

Datasheet

mSATA

3IE4 series

- SATA 6.0 Gb/s interface
- Exclusive iSLC FW architecture
- Followed JEDEC MO-300/MO-300B standard
- LDPC technology secures SSD reliability
- DRAM-less, high-level data integrity
- L³ architecture extends lifespan
- Excellent IOPS boosts system performance
- Built-in thermal sensor
- Support S.M.A.R.T, TRIM, NCQ and iData Guard



Introduction

Innodisk mSATA 3IE4 is SATA III 6.0 Gb/s flash based disk, which adopts latest Marvell NAND controller with Innodisk's exclusive L³ FW architecture. The upgraded L³ FW architecture, combining Innodisk signature 4K mapping algorithm L² FW architecture with powerful LDPC technology, makes 3IE4 series have outstanding high IOPS, better data integrity and extended lifespan through reducing the bad block number happening. Built-in thermal sensor, and iData Guard ensure data integrity and reliability of mSATA 3IE4 for industrial applications.

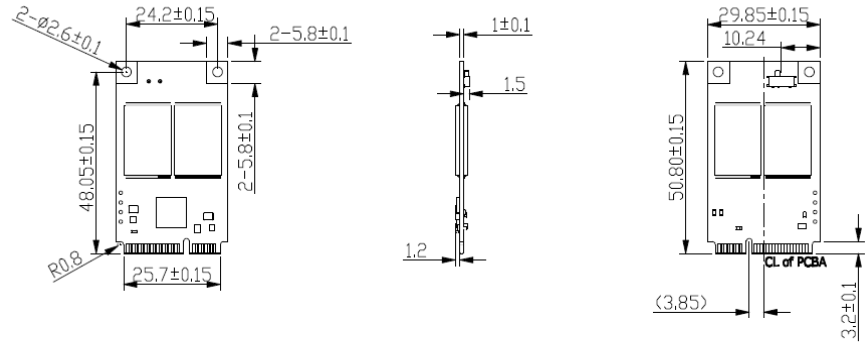
mSATA

3IE4 series

Diagram

Contact us for more information about the mSATA 3IE4.

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.



Specifications

Interface	SATA III
Flash Type	iSLC
Capacity	8GB~128GB
Max. Channels	2
Sequential R/W (MB/sec, max.)*	530 / 365 MB/s
4KB Random (QD32) R/W (IOPS)**	31,000/31,000
Max. Power Consumption	0.6 W (3.3 V x 0.2 A)
Thermal Sensor	√
External DRAM Buffer	-
H/W Write Protect	Optional
ATA Security	√
S.M.A.R.T.	√
Dimension (WxLxH)	29.85 X 50.8 X 3.7 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	

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Ordering Information (Please refer to TPS for detail)

Operation Temp.	8GB	16GB	32GB	64GB	128GB
Standard Grade (0°C ~ +70°C)	DHMSR-08GM41BC1DC DHMSR-08GM41BC1SC	DHMSR-16GM41BC1DC	DHMSR-32GM41BC1DC	DHMSR-64GM41BC1DC	DHMSR-A28M41BC1DC
Industrial Grade (-40°C ~ +85°C)	DHMSR-08GM41BC1DC DHMSR-08GM41BW1SC	DHMSR-16GM41BW1DC	DHMSR-32GM41BW1DC	DHMSR-64GM41BW1DC	DHMSR-A28M41BW1DC