FINANCIAL ANALYST DAY 2022

together we advance

Adaptive and Embedded Leadership

Victor Peng
President, Adaptive and Embedded Computing Group
Cautionary Statement

This presentation contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) including, but not limited to, the timing, availability, features, functionality and expected benefits of AMD's adaptive computing products; AMD's momentum and TAM; AMD's silicon roadmap; and AMD's new revenue opportunities and path forward, 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. 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 does not assume, and hereby disclaims, any obligation to update forward-looking statements made in this presentation, except as may be required by law.
**XILINX MOMENTUM**

Building on Momentum as Part of AMD

- **Data Center**
- **5G Telecommunications**
- **Automotive**
- **Platform Transformation**

**FY21**: $3.2B

**FY22**: $3.9B

**CY25 TAM**: $33B

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* Xilinx fiscal year ended April 3, 2021
** Xilinx trailing 4 quarters ended March 26, 2022
AECG MISSION

Exceeding customer expectations with high performance, adaptive, and intelligent solutions for the data center, edge, and endpoints
AECG STRATEGY

- Delivering leadership adaptive compute products and technology
- Increase data center growth in networking, compute, and AI acceleration with adaptive and customizable solutions
- Drive growth in embedded markets by enabling customer differentiation with a broad product portfolio and AI technology
SIGNIFICANT TAM EXPANSION

$105B
Long-Term TAM

Data Center*
$13B

Embedded
$33B

Communications
$32B

Automotive
$27B

Over 3X Xilinx CY25 TAM

*Includes in Data Center TAM Based on AMD Internal Data
ADAPTIVE COMPUTING
DATA CENTER LEADERSHIP

Compute Acceleration  Adaptive SmartNIC  Computational Storage  General Purpose

Deployed Across 10 of the Largest Hyperscalers
ADAPTIVE COMPUTING
COMMUNICATIONS LEADERSHIP

Metro/Transport and Converged Access  5G Core  Central Unit  Distributed Unit  Radio Unit

Deployed at 6 of the Top 7 5G Wireless Equipment Manufacturers
ADAPTIVE COMPUTING
AUTOMOTIVE LEADERSHIP

Autonomous Control
ADAS/AD Domain Controller
Surround View
Automated Parking ECU

External Sensors
Lidar
Radar
Forward-Looking Camera

Internal Safety and Comfort
Infotainment
Occupant Monitoring

Designed-in at the Top 10 Manufacturers

BYD Continental DAIMLER MAGNA SUBARU TESLA ZF
ADAPTIVE COMPUTING
EMBEDDED LEADERSHIP

Healthcare and Sciences
5M Units Deployed in Medical Equipment in Last 12 Months*

Industrial
#1 Logic IC Vendor in the Industrial Market**

Aerospace and Defense
30+ Years of Innovation, Longevity of Supply and Reliability

Test, Measurement and Emulation
#1 Logic IC Vendor for Test and Measurement**

Edge Server
Performance Leadership and Advanced Reliability

6000+ Unique Customers Across Diverse Embedded Markets

*Based on AMD Internal Data
**According to Omdia Industrial Semiconductor Market Tracker Database. 4Q21, Xilinx holds the #1 spot for Logic IC vendor on the top ten semiconductor suppliers list for the industrial market, which captures 2019-2020 revenue and market share.
AECG GROWTH ACCELERATION

- Leadership adaptive computing platforms
- Sustained double digit growth
- Diverse high-margin markets
AMD + XILINX OPPORTUNITIES

AI Inference and Training
Data Center and Communications
Automotive
Embedded

Leverage Expanded Customer Base, Leadership Products, and AI Platforms
PERVASIVE AI

Commercial & Enterprise
EPYC®, Ryzen™ PRO CPUs
- Server
- PC
- Workstation

Cloud Data Center
EPYC™ CPUs, AMD Instinct™ GPUs
- AI Training
- AI Inference

Digital Home
Ryzen™, Radeon™ CPUs
- PCs and Consoles
- Metaverse
Pervasive AI Strategy

- Leadership AI IP with AMD CDNA™ and scalable AIE architecture
- Broaden AMD AI product portfolio across cloud, edge, and endpoint applications
- Unified AI stack to empower developers across the AMD portfolio
AMD XDNA: ADAPTIVE ARCHITECTURE IP

- Dataflow architecture optimal for AI and signal processing applications
- Highly-scalable array of engines with local memory and data movers
- Leverages deep expertise of compiling algorithms to FPGAs and adaptive SoCs

High-Performance and Energy Efficiency for AI and Signal Processing

FPGA Fabric

Leading FPGA for broad set of applications and AI

Source: The McClean Report, May 2022
AMD AI ENGINE: ADAPTIVE DATAFLOW PROCESSOR

Deep Neural Network (DNN)

L1  L2  L3  L4  L5  L6

Data “flows” from layer to layer, connections between layers are often “sparse”

DNN Runs Optimally on AIE

Dataflow architecture, sparsity, efficient datatypes deliver high performance and low power

High-Performance, Energy Efficient, and Customizable for AI Workloads
AI APPLICATION COVERAGE

Increasing Processing Requirements

<table>
<thead>
<tr>
<th></th>
<th>Small-medium models (EPYC® CPUs only)</th>
<th>Medium-large models</th>
<th>Large-very large models</th>
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</thead>
<tbody>
<tr>
<td><strong>Training</strong></td>
<td>Mid-size models, mid-range performance and memory BW, high memory capacity (e.g., face recognition, recommendation systems)</td>
<td>Larger models, high performance and more memory BW (e.g., video analytics)</td>
<td>Very large models, efficient data types, and high memory BW (e.g., NLP, large recommendation systems)</td>
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<tr>
<td><strong>Inference</strong></td>
<td>RCPUs</td>
<td>EPYC® CPUs</td>
<td>Versal® AI Adaptive SoCs</td>
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AI APPLICATION COVERAGE

Increasing Processing Requirements

**AMD Instinct™ GPUs**

**Versal® AI Adaptive SoCs**

**Radeon™ GPUs**

**EPYC™ CPUs**

**Ryzen™ CPUs**

**EPYC™ CPUs AMD XDNA AIE**

**Ryzen™ CPUs AMD XDNA AIE**

**Adaptive SoCs**

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**Training**
- Small-medium models (EPYC™ CPUs only)

**Inference**
- Mid-size models, mid-range performance and memory BW, high memory capacity (e.g., face recognition, recommendation systems)

**Medium-large models**
- Larger models, high performance and more memory BW (e.g., video analytics)

**Large-very large models**
- Very large models, efficient data types, and high memory BW (e.g., NLP, large recommendation systems)
AMD AI SOFTWARE TODAY

**CPU Stack**
- Optimized Inference Models
  - WinML
  - ONNX Runtime
- ML Graph Compiler
- ZenDNN, AOCL Optimized Library
- ZEN Studio (AOCC)
- Windows Runtime
- Linux Runtime

**ROCm™ Platform**
- Optimized Inference Models
  - ONNX Runtime
  - Pytorch
  - TensorFlow
  - MIGraphX: AI Development Tools
  - MIGraphX: ML Graph Compiler
  - MIOpen, ROCLAS
  - ROCm™ HIP Compiler and tools
  - Runtime

**Vitis™ AI Platform**
- Optimized Inference Models
  - ONNX Runtime
  - Pytorch
  - TensorFlow
  - Vitis AI Development & Deployment Tools
  - Vitis AI ML Graph Compiler
  - Vitis ML Libraries
  - Vitis SW Platform (AIE Compiler, HLS and tools)
  - Runtime
  - CNN Overlay
  - Transformer Overlay

*Ryzen uses Radeon ML, and WinML
**WinML for Ryzen Only

AI Development Tools: Quantizer, Sparsity/Pruning Tool
AI Deployment Tools: Inference Server

Ryzen™ CPUs, EPYC™ CPUs, AMD Instinct™ GPUs, Radeon™ GPUs, Versal® Adaptive SoCs, Zynq® Adaptive SoCs
### AMD Unified AI Stack 1.0

**Unified Inference Frontend (UIF) for AI Developers**

<table>
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<th>Optimized Inference Models</th>
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*WinML for Ryzen Only

All roadmaps are subject to change.
AMD + XILINX OPPORTUNITIES

- AI Inference and Training
- Data Center and Communications
- Automotive
- Embedded

>$10B IDENTIFIED REVENUE OPPORTUNITIES

Based on AMD Internal Data
ACCELERATING AMD GROWTH

TAM Expansion
Large and diversified markets

Leadership Products
Broad portfolio of platforms

Pervasive AI
Drive cloud, edge and endpoints to scale