

Datasheet

mSATA mini

3ME4 series

- SATA 6.0 Gb/s interface
- 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 mini 3ME4 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 3ME4 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 mini 3ME4 for industrial applications.

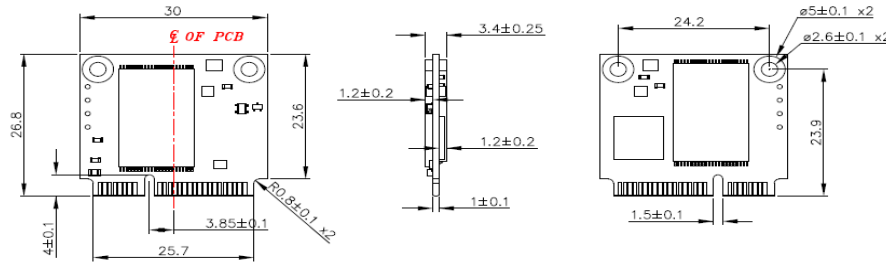


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3ME4 series



Diagram



UNIT: mm
TOLERANCE: ±0.15mm

Specifications

Interface	SATA III
Flash Type	MLC
Capacity	8GB~128GB
Max. Channels	2
Sequential R/W (MB/sec, max.)*	470 / 125
4KB Random (QD32) R/W (IOPS)**	32,000/29,000
Max. Power Consumption	0.6 W (3.3 V x 0.2 A)
Thermal Sensor	√
External DRAM Buffer	-
H/W Write Protect	-
ATA Security	√
S.M.A.R.T.	√
Dimension (WxLxH)	30 X 26.8 X 3.4 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	

Ordering Information (Please refer to TPS for detail)

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