Cachengo® Pizza™ is Revolutionizing Data Center Economics with a Scalable and Energy Efficient Solution

Why it Matters?

Market size and power demand are skyrocketing, but current infrastructure can't keep up. Cachengo® addresses the AI power crisis by decentralizing workloads, reducing energy use, and allowing for instant deployment—no waiting for grid upgrades. With our scalable Pizza™ solution, we're redefining data center economics. The AI power crisis isn't inevitable—it's a choice. Deploy edge AI today with Cachengo®.

How it Works?

Pizza's architecture supports thousands of nodes close to the subscriber, making it ideal for inference, VR, online gaming and handling large-scale AI workloads. With an average power consumption of just 330W per unit, Pizza™ reduces operational costs while addressing sustainability concerns—a critical factor for data centers consuming significant power.

A single, energy efficient 1U Pizza™ solution has 32 Symbiote® bare metal servers, supporting 256 ARM processor cores, 128 GPU cores, 32 NPU cores, and up to 64TB of flash storage. Pizza™ offers the highest density per KW.

Each Symbiote® is an independent device allowing parallel workloads to be spread across multiple nodes. Cachengo software defined WAN architecture efficiently connects thousands of Symbiotes, allowing for massive scalability to meet the evolving demands of AI, analytics, and data center applications.

The Benefits

- **Massive Scalability:** Easily expand Pizza™ deployments to support thousands of nodes for robust AI, analytics, and data center applications.

- **Enhanced Data Security and Governance:** Peer-to-peer network architecture, significantly enhances security, making data breaches virtually impossible.

- **Cost Efficiency:** Energy and rack-space efficient design results in significant reductions in CAPEX (by 5X) and OPEX (by 4X) compared to traditional server architectures.

- **Simplified Management:** Cachengo® Knowhere™ management portal streamlines the deployment, management and rental of Symbiote® bare metal servers.

Pizza™ Specifications

- 32 independent Symbiote® bare metal servers
- 256 ARM processor cores (RK3588)
- 128 GPU cores
- 32 NPU cores (6 TOPS each)
- 16TB to 64TB of storage
- 512GB of DDR4 memory
- Cloud native and multi-cloud support
- Just-In-Time Data "Thin-provisioning"
- Native ML/AI Capabilities
- Enhanced SD-WAN connectivity
- Erasure coding and replication data protection
- Weight: 26.5 lbs. (12kg)
- Dimensions: Height: 1.75" (44.45mm), Width: 17.6" (447mm), Depth: 20" (506mm)
- System Cooling: 5x 4056 heavy duty fans
- Operating Environment: Target Temp Range: 32ºF - 95ºF (0ºC - 35ºC)
- Power Consumption: 330 watts avg power consumption
- Power Supply: 1 x 1U 800W PSU (90-264V AC, 96% Efficiency). Redundant PSU optional
- Thermal Dissipation: 255 BTU/hr maximum, 170 BTU/hr typical
- Operating Requirements Switching Power: 180V-300V, 47-63Hz
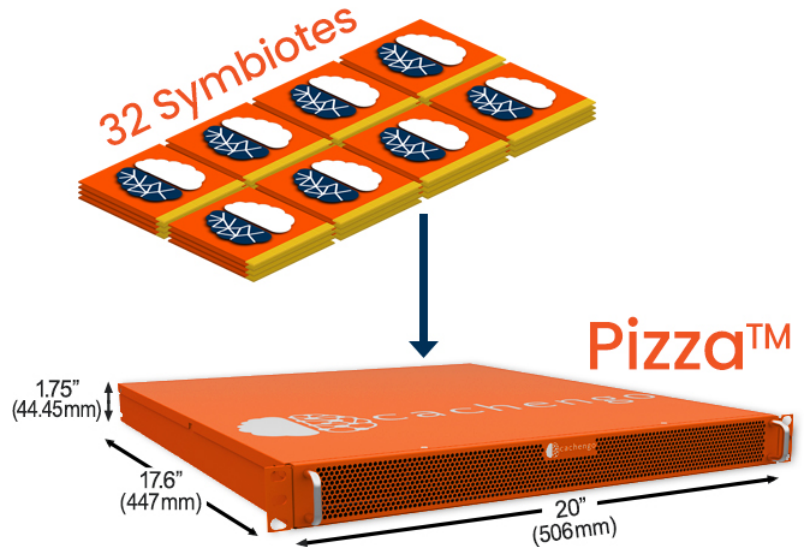
Decentralize your cloud.
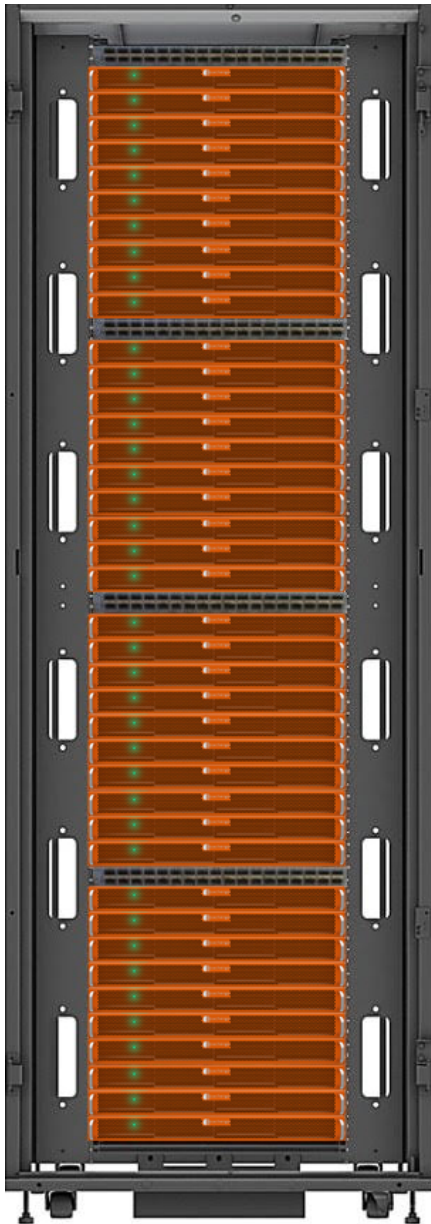
- **40 Pizza™ 1U Form Factor**

- **1,280 ARM Servers**

- **Pizza™ offers the highest density per KW**