

## M.2

### SNE1B:2242



### SNE1B:2280



#### GENERAL INFORMATION

|                            |  |  |  |  |
|----------------------------|--|--|--|--|
| TYPE                       | M.2 2242   |  | M.2 2280                                 |  |
| INTERFACE                  | Serial ATA Revision 3.1  |  |  |  |
| DATA TRANSFER MODE         | SATA 1.5Gbps, 3.0Gbps, 6.0Gbps   |  |  |  |
| CONNECTOR                  | 75 pin. Edge B & M key   |  |  |  |
| OUTLINE DIMENSIONS         | 22 x 42 mm   |  | 22 x 80 mm                               |  |
| SERIES                     | SNE1B  |  |  |  |
| CONTROLLER TYPE            |  TDK GBDriver GS1 |  |  |  |
| FLASH TYPE                 | SLC  | pSLC/MLC   | SLC                                      | pSLC/MLC   |
| DENSITY RANGE              | 16 GB - 64 GB  | pSLC: 16 GB - 128 GB<br>MLC: 32 GB - 256 GB                        | 16 GB - 128 GB                           | pSLC: 16 GB - 256 GB<br>MLC: 32 GB - 512 GB                        |
| DATA RETENTION             | 10 years @ life begin-10%<br>1 year @ life end   |  |  |  |
| ENDURANCE<br>ENTERPRISE WL | 100,000 P/E Cycles<br>*Flash Block Level   | pSLC: 20,000P/ECycles<br>MLC: 3,000P/ECycles<br>*Flash Block Level | 100,000 P/E Cycles<br>*Flash Block Level | pSLC: 20,000P/ECycles<br>MLC: 3,000P/ECycles<br>*Flash Block Level |

#### TEMPERATURE

|                       |  |
|-----------------------|--|
| OPERATING TEMPERATURE | Commercial: 0°C to +70°C<br>Industrial: -40°C to +85°C   |
| STORAGE TEMPERATURE   | Commercial: -25°C to +85°C<br>Industrial: -40°C to +85°C |

#### PERFORMANCE

|              |               |   |               |   |
|--------------|---------------|---|---------------|---|
| Read (max.)  | 340 MByte/sec | pSLC: 345 MByte/sec<br>MLC: 295 MByte/sec | 340 MByte/sec | pSLC: 345 MByte/sec<br>MLC: 295 MByte/sec |
| Write (max.) | 105 MByte/sec | pSLC: 145 MByte/sec<br>MLC: 75 MByte/sec  | 105 MByte/sec | pSLC: 145 MByte/sec<br>MLC: 75 MByte/sec  |

#### ROBUSTNESS

|           |                                |
|-----------|--------------------------------|
| MTBF      | ≥ 2,500,000 hours              |
| SHOCK     | 1500G, 0.5ms                   |
| VIBRATION | 20G, 10-2000Hz                 |
| HUMIDITY  | 0 to 90 % RH (No condensation) |

#### ELECTRICAL DATA

|                   |   |
|-------------------|---|
| VOLTAGE           | 3.3 V ± 5 %   |
| POWER CONSUMPTION | <ul style="list-style-type: none"> <li>- Read: 385mA max.</li> <li>- Write: 370mA max.</li> <li>- Slumber: less than 100mA</li> </ul> |

#### FEATURE LIST

|                  |   |                     |                      |                      |
|------------------|---|---------------------|----------------------|----------------------|
| FEATURES & TOOLS | <ul style="list-style-type: none"> <li>- In-House Designed Controller (HW/FW)               <ul style="list-style-type: none"> <li>- Power Fail Data Safety</li> <li>- Power Back-up Circuit</li> </ul> </li> <li>- Global static wear leveling               <ul style="list-style-type: none"> <li>- SMART</li> <li>- NCQ, TRIM</li> </ul> </li> <li>- AES 128/256bit encryption</li> </ul> |                     |                      |                      |
| PART NUMBER      | SNE1BxxxxTXDxB00SAA0  | SNE1BxxxxTxDb00SAA0 | SNE1BxxxxTXDxBA0SAA0 | SNE1BxxxxTXDxBA0SAA0 |