

Cachengo® Bento Box



B108-Series Set Top 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 Bento 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.

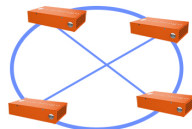
- **Security** comes from a Hive Connect peer to peer network that sits on top of Ethernet that makes it virtually impossible to hack or disintermediate.
- **Scale** comes from adding processing power with storage so that capability and capacity expand together. Scale doesn't need to take a lot of space, the Bento Box form factor packages 8 independent Symbiote drives in a compact 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

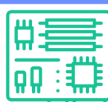


Bento - up to 8 Symbiotes



Pizza - 32 Symbiotes

Drives



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

Cachengo Bento Box Product Brief



Features

- Low power ARM-based cluster in a box under 50W
- 48 ARM cores + 32 Mali GPU cores
- Up to 4096GB 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	10GbE SFP+
Dimensions	Height: 1.96" (50mm), Width: 4.88" (124mm), Depth: 7.87" (200mm)
Weight	10 lbs. (4.53kg) max per Bento Box, 0.25 lbs (0.11kg) per Symbiote
System Cooling	2x (40x40x10mm) heavy duty fans
Operating Environment	Target Temp Range: 32°F - 95°F (0°C - 35°C)
Power Consumption	75W maximum, <50W typical
Power Supply	External AC/DC switching power adapter
Thermal Dissipation	255 BTU/hr maximum, 170 BTU/hr typical
Operating Requirements	12V / 6.5A, Connector Type: AC-DC Adapter [220V or 110V]

The Bento Box is available in two different models of 2 or 4 TB (raw) capacity to provide different amounts of Flash storage based on your needs.

Orderable PN	1AA001	1AA002
Storage (Raw)	2048GB	4096GB
ARM Cores	48	48
GPU Cores	32	32
Memory	32GB	32GB

For more information go to www.cachengo.com

Cachengo, Inc.

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

© 2021 Cachengo, Inc. All rights reserved. References in this publication to Cachengo products and/or software do not imply that they will be made available in all countries/territories. Product specifications provided are sample specifications and do not constitute a warranty. Actual specifications for unique part numbers may vary. Images shown may vary from actual products. Email info@cachengo.com for more information.