cachengo

Cachengo® Pizza Box

P1032-Series 1U Edge Analytics Box

Energy-efficient modular server for demanding Edge Analytics workloads

Edge Analytics requires the right combination of compute GPU/TPU, Flash storage and networking - the elements found in the Cachengo Pizza Box. Purpose built for demanding edge analytics workloads.

Cachengo Edge Analytics Architecture

Most want to take advantage of data at the edge of the enterprise where businesses can make a difference but don't know how. Cachengo creates an environment for innovation at the edge by providing the right combination of security, scale, economics and performance. What makes Cachengo unique is the technology that supports these capabilities.

- **Security** comes from a Hive Connect peer to peer network that sits on top of Ethernet that makes it virtually impossible to hack or disintermediate.
- **Scale** comes from adding processing power with storage so that capability and capacity expand together. Scale doesn't need to take a lot of space, the Pizza Box compact form factor can package up to 96 independent Symbiote drives in a single rack unit.
- **Favorable economics** come from a simplified edge architecture to reduce CAPEX by 5x and OPEX by 4x compared with traditional Intel architectures by employing the Hive Connect management schema that scales from the edge to the cloud to the data center.
- **Performance** comes from not just CPUs added to storage, but also GPUs or TPUs to optimize analytics at the edge.
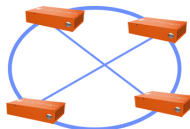

Management

Cachengo Portal - Cloud-based management tool for easy drag and drop management

Cachengo Market - portfolio of applications

Network

Cachengo Connect - Highly secure peer-to-peer Network SD-WAN perfect for Convolutional Neural Network jobs
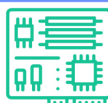
Boxes

Bento - up to 8 Symbiotes

Pizza - 32 Symbiotes

Drives

Symbiote includes CPU, GPU/TPU, Flash, and networking in a 2.5" form factor

Cachengo Pizza Box Product Brief

Features

- Low power ARM-based cluster in a box under 250W
- 192 ARM cores + 128 Mali GPU cores
- Up to 16384GB of storage
- Central management Interface for resource, App
- deployment and orchestration
- Cloud native and multi-cloud support
- Support erasure coding and replication data protection
- Enhanced proprietary SD-WAN solution
- Just-In-Time Data "Thin-provisioning" data caching support
- Native ML/AI Capabilities

Form Factor	**Proprietary Micro Set-top Box**
Network Connections	4x 10GbE SFP+
Dimensions	Height: 1.75" (44.45mm), Width: 17.6" (447mm), Depth: 20" (506mm)
Weight	26.5 lbs. (12kg)
System Cooling	5x 4056 heavy duty fans
Operating Environment	Target Temp Range: 32°F - 95°F (0°C - 35°C)
Power Consumption	300W maximum, <250W typical
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

The Pizza Box is available in two different models of 8 or 16TB (raw) capacity
to provide different amounts of Flash storage based on your needs.

Orderable PN	1AA003	1AA004
Storage (Raw)	8192GB	16384GB
ARM Cores	192	192
GPU Cores	128	128
Memory	128GB	128GB

For more information go to www.cachengo.com

Cachengo, Inc.

9575 Hwy 22
Huntingdon, TN 38344
www.cachengo.com