



ZeusRAM™ SAS

Highlights

- Integrated small-footprint solution eliminates the need for volatile DRAM
- High throughput SCSI-compatible interface for use in unified enterprise storage applications
- Reduces file system overhead in enterprise appliances
- Full data path protection
- Power-down protection
- Easy removal and replacement without system downtime
- SMART feature eliminates wearout under the most write-intensive enterprise workloads

Applications/Environments

- Enterprise applications
- Business applications
- High-performance computing (HPC)



Low Latency, Enterprise-Class SSDs

ZeusRAM™ SSDs from HGST deliver DRAM-like read and write speeds with the persistent data storage of flash.

ZeusRAM is an enterprise-class, power-safe, flash-backed DDR3 RAM drive targeted at high-write transactional environments requiring fast write commit capabilities for speeding up end-user application throughput of NAS and unified storage appliances. During the warranted life of the product, enterprise applications can write to ZeusRAM at extremely high speeds 24 hours-per-day, 365 days-per-year, year-after-year, the drive will not wear out—even under the most write-intensive workloads. HGST's PowerSafe® technology provides critical data protection with instant data backup and recovery in the event of power interruption. ZeusRAM has the additional advantage of being hot-pluggable, so SSDs can be swapped in and out without system downtime.

ZeusRAM has two 6Gb/s SAS ports that can each run independently. The two ports are connected to two separate hosts (HBAs) to provide for a redundant or high availability configuration. It is also possible to connect the two ports in a dual-port mode and run multipath I/O drivers (MPIO) which are available with standard operating systems to achieve higher performance.

Enterprise applications have growing data storage demands within data centers, using NAS and accelerate file system metadata stores, file system journaling and logging functions, database indexing and hashing operations to optimize data handling in a variety of enterprise appliances and applications. By cutting file system overhead, ZeusRAM SSDs free NAS and unified storage appliances to handle user I/O requests more efficiently, which translates to faster enterprise application performance.



HGST Quality and Service

HGST's ZeusRAM family extends the company's long-standing tradition of performance and reliability leadership. A balanced combination of new and proven technologies enables high reliability and availability to customer data.

HGST drives are backed by an array of technical support and services, which may include customer and integration assistance. HGST is dedicated to providing a complete portfolio of SSD/HDD solutions to satisfy today's monumental computing needs.



8GB | 3.5-inch SFF | SAS 6Gb/s



ZeusRAM™ SAS

Features & Benefits

Feature / Function	Benefits
3.5-inch form factor DDR3 DRAM-based RAM drive	Integrated small-footprint solution eliminates the need for volatile DRAM
Dual Port 6Gb/s SAS host connect	Robust, high throughput SCSI-compatible interface for use in NAS and unified storage appliances to speed up storage performance for application acceleration
Low latency	Reduces file system overhead in enterprise appliances, improving efficiency and accelerating applications
PowerSafe® technology	Provides data persistence and instant backup and recovery in the event of an unplanned power failure
Full data-path protection	Protects critical data from corruption
Hot pluggable	Designed for the easy removal and replacement of drives without system downtime
Wear resistant	Will not wear out, even under the most write-intensive enterprise workloads

Specifications

Model # / Part #	Z4RZF3D-8UCS / OT00291	
Configuration		
Interface	SAS 6Gb/s	
Capacity (GB) ¹ at 512 bytes/sector	8	
Form factor	3.5-inch	
Performance	SINGLE PORT	DUAL PORT
Average latency	< 23 µs	< 23 µs
Sustained read throughput (MB/s)	475	900
Sustained write throughput (MB/s)	430	800
Read IOPS (random 4k)	69,000 sustained	100,000 sustained
Write IOPS (random 4k)	51,000 sustained	100,000 sustained

Power	
Power supply	5V, 12V
Physical	
z-height (mm)	25.4
Dimensions (mm)	147 x 101.6
Environmental	
Operating temperature	0° to 60°C

¹One gigabyte (GB) is equal to one billion bytes, one terabyte (TB) is equal to 1,000GB (one trillion bytes), and one petabyte (PB) is equal to 1,000TB (one quadrillion bytes) when referring to solid-state drive or hard drive capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the drive, the computer's operating system, and other factors.

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Please visit the Support section of our website www.hgst.com/support for additional information on product specifications. Photographs may show design models.