

Apacer

The Most **Reliable** Storage For Industries

SH250-300



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SH250-300

Overview

Apacer's SH250-300, utilizing 3D NAND for higher capacity up to 640GB 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, SH250-300 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.



SH250-300 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. With Apacer's SLC-liteX technology, SH250-300 performs with higher number of P/E cycles up to 100,000 times. Furthermore, SH250-300 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, SH250-300 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) ensures data security and provides users with peace of mind knowing their data is safeguarded at all times. SH250-300 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, DataDefender™ and SMART Read Refresh™. With exceptional performance, trustable reliability and enhanced data protection, SH250-300 is definitely the ideal storage or cache solution for a variety of applications ranging from industrial, imaging, computing to enterprise markets.

SH250-300

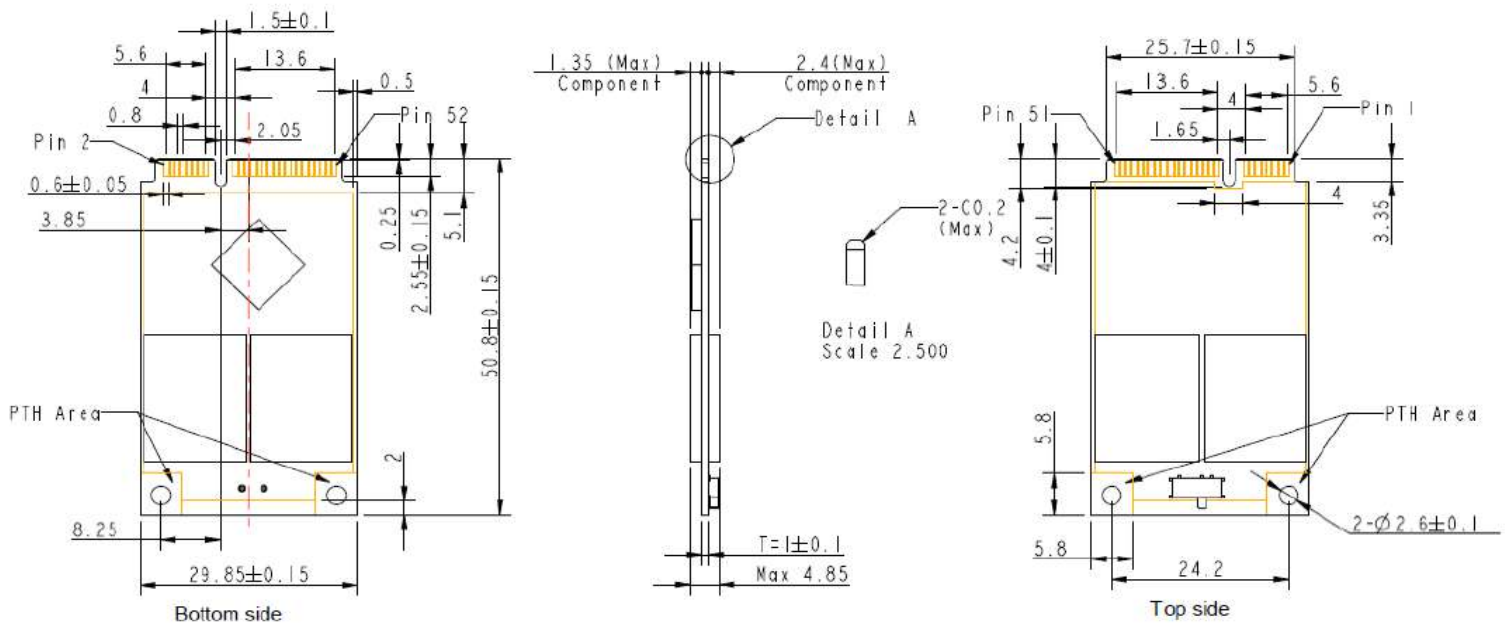
Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T. Function
- DataDefender™
- Device Sleep
- ATA Secure Erase
- TRIM Support
- SMART Read Refresh™
- SLC-liteX (P/E cycle: 100K)

Specifications

| | |
|--|--|
| Model | SH250-300 |
| Interface | SATA 3.2 (6Gb/s) |
| Connector | 52-pin mSATA connector |
| Form Factor | JEDEC MO-300 |
| NAND Flash Type | 3D TLC |
| Capacity | 40GB~640GB |
| External DRAM | No |
| Sustained Read Performance (MB/sec) | Up to 550 |
| Sustained Write Performance (MB/sec) | Up to 485 |
| ECC Engine | Low-Density Parity-Check (LDPC) Code |
| IOPS (4K Random Write) | 63K |
| Standard Operating Temperature (°C) | 0 ~ + 70 |
| Extended Operating Temperature (°C) | -40 ~ + 85 |
| Storage Temperature (°C) | -55 ~ + 100 |
| Thermal Sensor | Yes |
| Shock | Operation: 50G/11ms 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:420 mA / Idle mode: 60 mA |
| Dimension (L x W x H) | 50.80 x 29.85 x 4.85 (mm) |
| MTBF (hours) | >3,000,000 |

Mechanical Specification



Unit: mm

For more information,
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