



Longsys ORCA 4836 Series Enterprise-class NVMe SSD

Longsys is committed to creating enterprise-class SSD series ORCA 4836 SSD, PCIe Gen4 U.2 SSD supporting NVMe1.4, providing mainstream solutions with capacity up to 7.68TB, and Random Read up to 1100K* IOPS.

ORCA 4836 SSD supports a variety of advanced features, and provides a high-perf, low-latency, high-reliable and flexible power adjustment storage solution for Internet, cloud computing, financial and other industries.

Advanced Features

• NVMe MI 1.1	• Secure Boot & Download	• Enhanced Power Loss Protection
• Multiple Namespace	• Sanitize	• Firmware Upgrade Activate without Reset
• End-to-End Data Protection	• Thermal throttling	• Flexible Power Adjustment
• RAIN	• Telemetry	

Applications



Server



Distributed storage



Cloud computing



Edge Computing



Workstation

*This version is to be updated on November 23st, 2022. Actual conditions are subject to the Longsys website.

Key Benefits

01. Outstanding Performance

ORCA 4836 series supports PCIe 4.0 x 4 interfaces and carries built-in performance optimization and thus guarantees high level of QoS and IO consistency. It delivers reach 6.9GB/s* Sequential Read throughput and 1100K* Random Read IOPS. This ensures high performance and steady data service in wide-range of enterprise applications.

02. Reliable Data Storage

Through rigorous design, simulation and verification, ORCA 4836 meets the reliability standard of 2 million hours of MTBF; it supports enhanced PLP, RAIN, and security features. Specifically designed for the enterprise usage, focusing on data protection for a variety of applications.

03. Energy-efficiency

ORCA 4836 provides the above-mentioned performance with the power envelope of 14W, and offers power consumption tuning on per-Watt basis (ranging 6~14W). This flexibility allows enterprise users to adjust power consumption based on the needs of specific applications.

Specification

Series		ORCA 4836 PRO			ORCA 4836 MAX	
NAND Flash		128 layer 3D eTLC				
Form factor		2.5" U.2				
Host interface		PCIe Gen 4*4				
Capacity		1.92 TB	3.84 TB	7.68 TB	3.2TB	6.4TB
Performance ^[1]	Sequential read*	6900MB/s	6800MB/s	6800MB/s	6800MB/s	6800MB/s
	Sequential write*	2700MB/s	4600MB/s	4600MB/s	4600MB/s	4600MB/s
	Random read*	750K IOPS	1000K IOPS	1100K IOPS	1000K IOPS	1100K IOPS
	Random write*	120K IOPS	200K IOPS	220K IOPS	340K IOPS	360K IOPS
Endurance		DWPD=1			DWPD=3	
Warranty Period		5 years				
Uncorrectable Bit Error Rate (UBER)		1 sector per 10 ¹⁷ bits read				
Mean Time Between Failure (MTBF)		2,000,000 hours				
Power consumption		Active:<=14 W Idle:<=5W				
Operating Temp ^[2]		0~70 °C				
Spec Compliance		NVM Express Base Specification1.4 PCI Express Base Specification Revision 4.0				
Manageability		NVM Express Management Interface Specification1.1				

[1] The performance measurement is referred to the SNIA SSS-PTS-E test specification;

[2] Case surface temperature on the center-top side of the device

*The data comes from Longsys's internal test. The actual performance may vary due to equipment differences.