Apacer

The Most **Reliable**
Storage For Industries

SV250-300B

SV250-300B

Overview

Apacer's SV250-300B, utilizing 3D NAND for higher capacity up to 960GB and providing more power efficiency than 2D NAND, is the next generation Solid State Drive (SSD) with compact and high-speed storage and great performance. Designed in SATA 6 Gb/s interface, SV250-300B provides full compliance with the latest SATA Revision 3.2 interface specifications and delivers exceptional read/write speed, making it the leading add-in storage solution for future host computing systems.

SV250-300B is built with a powerful SATA controller that supports on-the-module ECC as well as efficient wear leveling scheme and implemented with LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability. Furthermore, SV250-300B is equipped with a built-in thermal sensor to monitor the temperature of the SSD via S.M.A.R.T commands to prevent overheating. Operating under 6 Gb/s interface, SV250-300B 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 analysis. For highly-intensive applications, End-to-End Data Protection ensures that data integrity can be assured at multiple points in the path to enable reliable delivery of data transfers.

Security-wise, Advanced Encryption Standard (AES) and Trusted Computing Group (TCG) Opal (optional) ensure data security and provide users with peace of mind knowing their data is safeguarded against unauthorized use at all times. SV250-300B also adopts the latest page mapping file translation layer and comes with various implementations including power saving modes, wear leveling, flash block management, S.M.A.R.T., TRIM, Hyper Cache technology, over-provisioning, DataDefender™, DataRAID™ and SMART Read Refresh™. With exceptional performance, trustable reliability and enhanced data protection, SV250-300B is definitely the ideal storage or cache solution for a variety of applications ranging from industrial, imaging, computing to enterprise markets.

SV250-300B

Features

- Low-Density Parity-Check (LDPC) Code

- Global Wear Leveling

- Flash bad-block management

- Flash Translation Layer: Page Mapping

- S.M.A.R.T.

- DataDefender™

- Device Sleep

- ATA Secure Erase

- TRIM

- Hyper Cache Technology

- Over-provisioning

- DataRAID™

- SMART Read Refresh™

Specifications

Model	SV250-300B
Interface	SATA 3.2 (6Gb/s)
Connector	52-pin mSATA connector
Form Factor	mSATA mini, JEDEC MO-300B
NAND Flash Type	3D TLC
Capacity	120GB-1920GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 560
Sustained Write Performance (MB/sec)	Up to 470
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	68K
Standard Operating Temperature (°C)	0 ~ + 70
Extended Operating Temperature (°C)	-40 ~ + 85
Storage Temperature (°C)	-55 ~ + 100
Thermal Sensor	Yes
Shock	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
Vibration	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 4.02 Grms, 15 ~ 2000 Hz/random (compliant with MIL-STD-810G)
Operating Voltage	3.3 V ±5%
Power Consumption	Active mode: 380 mA / Idle mode: 60 mA
Dimension (L x W x H)	29.85 x 26.80 x 3.85 mm
MTBF (hours)	>3,000,000

Mechanical Specification
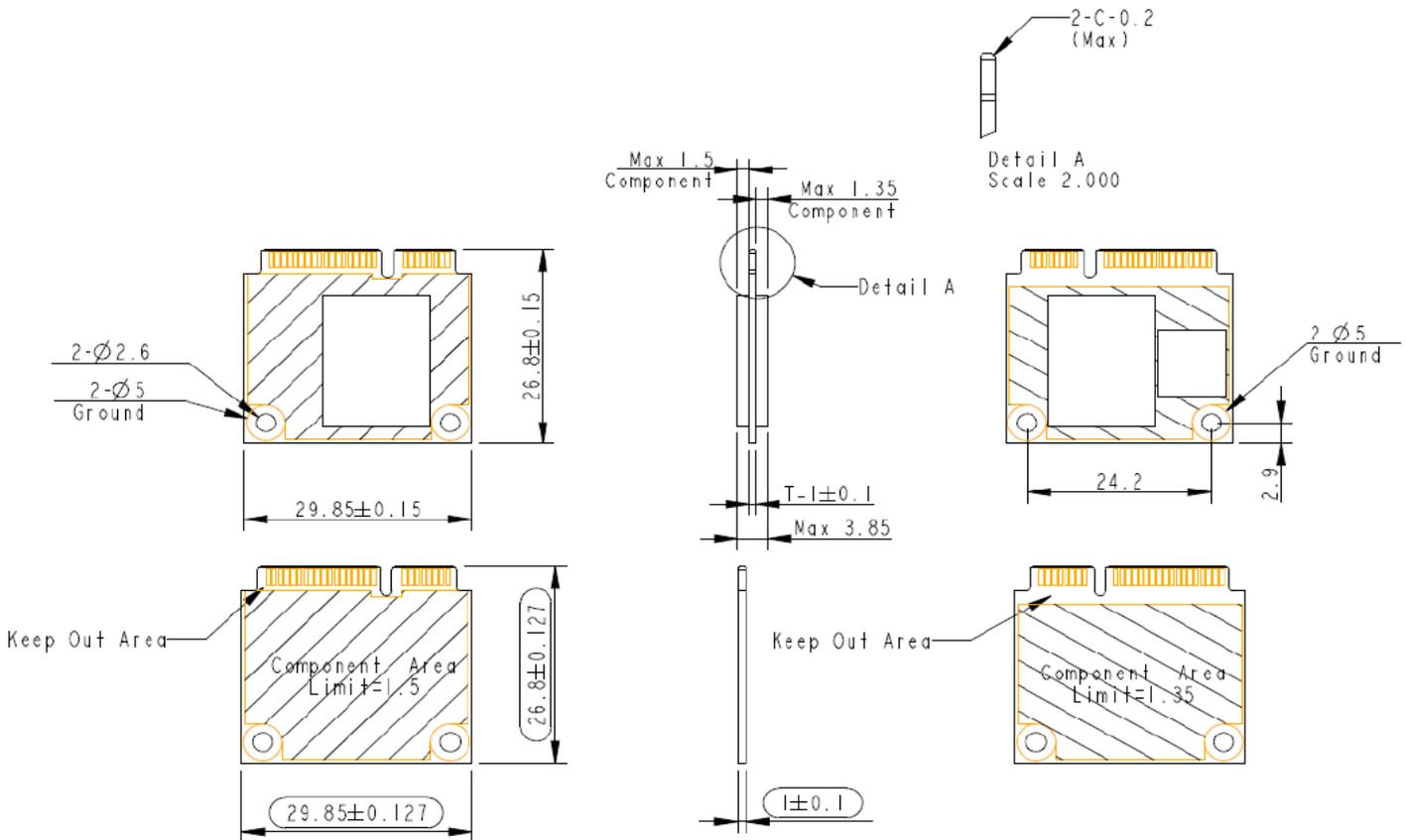
Figure 9-1 Physical Dimensions

Unit: mm

For more information,
contact your Apacer representative

Global Presence