

SSD

Solid State Drive

ADLINK SSD Products



ASD SATA 6 Gb/s SSD



32nm Technology



Wide Temperature



Shock & Vibration



SATA Interface



Flash Security ID

ADLINK industrial grade solid state drives (SSDs) are designed to provide high performance, low power consumption, high reliability and high capacity in 2.5" and 1.8" form factors. Optimized for high-throughput data transfers, ADLINK ASD SSDs are ideal for telecom server, defense, transportation and industrial applications.

Built on high speed SLC/MLC NAND flash and advanced controller technology, ADLINK ASD SATA 6 Gb/s SSDs deliver high speed sustained sequential read/write performance of up to 400MB/s and 300MB/s, respectively, at 256GB capacity. By utilizing single level cell (SLC) NAND technology, the ADLINK SLC line of SSDs provides increased reliability and longer life cycle for mission critical applications.

Designed to industrial grade specifications, ADLINK ASD SSDs are available in both commercial (0°C to +70°C) and industrial (-40°C to +85°C) operating temperature ranges. Strict shock and vibration tests are performed to ensure that ADLINK ASD SSDs meet the needs of the most demanding applications.

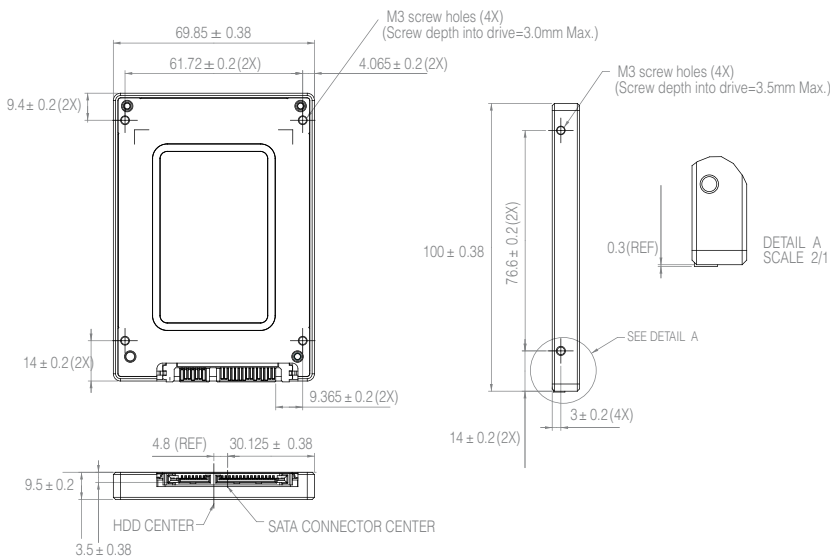
Features

- SATA 6 Gb/s interface, backward compatible with SATA 3 Gb/s and 1.5 Gb/s
- High performance: Up to 400//300 MB/s sustained sequential read/write speed
- Toshiba 32nm SLC/MLC NAND
- 64GB, 128GB, 256GB capacity in 2.5" and 1.8" form factor
- High reliability for demanding environments; withstands extreme shock and vibration
- Compatible with most operating systems and platforms
- Long product life cycle

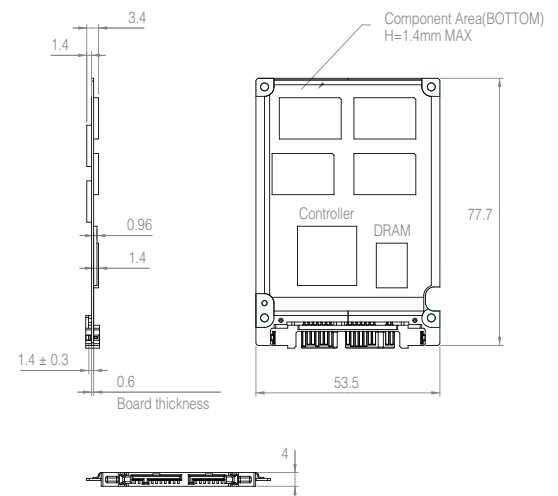
Target Applications

- Telecom and datacenter servers
- Military applications
- Transportation
- Robotic systems
- ATM and kiosk

2.5" Form Factor

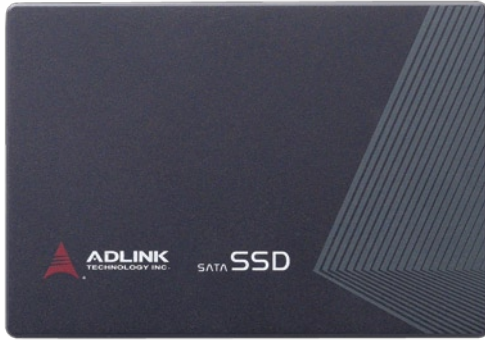


1.8" Form Factor



Units: mm

- 1 Advanced TPA Products
- 2 6U cPCI Blades
- 3 6U cPCI Platforms
- 4 3U cPCI Blades
- 5 3U cPCI Platforms
- 6 Industrial SBCs & MBs
- 7 Industrial Chassis
- 8 IPC Accessories
- 9 Computer-On-Modules
- 10 Ampere by ADLINK Extreme Budget
- 11 SSD



Features

- Sustained read up to 470 MB/s
- Sustained write up to 385 MB/s
- Capacity: 64, 128 GB
- SATA 6 Gb/s interface
- Toshiba 32nm SLC NAND flash
- Industrial Temperatures: -40°C~85°C
- Shock and vibration resistant



Specifications

Physical

Capacity	64, 128 GB
Flash Components	Single-Level Cell (SLC) 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 420 MB/s - Sustained write up to 310 MB/s
	128GB:
	- Sustained read up to 470 MB/s - Sustained write up to 385 MB/s
Read and Write IOPS	64GB
	- Random 4KB Read: up to 20,000 IOPS - Random 4KB Write: up to 14,000 IOPS
	128GB
	- Random 4KB Read: up to 17,000 IOPS - Random 4KB Write: up to 11,000 IOPS
Power on to ready	<1.0 sec
PCMark Vantage	64GB: 33,000
Benchmark HDD Score	128GB: 31,000

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: 7~800Hz, 2.17 Grms
	- Non-operating: 7~800Hz, 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
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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
Life Cycle	Minimum of 5 years useful life

Ordering Information

Model Number	Description/Configuration
ASD25-SLC64G-ET	2.5" SATA 6 Gb/s SSD series 64G, SLC type, (-40°C~85°C)
ASD25-SLC128G-ET	2.5" SATA 6 Gb/s SSD series 128G, SLC type, (-40°C~85°C)
ASD25-SLC64G-CT	2.5" SATA 6 Gb/s SSD series 64G, SLC type, (0°C~70°C)
ASD25-SLC128G-CT	2.5" SATA 6 Gb/s SSD series 128G, SLC type, (0°C~70°C)

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
- Toshiba 32nm MLC NAND flash
- Industrial Temperatures: -40°C~85°C
- Shock and vibration resistant



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 95 MB/s	
128GB:	- Sustained read up to 370 MB/s	
	- Sustained write up to 185 MB/s	
	256GB	
- Sustained read up to 400 MB/s	- Sustained write up to 300 MB/s	
	Read and Write IOPS	
	64GB	
- Random 4KB Read: up to 15,000 IOPS	- Random 4KB Write: up to 5,500 IOPS	
128GB	- Random 4KB Read: up to 20,000 IOPS	- Random 4KB Write: up to 14,000 IOPS
256GB	- Random 4KB Read: up to 17,000 IOPS	- Random 4KB Write: up to 11,000 IOPS
Power on to ready	<1.0 sec	
PCMark Vantage	64GB: 31,000	
Benchmark HDD Score	128GB: 33,000	
	256GB: 31,000	

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

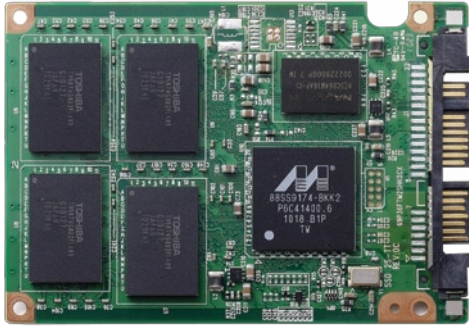
Reliability

MTBF	1,500,000 hours
Long Life Support	Minimum of 5 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-MLC256G-ET	2.5" 256GB 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)

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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
- Toshiba 32nm MLC NAND flash
- Shock and vibration resistant



32nm
Technology



Shock &
Vibration



SATA
Interface



Flash
Security ID

Specifications

Physical

Capacity	64, 128, 256 GB
Flash Components	Multi-Level Cell (MLC) NAND
Interface	SATA 6 Gb/s
Form Factor	1.8" form factor
Dimensions	77.7 x 53.5 x 3.4 mm (L x W x H)
Weight	19 g (without case)

Performance

Bandwidth	64GB:
	- Sustained read up to 350 MB/s
	- Sustained write up to 95 MB/s
128GB:	- Sustained read up to 370 MB/s
	- Sustained write up to 185 MB/s
	256GB
- Sustained read up to 400 MB/s	
- Sustained write up to 300 MB/s	

Read and Write IOPS

64GB	- Random 4KB Read: up to 15,000 IOPS
	- Random 4KB Write: up to 5,500 IOPS
	128GB
- Random 4KB Read: up to 20,000 IOPS	
- Random 4KB Write: up to 14,000 IOPS	
256GB	
- Random 4KB Read: up to 17,000 IOPS	
- Random 4KB Write: up to 11,000 IOPS	

Power on to ready

Power on to ready	<1.0 sec
PCMark Vantage	64GB: 31,000
Benchmark HDD Score	128GB: 33,000
	256GB: 31,000

Environmental

Operating Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C
Shock	1,500 G, 0.5 ms
Vibration	- Operating: 7~800 Hz, 2.17 Grms
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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	9-pin SATA connector for DC 3.3V input

Reliability

MTBF	1,500,000 hours
Long Life Support	Minimum of 5 years useful life

Ordering Information

Model Number	Description/Configuration
ASD18-MLC64G-CT	1.8" Micro SATA 6 Gb/s SSD M2S series 64G, MLC type, (0°C~70°C)
ASD18-MLC128G-CT	1.8" Micro SATA 6 Gb/s SSD M2S series 128G, MLC type, (0°C~70°C)
ASD18-MLC256G-CT	1.8" Micro SATA 6 Gb/s SSD M2S series 256G, MLC type, (0°C~70°C)