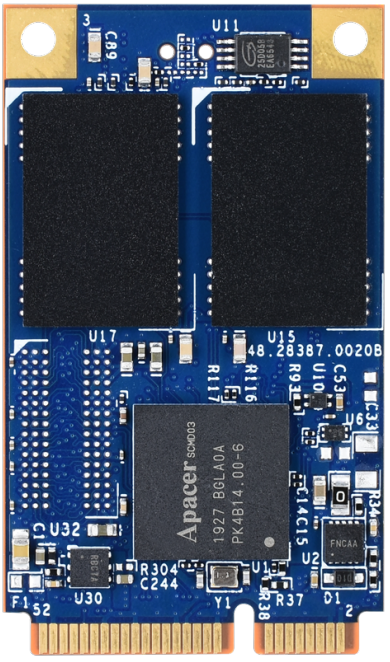
Apacer

The Most **Reliable** Storage For Industries

SV240-300



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Overview

SV240-300



Apacer's SV240-300 is a well-balanced solid-state drive (SSD) with a standard form factor and exceptional performance. Designed with a SATA 6 Gb/s interface, SV240-300 fully complies with the latest SATA Revision 3.2 specifications, delivering outstanding read/write speeds. Its random performance is further enhanced by integrating DRAM into the internal controller, making it an ideal companion for heavy-loading industrial or server operations.

Utilizing 3D NAND technology for capacities up to 1920GB, SV240-300 offers greater power efficiency than 2D NAND. It features a powerful SATA controller supporting on-the-module ECC and an efficient wear-leveling scheme, and is equipped with an LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and enhance data reliability. Additionally, SV240-300 includes a built-in thermal sensor that monitors the SSD temperature via S.M.A.R.T commands to prevent overheating. Operating under a 6 Gb/s interface, SV240-300 incorporates Apacer's latest S.M.A.R.T technology, primarily oriented for the newest SATA interface SSDs, for drive lifetime monitoring and analysis. For highly intensive applications, End-to-End Data Protection ensures data integrity across multiple points in the path, enabling reliable data transfers.

In terms of security, Advanced Encryption Standard (AES) and Trusted Computing Group (TCG) Opal (optional) safeguard data, providing users with peace of mind that their data is protected against unauthorized access. SV240-300 also includes numerous advanced features such as flash block management, page mapping, ATA secure erase, DataDefender, TRIM, device sleep, Hyper Cache technology, over-provisioning, power-saving modes, DataRAID, and SMART Read Refresh.

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Features

- Low-Density Parity-Check (LDPC) Code
- Global Wear-leveling
- Flash Bad Block Management
- Flash Translation Layer: Page Mapping
- DataDefender™
- S.M.A.R.T.
- TRIM
- Over-provisioning
- Hyper Cache Technology
- SMART Read Refresh™
- ATA Secure Erase
- Device Sleep
- SATA Power Management
- DataRAID™

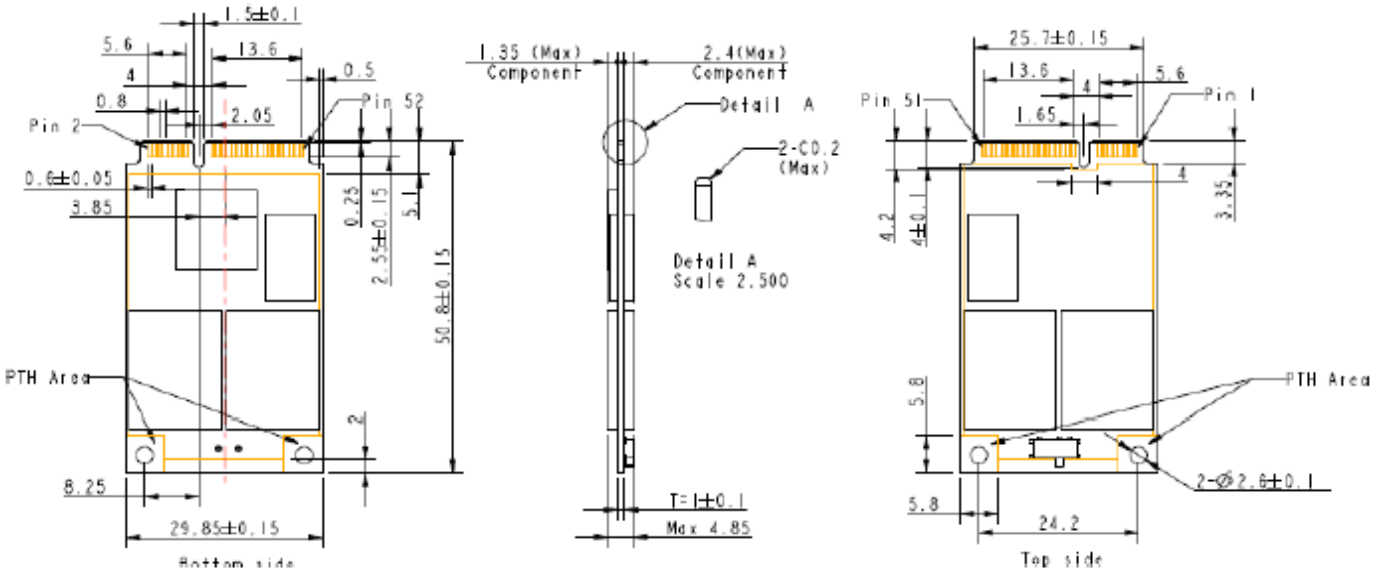
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Specifications

Model Name	SV240-300
Interface	SATA 3.2 (6Gb/s)
Connector	52-pin
Form Factor	JEDEC MO-300
NAND Flash Type	3D TLC
Capacity	120GB~1920GB
External DRAM	Yes
Sustained Read Performance (MB/sec.)	Up to 560
Sustained Write Performance (MB/sec.)	Up to 505
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	77K
Standard Operating Temperature (°C)	0°C ~ 70°C
Extended Operating Temperature (°C)	-40°C ~ 85°C
Storage Temperature (°C)	-55°C ~ 100°C
Housing	-
Thermal Sensor	-
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/sine (Compliant with MIL-STD-810G)
Operating Voltage	3.3V ±5%
Power Consumption	Active Mode: 670 mA / Idle Mode: 85mA
Dimension (L x W x H)	50.80 x 29.85 x 4.85, unit: mm
MTBF (Hours)	>3,000,000

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Mechanical Specifications



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