

# FSA Series

Flash SATA Disk /SATAIII SLC, MLC



▲ 2.5" SATA Flash Disk /SLC (MLC)

## Introduction

Axiomtek's FSA (Flash SATA Disk) series is a high performance 2.5" flash disk and fully compatible with SATAIII standard which make it an ideal replacement for conventional SATA HDD without any driver or system modification. This 2.5" SATAIII flash disk is provided with huge capacities up to 512GB to meet diverse needs of data storage. With the features of high capacity storage, data integrity, anti-vibration and low power consumption, the FSA series is surely a solid solution for expanding an industrial computer's memory.

## System

### General Specification

Capacity	SLC : 4GB ~ 512GB MLC : 8GB ~ 512GB
Interface	SATA III 6.0 Gbp/s
Connector	7+15 pin male
Flash type	SLC /MLC
Form Factor	2.5"
Data Transfer Rate	SLC: Read: 68~490 MB/sec (max.) Write: 52~430 MB/sec (max.) MLC: Read: 100~415 MB/sec (max.) Write: 20~200 MB/sec (max.)
Thermal Sensor	ST-Optional; WT-Supported
External DRAM Buffer	N/A
H/W Write Protect	N/A
Pin7 Power	N/A
ATA Security	Supported
S.M.A.R.T.	Supported

### Environmental Specification

Operating Temperature	0°C ~ 70°C (32°F ~ 158°F) (standard temp.) -40°C ~ 85°C (-40 °F ~185°F) (industrial temp.)
Storage Temperature	-55°C ~ 95°C (-67°F ~ 203°F)
Humidity	10% ~ 95%, non-condensing
Vibration	20G (7 ~ 2000Hz)
Shock	1500G/0.5ms

### System Reliability

ECC technology	High reliability based on the internal ECC function
MTBF	>3,000,000 hours
Flash P/E Cycle Limit	SLC: 100,000 P/E cycles MLC: 3,000 P/E cycles
Wear-leveling	Supported

### Power Requirement

DC Input Voltage	+5 DC ± 5%
Power Consumption	SLC 3.0 W (5V x 600 mA) MLC 2.1 W (5V x 428 mA)

### Physical Specification

Enclosure Material	Aluminum Mechanical Cover
Dimensions	69.8 x 100 x 7.0 mm (W x L x H) MLC 69.8 x 100 x 9.2 mm (W x L x H) SLC *Tolerance ± 0.25 mm

## Features

- SATA III standard interface, Excellent data transfer speed  
Capacity: SLC : 4GB ~ 512GB  
MLC : 8GB ~ 512GB
- 2.5" standard form factor
- Suitable for high demanding applications
- Well performed under harsh operating environment
- Anti-vibration & shock resistance
- Data integrity with Error Detection Code/Error Correction Code (EDC/ECC)
- Intelligent error recovery system
- Perfect replacement of hard drive
- High operating reliability & durability
- Enhanced power cycling management & Low power consumption
- iSMART disk health monitoring

## Ordering Information

### SLC

Models (Standard temp. SLC)	Models (Industrial temp. SLC)	Interface	Capacity
FSA004GSC1T	FSA004GSW1T	SATAIII 6.0G	4GB
FSA008GSC1T	FSA008GSW1T	SATAIII 6.0G	8GB
FSA016GSC1T	FSA016GSW1T	SATAIII 6.0G	16GB
FSA032GSC1T	FSA032GSW1T	SATAIII 6.0G	32GB
FSA064GSC1T	FSA064GSW1T	SATAIII 6.0G	64GB
FSA128GSC1T	FSA128GSW1T	SATAIII 6.0G	128GB
FSA256GSC1T	FSA256GSW1T	SATAIII 6.0G	256GB
FSA512GSC1T	FSA512GSW1T	SATAIII 6.0G	512GB

### MLC

Models (Standard temp. MLC)	Models (Industrial temp. MLC)	Interface	Capacity
FSA008GMC5T	FSA008GMW5T	SATAIII 6.0G	8GB
FSA016GMC5T	FSA016GMW5T	SATAIII 6.0G	16GB
FSA032GMC5T	FSA032GMW5T	SATAIII 6.0G	32GB
FSA064GMC5T	FSA064GMW5T	SATAIII 6.0G	64GB
FSA128GMC5T	FSA128GMW5T	SATAIII 6.0G	128GB
FSA256GMC5T	FSA256GMW5T	SATAIII 6.0G	256GB
FSA512GMC5T	FSA512GMW5T	SATAIII 6.0G	512GB

\* All specifications and photos are subject to change without notice.