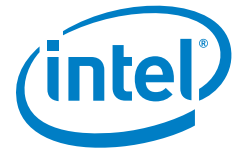


PRODUCT BRIEF

Intel® Solid State Drive Data Center S3100 Series



The Solid Choice: Intel Performance, Value, and Quality

Stop spinning. Drive to solid performance and value.

Intel's first three level cell (TLC) NAND based data center SSD delivers low latency and performance that matters for your applications, at amazingly attractive price points.



Overview

Enterprises of all sizes are finding that the limitations of traditional mechanical hard disk drives (HDDs) have become a key bottleneck in system performance. Data centers are utilizing more virtualized applications to support the growth of data and users are increasing their demand for content and real time data access.

HDD storage devices create bottlenecks with slow I/O performance and long latencies. Introducing the SATA Intel® SSD DC S3100 Series, an entry level SSD for the data center which delivers low latency, high reliability and performance that matters for your applications. The DC S3100 Series delivers low cost per input/output operations per second (IOPS), enabling data centers to deliver improved services to their customers.

The DC S3100 Series is the perfect choice for cost effectively accelerating read intensive workloads such as web hosting, content caching and search index creation all of which require consistent performance, value endurance, low latency and high reliability.

Architected with a combination of single level cell (SLC) and TLC NAND, the Intel SSD DC S3100 Series delivers the right balance of performance and value.

Cost Optimized

The DC S3100 Series is an entry-level, value endurance drive. This product combines the latest industry-tested firmware technology with 16nm TLC NAND to form a solid, low cost Intel SSD for the data center. To maintain a low cost structure, the DC S3100 Series does not incorporate some Intel Data Center specific features such as Power Loss Imminent protection and full end-to-end data protection features. The result is a cost-optimized SSD providing great value for non-mission critical data center applications.

Performance That Matters

The DC S3100 Series has performance that matters with up to 535/118 megabytes per second (see specification table below) and 4K random read-write IOPS of 59K/4.7K IOPS.¹ In capacities of 180GB, 240GB, 480GB, and 1TB, the DC S3100 Series is offered in a 2.5-inch form factor.

Applications benefit from faster access to data with 55µ typical read latency on the DC S3100 Series compared to ~4.5 milliseconds on HDD. It is well suited for HDD replacement in non-mission critical applications such as boot OS, edge cache and search index creation.

Product Spotlight

- Intel's first TLC SATA drive for the data center
- Lowest cost data center SSD
- Suited for read intensive applications
- 0.1 Drive write per day³
- Low latency
- AES 256-bit Encryption

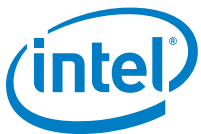
Low Total Cost of Ownership

In addition to the low initial acquisition costs, the DC S3100 enables low operating costs for the data center, as SSDs consume far less power when compared to HDDs. The Intel SSD S3100 is architected to include a dedicated "XOR" NAND which provides internal RAID-like protection from block, page, or total die failure, leading to low failure

rates. Intel's track record for data center SSD reliability means that the data center will experience far fewer drive failures and service calls than with traditional HDDs.² Optimize your dollars per IOPs, energy costs, and floor space in your data center with the low power, highly reliable Intel SSD DC S3100 Series.

SPECIFICATIONS⁴

PRODUCT	CAPACITY	4K RANDOM READ IOPS	4K RANDOM WRITE IOPS	SEQ READ/WRITE MB/S	POWER READ/WRITE	POWER IDLE
Intel® SSD DC S3100	180 GB	50,400	2,900	510/81	2.2/2.5W	0.65W
Intel® SSD DC S3100	240 GB	54,000	4,400	535/106	2.8/3.8W	0.65W
Intel® SSD DC S3100	480 GB	55,300	4,700	501/118	3.5/3.9W	0.65W
Intel® SSD DC S3100	1TB	59,000	3,900	501/114	3.6/4.9W	0.7W



For more information on Intel® Solid State Drive DC S3100 Series, visit www.intel.com/SSD

¹ Performance measured using IOMeter* with 128KB (131,072 bytes) of transfer size with Queue Depth 32, 1TB density

² <https://www.backblaze.com/blog/hard-drive-reliability-stats-for-q2-2015>

³ 0.1 DWPD for 3 years, warranted for five years with 72 TBW or E9=1.

⁴ System Configuration for all performance JEDEC testing performed by Intel: Intel® Core™ i7-3960x on Intel® DX79SI desktop motherboard, BIOS Version 0537, 8GB, DDR3, LSI-9265-Bi, FW 3.190.25-1776, Intel® SSD DC S3100 FW LSDG200

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