### Datasheet

# SATADOM-SH 3IE7 series

- SATA III soultion for industrial field
- Exclusive L<sup>3</sup> architecture
- DRAM-less, 100% data integrity
- Excellent random performance
- Designed with hardware LDPC ECC engine
- Built-in Pin 8 power supply

# Introduction

Innodisk SATADOM-SH 3IE7 is characterized by L<sup>3</sup> architecture with the latest SATA III (6.0GHz) Marvell NAND controller. Innodisk's exclusive L<sup>3</sup> architecture is L<sup>2</sup> architecture multiplied LDPC (Low Density Parity Check). L<sup>2</sup> (Long Life) architecture is a 4K mapping algorithm that reduces WAF and features a real-time wear leveling algorithm to provide high performance and prolong lifespan with exceptional reliability.

Innodisk SATADOM-SH 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.

The innovative Pin 8 uses the SATA connector itself as a power supply to drive the device without external cables. It could be connected directly to the SATA on-board socket on customer's system without additional power cable. Besides, the booting time for operation and the power consumption is less than hard disk drive (HDD), and can work under harsh environment compile with ATA protocol, no additional drives are required, and the SSD can be configured as a boot device or data storage device.



# **SATADOM-SH** 3IE7 series

Diagram

# *Contact us for more information about the SATADOM-SH 3IE7.*

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

### Headquarters (Taiwan)

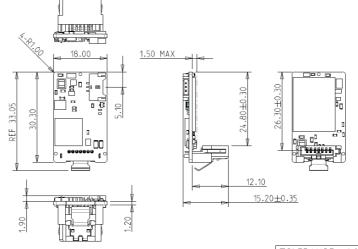
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20210204



TOLERANCE: ±0.20mm UNIT: mm

## **Specifications**

| Interface                     | SATA III                           |  |  |
|-------------------------------|------------------------------------|--|--|
| Flash Type                    | iSLC (3D TLC)                      |  |  |
| Capacity                      | 20GB~160GB                         |  |  |
| Max. Channels                 | 2                                  |  |  |
| Sequential R/W (MB/sec, max.) | 550/480                            |  |  |
| Max. Power Consumption        | 1.5W                               |  |  |
| Thermal Sensor                | $\checkmark$                       |  |  |
| Extended DRAM buffer          | -                                  |  |  |
| H/W Write Protect             | -                                  |  |  |
| ATA Security                  | $\checkmark$                       |  |  |
| S.M.A.R.T.                    | $\checkmark$                       |  |  |
| Dimension (WxLxH)             | xH) 33.05 x 18.0 x 15.2 mm         |  |  |
| Environment                   | Vibration: 20G @7~2000Hz           |  |  |
|                               | Shock: 1500G @ 0.5ms               |  |  |
|                               | Storage Temperature: -55°C ~ +95°C |  |  |
|                               | 5 .                                |  |  |
|                               | MTBF: 3 million hours              |  |  |

## **Ordering Information**

|                  | 20GB         | 40GB         | 80GB         | 160GB        |
|------------------|--------------|--------------|--------------|--------------|
| Standard Grade   | DHSSH-       | DHSSH-       | DHSSH-       | DHSSH-       |
| (0°C ~ +70°C)    | 20GDK1KCADL* | 40GDK1KCADL* | 80GDK1KCADL* | A60DK1KCADL* |
| Industrial Grade | DHSSH-20GDK1 | DHSSH-       | DHSSH-       | DHSSH-       |
| (-40°C ~ +85°C)  | KWADL*       | 40GDK1KWADL* | 80GDK1KWADL* | A60DK1KWADL* |

\*=A-> Pin 8+ power cable / \*=B-> Pin 8+ Pin 7



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