Replace HDDs with the highly efficient Intel® SSD D3-S4510 and D3-S4610 Series to reduce storage operating cost, and accelerate read-intensive workloads with power-efficient performance.

Move to more efficient storage while preserving your legacy infrastructure. Replacing HDDs with the Intel® SSD D3-S4510 and D3-S4610 Series based on 64-layer Intel® 3D NAND TLC, reduces the storage operating cost, accelerates read-intensive workloads at higher service levels and improves overall system dependability and flexibility.

These reliable SSDs meet demanding service level requirements while increasing server efficiency. Innovative SATA firmware and the latest generation of Intel® 3D NAND make SSD D3-S4510 and D3-S4610 compatible with existing SATA setups for an easy storage upgrade.

Reduce Operating Cost While Preserving Infrastructure Investment

Built for compatibility with legacy infrastructures, the SSD D3-S4510 and D3-S4610 minimize the costs associated with modernizing your data center. Available in a variety of capacities, from 240GB up to 7.68TB, in a standard 2.5-inch, and M.2 form factor, the larger capacity drives consume up to 6x lower power[1] and have up to 6x lower cooling[1] requirements than 2.5-inch HDDs. The SSD D3-S4510 and D3-S4610 also enable 3.2x more data to be stored in the same amount of space.[2]

Accelerate Read-Intensive Workloads with Power-Efficient Performance

Simply by integrating SSDs into the environment, organizations can improve server agility with up to 300x more IOPS/TB[4] than HDDs, supporting more users and better services to grow the business without expanding the server footprint. Additionally, the Flex Workload feature enables a common drive type to cover more workloads with flexible capacity, flexible endurance, and flexible power-efficient performance.

Improve System Reliability and Flexibility

The reliability of the SSD D3-S4510 and D3-S4610 reduces the need for drive replacement that is necessary with HDDs. With a 4.2x lower annualized failure rate (AFR) compared to HDDs, IT departments will spend less time and expense replacing or upgrading storage devices.[5] Equally important, once the SSDs are installed, the innovative SATA firmware completes updates without reset, reducing downtime.

Key Benefits

- **Compatible with existing SATA setups for easy storage upgrade**
- **Up to 6x lower power[3] and lower cooling[3] requirements than 2.5-inch HDDs**
- **3.2x more data in the same amount of space[2]**
- **Up to 4.2x lower annualized failure rates (AFR) for fewer drive replacements[5]**
- **Up to 300x more IOPS/TB[4] than HDDs**

Minimize Service Disruptions

For years, Intel has been a leader in providing trusted data center SSDs that maximize data continuity in enterprise and cloud data centers. That reputation continues with the D3-S4510 and D3-S4610 and their key capabilities that help ensure more uptime:

- Consistently delivers durable performance to optimize service level continuity

- End-to-end data protection helps keep data safe—even in the event of a power loss

- Up to 4.2x lower annualized failure rates (AFR) means fewer drive replacements[5]

- Innovative firmware completes updates without server reset, reducing downtime

- Simplified configurations reduce risk of component failure and streamline maintenance

Features At-a-Glance[3]	
Capacity	**S4510**: 2.5in - 240GB, 480GB, 960GB, 2TB (1.92TB), 4TB (3.84TB), 8TB (7.68TB)ᵀ M.2 - 240GB, 480GB, 960GB
	S4610: 2.5in - 240GB, 480GB, 960GB, 2TB (1.92TB), 4TB (3.84TB), 8TB (7.68TB)ᵀ
Performance[3]	128KB Sequential Read/Write – up to 560/510 MB/s
	S4510: 4KB Random Read/Write – up to 97,000/36,000 IOPS
	S4610: 4KB Random Read/Write – up to 97,000/51,000 IOPS
Reliability	Designed for end-to-end data protection from silent data corruption, uncorrectable bit error rate < 1 sector per 10^{17} bits read
Power	**S4510**: Active power up to 3.6W; Idle power up to 1.1W
	S4610: Active power up to 3.7W; Idle power up to 1.1W
Interface	SATA 6Gb/s
Form Factor	**S4510**: 2.5in x 7mm; M.2 2280
	S4610: 2.5in x 7mm
Media	Intel 3D NAND, TLC
Endurance	**S4510**: up to 2 DWPD
	S4610: 3 DWPD
Warranty	5-year limited warranty