

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



## Introduction

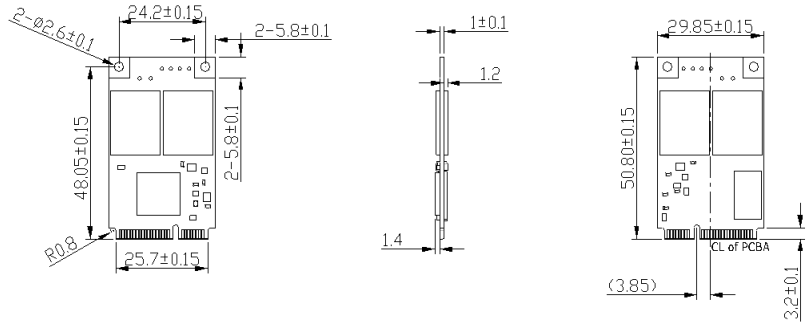
Innodisk mSATA 3MG2-P is SATA III 6Gb/s flash based disk, which delivers excellent performance, especially in random data transfer rate, and which offers reliability making it the ideal solution for a variety of applications, including embedded system, industrial computing, and enterprise field. 3MG2-P 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

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.

## Diagram



TOLERANCE:±0.20 mm  
UNIT:mm

## Specifications

Interface	SATA III
Flash Type	MLC
Capacity	8GB~512GB
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	2.8 W ( 3.3 V x 0.86 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 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-08GD81BC1SC	DGMSR-16GD81BC1&C	DGMSR-32GD81BC1% C	DGMSR-64GD81BC1QC	DGMSR-A28D81BC1QC	DGMSR-B56D81BC1QC	DGMSR-C12D81BCAQC
		DGMSR-16GD81SCASN	DGMSR-32GD81SCADN	DGMSR-64GD81SCAQN	DGMSR-A28D81SCAQN	DGMSR-B56D81SCAQN	DGMSR-C12D81SCAQN
Industrial Grade (-40°C ~ +85°C)	DGMSR-08GD81BW1SC	DGMSR-16GD81BW1&C	DGMSR-32GD81BW1% C	DGMSR-64GD81BW1QC	DGMSR-A28D81BW1QC	DGMSR-B56D81BW1QC	DGMSR-C12D81BWAQC
		DGMSR-16GD81SWASN	DGMSR-32GD81SWADN	DGMSR-64GD81SWAQN	DGMSR-A28D81SWAQN	DGMSR-B56D81SWAQN	DGMSR-C12D81SWAQN

&: S: Single channel, D: Dual channel

%: D: Dual channel, Q: 4 channel

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