

Datasheet

# M.2 (S80) 3IE7 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 2280-D2-B-M standard
- Designed with hardware LDPC ECC engine



## Introduction

Innodisk M.2 (S80) 3IE7 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 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 (S80) 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 (S80)

## 3IE7 series

### Diagram

Contact us for more information about the M.2 (S80) 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)

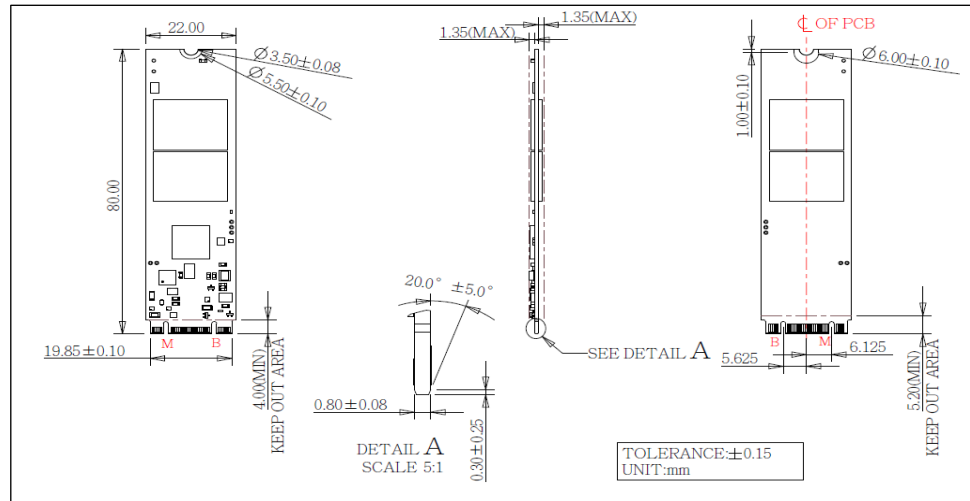
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### Specifications

Interface	SATA III
Flash Type	iSLC (3D TLC)
P/E cycle	30,000
Capacity	40GB~640GB
Max. Channels	4
Sequential R/W (MB/sec, max.)	550/520
Max. Power Consumption	1.98W(3.3V x600mA)
Thermal Sensor	✓
External DRAM buffer	-
H/W Write Protect	Optional
ATA Security	✓
S.M.A.R.T.	✓
Dimension (WxLxH)	22.0 X 80.0 X 3.5 mm (Max)
Environment	Vibration: 20G @7~2000Hz Shock: 1500G @ 0.5ms Storage Temperature: -55°C ~ +95°C MTBF: 3 million hours

Operation Temp.	40GB	80GB	160GB	320GB	640GB
Standard Grade (0°C ~ +70°C)	DHM28-40GDK1GCADL	DHM28-80GDK1GCAQL	DHM28-A60DK1GCAQL	DHM28-D2GDK1GCAQL	DHM28-F4GDK1GCAQQ
Industrial Grade (-40°C ~ +85°C)	DHM28-40GDK1GWADL	DHM28-80GDK1GWAQL	DHM28-A60DK1GWAQL	DHM28-D2GDK1GWAQL	DHM28-F4GDK1GWAQQ

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