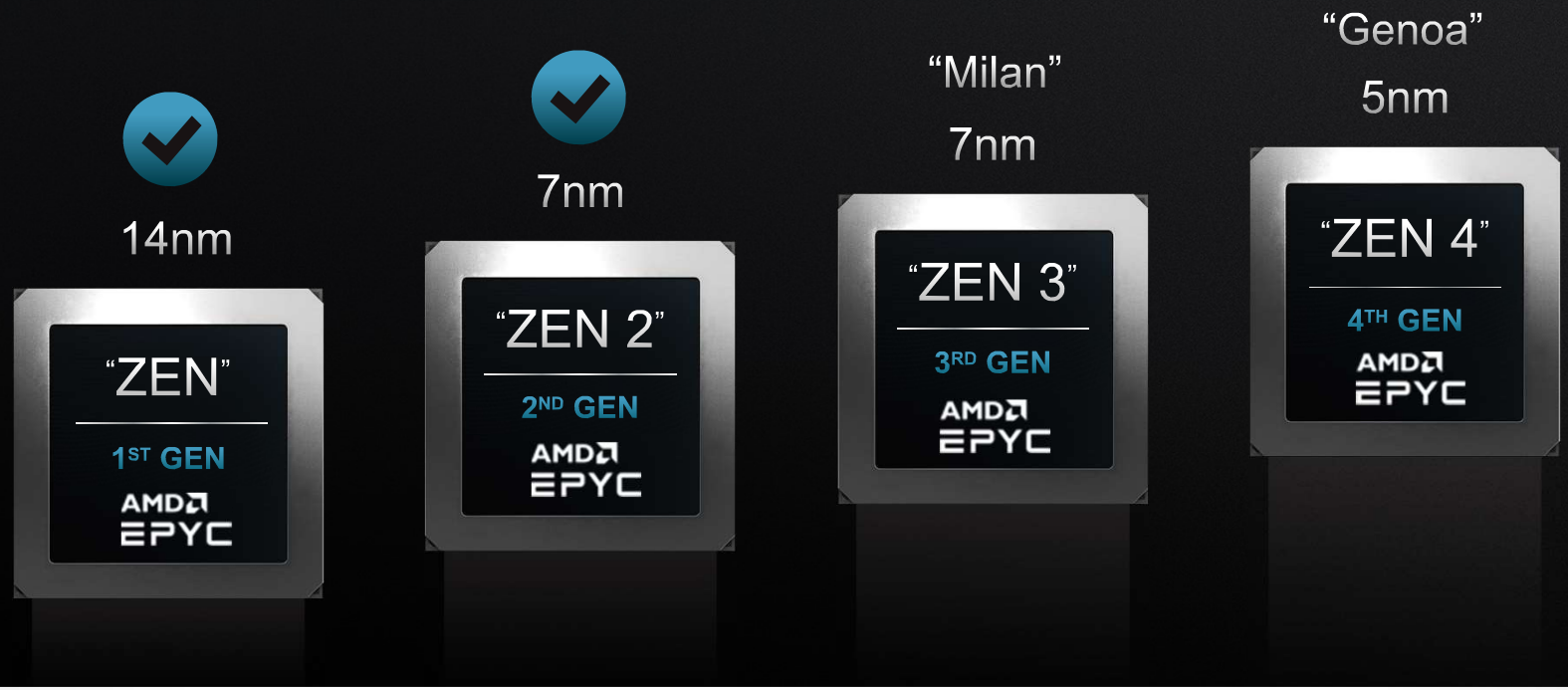
140+ Platforms

Expected in 2020

AMD

AMD DATA CENTER CPU ROADMAP

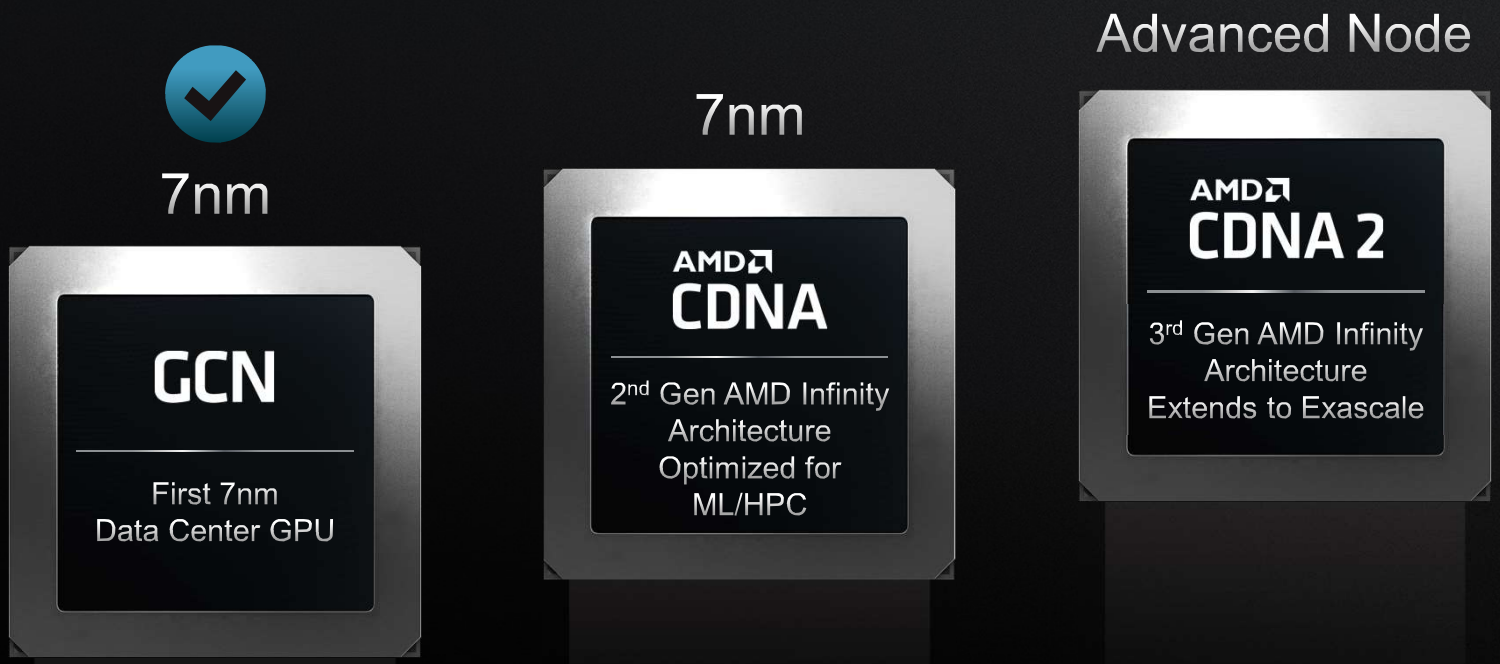
SUSTAINED HIGH-PERFORMANCE LEADERSHIP



Roadmaps subject to change

AMD

AMD DATA CENTER GPU ROADMAP



Roadmaps subject to change

AMD

OUR PATH FORWARD

THE NEW DATA CENTER LEADER

Leadership Roadmap, Consistent Execution	Leadership Performance	Leadership Architecture for Accelerated Computing

AMD Internal Estimates

AMD

AMD CLIENT FOCUS

BUILDING THE BEST PROCESSORS IN THE WORLD

Desktops

Gaming
Commercial
Consumer
High-end

Notebooks

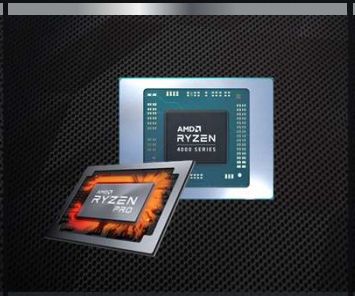
Gaming
Commercial
Consumer
Chromebook

Workstations

Commercial
Consumer

AMD CLIENT LINEUP

NON-STOP PRODUCT MOMENTUM

					
AMD Ryzen™ 5000 Series Desktop Processors	**AMD Ryzen™ 4000 Series Mobile Processors**	**AMD Ryzen Threadripper™ and Threadripper PRO Desktop Processors**	**AMD Ryzen 3000 Series Desktop Processors**	**AMD Ryzen and Athlon Processors for Chromebooks**	**AMD Ryzen™ Desktop Processors with Radeon™ Graphics**
“Zen 3” Architecture	“Zen 2” Architecture + Radeon™ Vega Graphics	“Zen 3” Architecture	“Zen 2” Architecture	“Zen” Architecture + Radeon™ Vega Graphics	“Zen 2” Architecture + Radeon™ Vega Graphics

AMD RYZEN

AMD RYZEN THREADRIPPER

AMD RYZEN PRO

AMD THREADRIPPER PRO

AMD ATHLON

AMD internal estimates, subject to change

AMD

ANNOUNCED OCTOBER 2020

AMD RYZEN™ 5000 SERIES

THE WORLD'S FASTEST GAMING PROCESSORS

- Across the board performance leadership for gamers and content creators
- 7nm "Zen 3" core architecture delivers 19% IPC uplift
- Up to 26% gaming performance generational uplift
- Leadership power efficiency with up to 2.8X performance-per-watt versus competition

See endnotes R5K-002, R5K-007, R5K-009, R5K-003

AMD RYZEN™ 4000 SERIES

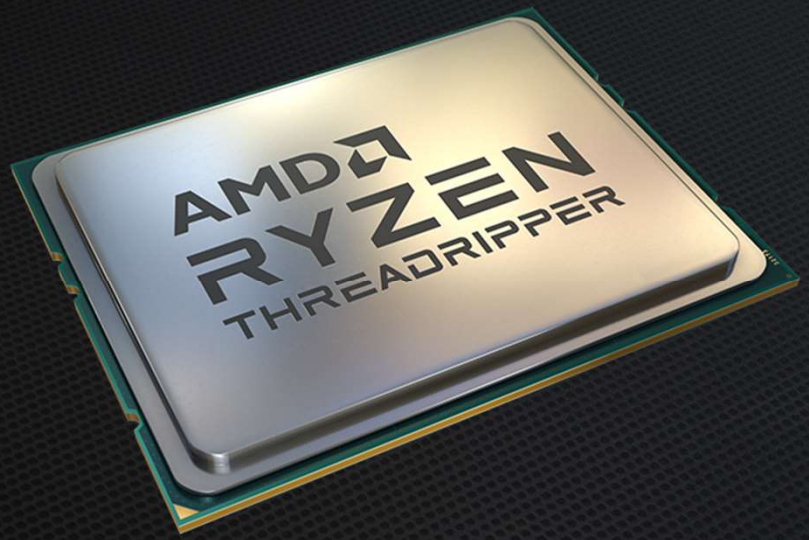
MOBILE PROCESSORS FOR CONSUMER AND COMMERCIAL NOTEBOOKS

- World's highest performing ultrathin notebook processor
- Based on 7nm "Zen 2" core architecture
- Designed for premium battery life experience
- Up to 2x performance-per-watt vs. 2nd generation

See endnotes RM3-123, RM3-127, RZ3-24, RM3-250.

AMD RYZEN™ THREADRIPPER™ 3000 SERIES

THE WORLD'S FASTEST HIGH-END DESKTOP (HEDT) PROCESSORS

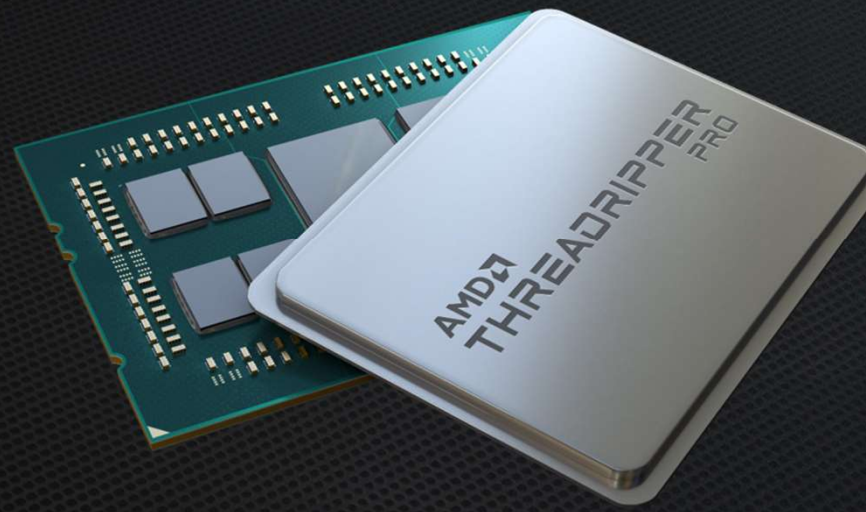


- 7nm "Zen 2" architecture
- Including the World's 1st 64-core HEDT processor
- Designed for creators, developers and PC enthusiasts
- Threadripper PRO CPUs bring enterprise grade security and manageability

See endnote CPK-02

AMD RYZEN™ THREADRIPPER™ PRO

THE ULTIMATE PROCESSORS FOR PROFESSIONAL WORKSTATIONS

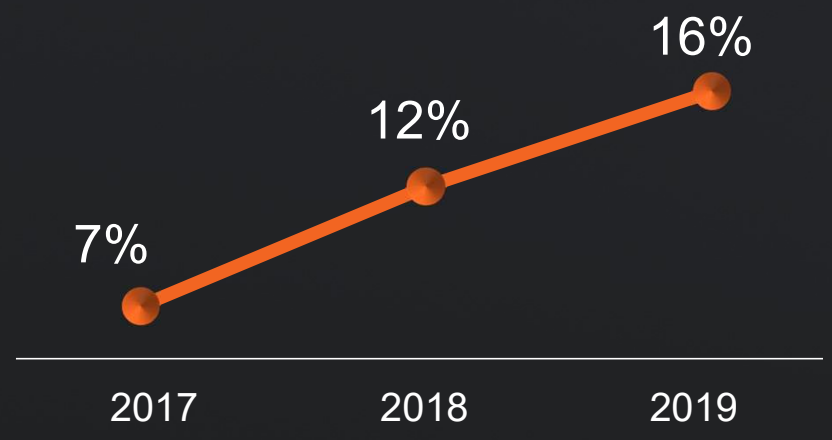


- World's first 64-core pro workstation processor
- Most advanced professional platform
- Enterprise grade security and manageability with AMD Pro technologies
- Leading memory bandwidth and PCIe® performance

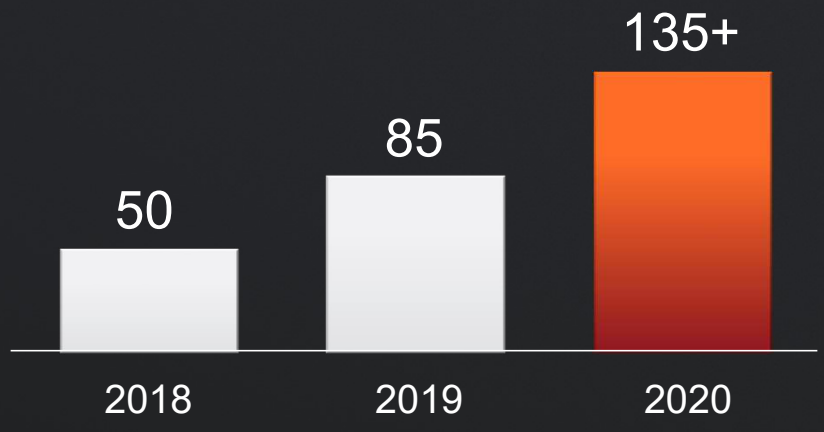
See endnotes CPP-03, CPP-77, CPP-06

ACCELERATED NOTEBOOK MOMENTUM

AMD NOTEBOOK UNIT MARKET SHARE



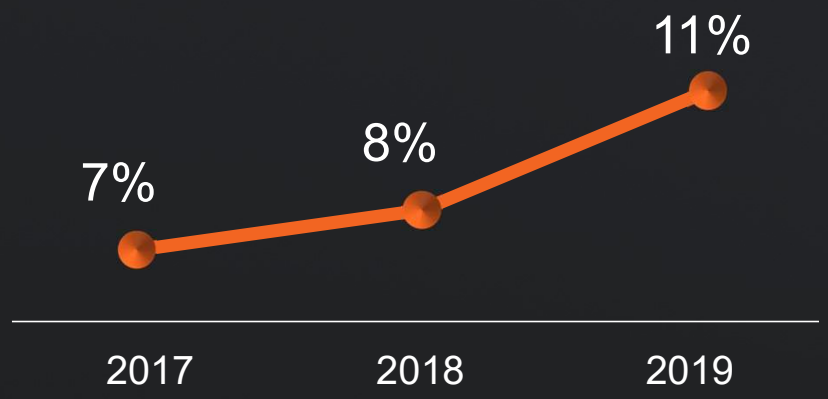
AMD PLATFORM MOMENTUM



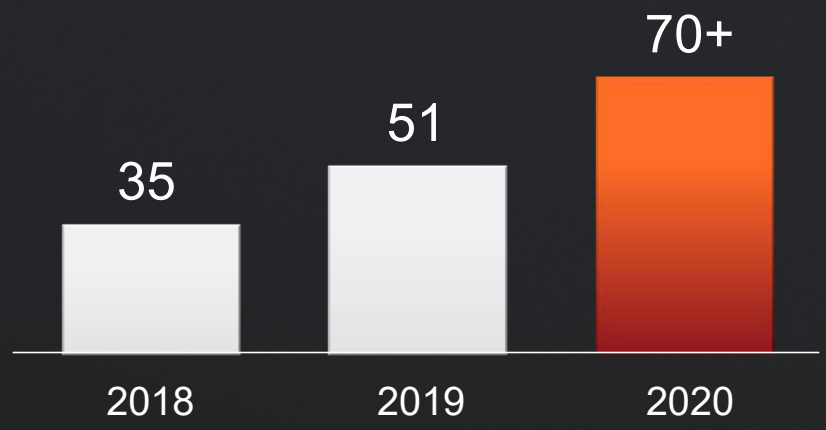
Source: Mercury (Q4 Exit Data) and AMD Estimates

STRONG COMMERCIAL MOMENTUM

AMD COMMERCIAL UNIT MARKET SHARE



AMD PLATFORM MOMENTUM



hp Lenovo

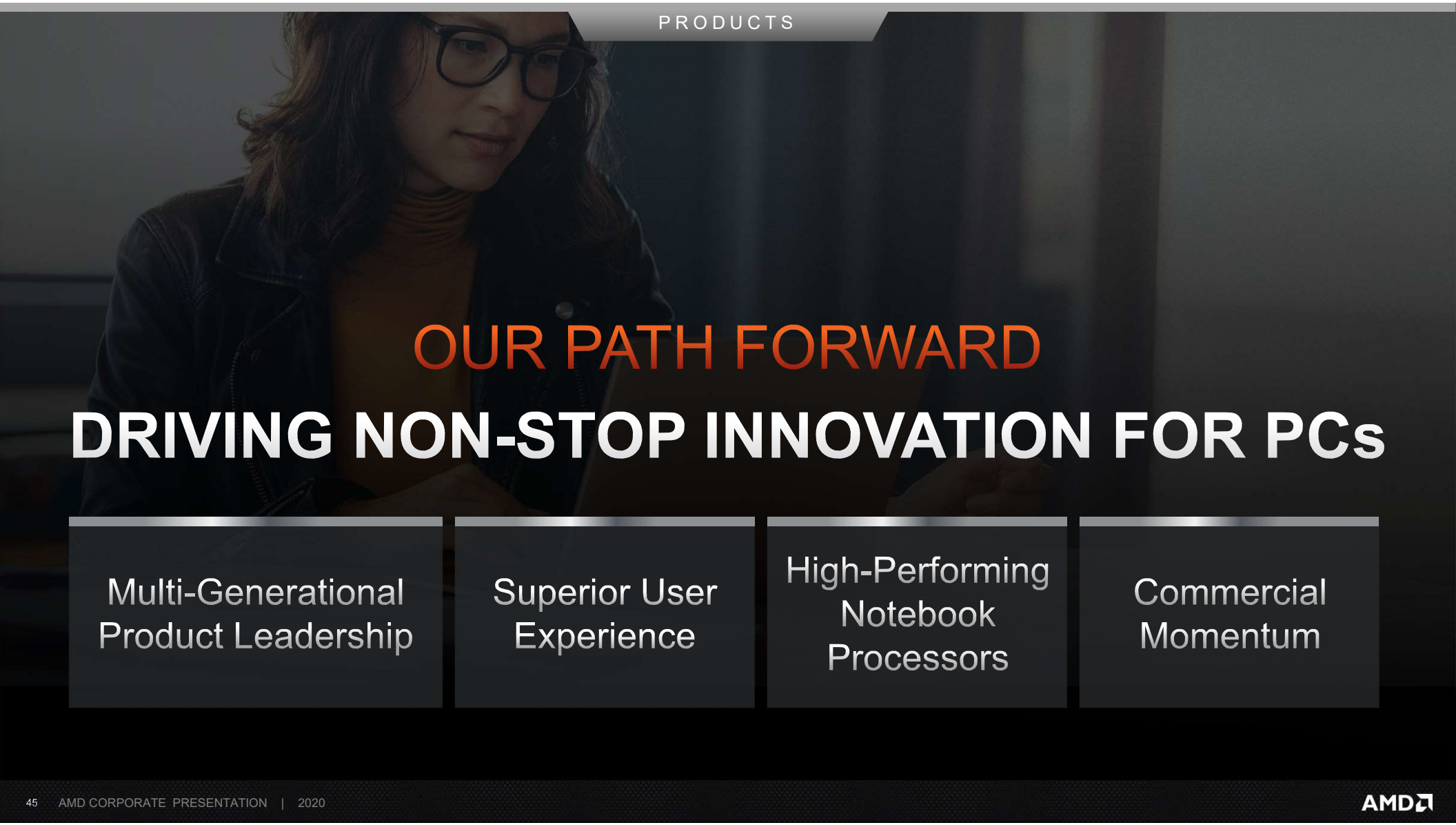
Source: Mercury (Q4 Exit Data) and AMD Estimates

AMD CLIENT CPU ROADMAP

SUSTAINED HIGH-PERFORMANCE LEADERSHIP

2017 — 2021

Roadmaps subject to change



OUR PATH FORWARD

DRIVING NON-STOP INNOVATION FOR PCs

- Multi-Generational Product Leadership
- Superior User Experience
- High-Performing Notebook Processors
- Commercial Momentum

AMD

AMD GRAPHICS FOCUS

RADEON™ IS EVERYWHERE

PCs

Radeon™ RX 6000 series, RX 5000 series, and Radeon™ Pro W5000 series

Apple Mac

Broad line-up, including Radeon™ Pro 5000 and 5000M series and W5700X GPUs

Consoles

Next generation consoles with “Zen 2” and RDNA

Cloud

Google Stadia, Microsoft Project xCloud, Microsoft Azure

Mobile

Samsung partnership and IP licensing

HPC

El Capitan and Frontier supercomputers

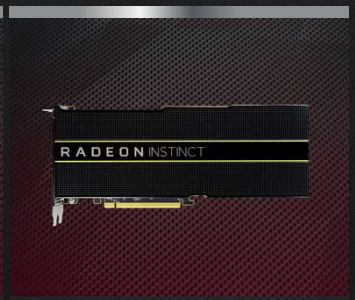
AMD RADEON

AMD RADEON INSTINCT

AMD

AMD RADEON LINEUP

EXPANDING THE RADEON UNIVERSE

					
AMD Radeon™ RX 6000 Series	**AMD Radeon™ RX 5000 Series**	**AMD Radeon™ RX 500 Series**	**AMD Radeon™ VII**	**AMD Radeon™ Pro Workstation Graphics**	**Radeon™ Instinct MI50**
AMD RDNA™ 2 Architecture	AMD RDNA™ Architecture	“Polaris” GCN Architecture	“Vega” GCN Architecture	RDNA™ Architecture “Vega” Architecture	GCN Architecture

AMD RADEON

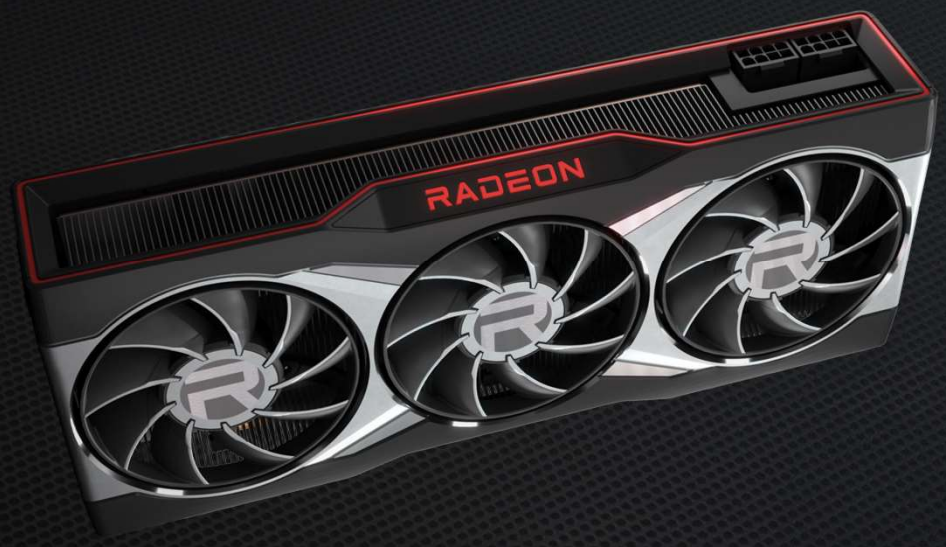
AMD RADEON PRO

AMD internal estimates, subject to change

ANNOUNCED OCTOBER 2020

AMD RADEON™ RX 6000 SERIES

HIGH-PERFORMANCE GAMING



AMD RDNA™ 2 architecture enables performance, features and efficiency

Up to 2X higher performance compared to AMD RDNA GPUs

Up to 54% higher performance-per-watt over AMD RDNA GPUs

Enables DirectX 12 Ultimate support, raytracing and variable rate shading

See endnotes RX-558, RX-549

AMD RADEON™ RX 5000 SERIES

HIGH-PERFORMANCE GAMING

High-fidelity gaming experiences for desktops and notebooks

AMD RDNA™ architecture for superior performance and power efficiency

Industry-leading 7nm process technology

Game-changing Radeon™ Software features

See endnotes RX-325, RX-326

AMD RADEON™ PRO W5000 SERIES

POWERFUL WORKSTATION GRAPHICS

High-performance, power-efficient AMD RDNA™ graphics architecture

Industry-leading 7nm process technology

New levels of performance and advanced features enable 3D designers, architects and engineers

AMD RADEON™ PRO VII

THE NEW STANDARD FOR COMPLEX DOUBLE PRECISION SIMULATIONS AND DESIGN VALIDATION

Up to
6.5 TFLOPS
double precision performance

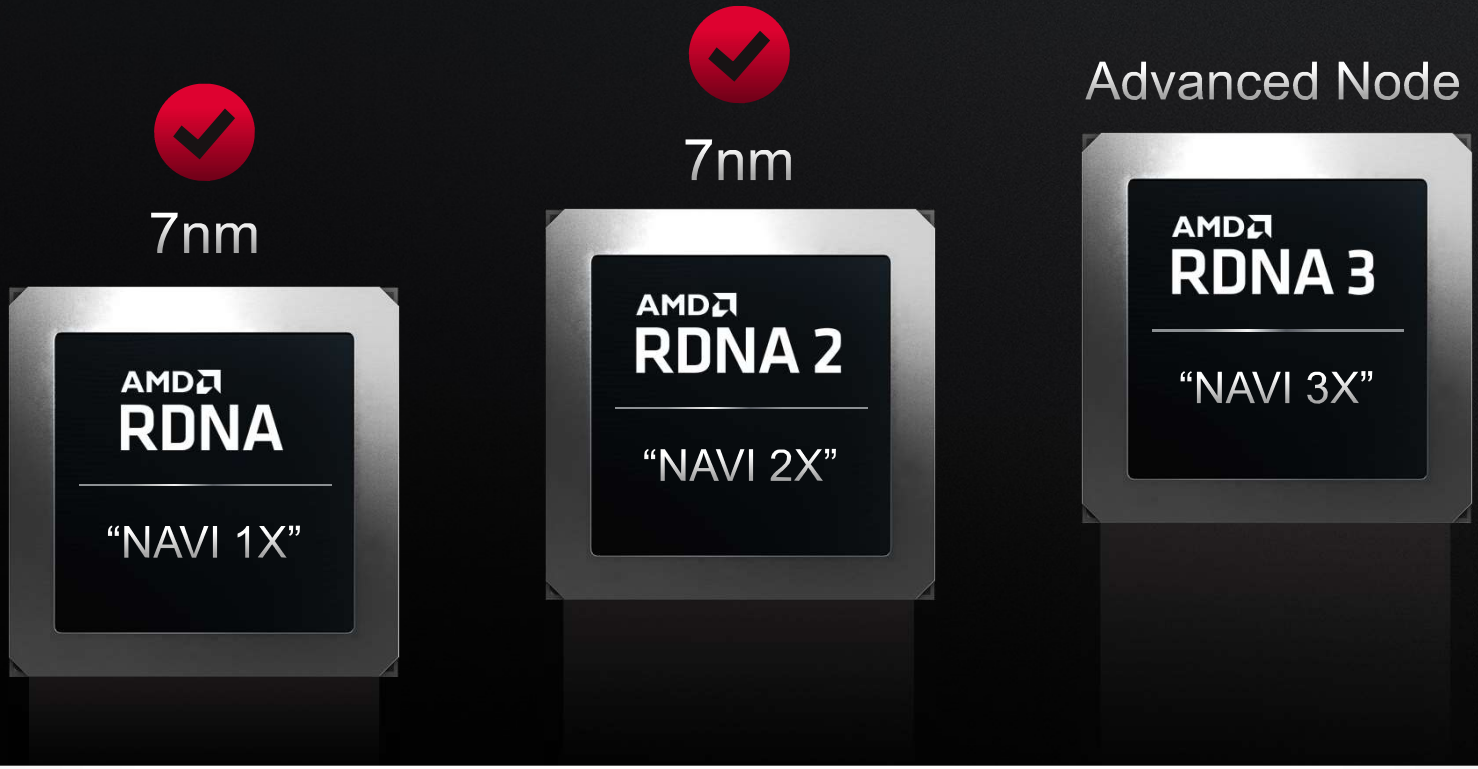
16GB
HBM2 memory

AMD Infinity Fabric™ enables memory sharing between GPUs

High-bandwidth PCIe 4.0 support

AMD internal estimates

AMD GAMING GPU ROADMAP



Roadmaps subject to change

AMD

OUR PATH FORWARD

PUSHING THE ENVELOPE FOR GAMERS

AMD RDNA™ Scales from PC to Console to Cloud

Top-to-Bottom Leadership Product Stack

Advanced Software

AMD

AMD MARKET & FINANCIAL MOMENTUM

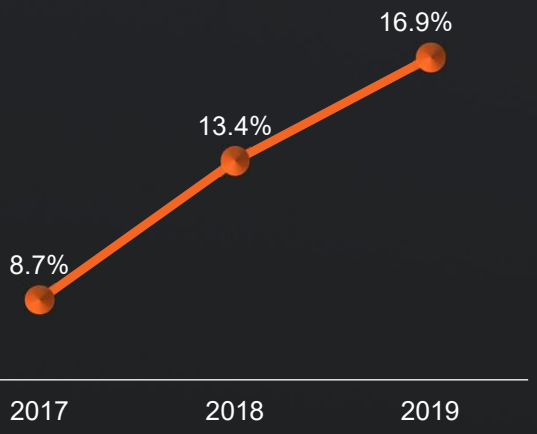
EXPANDING OUR CUSTOMER BASE

ACROSS PCs, GAMING AND THE DATA CENTER

AMD MARKET SHARE

UNIT MARKET SHARE

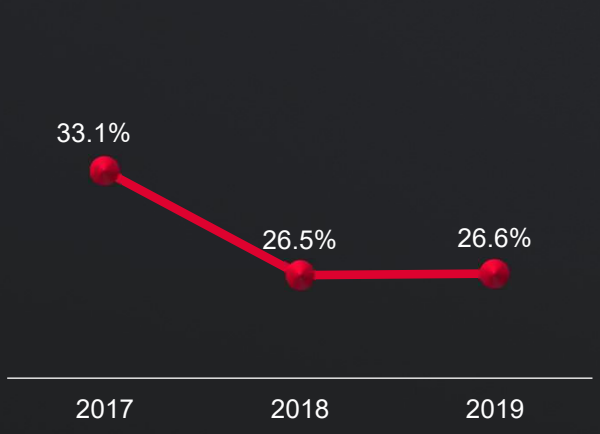
CLIENT
(EXCLUDING IoT)



Q3 2020 CLIENT HIGHLIGHTS

Record quarterly notebook unit shipments and revenue driven by demand for strongest mobile processor portfolio in AMD history

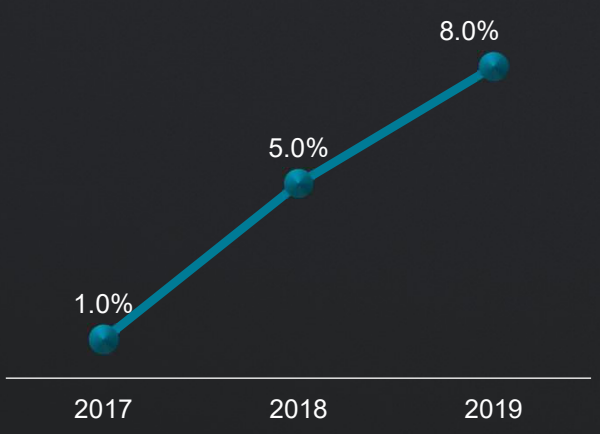
DISCRETE GRAPHICS



Q3 2020 GRAPHICS HIGHLIGHTS

Double-digit percentage increase in mobile GPU sales Y/Y led by solid demand for Radeon Pro 5000M series

x86 SERVER
(EXCLUDING IoT)

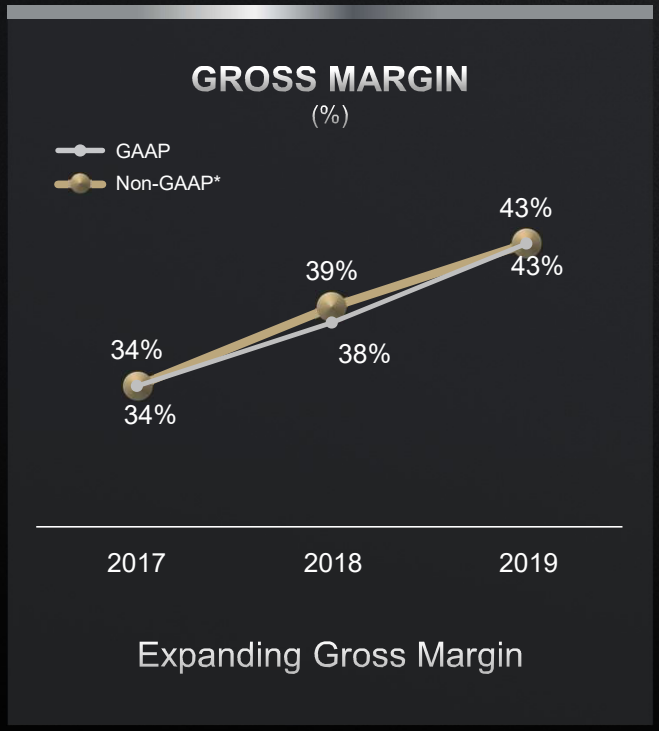


Q3 2020 SERVER HIGHLIGHTS

Record quarterly server processor revenue; sales more than doubled Y/Y driven by growing cloud and enterprise adoption

Share exiting the year. Sources: Client – Mercury Research (Jan 2020), Graphics – Jon Peddie Research (Feb 2020), Server – IDC, AMD Internal Estimates

FINANCIAL MOMENTUM AND GROWTH



EARNINGS POWER OF AMD FINANCIAL MODEL

*See Appendices for GAAP to Non-GAAP reconciliation.

AMD

The Industry's High Performance Computing Leader

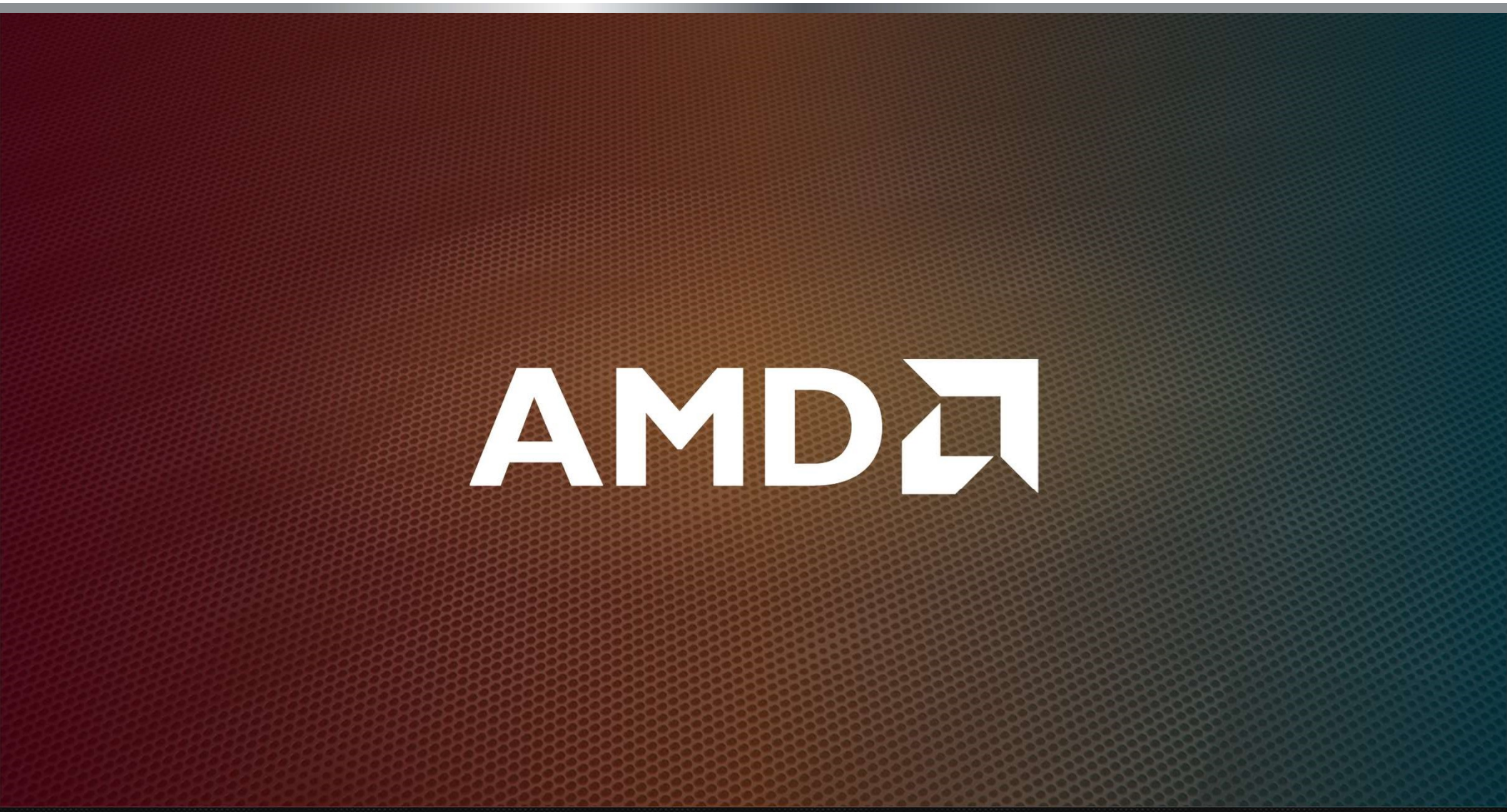
Comprehensive Processor Portfolio	Diversified & Growing Markets	Data Center Momentum	Margin Expansion	Immediately Accretive

AMD

BUILDING THE BEST

Innovative CPU and GPU solutions	Multi-year leadership technology roadmaps	Growing customer base and momentum across target markets	Strong and consistent execution	Best-in-class growth

HIGH-PERFORMANCE COMPUTING LEADERSHIP


AMD

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AMD Executive Team

AMD Board of Directors

Annual Report

Case Studies

Corporate Responsibility at AMD

Learn More About AMD Ryzen Processors

Learn More About AMD Radeon Graphics Cards

Learn More About AMD EPYC Server Processors

AMD Innovations

Careers at AMD

ENDNOTES + APPENDICES

ENDNOTES

Footnotes GD-122, GD-142, RZ3-34, R5K-003, R5K-007, R5K-012, R5K-004, RX-325, RX-362

GD-122: The information contained herein is for informational purposes only and is subject to change without notice. Timelines, roadmaps, and/or product release dates shown in these slides are plans only and subject to change. ”Zen,” “Zen 2,” “Zen 3,” “Zen 4,” “RDNA,” “RDNA 2,” “Excavator,” “Vega,” “Polaris,” “GCN,” “Naples,” “Rome,” “Milan” and “Genoa” are codenames for AMD architectures, and are not product names.

GD-142: AMD APUs and GPUs based on the Graphics Core Next and RDNA architectures contain GPU Cores comprised of compute units, which are defined as 64 shaders (or stream processors) working together.

RZ3-34: ~15% IPC uplift: AMD "Zen 2" CPU-based system scored an estimated 15% higher than previous generation AMD “Zen” based system using estimated SPECint®_base2006 results. SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. See www.spec.org.
RX-325: Testing done by AMD performance labs 6/1/19, using the Division 2 @ 25x14 Ultra settings. Performance may vary based on use of latest drivers. RX-325

R5K-003: Testing by AMD performance labs as of 09/01/2020. IPC evaluated with a selection of 25 workloads running at a locked 4GHz frequency on 8-core "Zen 2" Ryzen 7 3800XT and "Zen 3" Ryzen 7 5800X desktop processors configured with Windows® 10, NVIDIA GeForce RTX 2080 Ti (451.77), Samsung 860 Pro SSD, and 2x8GB DDR4-3600. Results may vary. R5K-003

R5K-007: Testing by AMD Performance Labs as of 09/01/2020 using Cinebench R20 nT versus system wall power during full load CPU test using a Core i9-10900K, Ryzen 9 3900XT, Ryzen 9 5900X, Ryzen 9 3950X, and a Ryzen 9 5950X configured with: 2x8GB DDR4-3600, GeForce RTX 2080 Ti, Samsung 860 Pro SSD, Noctua NH-D15s cooler, and an open-air test bench with no additional power draw sources. Results may vary. R5K-007

R5K-012: Testing by AMD Performance Labs as of 09/01/2020 using a Ryzen 7 1800X, Ryzen 9 3900XT, and a Ryzen 9 5900X CPU in Cinebench R20 nT versus system wall power during full load CPU test. All systems configured with: 2x8GB DDR4-3600, GeForce RTX 2080 Ti, Samsung 860 Pro SSD, Noctua NH-D15s cooler, and an open-air test bench with no additional power draw sources. Results may vary. R5K-012

R5K-004: Testing by AMD performance labs as of 09/01/2020 with a Ryzen 9 5950X processor vs a Core i9-10900K configured with NVIDIA GeForce GTX 2080 Ti graphics, Samsung 860 Pro SSD, 2X8 DDR4-3600, Windows 10 and a Noctua NH-D15s cooler. Single-core performance evaluated with Cinebench R20 1T benchmark. Results may vary. R5K-004

RX-325: Testing done by AMD performance labs 6/1/19, using the Division 2 @ 25x14 Ultra settings. Performance may vary based on use of latest drivers.

RX-362: Testing done by AMD performance labs on June 4, 2019. Systems were tested with: Intel(R) Core(TM) i7-5930K CPU @ 3.50GHz (6 core) with 16GB DDR4 @ 2133 MHz using an Asus X99-E Motherboard running Windows 10 Enterprise 64-bit (Ver. 1809, build 17763.053). Using the following graphics cards: Navi 10 (Driver 19.30_1905161434 (CL# 1784070)) with 40 compute units, versus a Vega 64 (Driver 19.4.1) with 40 compute units enabled. Breakdown based on AMD internal data June 4, 2019. Performance may vary. RX-362

ENDNOTES

Footnotes RX-558, RX-537, RX-549, RX-554, ROM-169, ROM-114, EPYC-18

RX-558: Testing done by AMD performance labs October 20 2020 on RX 6900 XT and RX 5700 XT (20.45-201013n driver), AMD Ryzen 9 5900X (3.70GHz) CPU, 16GB DDR4-3200MHz, Engineering AM4 motherboard, Win10 Pro 64. The following games were tested at 4k at max settings: Battlefield V DX11, Doom Eternal Vulkan, Forza DX12, Resident Evil 3 DX11, Shadow of the Tomb Raider DX12. Performance may vary. RX-558

RX-537: Idle power analysis measured by AMD performance labs 10/16/2020 on a system configured with a Radeon RX 6800 XT with driver 27.20.14502.62, Radeon RX 5700 XT with driver 27.20.216.331, AMD Ryzen 5 3600X, 16GB DDR4-3200MHz, ASUS Prime X570 Pro, on Win10 Pro x64 19041.508. Performance may vary. RX-537

RX-549: Testing done by AMD performance labs 10/16/20, using Assassins Creed Odyssey (DX11, Ultra), Battlefield V (DX12, Ultra), Borderlands 3 (DX12, Ultra), Control (DX12, High), Death Stranding (DX12 Ultra), Division 2 (DX12, Ultra), F1 2020 (DX12, Ultra), Far Cry 5 (DX11, Ultra), Gears of War 5 (DX12, Ultra), Hitman 2 (DX12, Ultra), Horizon Zero Dawn (DX12, Ultra), Metro Exodus (DX12, Ultra), Resident Evil 3 (DX12, Ultra), Shadow of the Tomb Raider (DX12, Highest), Strange Brigade (DX12, Ultra), Total War Three Kingdoms (DX11, Ultra), Witcher 3 (DX11, Ultra no HairWorks) at 4K. System comprised of an RX 6800 XT with AMD Radeon Graphics driver 27.20.12031.1000 and an RX 5700 XT with AMD Radeon Graphics driver 26.20.13001.9005. Performance may vary. RX-549

RX-554: Testing done by AMD performance labs 10/21/20, using Assassins Creed Odyssey (DX11, Ultra), Battlefield V (DX12, Ultra), Borderlands 3 (DX12, Ultra), Control (DX12, High), Death Stranding (DX12 Ultra), Division 2 (DX12, Ultra), F1 2020 (DX12, Ultra), Far Cry 5 (DX11, Ultra), Gears of War 5 (DX12, Ultra), Hitman 2 (DX12, Ultra), Horizon Zero Dawn (DX12, Ultra), Metro Exodus (DX12, Ultra), Resident Evil 3 (DX12, Ultra), Shadow of the Tomb Raider (DX12, Highest), Strange Brigade (DX12, Ultra), Total War Three Kingdoms (DX11, Ultra), Witcher 3 (DX11, Ultra no HairWorks) at 4K. System comprised of an RX 6900 XT with AMD Radeon Graphics driver 27.20.12031.1000 and an RX 5700 XT with AMD Radeon Graphics driver 26.20.13001.9005. Performance may vary. RX-554

ROM-169: For a complete list of world records see http://amd.com/worldrecords.

ROM-114: An 2P EPYC 7742 powered server has SPECrate®2017_int_peak score of 749 and an int_base score of 682, URL. The next highest int_peak score is a 2P Intel Platinum 9282 server with a score of 676 and an int_base score of 643, http://spec.org/cpu2017/results/res2019q3/cpu2017-20190624-15369.pdf. An 1P EPYC 7742 powered server has SPECrate®2017_int_peak score of 385 and an int_base score of 349, URL. The next highest int_peak score is a 1P Intel Platinum 8280L server with a score of 180, http://spec.org/cpu2017/results/res2019q2/cpu2017-20190319-11289.pdf. The next highest int_bK113:K115ase score is a 1P Intel Platinum 8280 server with a score of 181, http://spec.org/cpu2017/results/res2019q2/cpu2017-20190318-11230.pdf. All Intel scores as of July 28, 2019. SPEC®, SPECrate® and SPEC CPU® are registered trademarks of the Standard Performance Evaluation Corporation. See www.spec.org for more information.

EPYC-18: Max 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

ENDNOTES

Footnotes ROM-517, ROM-557, RIV-20, R5K-002, R5K-009, RM3-123, RM3-127

ROM-517: 16-n, 2P 2nd Gen EPYC™ 7702 powered server scores a world record result of 7100 SPECrate®2017_int_base http://spec.org/cpu2017/results/res2020q1/cpu2017-20191223-20452.pdf. The next highest published score is 3920 SPECrate®2017_int_base on a 16-n, 2-socket Xeon® 8180 powered server http://spec.org/cpu2017/results/res2018q1/cpu2017-20171222-01950.pdf as of 02/12/20. ROM-517

ROM-557: Estimates based on AMD Server Virtualization TCO (total cost of ownership) Estimator tool v5.5, comparing the AMD EPYC™ and Intel® Xeon® server solutions required to deliver 320 total virtual machines (VM), requiring 1 core and 8GB of memory per VM, with a minimum total solution memory requirement of 2.56 TB of memory. The analysis includes both hardware and virtualization software components. For 320 VMs and 1 core per VM, the Intel _Gold_6250 processor requires 20 - 2P servers. The AMD EPYC_7702P solution requires 5 - 1P servers. Virtualization software pricing as of October 2019. Third party names are for informational purposes only and may be trademarks of their respective owners. This scenario contains many assumptions and estimates and, while based on AMD internal research and best approximations, should be considered an example for information purposes only, and not used as a basis for decision making over actual testing. All pricing is in USD. ROM-557

RIV-20: Testing Conducted by AMD performance lab as of 11-10-2019 using NAMD 2.13, STMV 1M Atom benchmark. Best-in-class based on industry-standard pin-based (LGA) X86 processors. Results may vary. RIV-20

R5K-002: Testing by AMD performance labs as of 9/2/2020 based on the average FPS of 40 PC games at 1920x1080 with the High image quality preset using an AMD Ryzen™ 9 5900X processor vs. Core i9-10900K. Results may vary. R5K-002

R5K-009: Testing by AMD performance labs as of 09/01/2020 measuring gaming performance of a Ryzen 9 5900X desktop processor vs. a Ryzen 9 3900XT in 11 popular titles at 1920x1080, the High image quality preset, and the newest graphics API available for each title (e.g. DirectX® 12 or Vulkan™ or DirectX® 11). Results may vary. R5K-009

RM3-123: Testing by AMD Performance Labs as of 11/22/2019 utilizing the Ryzen 7 4800U vs. 2nd Gen Ryzen 7 3700U in Cinebench R20 Benchmark. Results may vary.

RM3-127 - “Ultrathin laptop processor" defined as 15W typical TDP. Testing by AMD Performance Labs as of 12/09/2019 utilizing an AMD Ryzen™ 4800U reference system, a Dell XPS 7390 system with 10th Gen Intel® Core i7-1065G7 processor, and a Dell XPS 7390 with a 10th Gen Intel® Core i7-10710U processor using Cinebench R20 1T, Cinebench R20 nT and 3DMark 11 Performance. Results may vary. 3DMark is a registered trademark of Futremark Corporation.

ENDNOTES

Footnotes RZ3-24, RM3-250, CPK-02, CPP-03, CPP-77, CPP-06, GD-127, GD-147, GD-151

RZ3-24: AMD "Zen 2" CPU-based system scored an estimated 15% higher than previous generation AMD “Zen” based system using estimated SPECint®_base2006 results. SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. See www.spec.org.

RM3-250: Testing by AMD performance labs in February 2020, utilizing a Ryzen™ 7 4800 in an AMD reference system and a previous generation Ryzen™ 7 3700U in an AMD reference system and tested in 3DMark Time Spy. Results may vary. 3DMark is a registered trademark of Futuremark.

CPK-02: Testing by AMD performance labs on 10/07/2019 comparing an AMD Ryzen™ Threadripper™ 3970X and AMD Ryzen™ Threadripper™ 3960X vs. Intel© Core™ i9-9980XE in the Cinebench R20 nT benchmark test. Results may vary.

CPP-03: The AMD Ryzen™ Threadripper™ PRO 3995WX has up to 64 cores compared to the highest core count Intel Xeon Scalable workstation processor, the 8280 at 28-cores. CPP-03

CPP-77: ‘Most advanced’ defined as superior 7nm process technology in a smaller node and unique PCIe® 4.0 capability in the workstation processor market. CPP-77.

CPP-06: Based on AMD internal analysis June 1, 2020, comparing memory bandwidth specifications of AMD Ryzen™ Threadripper™ PRO to Intel Xeon Scalable 8280. CPP-06

GD-127: Radeon FreeSync technology requires a monitor and AMD Radeon™ graphics, both with FreeSync support. See www.amd.com/freesync for complete details. Confirm capability with your system manufacturer before purchase. GD-127

GD-147: Game clock is the expected GPU clock when running typical gaming applications, set to typical TGP (Total Graphics Power). Actual individual game clock results may vary. GD-147

GD-151: Boost Clock Frequency is the maximum frequency achievable on the GPU running a bursty workload. Boost clock achievability, frequency, and sustainability will vary based on several factors, including but not limited to: thermal conditions and variation in applications and workloads. GD-151

APPENDICES

Reconciliation of GAAP to Non-GAAP Gross Margin

(Millions)	2017	2018	2019
GAAP gross margin	$ 1,787	$ 2,447	$ 2,868
GAAP gross margin %	34%	38%	43%
Impairment of technology licenses	—	45	—
Stock-based compensation	2	4	6
Non-GAAP gross margin	$ 1,789	$ 2,496	$ 2,874
Non-GAAP gross margin %	34%	39%	43%

APPENDICES

Reconciliation of GAAP to Non-GAAP Net Income (Loss) / Earnings (Loss) Per Share

(Millions, except per share data)	2017		2018		2019	
GAAP net income (loss) / earnings (loss) per share	$ (33)	$ (0.03)	$ 337	$ 0.32	$ 341	$ 0.30
Loss on debt redemption/conversion	12	0.01	12	0.01	176	0.15
Non-cash interest expense related to convertible debt	22	0.02	24	0.02	22	0.02
Stock-based compensation	97	0.09	137	0.11	197	0.16
Gain on sale of 85% of ATMP	(3)	—	—	—	—	—
Tax provision related to sale of 85% of ATMP JV	1	—	—	—	—	—
Impairment of technology licenses	—	—	45	0.04	—	—
Equity loss in investee	7	0.01	2	—	—	—
Loss contingency on legal matter	—	—	—	—	12	0.01
Provision for (benefit from) income taxes	—	—	—	—	8	—
Withholding tax refund including interest	—	—	(43)	(0.04)	—	—
Non-GAAP net income / earnings per share	$ 103	$ 0.10	$ 514	$ 0.46	$ 756	$ 0.64

Shares used and net income adjustment in earnings per share calculation (1)

Shares used in per share calculation (GAAP)	952	1,064	1,120
Interest expense add-back to GAAP net income	$ —	$ —	$ —
Shares used in per share calculation (Non-GAAP)	1,039	1,165	1,209
Interest expense add-back to Non-GAAP net income	$ —	$ 18	$ 16

(1) 2017 GAAP net loss per share is calculated using basic shares. 2017 non-GAAP earnings per share and 2018 and 2019 GAAP earnings per share do not include the shares related to the conversion of the Company's 2026 Convertible Notes and the associated interest expense add-back to net income because their inclusion would have been anti-dilutive under the "if converted" method. 2018 and 2019 non-GAAP earnings per share include the shares related to the conversion of the Company's 2026 Convertible Notes and the associated interest expense add-back to net income under the "if converted" method.

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