

FSA 301 Series

Flash SATA Disk/mSATA Mini SATA 3
SLC, MLC



▲ mSATA Mini /SLC (MLC)

Introduction

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

The mSATA mini 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

General Specification	
Capacity	SLC: 1 GB ~ 32 GB MLC: 4 GB ~ 64 GB
Interface	SATA III 6.0Gb/s
Connector	mSATA, 52P/Mini PCIe
Flash Type	SLC/MLC
Form Factor	MO300A/MO300B
Data Transfer Rate	SLC: Read: 300 MB/sec (max.) Write: 130 MB/sec (max.) MLC: Read: 300 MB/sec (max.) Write: 70 MB/sec (max.)
Environmental Specification	
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	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 Endurance	SLC: 100,000 P/E Cycles MLC: 3,000 P/E Cycles
Wear-leveling	Support
Power Requirement	
DC Input Voltage	+3.3V/+5V single power supply operation
Idle Mode	SLC: 100mA (max.) MLC: 100mA (max.)
Physical Specification	
Dimensions	29.8 x 26.8 x 4.4 mm (W x L x H)

Features

- SATA III (6.0Gb/s) interface
- Capacity: SLC 1 GB to 32 GB
MLC 4 GB to 64 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 MO300B dimension

Ordering Information

SLC			
Models (Standard temp. SLC)	Models (Industrial temp. SLC)	Interface	Capacity
FSA001G301SC1T	FSA001G301SW1T	SATAIII 6.0G	1 GB
FSA002G301SC1T	FSA002G301SW1T	SATAIII 6.0G	2 GB
FSA004G301SC1T	FSA004G301SW1T	SATAIII 6.0G	4 GB
FSA008G301SC1T	FSA008G301SW1T	SATAIII 6.0G	8 GB
FSA016G301SC1T	FSA016G301SW1T	SATAIII 6.0G	16 GB
FSA032G301SC1T	FSA032G301SW1T	SATAIII 6.0G	32 GB

MLC			
Models (Standard temp. MLC)	Models (Industrial temp. MLC)	Interface	Capacity
FSA004G301MC1T	FSA004G301MW1T	SATAIII 6.0G	4 GB
FSA008G301MC1T	FSA008G301MW1T	SATAIII 6.0G	8 GB
FSA016G301MC1T	FSA016G301MW1T	SATAIII 6.0G	16 GB
FSA032G301MC1T	FSA032G301MW1T	SATAIII 6.0G	32 GB
FSA064G301MC1T	FSA064G301MW1T	SATAIII 6.0G	64 GB