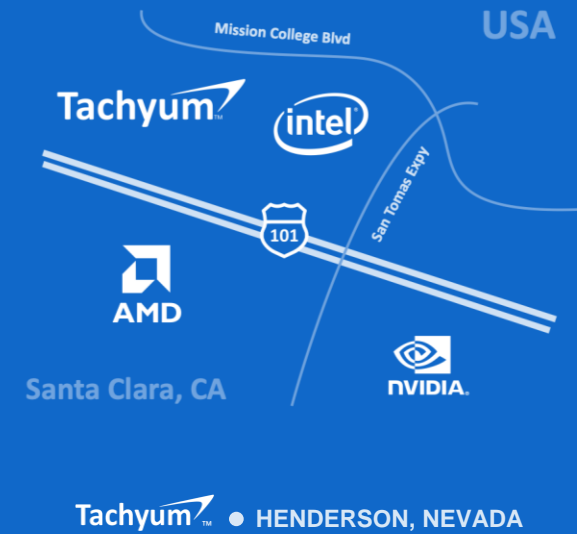


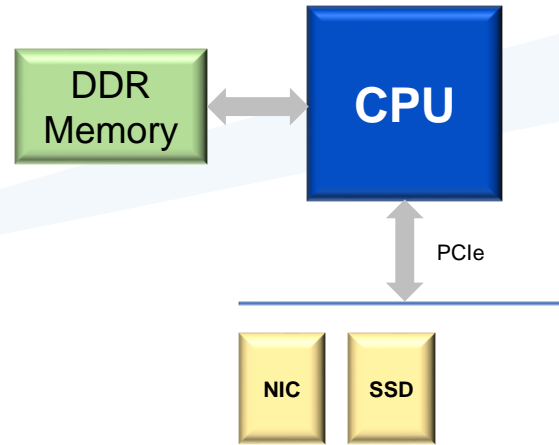
Tachyum™

Prodigy Compared with Homogeneous and Heterogeneous Computer Architectures

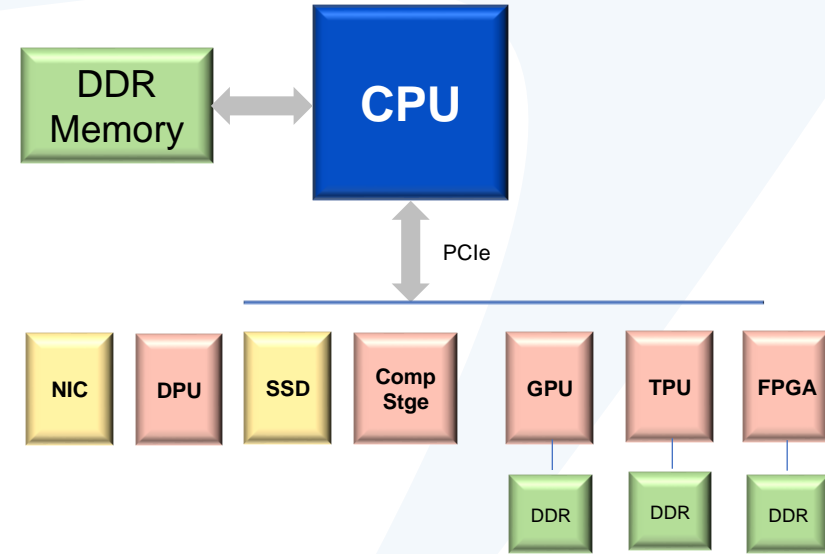


Traditional Homogeneous vs. Heterogeneous Architectures

Homogeneous



Heterogeneous

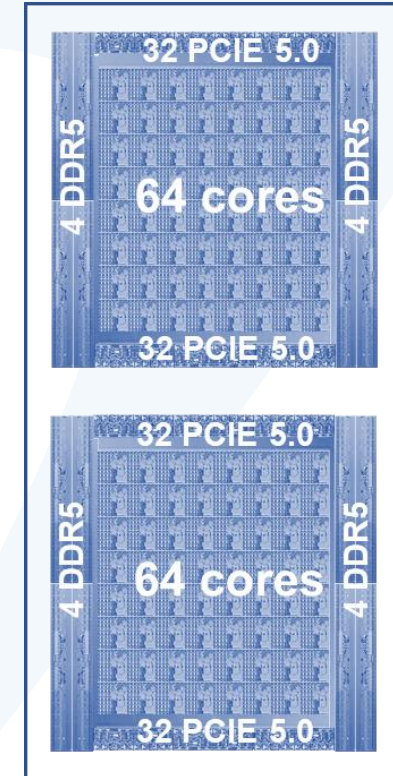


Pros	Cons
<ul style="list-style-type: none"> • General purpose, flexible • Easy deployment/ maintenance 	<ul style="list-style-type: none"> • Not designed for HPC or AI • Low parallel performance for modern workloads

Pros	Cons
<ul style="list-style-type: none"> • Accelerates specific workloads, including HPC and AI • Scalable 	<ul style="list-style-type: none"> • Requires special programming • Expensive, power-hungry • Under-utilized – contrary to software defined data center

Tachyum Prodigy – Advantages of Homogeneous and Heterogeneous Architectures without the Disadvantages

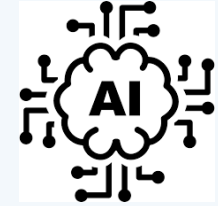
- **High Integer Performance for General Purpose Workloads**
 - Up to 2 x 64 general purpose cores in a single package
- **High Floating Point Performance for Parallel Workloads**
 - Dual 512b vector units provide high performance HPC, AI/ML
- **Scalable**
 - Family of 16 – 128 core devices with support 2P and 4P platforms
- **Common Software – Easy Deployment/ Maintenance**
 - All cores part of same ISA
- **High Memory Bandwidth**
 - 16 DDR5 controllers provides best in industry bandwidth



- Q2 '21: Emulation for early adopters
- Q3 '21: Emulation system general access
- Q4 '21: Device samples

Samples Q4 '21

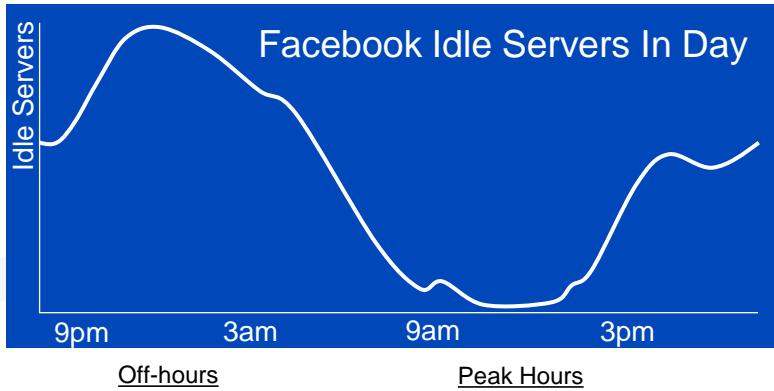
Prodigy Delivers Key Requirements for Target Markets



	Hyperscale/ Cloud	HPC	AI/ML
High Integer Performance	✓		
High Single-thread Performance	✓		
High Performance Parallel Processing	✓	✓	✓
High Memory Bandwidth	✓	✓	✓
Scalable, including large memory footprint	✓	✓	✓
Easy Deployment and Maintenance	✓	✓	✓
Cost and Power Efficient	✓	✓	✓
Special and compressed data types			✓
4-bit data pipes for inference – Int4			✓

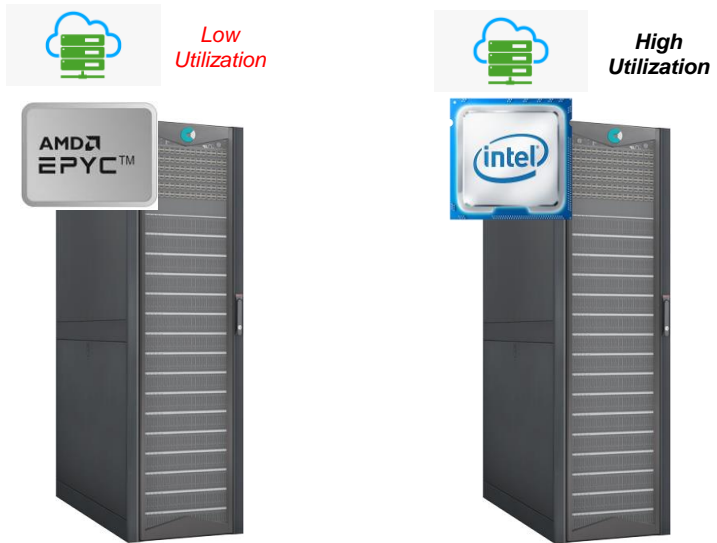
Case Study: Repurposing Idle Servers in Hyperscale Data Center

Facebook web servers sit idle during off hours



Prodigy keeps servers fully utilized 24/7

- AI/ML workloads during off hours
- Web servers during peak hours
- High efficiency, Low TCO



Thank You!

visit

www.Tachyum.com