Datasheet

# mSATA 3MG2-P 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
- AES Optional



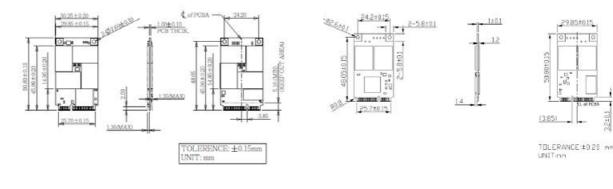
#### Introduction

Innodisk mSATA 3MG2-P is SATA III 6Gb/s flash based disk, which delivers excellent performance, especially in random data transfer rate, and which offers reliability making it the ideal solution for a variety of applications, including embedded system, industrial computing, and enterprise field. 3MG2-P mSATA 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. Featuring L<sup>2</sup> architecture, the life span of the SSD is maximized by an evolved wear leveling algorithm.



## mSATA 3MG2-P series

#### Diagram



### Specifications

Interface	SATA III				
Flash Type	MLC				
Capacity	8GB~1TB (1TB Doesn't Comply with JEDEC MO-300 Dimension)				
Max. Channels	4				
Sequential R/W (MB/sec, max.)*	520 / 355 MB/s				
4KB Random (QD32) R/W (IOPS)**	68,000/71,000				
Max. Power Consumption	3.4 W ( 3.3 V x 1.03 A )				
Thermal Sensor	$\checkmark$				
External DRAM Buffer	$\checkmark$				
H/W Write Protect	Optional except for 1TB				
ATA Security	$\checkmark$				
S.M.A.R.T.	$\checkmark$				
DEVSLP Mode	$\sqrt{(min.\ power\ consumption\ 3mW)}$				
Slumber Mode	$\sqrt{(min. power consumption 30mW)}$				
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 Cyst	alDiskMark 3.01 with file size 1000MB				

\* \* Random performance based on IOmeter with Queue Depth 32

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

Operation Temp.	8GB	16GB	32GB	64GB	128GB	256GB	512GB	1TB
Standard Grade (0°C ~ +70°C)	DGMSR- 08GD81BC1S C	DGMSR- 16GD81BC1 %C	DGMSR- 32GD81BC1 %C	DGMSR- 64GD81BC1Q C	DGMSR- A28D81BC1Q C	DGMSR- B56D81BC1Q C	DGMSR- C12D81BCBQ C	DGMSR- 01TD81BCAQ C
Industrial Grade (-40°C ~ +85°C)	DGMSR- 08GD81BW1S C	DGMSR- 16GD81BW1 %C	DGMSR- 32GD81BW1 %C	DGMSR- 64GD81BW1 QC	DGMSR- A28D81BW1Q C	DGMSR- B56D81BW1Q C	DGMSR- C12D81BWBQ C	DGMSR- 01TD81BWAQ C



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

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.

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