

V310Pro Series SATA SSD



Introduction

V310Pro series uses MAXIO's latest MAS1101-I SATA controller and Yangtze Memory 128L 3D NAND TLC. Its SATA interface supports 6 Gb/s transmission speed. At the same time, the product can better protect important data stored in it with more reliable end-to-end data protection function and read-only firmware auto reloading function.

Features

- **Optimized Firmware for Complex I/O Load in Data Center**

The product can achieve better QoS (Quality of Service) performance in SATA interface via optimized firmware. The sequential read/write speeds of up to 536 / 506 MB/s and random read/write speeds of up to 96 K / 85 K IOPS makes it easy to handle a large number of complex data read/write requests.

- **More Reliable Data Protection Design**

Data integrity is of the utmost importance to the enterprise or data center. The product is designed with reliable end-to-end data protection strategy, complete exception power-off protection, and the read-only firmware auto reloading function in exceptional circumstances.

- **Good Maintainability**

The product supports hot update of the firmware. After applying the update command, the firmware will take effect without restarting, avoiding causing inconvenience. Meanwhile, Hiksemi's all-series SSD product provides management tool for more convenient maintenance of your storage system.

- **Professional Aftersales Team**

Relying on Hikvision's after-sales outlets, you can easily obtain technical services and warranty replacement. Our SSD supports a limited 3-year warranty. If the product fails, we will provide you with a solution.

Ordering Information

Capacity	Model
2000 GB	V310Pro 2T-SSDV13dBB43A2000GCAA
4096 GB	V310Pro 4T-SSDV13dBB83A4096GCAA
8192 GB	V310Pro 8T-SSDV13dBB163A8192GCAA



Note

Please contact the local sales for detailed model information.

Specification

Model		V310Pro Series		
Capacity ¹		2000 GB	4096 GB	8192G
Form Factor		2.5 inch 7mmT		
Dimensions (L × W × H)		100.2 × 69.85 × 6.9 (mm)		
Weight		Max. 85 g		
NAND Type		YMTC 128Layer 3D TLC		
Interface		SATA 6.0 Gbps		
Performance ²	Seq.Read (128 KiB)	536 MB /s		538 MB /s
	Seq.Write (128 KiB)	506 MB/s		507 MB/s
	Random Read (4 KiB QD32 100% Span)	96 K		97 K
	Random Write (4 KiB QD32 100% Span)	85 K	84 K	22 K
	Random Read (8 KiB QD32 100% Span)	58 K	57 K	58 K
	Random Write (8 KiB QD32 100% Span)	53 K		54 K
Average Power Consumption ³		Avg. read 2.75 W Avg. write 3.63 W	Avg. read 2.80 W Avg. write 3.66 W	Avg. read 3.55 W Avg. write 4.30 W
Allowed Voltage		5.0 VDC ± 5%, 12.0 VDC ± 10%		
MTBF ⁴		2 M hours		
UBER ⁵		10 ⁻¹⁷		
Operating Temperature ⁶		-25 °C to 85 °C (-13 °F to 185 °F)		
Storage Temperature (No Operation)		-55 °C to 95 °C (-67 °F to 203 °F)		
Shock and Vibration (No Operation)		1500 g / 20 g		
Sequential Workload		4800 TB	9600 TB	19200 TB
Client Workload		1200 TB	2400 TB	4800 TB
Warranty Period ⁷		3-year limited warranty		

 Note

1. 1 GB = 1,000,000,000 bytes according to the International Disk Drive Device Equipment and Materials Association (IDEMA). The available space may be smaller due to formatting, partitioning method, operating system, application, or other factors.
2. Hardware environment and application software are different during actual use. Performance may be affected. Test conditions in list are as follows:
 - Use FIO 3.7 to test under QD32 condition. The test platform uses Intel Xeon Scalable 4210R dual-channel server to connect to Intel 6G SATA interface.
 - Read/write span is full disk LBA span (Full LBA Span) during test.
 - Write Cache Enabled
 - 1 MB /s = 1,048,676 bytes/sec
3. Power consumption is influenced by operating system, hardware, and other parameters during actual use. Power consumption test in list is based on 128 KiB sequential writing and 128 KiB sequential reading.
4. The Mean Time Between Failure (MTBF) is the estimated time between two faults during SSD operation.
5. UBER characterization data error rate. JEDEC JESD218 document stipulates that the number of data errors read per bit. In enterprise-level applications, UBER should be less than 10^{-16} .
6. The operating temperature is obtained from the SMART temperature captured by the sensor on the SSD.
7. Warranty period and writing amount, whichever is earlier.

For more information, go to <https://www.hiksemitech.com/> or contact regional sales for details.

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Revision History

Version	Description	Date
V1.0.0	V310Pro Series SATA SSD	20240821

Data subject to change without notice.

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