# FSA 300 Series

### Flash SATA Disk /mSATA SATA 3 SLC,MLC



#### Introduction

Axiomtek's FSA mSATA series is designed as the standard Mini PCle form factor with SATA interface, and support SATA III standard (6.0Gb/s) with excellent performance. The form factor refers to the MO-300 specification which established by JEDEC. Regarding of mechanical interference, the mSATA absolutely replaces the traditional hard disk and makes personal computer, in any field, smaller and easier.

The mSATA effectively reduced the booting time of operation system and the power consumption is less than hard disk drive (HDD), and complies with ATA protocol, no additional drives are required, and can be configured as a boot device or data storage device.

#### **System**

<b>General Specification</b>				
Capacity	SLC: 1 GB ~ 64 GB			
	MLC: 4 GB ~ 128 GB			
Interface	SATA III 6.0Gbp/s			
Connector	mSATA, 52P/Mini PCle			
Flash type	SLC/MLC			
Form Factor	M0300A/M0300B			
Data Transfer Rate	SLC: Read: 460 MB/sec (max.)			
	Write: 230 MB/sec (max.)			
	MLC: Read: 460 MB/sec (max.)			
	Write: 160 MB/sec (max.)			
<b>Environmental Specifi</b>	cation			
Operating Temperature	Standard Grade: 0°C ~ +70°C (32°F ~ 158°F)			
	Industrial Grade: -40°C ~ +85°C (-40 °F ~ 185°F)			
Storage Temperature	-55°C ~ +95°C (-67°F ~ 203°F)			
Humidity	10% ~ 95% non-condensing			
Vibration	20 G (7~2000Hz)			
Shock	1500G/0.5ms			
System Reliability				
ECC Technology	High reliability based on the internal ECC function			
MTBF	>3,000,000 hours			
Flash Endurance	SLC: 100,000 P/E Cycles			
	MLC: 3,000 P/E Cycles			
Wear-leveling	Support			
Power Requirment				
DC Input Voltage	+3.3V/+5V single power supply operation			
Idle Mode	SLC: 120mA (max.)			
	MLC: 95mA (max.)			
Physical Specification	I			
Dimensions	29.8 x 50.8 x 4.4 mm (W x L x H)			

## **Features**

- SATA III (6.0Gb/s) interface
- Capacity: SLC 1 GB to 64 GB MLC 4 GB to 128 GB
- iSMART disk health monitoring
- Intelligent error recovery system
- Write protection security
- Anti-vibration mechanical design
- Excellent data transfer speed
- Zero mechanical interference
- JEDEC standard MO-300B dimension

### **Ordering Information**

SLC			
Models (standard temp. SLC)	Models (industrial temp. SLC)	Interface	Capacity
FSA001G300SC1T	FSA001G300SW1T	SATAIII 6.0G	1 GB
FSA002G300SC1T	FSA002G300SW1T	SATAIII 6.0G	2 GB
FSA004G300SC1T	FSA004G300SW1T	SATAIII 6.0G	4 GB
FSA008G300SC1T	FSA008G300SW1T	SATAIII 6.0G	8 GB
FSA016G300SC1T	FSA016G300SW1T	SATAIII 6.0G	16 GB
FSA032G300SC1T	FSA032G300SW1T	SATAIII 6.0G	32 GB
FSA064G300SC1T	FSA064G300SW1T	SATAIII 6.0G	64 GB

#### MLC

Models (Standard temp. MLC)	Models (industrial temp. MLC)	Interface	Capacity
FSA004G300MC1T	FSA004G300MW1T	SATAIII 6.0G	4 GB
FSA008G300MC1T	FSA008G300MW1T	SATAIII 6.0G	8 GB
FSA016G300MC1T	FSA016G300MW1T	SATAIII 6.0G	16 GB
FSA032G300MC1T	FSA032G300MW1T	SATAIII 6.0G	32 GB
FSA064G300MC1T	FSA064G300MW1T	SATAIII 6.0G	64 GB
FSA128G300MC1T	FSA128G300MW1T	SATAIII 6.0G	128 GB

<sup>\*</sup> All specifications and photos are subject to change without notice.