Apacer

The Most **Reliable** Storage For Industries

SH250-25

SH250-25

Overview

Apacer's SH250-25, utilizing 3D NAND for higher capacity up to 640GB and providing more power efficiency than 2D NAND, is a well-balanced solid-state disk (SSD) drive with standard form factor and great performance. Designed in SATA 6 Gb/s interface, SH250-25 provides full compliance with the latest SATA Revision 3.2 interface specifications and delivers exceptional read/write speed, making it the ideal companion for heavy-loading industrial or server operations.

SH250-25 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, SH250-25 performs with higher number of P/E cycles up to 100,000 times. Furthermore, SH250-25 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, SH250-25 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. SH250-25 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, SH250-25 is definitely the ideal storage or cache solution for a variety of applications ranging from industrial, imaging, computing to enterprise markets.

SH250-25

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 Support

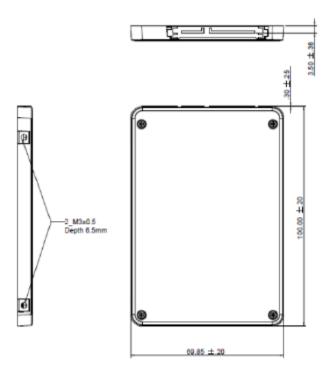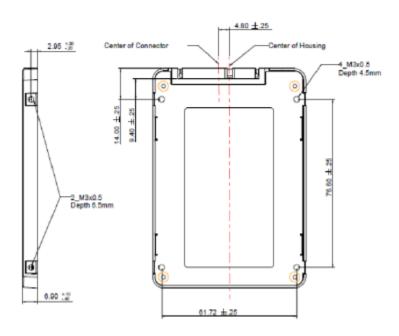· SAMRT Read Refresh™ technology

· SLC-liteX (P/E cycle: 100K)

Specifications

Model	SH250-25
Interface	SATA 3.2 (6Gb/s)
Connector	(7+15) pin
Form Factor	2.5"
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 495
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	63K
Standard Operating Temperature (°C)	0 ~ + 70
Wide 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	5.0 V±5%
Power Consumption	Active mode: 270 mA / Idle mode: 45 mA
Dimension (L x W x H)	7mm:100.00 x 69.85 x 6.90mm
MTBF (hours)	>3,000,000

Mechanical Specification

Unit: mm

For more information,
contact your Apacer representative