

Datasheet

# M.2 (S42) 3TE7 series

- SATA III solution for industrial field
- Exclusive L<sup>3</sup> architecture
- DRAM-less, 100% data integrity
- Excellent random performance
- Supports TRIM/NCQ/SMART
- Built in iData Guard
- Compatible with M.2 2242-D2-B-M standard
- Designed with hardware LDPC ECC engine



## Introduction

Innodisk M.2 (S42) 3TE7 is SATA III 6.0 Gb/s flash based disk, which adopts latest SATA III NAND controller with Innodisk's exclusive L<sup>3</sup> FW architecture. The upgraded L<sup>3</sup> FW architecture, combining Innodisk signature 4K mapping algorithm L<sup>2</sup> 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 3TE7 for industrial applications.

Innodisk M.2 (S42) 3TE7 is designed for industrial field, and supports several standard features, including TRIM, NCQ, and S.M.A.R.T. In addition, Innodisk's exclusive industrial-oriented firmware provides a flexible customization service, making it perfect for a variety of industrial applications.

# M.2 (S42) 3TE7 series

## Diagram

Contact us for more information  
about the M.2 (S42) 3TE7.

Innodisk is a service-driven provider of industrial embedded flash and DRAM storage products and technologies, with a focus on the cloud computing, industrial/embedded, and aerospace and defense industries.

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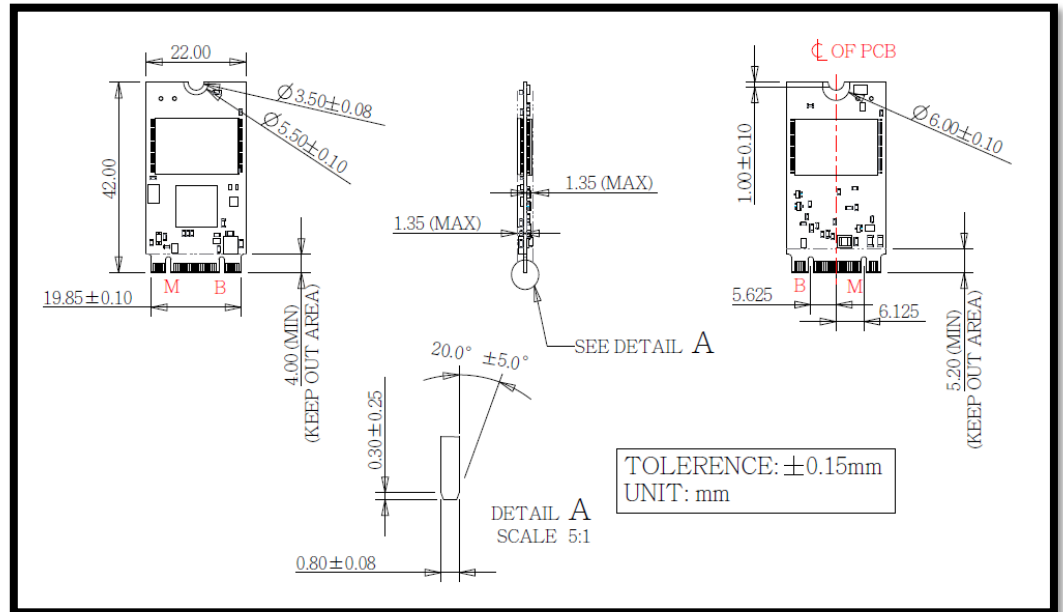
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## Specifications

Interface	SATA III
Flash Type	3D TLC
P/E cycle	3,000
Capacity	32GB~1TB
Max. Channels	4
Sequential R/W (MB/sec, max.)	550/520
Max. Power Consumption	1.5W
Thermal Sensor	✓
External DRAM buffer	-
H/W Write Protect	Optional
ATA Security	✓
S.M.A.R.T.	✓
Dimension (WxLxH)	22.0 X 42.0 X 3.5 mm
Environment	Vibration: 20G @7~2000Hz Shock: 1500G @ 0.5ms Storage Temperature: -55°C ~ +95°C MTBF: 3 million hours

## Ordering Information

Operation Temp.	32GB	64GB	128GB	256GB	512GB	1TB
Standard Grade (0°C ~ +70°C)	DEM24-32GDK1EC1SF	DEM24-64GDK1EC1DF	DEM24-A28DK1%C*DF	DEM24-B56DK1%C*&F	DEM24-C12DK1%CAQF	DEM24-01TDK1GCAQF
Industrial Grade (-40°C ~ +85°C)	DEM24-32GDK1EW1SF	DEM24-64GDK1EW1DF	DEM24-A28DK1%W*DF	DEM24-B56DK1%W*&F	DEM24-C12DK1%WAQF	DEM24-01TDK1GWAQF

%:E: 64 layers 3D TLC; G: 96 layers 3D TLC

\*. PCB version control

&. D=Dual channel; Q=4 channel

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