



AMD INFINITY ARCHITECTURE

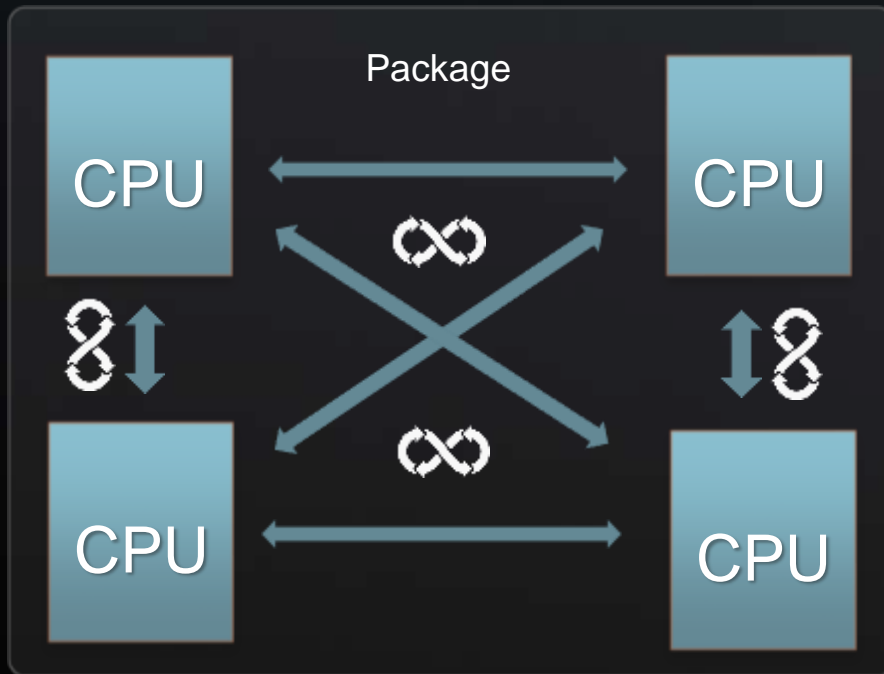
A Scalable, Coherent Server Architecture for the Exascale Era

A close-up, angled view of an AMD EPYC processor mounted on a server motherboard. The processor is a large, square, metallic component with a brushed metal finish. The AMD logo and the word "EPYC" are embossed on its top surface. The motherboard is dark, and various components like capacitors and connectors are visible around the processor. The lighting is dramatic, with a blueish tint, highlighting the metallic texture of the processor.

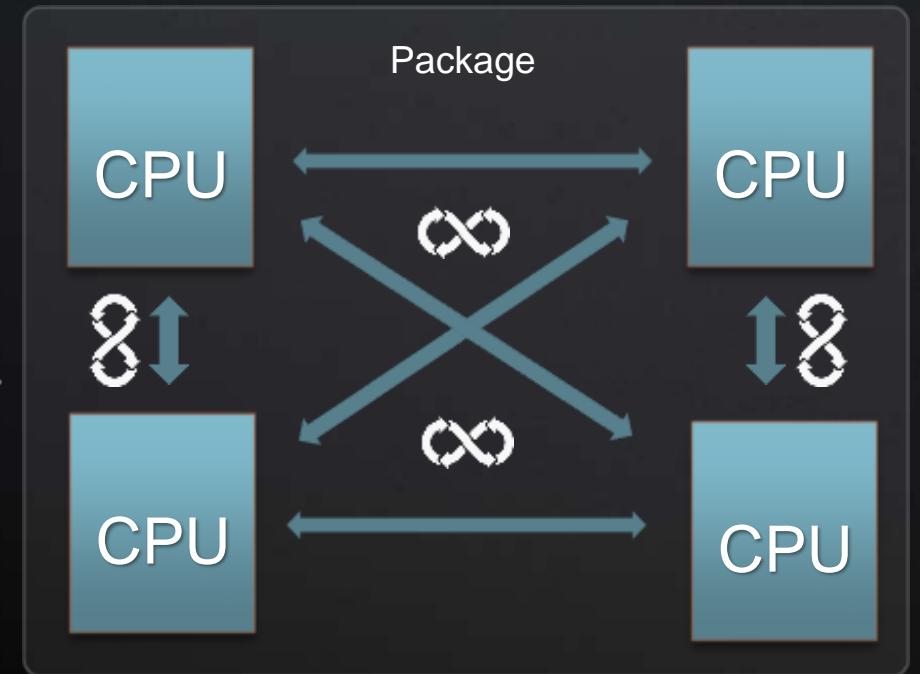
AMD
EPYC

1ST GENERATION COHERENT INTERCONNECT

WITHIN SOCKET



WITHIN SOCKET

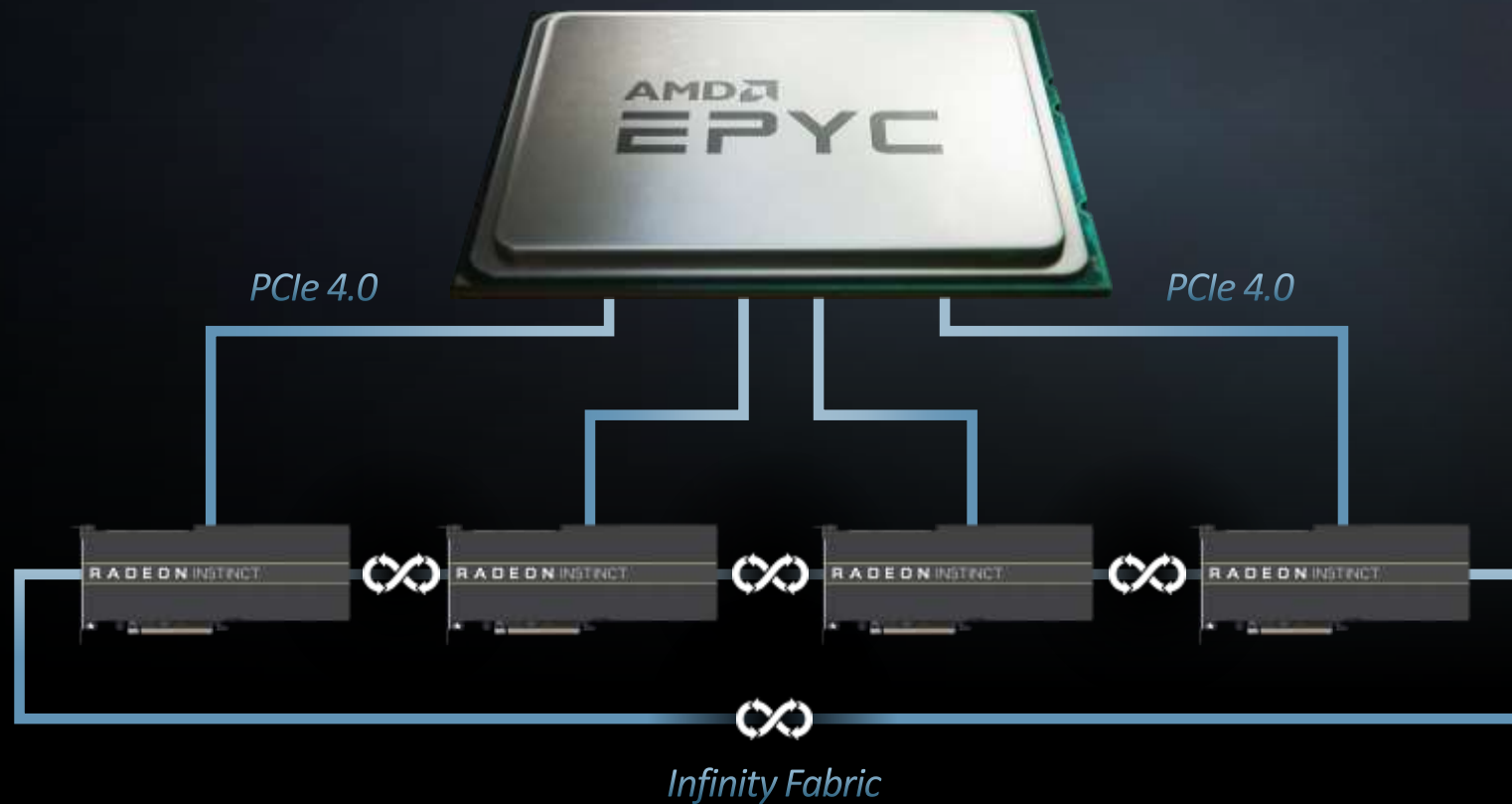


Scalable Fabrics Enabling
Architectural Innovation

On-Package and
Between Sockets

Muxed with PCI
Express[®] lanes

HIGH-PERFORMANCE HETEROGENEOUS PLATFORMS



2ND GENERATION AMD EPYC™ LEADERSHIP ARCHITECTURE

AMD INFINITY ARCHITECTURE – THE FOUNDATION OF THE MODERN DATA CENTER



EFFICIENCY

Hybrid Multi-Die SoC Design

First 7nm x86 server processors
Energy & NUMA Enhancements

PERFORMANCE

Core Performance Upgrades

~2.2X Performance Increase¹
Up to 4X Theoretical FLOPS²



2ND GENERATION



INFINITY FABRIC™



THROUGHPUT

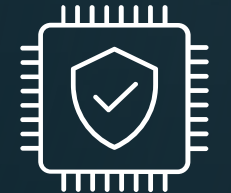
Breakthrough System Features

First PCIe® 4 x86 Server Processors
Leading I/O and Memory Bandwidth³

SECURITY

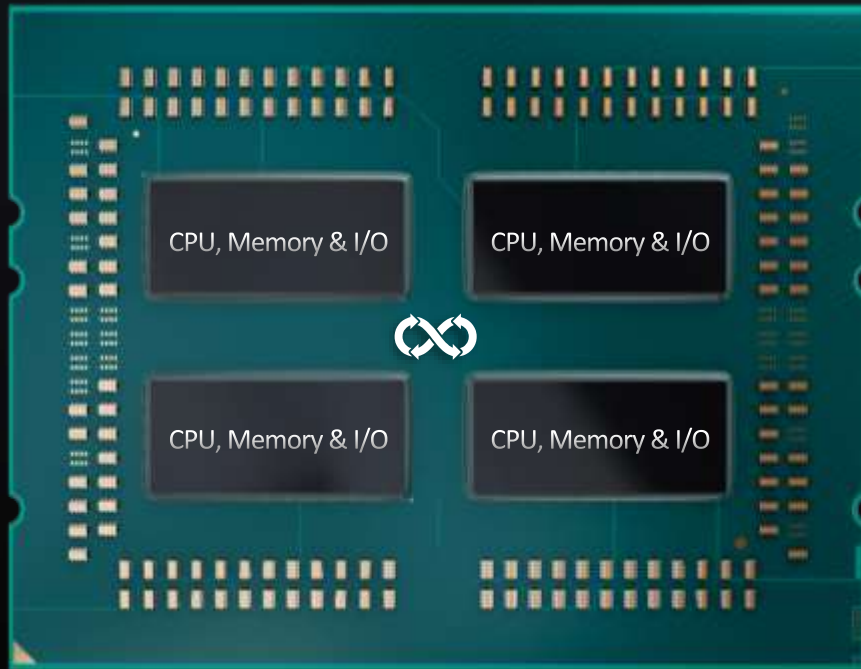
'Hardened at the Core'

Micro-Architecture Enhancements
Advanced Security Features



1ST GENERATION

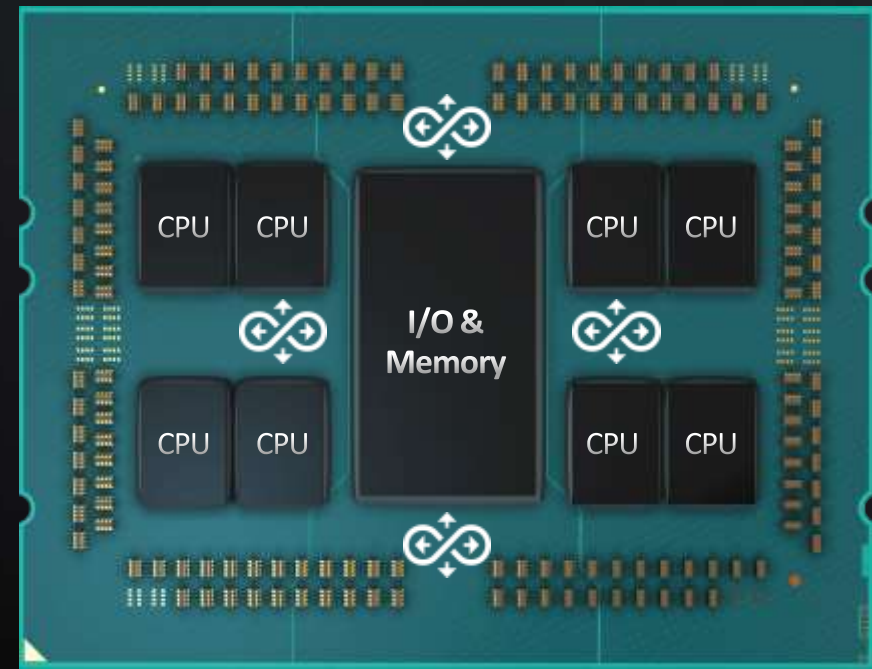
AMD
EPYC



Four SOCs Interconnected
via 1st Gen AMD Infinity Architecture

2ND GENERATION

AMD
EPYC



Eight 7nm Chiplet CPUs and One 14nm Chiplet I/O
Interconnected via 2nd Gen AMD Infinity Architecture

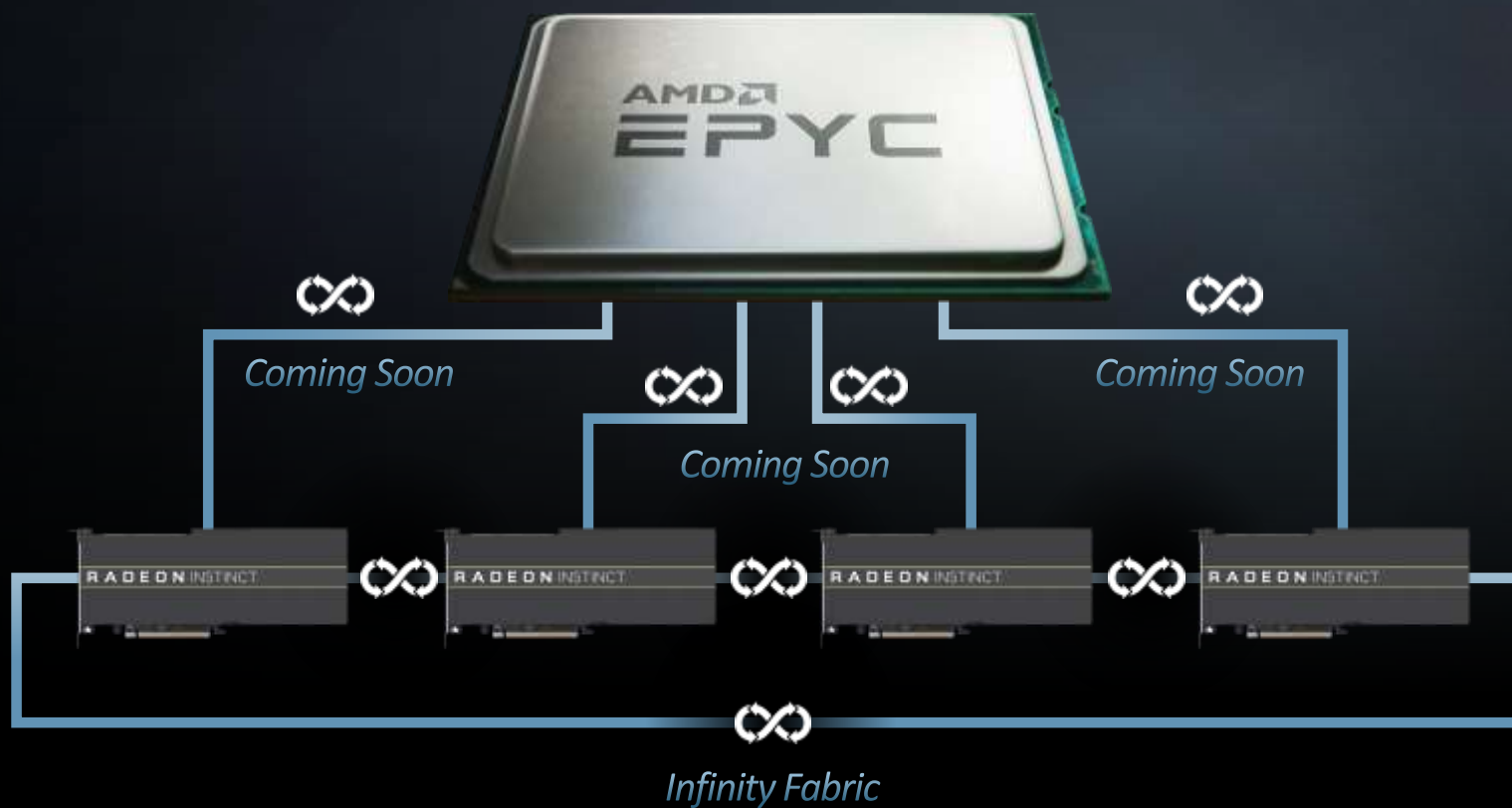
Each IP in its Optimal
Process Technology

Distributed
Control

I/O Die and CPU Die Optimizes
Latency and Power

Flexible and More Unified
Memory Architecture

CPU-GPU CONNECTIVITY COMING WITH FRONTIER



A COHERENT FUTURE

 CCIX

 GEN Z

 FABRIC

 CXL

CPUs, Accelerators, Fabrics, I/O

Sharing a Coherent Pool of Memory

COMING SOON...