

Apacer



CoreSecurity2 Technology

Built-In Security for Always-On Edge AI Operations



Apacer CoreSecurity2 is a proprietary, comprehensive security technology that integrates customized firmware and hardware-level defense mechanisms to prevent data leakage, counter cyber threats, and secure mission-critical applications.



Hardware-Based Data Encryption

Implements AES 256-bit Encryption and TCG Opal 2.0 for hardware-based data protection.



Instant Data Destruction

Irreversibly destroys the flash media and controller via hardware or software trigger if compromised.



Secure Data Sanitization

Provides complete data sanitization in three modes: Quick, Full, and MIL Erase, ensuring zero data remanence.



Prevent Unauthorized Access

Blocks unauthorized writes with hardware Write Protect and Device Lock, independent of the OS.

Product Specification



Model Name	PV250-M280	PV230-M280	PV250-M242	PV230-M242
Form Factor	M.2 2280	M.2 2280	M.2 2242	M.2 2242
Interface	PCIe Gen4 x4	PCIe Gen3 x4	PCIe Gen4 x4	PCIe Gen3 x4
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC
Capacity	120GB~3840GB	120GB~1920GB	120GB~3840GB	120GB~960GB
Max. Sequential R/W (MB/sec.)	3740/3280	3560/2705	3740/3350	3560/2560
Max. Random R/W (IOPS)	662K	325K	576K	325K
External DRAM Buffer	No	No	No	No
Operating Temperature (°C)	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C



Model Name	SV250-25	SV250-M280	SV250-M242	SV250-300
Form Factor	2.5"	M.2 2280	M.2 2280	JEDEC MO-300
Interface	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC
Capacity	120GB~1920GB	120GB~1920GB	120GB~960GB	120GB~1920GB
Max. Sequential R/W (MB/sec.)	560/500	560/470	560/470	560/470
Max. Random R/W (IOPS)	68K	68K	68K	68K
External DRAM Buffer	No	No	No	No
Operating Temperature (°C)	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C