

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.

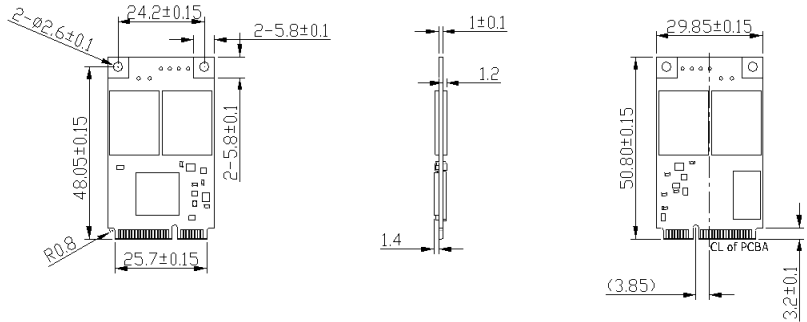
# mSATA

## 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



TOLERANCE: ±0.20 mm  
UNIT: mm

### Specifications

Interface	SATA III
Flash Type	MLC
Capacity	16GB~512GB
Max. Channels	4
Sequential R/W (MB/sec, max.)*	530 / 370
4KB Random (QD32) 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.	√
DEVSLP 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 CystalDiskMark 3.01 with file size 1000MB	
** Random performance based on Iometer with Queue Depth 32	

#### Headquarters (Taiwan)

5F., No.237, Sec. 1, Datong Rd., Xizhi Dist., New Taipei City, Taiwan (R.O.C.)

Tel: +886-2-77033000

Email: sales@innodisk.com

#### Branch Offices:

USA

[usasales@innodisk.com](mailto:usasales@innodisk.com)

+1-510-770-9421

Europe

[esusales@innodisk.com](mailto:esusales@innodisk.com)

+31-(0)40-282-1818

Japan

[jpsales@innodisk.com](mailto:jpsales@innodisk.com)

+81-3-6667-0161

China

[sales\\_cn@innodisk.com](mailto:sales_cn@innodisk.com)

+86-755-21673689

[www.innodisk.com](http://www.innodisk.com)

© 2016 Innodisk Corporation.

All right reserved. Specifications are subject to change without prior notice.

20160219

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

Operation Temp.	16GB	32GB	64GB	128GB	256GB	512GB
Standard Grade (0°C ~ +70°C)	DGMSR-16GD82SCASN	DGMSR-32GD82SCADN	DGMSR-64GD82SCAQN	DGMSR-A28D82SCAQN	DGMSR-B56D82SCAQN	DGMSR-C12D82SCAQN
Industrial Grade (-40°C ~ +85°C)	DGMSR-16GD82SWASN	DGMSR-32GD82SWADN	DGMSR-64GD82SWAQN	DGMSR-A28D82SWAQN	DGMSR-B56D82SWAQN	DGMSR-C12D82SWAQN

**innodisk**

[www.innodisk.com](http://www.innodisk.com)