



Memory and Storage Solutions for today's world
Accelerated Memory Production, Inc.

2.5" Solid State Drive SATA III SATAprime Series, MLC-SLC

amp inc's 2.5" SATA III SSD (Solid State Drive) is a high performance and high reliability storage device based on NAND Flash technology that is designed to solve the "bottlenecking" of computing system by traditional hard disk drives. With zero moving parts, the 2.5" SATA III SSD has same host interface and physical dimensions as a hard disk drive. With high performance and low power consumption, amp inc's 2.5" SATA III SSD can store a large amount of data for many different operating systems without the large footprint and weight.

amp inc's 2.5" SATA III SSD provides protection against shock and vibration that are common in extreme environments. amp inc's 2.5" SATA III SSD also contains a highly advanced flash memory management algorithm system to guarantee higher performance and data integrity.

Form Factor

2.5" (100.00 X 69.85 X 9.50) mm

Capacity

32GB to 640GB

Host interface

Serial ATA interface of 6 Gbps

Performance

- ATA-8 standard compliant including ATA8-ACS2
- Sequential Data Read/Write (max): 520/500MB/s*
- Flash management algorithm: static and dynamic wear-leveling, bad block management algorithm
- Supports dynamic power management and SMART (Self-Monitoring, Analysis and Reporting Technology)
- ECC (Error Correction Code): 64 bit BCH ECC per 1KByte
- Write endurance: >8 years @ 100GB write/ day
- Read endurance: unlimited
- Data retention: 10 years
- MTBF: 2,000,000 Hours
- MLC-SLC NAND
- AES256 and AES128

Power consumption

Input voltage: +5VDC, ±5%

Environmental Temperature

Operating: 0°C ~ 70°C (Commercial)
-40°C ~ 85°C (Industrial)



Shock

Operating: 1500G, duration 11ms, Half Sine Wave
Non-Operating: 1500G, duration 0.5ms, Half Sine Wave

Vibration

20G Peak, 10~2000Hz,(15mins/Axis) x3 Axis

RoHS

RoHS Compliant (Lead Free)

Part Number

MLC

Part Number	Capacity
AMP25T032-NM9VAC(I)	32GB
AMP25T064-NM9VAC(I)	64GB
AMP25T080-NM9VAC(I)	80GB
AMP25T128-NM9VAC(I)	128GB
AMP25T160-NM9VAC(I)	160GB
AMP25T256-NM1VAC(I)	256GB
AMP25T320-NM1VAC(I)	320GB
AMP25T512-NM2VAC(I)	512GB
AMP25T640-NM2VAC(I)	640GB

SLC

Part Number	Capacity
AMP25T032-NS9VAC(I)	32GB
AMP25T064-NS9VAC(I)	64GB
AMP25T080-NS9VAC(I)	80GB
AMP25T128-NS9VAC(I)	128GB
AMP25T160-NS9VAC(I)	160GB
AMP25T256-NS1VAC(I)	256GB
AMP25T320-NS1VAC(I)	320GB
AMP25T512-NS2VAC(I)	512GB
AMP25T640-NS2VAC(I)	640GB

*C = Commercial Temperature

*I = Industrial Temperature