2.5" SATA SSD ASD+S7T Series

2.5" SATA SSD for Industrial Embedded Applications

Preliminary

Features

- Advanced Flash Management including static and dynamic wear leveling, bad block management, TRIM, SMART, over-provision, and firmware update
- TCG OPAL-activated SSD supports PSID
- Low Power Management including DEVSLP mode (optional) and DIPM/HIPM mode
- Operating temperature range: up to -25°C to 85°C
- MTBF of more than 3,000,000 hours
- Vibration and shock resistance
- RoHS compliant

Introduction

ADLINK's industrial 2.5" SATA SSD Series delivers all the advantages of today's flash disk technologies with SATA 6Gb/s interface, and is fully compliant with the standard 2.5" 7mm form factor. Capacities of 128GB to 2TB are available and read/write speeds of up to 550MB/s and 510MB/s respectively are supported.

Ordering Information

ASDS25SHE-128GT0	2.5" SATA SSD ASD+S7T Series, BiCS5 3D TLC, 128GB, -25°C ~ 85°C
ASDS25SHE-256GT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 256GB, -25°C ~ 85°C
ASDS25SHE-512GT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 512GB, -25°C ~ 85°C
ASDS25SHE-1TBT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 1TB, -25°C ~ 85°C
ASDS25SHE-2TBT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 2TB, -25°C ~ 85°C
ASDS25SHI-128GT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 128GB, -40°C ~ 85°C
ASDS25SHI-256GT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 256GB, -40°C ~ 85°C
ASDS25SHI-512GT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 512GB, -40°C ~ 85°C
ASDS25SHI-1TBT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 1TB, -40°C ~ 85°C
ASDS25SHI-2TBT0	2.5" SATA SSD ASD+S7T Series, BICS5 3D TLC, 2TB, -40°C ~ 85°C

Ordering Information

ASDS25SHE-32GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 32GB, -25°C ~ 85°C
ASDS25SHE-64GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 64GB, -25°C ~ 85°C
ASDS25SHE-128GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 128GB, -25°C ~ 85°C
ASDS25SHE-256GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 256GB, -25°C ~ 85°C
ASDS25SHE-512GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 512GB, -25°C ~ 85°C
ASDS25SHI-32GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 32GB, -40°C ~ 85°C
ASDS25SHI-64GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 64GB, -40°C ~ 85°C
ASDS25SHI-128GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 128GB, -40°C ~ 85°C
ASDS25SHI-256GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 256GB, -40°C ~ 85°C
ASDS25SHI-512GP0	2.5" SATA SSD ASD+S7T Series, BiCS5 pSLC, 512GB, -40°C ~ 85°C

Specifications

Model		ASD+S7T Series	
Capacity[1]		128GB to 2TB	32GB to 512GB
Form Factor		2.5" SATA 100.00mm(L) x 69.85mm(W) x 7.00mm(H)	
SATA Interface		SATA Revision 3.1 SATA 1.5Gb/s, 3Gb/s, and 6Gb/s interface	
Flash Type		BiCS5 3D TLC	BiCS5 pSLC
Performance[4]		Read: up to 550 MB/s Write: up to 510 MB/s Random 4K Read: > 44,500 IOPS Random 4K Write: > 78,500 IOPS	Read: up to 550 MB/s Write: up to 510 MB/s Random 4K Read: > 49,500 IOPS Random 4K Write: > 78,500 IOPS
Power Consumption		Active mode: <=1750mW Idle mode: <=215mW	
MTBF		More than 3,000,000 hours	
Advanced Flash Management		Advanced Wear Leveling Bad Block Management TRIM S.M.A.R.T Over Provision Firmware Update	
Security		Secure Erase Write Protect Crypto Erase Physical Presence SID (PSID)	
Low Power Management		DEVSLP Mode (Optional) DIPM/HIPM Mode	
Temperature Range[2]	Operating[3]	-25°C to 85°C	
	Storage	-40°C to 85°C	
Environment		Vibration: 20Hz to 80Hz / 1.52mm 80Hz to 2000Hz / 20Gp-p Shock (operation/non-operating): 1500G @0.5ms	
RoHS compliant		Yes	

Notes:
1. Other capacities may be supported in the future.
2. As measured by SMART temperature. Active airflow is recommended within the system for maintaining proper device operating temperature on heavier workloads.
3. Actual operating temperature specification may vary by model.
4. Performance benchmarked by CrystalDiskMark