Lightspeed. Solid. Impressive.

Nytro 5910 NVMe SSD

The Seagate® Nytro® 5910 NVMe add-in card is designed to optimize TCO for high-performance computing and deliver industry-leading performance/$ for enterprise and hyperscale applications.

Optimizing TCO for High-Performance Workloads

The continual growth of big data is increasing the demands on modern data centers for robust storage solutions, better application performance and optimized TCO. The Nytro 5910 NVMe add-in card delivers industry-leading performance per dollar. The Nytro 5910 combines multiple M.2 SSD controllers into a single PCIe card without any additional cost, power or latency required from a PCIe bridge chip or switch. It enables servers to communicate directly with the four individual controllers through one motherboard PCIe socket for flexible utilization and scalability.

The Nytro 5910 OCP-compliant add-in card leverages the existing and widely used ×16 PCIe slots in servers while delivering maximum capacity and performance per PCIe slot for high-performance enterprise and hyperscale applications.

Ultra-Fast With 8GB/s Throughput

The Nytro 5910 meets the most demanding application requirements with ultra-high performance of 8GB/s through a single PCIe slot. By delivering high bandwidth and low latency, it improves QoS and significantly boosts application responsiveness.

The Nytro 5910 features a PCIe Gen3 ×16 interface with the NVMe protocol, delivering improved latency, consistent response time, high throughput and IOPS performance, all while requiring less CPU utilization.

Enterprise-Ready Configuration

By leveraging Seagate's existing enterprise expertise and manufacturing excellence, the Nytro 5910 delivers the highest levels of data integrity and endurance for critical business applications.

The Nytro 5910 supports end-to-end data protection, LDPC error correction and Seagate RAISE technology for solid reliability and endurance. With power-loss data protection, the Nytro 5910 maintains data integrity to help prevent loss of data in the event of unexpected power interruptions.

Key Features and Benefits

- PCIe Gen3 ×16 interface offers four individual PCIe Gen3 ×4 volumes using host-supported bifurcation
- NVMe 1.2a protocol for improved latency, consistent response time and high throughput
- 8TB of total raw capacity in a single PCIe add-in card
- Supports standard NVMe drivers for easy deployment
- UEFI bootable solution

Best-Fit Applications

- High-performance computing
- Big Data analytics
- Databases

Specifications	7.6TB
Standard Model	XP7680LE80002
Features	
Interface	PCIe Gen3 ×16, NVMe 1.2a
NAND Flash Type	3D cMLC
Form Factor	Full-height, half-length
Performance	
Sequential Read (MB/s) Sustained, 128KB[1]	8,150
Sequential Write (MB/s) Sustained, 128KB[1]	4800
Random Read (IOPS) Sustained, 4KB QD64[1]	975,000
Random Write (IOPS) Sustained, 4KB QD64[1]	132,000
Random 70/30 R/W (IOPS) Sustained, 4KB QD64[1]	369,000
Endurance/Reliability	
Lifetime Endurance (Drive Writes per Day)	0.3
Nonrecoverable Read Errors per Bits Read	1 per 10E16
Mean Time Between Failures (MTBF, hours)	2,000,000
Limited Warranty (years)	5
Power Management	
+12V Max Power (W)[2]	37.5
Average Read/Write Power (W)[2]	36
Environmental	
Temperature, Operating (°C) / Airflow	0 to 35 @ 300 LFM
Physical	
Height (in/mm, max)[3]	4.3in/111mm
Length (in/mm, max)[3]	6.6in/168mm
Weight (g)	280
Carton Unit Quantity	20

1 Performance data is based on testing under certain workload conditions and is subject to change.

2 Power consumption is based on 7% over-provisioning.

3 These dimensions conform to the PCI Express Card Electromechanical Specification found at pcisig.com.

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