Bamboo Systems B1000N Series

8 Arm Servers in 1U

50% of the cost

Because Bamboo systems use COTS Components, we can deliver at a much lower cost, for a comparable workload, than traditionally architected servers.
Combined with lower infrastructure costs, the TCO is unbeatable.

25% of the energy

Today the infrastructure to support servers can cost more than the actual servers themselves. By bringing embedded systems methodologies to server architecture design, the B1000N series uses 25% of the energy, or less, of traditionally architected servers.

20% of the rack space

If you use less power less heat is produced, enabling 5 times the compute capability within a given rack space. This means either a smaller data center is possible, or an existing data center can deliver more capability. Perfect for the edge.

Introducing the Bamboo B1000N series multi-node compute system; a revolutionary next generation modular platform using the patented Parallel Arm Node Designed Architecture (PANDA).

Rather than a re-implementation of a traditional server architecture, the Bamboo B1000N series is designed from the ground up to be energy and thermally efficient, reducing component heat, and optimizing airflow through the system to function in existing data center infrastructures. With an ambient operating temperature of 35C, power for cooling systems in data centers can be reduced, while still massively increasing compute density, considerably reducing data center operating costs.

The Bamboo B1000N series features a modular blade design concept that allows flexible swapping of any blade and choice of components. The rack frame architecture and enclosure is developed to support future product enhancements so that as Bamboo Systems releases new capabilities it is not necessary to change the chassis. This ensures maximum usage of data center infrastructure investments, further reducing CAPEX spend.

Because of its 1U size, and well-balanced linear scaling capabilities, the B1000N series is excellent for scale-out solutions for data centers, enabling services to be built with Bamboo. Its Class C classification makes it ideal for edge computing with minimal power consumption and cooling requirements.

Bamboo B1000N Series at a glance

Patented Architecture

It is Bamboo's patented PANDA architecture that enables Bamboo B1000N series to be the perfect platform for applications that can leverage linear scale-out platforms such as modern microservices-based applications running on Kubernetes, edge, AI/ML and PaaS.

Customer Replaceable Units

As the systems are highly modular, most parts are customer replaceable, with next business day delivery.

Build with Bamboo

Bamboo B1000N Series		
Chassis		One Bamboo B1000 Chassis
Fans		Six dual counter rotating fans
Management		via REST API
Power supply		1-2 1300W AC/DC PFC 48V DC Power supplies
Dimensions		Height: 1U (43mm or 1.68") Width: 483mm or 19" Length: 778mm or 30.63" Note: The Bamboo 1U Rail Kit is included to correctly install the chassis into a 19" rack.
B1004N		1 Blade System
B1008N		2 Blade System
N series Blade		Each Blade contains 4 compute nodes.
	Compute Node	NXP 2160A A72 Cortex 16 core processor giving 64 cores per blade.
	Memory	Up to 64GB ECC DDR4 per compute node, 256GB per blade.
	Storage	1 x NVMe SSD PCIe up to 8TB per compute node, 32TB per blade
	Network	Embedded 16-port 10/40Gb Ethernet non-blocking level 3 switch per blade
	Uplink	2 x 10/40Gb QSFP Ports per blade
Warranty		Three-year parts with a 4Hr response. Onsite support or labor are not included. All major components are designed to be customer replaceable.

Learn more at
bamboosystems.io

Bamboo Systems

410 E Santa Clara St
Unit #835
San Jose, CA 95113
USA
info@bamboosystems.io

400 Cambridge Science Park
Milton Road
Cambridge, CB4 OWH
United Kingdom