

Datasheet

# mSATA 3MG2-P AES series

- SATA 6.0 Gb/s interface
- JEDEC MO-300 standard dimension
- High IOPS by on-board DRAM design
- Intelligent error recovery system
- iSMART disk health monitoring
- iData Guard for abnormal power failure
- Zero mechanical interference
- DEVSLP supported



## Introduction

Innodisk mSATA 3MG2-P is designed with AES engine, which is built-in the controller. When controller receives the data package from host, AES engine encrypts the data package and save the encrypted data into NAND flash. Thus, unauthorized personal has no access to decrypt the data in NAND flash. Featuring L<sup>2</sup> architecture, the life span of the SSD is maximized by an evolved wear leveling algorithm. Furthermore, mSATA 3MG2-P supports TRIM for Windows 7, it can improves performance when deleting files.

mSATA 3MG2-P with AES not only performs unmatched performance, but also designed with Innodisk owned technical knowhow such as iData Guard to ensure the data integrity and highest levels of reliability.

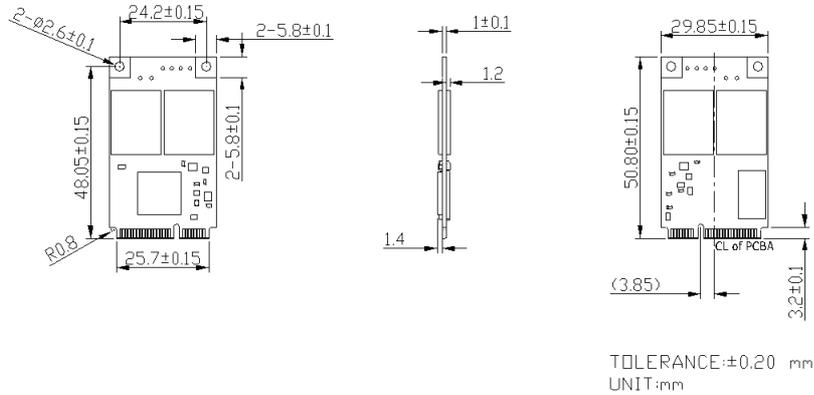
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# mSATA 3MG2-P AES series

Contact us for more information about the mSATA 3MG2-P AES.

Innodisk is a service-driven provider of industrial embedded flash and DRAM storage products and technologies, with a focus on the industrial/embedded, aerospace and defense, and cloud computing industries.

## Diagram



## Specifications

Interface	SATA III
Flash Type	MLC
Capacity	8GB~512GB
Max. Channels	4
Sequential R/W (MB/sec, max.)*	530 / 370
4KB Random (OD32) R/W (IOPS)**	68,000/69,000
Max. Power Consumption	5.4W ( 3.3 V x 1.64 A )
Thermal Sensor	✓
External DRAM Buffer	✓
H/W Write Protect	Optional
ATA Security	✓
S.M.A.R.T.	✓
DEVSLEEP Mode	✓ (min. power consumption 3mW)
Slumber Mode	✓ (min. power consumption 30mW)
Dimension (WxLxH)	29.85 X 50.8 X 3.6 mm
Environment	Vibration: 20G @7~2000Hz Shock: 1500G @ 0.5ms Storage Temperature: -55°C ~ +95°C MTBF: 3 million hours
* Sequential performance based on CrystalDiskMark 3.01 with file size 1000MB	
** Random performance based on Iometer with Queue Depth 32	

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## Ordering Information (Please refer to TPS for detail)

Operation Temp.	8GB	16GB	32GB	64GB	128GB	256GB	512GB
Standard Grade (0°C ~ +70°C)	DGMSR-08GD82BC1SC	DGMSR-16GD82BC1DC	DGMSR-32GD82BC1QC	DGMSR-64GD82BC1QC	DGMSR-A28D82BC1QC	DGMSR-B56D82BC1QC	DGMSR-C12D82BCBQC
Industrial Grade (-40°C ~ +85°C)	DGMSR-08GD82BW1SC	DGMSR-16GD82BW1DC	DGMSR-32GD82BW1QC	DGMSR-64GD82BW1QC	DGMSR-A28D82BW1QC	DGMSR-B56D82BW1QC	DGMSR-C12D82BWBQC

