

Datasheet

mSATA

3TE7 series

- mSATA SATA III solution for industrial field
- High IOPS
- iSMART disk health monitoring
- iPower Guard for protecting unstable start up and shut down.
- iData Guard for abnormal power failure



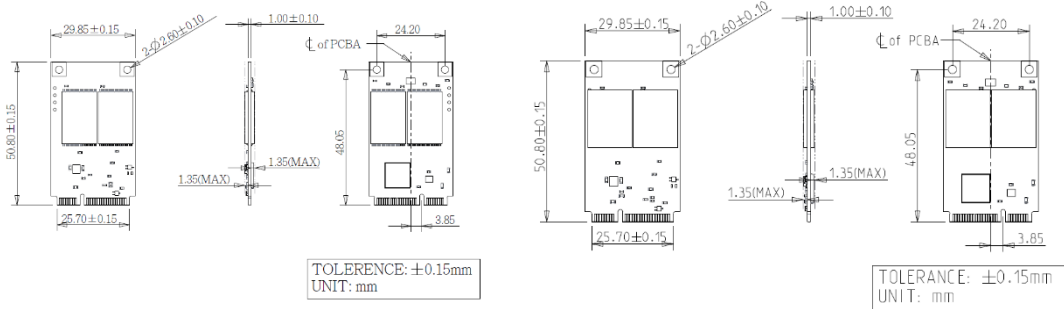
Introduction

Innodisk mSATA 3TE7 is SATA III 6.0 Gb/s flash based disk, which adopts latest SATA III 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 3TE7 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 3TE7 for industrial applications.

mSATA SSD 3TE7 series

Diagram
For 32GB~512GB

For 1TB~2TB



Contact us for more information about the mSATA 3TE7.

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	3D TLC
Capacity	32GB~2TB
Max. Channels	4
Sequential R/W (MB/sec, max.)*	560 / 510 MB/s
4KB Random (QD32) R/W (IOPS)*	85,000/70,000
Max. Power Consumption	2W
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
* Performance based on CystalDiskMark 5.1.2 with file size 1000MB	

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Ordering Information (Please refer to TPS for detail)

Operation Temp.	32GB	64GB	128GB	256GB
Standard Grade (0°C ~ +70°C)	DEMSR-32GDK1EC1SF	DEMSR-64GDK1EC1DF	DEMSR-A28DK1%C*&F	DEMSR-B56DK1%C*QF
Industrial Grade (-40°C ~ +85°C)	DEMSR-32GDK1EW1SF	DEMSR-64GDK1EW1DF	DEMSR-A28DK1EW1QF	DEMSR-B56DK1EW1QF
Operation Temp.	512GB	1TB	2TB	
Standard Grade (0°C ~ +70°C)	DEMSR-C12DK1%C*QF	DEMSR-01TDK1%CAQF	DEMSR-02TDK1GCAQF	
Industrial Grade (-40°C ~ +85°C)	DEMSR-C12DK1EW1QF	DEMSR-01TDK1EWAQF	NA	

%. E: 64 layers 3D TLC; G: 96 layers 3D TLC/ *. PCB version control/ &. D=Dual channel; Q=4 channel