

BladeRack® 2 FE Platform

THE PREMIER PLATFORM FOR DATA CENTER CONSOLIDATION



PRODUCT OVERVIEW

The BladeRack® 2 FE platform is the newest addition to Cirrascale's data center scale computing solutions and is designed with enterprise class data centers in mind. End users with resource hungry applications and power conscious facility managers will enjoy the best of both worlds with an ultra efficient (90%+) fully redundant power architecture and comprehensive line of available compute and storage blade offerings. Built upon the success of the original BladeRack 2 platform, Cirrascale's BladeRack 2 FE platform adds the scalable Cirrascale Management Control Suite and improved connectivity options to its portfolio. In addition, BladeRack 2 FE blade servers are drop-in compatible with the award-winning Cirrascale FOREST Container, which allows for a full scale out deployment of data center as a service and compute on demand applications.

The BladeRack 2 FE is perfect for mission critical customer installations where high availability, ultra dense systems are a requirement. With its ability to house up to 1.15PB of storage or 1440 processing cores per rack, the BladeRack 2 FE is one of the densest blade server platforms on the market today. BladeRack 2 FE blades also support IPMI as well as the Cirrascale Common Control Module software solution which enables IT managers to manage their Cirrascale solutions.

With the marriage of robust features and performance, customers in the Financial Services industry would find the Cirrascale BladeRack 2

FE an excellent vehicle for desktop consolidation and high performance grid installations while its ultra efficient power architecture fits seamlessly in their current power challenged environments. Data center administrators in the Service Provider industry would increase efficiency by utilizing the added connectivity options for virtual machine serving while dramatically cutting power and cooling costs due to the ground-breaking, efficient design.

The BladeRack 2 FE platform employs the industry leading patented Vertical Cooling Technology™. This allows Cirrascale to employ the fastest and most powerful processors available on the market without the performance loss commonly found in blade servers from other vendors. Increased thermal capacity has been incorporated into the design, as well as the ability to adjust airflow within the cabinet. Our patented Vertical Cooling Technology has proven over time to save money by reducing energy expenditure and ensuring reliability. BladeRack 2 FE blades utilize an ultra-efficient, auto-sensing 208V/400V/480VAC, 50/60Hz, 3-Phase input power solution that will drastically reduce your organization's energy expenditure. The efficiency of this power subsystem also allows IT staff to spend fewer resources on heat related failures and provides the ultimate in availability with fully redundant power inputs, power distribution modules, and power supplies. This ultra-redundant power system allows for greater server uptime, further protecting customer investments.

FEATURES AT A GLANCE

- Industry Leading Storage Capacity of Up to 1.15PB per Platform
- Up to 1440 Processing Cores per Platform
- Up to 60 Compute or Storage Servers per Platform
- Industry Leading Patented Vertical Cooling Technology™
- Compatible with the Award Winning FOREST Container
- CCM or IPMI Hardware Management
- Fully Redundant, 90%+ Efficient Power Subsystem
- Dense I/O Options for Virtualization Applications
- Ideal Platform for the Enterprise Cloud and Service Providers

CUSTOM CONFIGURATIONS

Cirrascale supports multiple configurations and can tailor any system to your specific needs. If you have questions, contact us today at (888) 942-3800 and speak with a Cirrascale Account Manager.

ABOUT CIRRASCALE

Cirrascale Corporation is a premier developer of independent blade-based cloud computing and cloud storage platforms for conventional and modular data centers that are defining a new era in the green data center. Cirrascale provides the industry's most energy-efficient and reliable standards-based solutions with the lowest possible total cost of ownership in the absolute densest form factor due to its patented Vertical Cooling Technology. Cirrascale sells directly to large-scale infrastructure operators and managed services providers, and through resellers and distributors to HPC and Cloud segments. Cirrascale also licenses its award winning systems-level designs to technology partners globally.

Architecture

- Separate Management and Data Networks
- Redundant Power Inputs
- Redundant Power Distribution Modules
- Redundant Power Modules
- Patented Vertical Cooling Technology

Capacity

- Up to 60 Blades
- Up to 480 Ethernet Connections
- Up to 1440 Processing Cores

Compatible Blade Servers

- VB1305FE
- VB1307FE
- VB1310FE
- VB1320FE
- WS1660FE
- VB1312FE
- VB1315FE
- VB1316FE
- VB1325FE
- GB1315FE

Compatible Storage Blades

- SB5315FE

Management Options

- Rack Enclosure
 - Single Point Multi-Rack support
 - Fan Control
 - PDM Control
- Blades
 - On / Off / Reset
 - Voltage, Temperature
 - Power Status

Rack Dimensions and Weight

Height: 2222 mm (87.5 in.)
 Width: 609 mm (24.0 in.)
 Depth: 1168 mm (46.0 in.)
 Weight: 907.1kg (2000 lbs.)

Power System

- Auto-Sensing 208V/400V/480V, 50/60Hz, 3-Phase Input Power
- Redundant Power Inputs (Plug Options)
 - Four Hubbell HBL2721, 30A twist-lock plugs
 - Four Hubbell CS8365C, 50A twist-lock plugs
 - Four Interpower, 63A International Cable Plugs
 - Four Interpower, 32A International Cable Plugs
- Ultra High-Efficiency
 - In Excess of 90% at 480V Input
- MTBF in Excess of 250,000 Hours

BLADERACK 2 FE BLADE MATRIX	Blade	Processor	Memory	Storage	Special Features
	VB1305FE	Two Intel Xeon 5600 Series	Up to 64GB	Up to 1TB	2x Hot Swap 2.5" HDD, SSD Options
	VB1307FE	Two Intel Xeon 5600 Series	Up to 64GB	Up to 1TB	2x Hot Swap 2.5" HDD, VMware Compatible
	VB1310FE	Two Intel Xeon 5600 Series	Up to 144GB	Up to 4TB	2x 3.5" HDD or SSD Options
	VB1312FE	Two Intel Xeon 5600 Series	Up to 144GB	Up to 4TB	2x 3.5" HDD, VMware Compatible
	VB1315FE	Two Intel Xeon 5600 Series	Up to 192GB	Up to 8TB	4x Fixed 3.5" HDDs
	VB1316FE	Two Intel Xeon 5600 Series	Up to 48GB	Up to 4TB	4x Hot Swap or 8x Fixed 2.5" HDDs, SSD Options
	VB1320FE	Two Intel Xeon 5600 Series	Up to 192GB	Up to 1TB	2x Hot Swap 2.5" HDD, SSD Options
	VB1325FE	Two Intel Xeon 5600 Series	Up to 288GB	Up to 1TB	HyperCloud™ Memory Enabled
	SB5315FE	HEAD NODE: Two Intel Xeon 5600 Series	Up to 192GB	Up to 96TB	SB1315 Head Node + SB1058S Disk Node
GB1315FE	Two Intel Xeon 5600 Series	Up to 96GB	Up to 8TB	Supports Latest GPGPU Cards from NVIDIA and ATI	
WS1660FE	One Intel Core i7-800 Series	Up to 16GB	Up to 1TB	Cirrascale Connexus Compatible	

BLADERACK 2 FE PLATFORM MATRIX	DESCRIPTION	BLADERACK 2 FE
	Cooling	VCT
	Maximum Density	60 Blades
	Power To Rack	208/400/480VAC
	Power To Blade	-48VDC
	Power Efficiency	90%+
	Height	2222mm (87.5 in.)
	Maximum Weight Fully Populated	1409kg (3100 lbs.)
	Maximum Weight (Compute Only)	1147kg (2530 lbs.)
	Depth With Doors	1360mm (53.5 in.)
	Width	609mm (24 in.)
	Management	CCM / IPMI
	Maximum Storage Capacity	1.15PB
	Redundant Power Inputs	Yes (Standard)
	Redundant Power Modules	Yes (Standard)
	Redundant Power Distribution Module	Yes (Standard)
	Utility Space	5U / 8U
Maximum # of Processor Cores	720	
Ability To Mix Compute and Storage Blades	Yes	

Rear View



VB1310FE Blade

