

Datasheet

M.2 (S42) 3IE7 series

- SATA III solution for industrial field
- Exclusive L³ 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



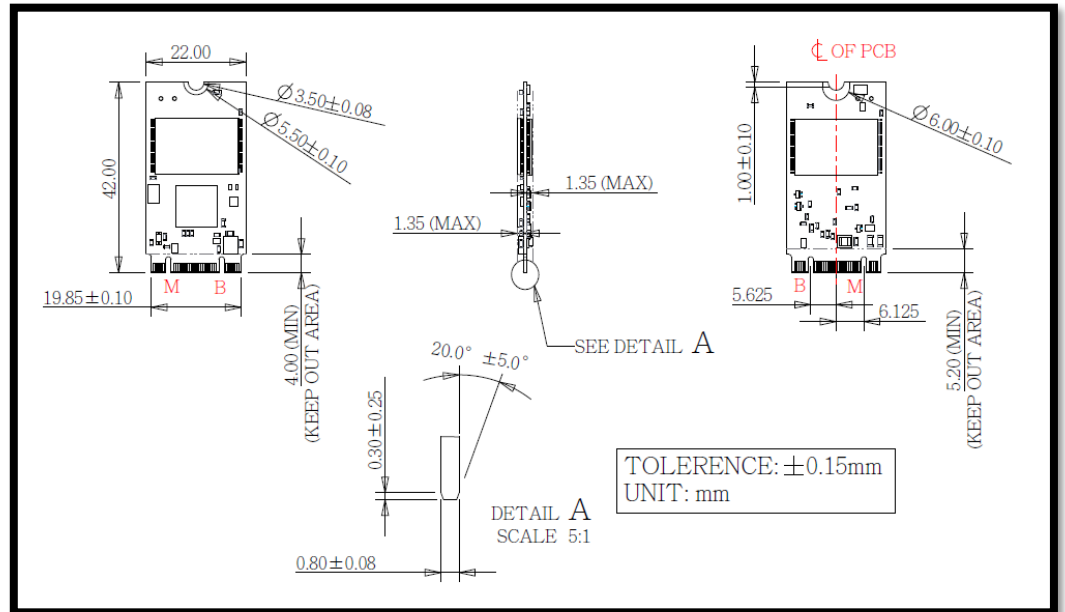
Introduction

Innodisk M.2 (S42) 3IE7 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 3IE7 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 3IE7 for industrial applications.

Innodisk M.2 (S42) 3IE7 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) 3IE7 series

Diagram



Contact us for more information about the M.2 (S42) 3IE7.

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.

Headquarters (Taiwan)

5F., No. 237, Sec. 1, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
Tel: +886-2-7703-3000
Email: sales@innodisk.com

Branch Offices:

USA
usasales@innodisk.com
+1-510-770-9421
Europe
eusales@innodisk.com
+31-40-3045-400
Japan
jpsales@innodisk.com
+81-3-6667-0161
China
sales_cn@innodisk.com
+86-755-21673689
www.innodisk.com

© 2023 Innodisk Corporation.
All right reserved. Specifications are subject to change without prior notice.

Specifications

Interface	SATA III
Flash Type	iSLC (3D TLC)
P/E cycle	30,000
Capacity	16GB~256GB
Max. Channels	4
Sequential R/W (MB/sec, max.)	550/510
Max. Power Consumption	3W
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: -40°C ~ +85°C MTBF: 3 million hours

Ordering Information

Operation Temp.	16GB	32GB	64GB	128GB	256GB
Industrial Grade (-40°C ~ +85°C)	DHM24-16GDK*KWASF	DHM24-32GDK*KWADF	DHM24-64GDK*KWAQF	DHM24-A28DK*KWAQF	DHM24-B56DK*KWAQF

*. 1: Disabled AES function; 2: Enabled AES function