

ASD25-MLC Series

2.5" SATA 6 Gb/s SSD with MLC NAND Flash



Features

- Sustained read up to 400 MB/s
- Sustained write up to 300 MB/s
- Capacity: 64, 128, 256 GB
- SATA 6 Gb/s interface
- Multi-Level Cell NAND Flash with Toggle Mode Technology
- Industrial Temperatures: -40°C~85°C (optional)
- Shock and vibration resistant



SATA 6 Gb/s



32nm Toggle
NAND



Wide
Temperature



Shock &
Vibration

Specifications

Physical

Capacity	64, 128, 256 GB
Flash Components	Multi-Level Cell (MLC) NAND
Interface	SATA 6 Gb/s
Form Factor	2.5" form factor
Dimensions	100 x 68.85 x 9.5mm (L x W x H)
Weight	80 g (with case)

Performance

Bandwidth	64GB:
	- Sustained read up to 350 MB/s
	- Sustained write up to 100 MB/s
128GB:	- Sustained read up to 400 MB/s
	- Sustained write up to 200 MB/s
	256GB
Read and Write IOPS	- Sustained read up to 400 MB/s
	- Sustained write up to 300 MB/s
	64GB
64GB	- Random 4KB Read: up to 15,000 IOPS
	- Random 4KB Write: up to 6,000 IOPS
	128GB
128GB	- Random 4KB Read: up to 15,000 IOPS
	- Random 4KB Write: up to 9,000 IOPS
	256GB
256GB	- Random 4KB Read: up to 15,000 IOPS
	- Random 4KB Write: up to 9,000 IOPS
	Power On to Ready
Power On to Ready	<1.0 sec
PCMark Vantage	64GB: 35,000
Benchmark HDD Score	128GB: 37,000
	256GB: 37,000

Environmental

Operating Temperature	- Commercial: 0°C to 70°C
	- Industrial: -40°C to 85°C
Storage Temperature	-40°C to 85°C
Shock	1,500 G, 0.5 ms
Vibration	- Operating: 7~800 Hz, 2.17 Grms
	- Non-operating: 7~800 Hz, 3.08 Grms
Certifications	UL, CE, RoHS, Microsoft WHQL

Compatibility

SATA	- SATA Revision 3.0 compliant: compatible with SATA 1.5 Gb/s, 3 Gb/s & 6 Gb/s interface
	- ATA/ATAPI- 8 compliant
	- SSD enhanced SMART ATA feature set
	- Native Command Queuing (NCQ) command set
	- TRIM supported

Power Requirements

Management	- 5V SATA
	- SATA interface power management
	- OS-aware hot plug/removal
Connector	15-pin SATA connector for DC 5V input

Reliability

MTBF	> 1,500,000 hours
Long Life Support	Minimum of 3 years useful life

Ordering Information

Model Number	Description/Configuration
ASD25-MLC64G-ET	2.5" 64GB SATA 6 Gb/s SSD series, MLC type, (-40°C~85°C)
ASD25-MLC128G-ET	2.5" 128GB SATA 6 Gb/s SSD series, MLC type, (-40°C~85°C)
ASD25-MLC64G-CT	2.5" 64GB SATA 6 Gb/s SSD series, MLC type, (0°C~70°C)
ASD25-MLC128G-CT	2.5" 128GB SATA 6 Gb/s SSD series, MLC type, (0°C~70°C)
ASD25-MLC256G-CT	2.5" 256GB SATA 6 Gb/s SSD series, MLC type, (0°C~70°C)