

# Apacer

The Most **Reliable**  
Storage For Industries

**SM230-M242**



## SM230-M242

### Overview

Apacer's SM230-M242 (M.2 2242) is the next generation modularized Solid State Drive (SSD) with the shape of all new M.2 form factor, with the aim of becoming more suitable for mobile and compact computers with standard width at only 22.00 mm. SM230-M242 appears in M.2 2242 mechanical dimensions and is believed to be the leading add-in storage solution for future host computing systems.

The M.2 SSD is designed with SATA-based connector pinouts, providing full compliance with the latest SATA Revision 3.1 interface specifications. Aside from SATA compliance, SM230-M242 delivers exceptional performance and power efficiency. On the other hand, the extreme thin and light form factor makes SM230-M242 the ideal choice for mobile computing systems, which appears to be the trend in the near future.

Regarding reliability, SM230-M242 is built with a powerful SATA controller that supports on-the-module ECC as well as efficient wear leveling scheme. Operating under SATA 6.0 Gbps interface, SM230-M242 is provided with Apacer latest S.M.A.R.T. that is primarily oriented for the latest SATA interface SSD, for drive lifetime monitoring and analyzing. Furthermore, with Advanced Encryption Standard (AES) and Trusted Computing Group (TCG) Opal support, SM230-M242 ensures data security and provides users with a peace of mind knowing their data is safeguarded against unauthorized use at all times.

### Feature

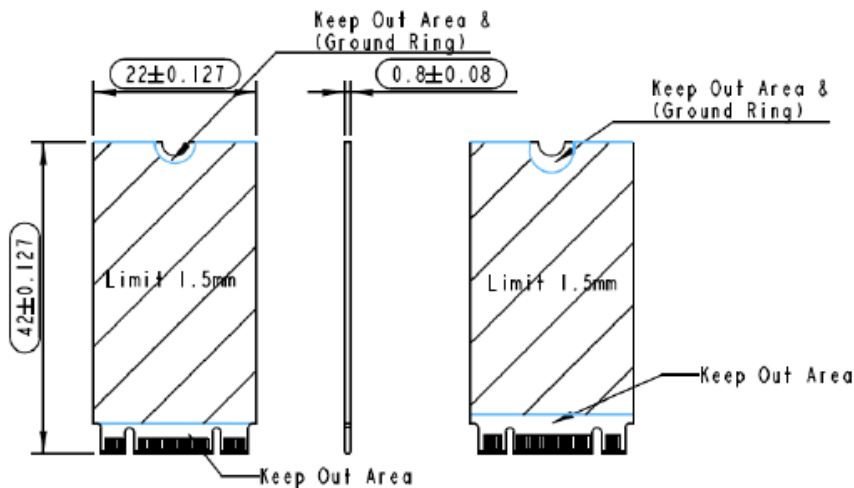
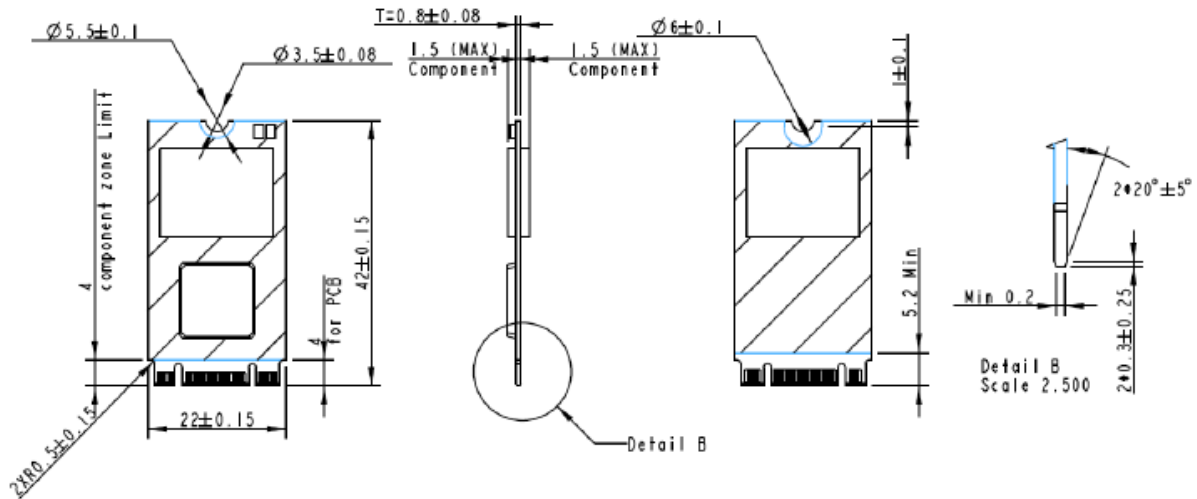
- SATA 3 (6Gb/s) interface
- M.2 (NGFF) connector
- Advanced 4K Page Mapping Technology
- Built-in ATA secure erase and S.M.A.R.T. functions
- Higher IOPS (with DRAM)
- Support TCG Opal 2.0/AES 256-bit encryption



## Specifications

<b>Model</b>	SM230-M242
<b>Interface</b>	SATA 3.0 (6Gb/s)
<b>Connector</b>	M.2 B & M key
<b>Form Factor</b>	M.2 2242-D5-B-M
<b>NAND Flash Type</b>	MLC
<b>Capacity</b>	8GB~256GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 525
<b>Sustained Write Performance (MB/sec)</b>	Up to 355
<b>ECC Engine</b>	Built-in up to 72-bit per 1K bytes BCH ECC
<b>IOPS (4K Random Write)</b>	40K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>Thermal Sensor</b>	Yes
<b>Shock</b>	Operation: 50G, 11ms Non-operation: 1500G, 0.5ms
<b>Vibration</b>	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 15G, 10 ~ 2000 Hz/sine
<b>Operating Voltage</b>	3.3 V ± 5%
<b>Power Consumption</b>	Active mode: 695mA & Idle mode: 135 mA
<b>Dimension (L x W x H )</b>	42.00mm x 22.00mm x 3.80mm
<b>MTBF (hours)</b>	>1,000,000

## Mechanical Specification



Unit: mm

**For more information,  
contact your Apacer representative**

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