

The background of the top half of the page is a vibrant, abstract graphic. It features a central circular tunnel-like structure with a bright light source at the far end, creating a sense of depth and speed. The walls of the tunnel are composed of concentric circles and radial lines, with a color palette of deep blues, teals, and greens. A green circuit board, likely an SSD or memory module, is positioned diagonally across the center of the tunnel, appearing to travel towards the light. The Apacer logo is in the top left corner.

Apacer

New-Generation Industrial Solutions

The
Most **Reliable** Storage and Memory
For Industries

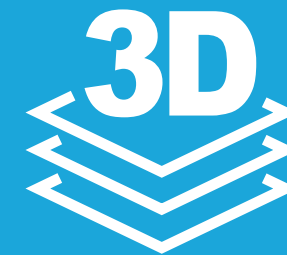
High Performance Solutions

PCIe Solutions

Superb performance and low latency

- Compliant with NVMe™ 1.3 specification to optimize the access performance
- Transmission speed up to 3,300 MB/s
- Capacity up to 1TB
- An ideal choice for high-speed computing and real-time data processing

Form Factor	M.2 2280	M.2 2280	CFexpress
Model	PV310-M280	PV120-M280	PV130-CFX
Interface	PCIe Gen3x4	PCIe Gen3x2	PCIe Gen3x2
Connector	M.2 M key	M.2 B & M key	21-pin
NAND Flash Type	3D TLC	3D TLC	3D TLC
Capacity	120GB~960GB	120GB~960GB	120GB~480GB
EST. Seq. R/W Performance (MB/sec)	Up to 3300/2600	Up to 1600/1000	Up to 1550/950
EST. IOPS R/W	370,000/300,000	240,000/180,000	120,000/150,000
Standard Operating Temperature (°C)	0~+70	0~+70	0~+70
Extended Operating Temperature (°C)	-40~+85	-40~+85	-40~+85



3D NAND Technology

High speed and stability

- Adopts advanced LDPC ECC engine with 3D NAND flash memory to improve reliability
- Larger density in a single die
- Maximum cost effectiveness

Form Factor	2.5"	M.2 2280	M.2 2280	M.2 2280	M.2 2242	M.2 2242
Model	SV170-25	PV310-M280	PV120-M280	SV170-M280	SV250-M242	SV170-M242
Interface	SATA 3.0	PCIe Gen3x4	PCIe Gen3x2	SATA 3.0	SATA 3.0	SATA 3.0
Capacity	30GB~960GB	120GB~960GB	120GB~960GB	30GB~960GB	30GB~480GB	30GB~480GB
EST. Seq. R/W Performance (MB/sec)	560/510	3300/2600	1600/1100	560/515	550/340	560/495
EST. IOPS R/W	80K/90K	370K/300K	240K/180K	83K/87K	70K/75K	82K/85K

Form Factor	MO300	MO297	uSSD	SDM 7P	CFast	CFexpress
Model	SV170-300	SV170-297	SV170-uSSD	SV170-7LP2	SV250-CFast	PV130-CFX
Interface	SATA 3.0	SATA 3.0	SATA 3.0	SATA 3.0	SATA 3.0	PCIe Gen3x2
Capacity	30GB~960GB	30GB~480GB	30GB~120GB	30GB~120GB	30GB~480GB	120GB~480GB
EST. Seq. R/W Performance (MB/sec)	560/510	560/500	560/460	335/235	560/520	1550 / 950
EST. IOPS R/W	83K/87K	84K/83K	70K/80K	38K/55K	66K/75K	120K/150K



High Performance Solutions

DDR4-2666 Memory Modules

Fully upgrades to new-generation DDR4 specification

- Transfer rates up to 2666 MT/s
- High performance, high bandwidth and low power consumption
- Supports the latest Intel Purley and AMD EPYC platforms

Module	UDIMM	SODIMM	RDIMM	LRDIMM	ECC UDIMM	ECC SODIMM
Memory Technology	DDR4					
Frequency	2133/2400/2666	2133/2400/2666	2133/2400/2666	2133/2400/2666	2133/2400/2666	2133/2400/2666
Density	2G/4G/8G/16G	2G/4G/8G/16G	4G/8G/16G/32G/64G	32G/64G	4G/8G/16G	4G/8G/16G
Voltage	1.2v	1.2v	1.2v	1.2v	1.2v	1.2v
Pin Count	288-Pin	260-Pin	288-Pin	288-Pin	288-Pin	260-Pin
Width	64-Bit	64-Bit	72-Bit	72-Bit	72-Bit	72-Bit
PCB Height	1.23"	1.18"	1.23"	1.23"	1.23"	1.18"
Operation Temperature	TC=0°C to 85°C					



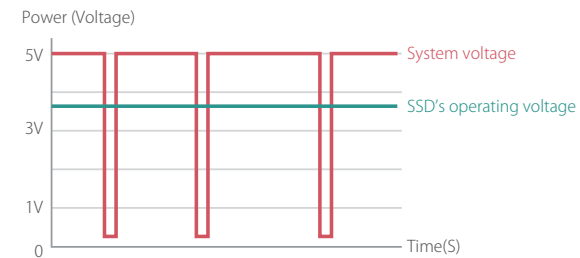
High Reliability Solutions



CoreVolt Technology

Ensures the stability of SSD's operating voltage

- Monitors system voltage in real time
- Ensures the stability of SSD's operating voltage when system voltage instability occurs
- Stabilizes SSD's data R/W operation to enhance data protection
- Ideal for IPC, defense & aviation and transportation applications requiring high reliability



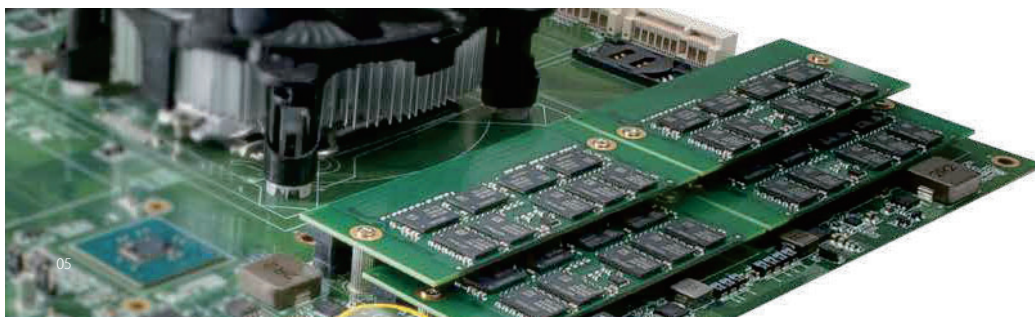
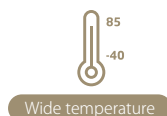
High Reliability Solutions

XR-DIMM Extremely rugged

- Designed for shock and vibration environments
- Innovative design with highly rugged 300-pin connector and mounting holes
- Improved the stability of signal transmission
- Applicable for transportation, defense and aeronautical equipment

Model	DDR4 XR-DIMM
Module Type	XR-DIMM
Memory Technology	DDR4
Frequency	2133/2400
Density	8G/16G
Voltage	1.2v
Pin Count	300-Pin
Width	72-Bit
PCB Height	1.466"
Operation Temperature	TC=0°C to 85°C / -40°C to 85°C

Value-added technologies



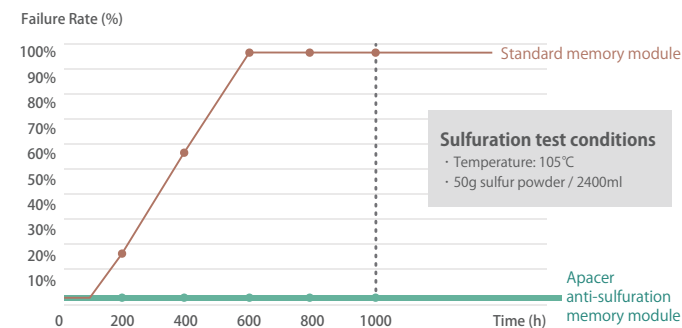
Anti-Sulfuration Technology Effectively solves corrosion problems

- World's first anti-sulfuration memory modules
- Adopts exclusive and improved alloy materials to ensure product reliability and durability
- Increases overall system lifespan and allows stable system operation over long hours in a harsh environment
- Widely recognized awarded patents in many countries

Widely recognized and awarded patents

	Date	No.
China	2016/10/12	201620478703.X
USA	2017/4/11	US9,622,337
Taiwan	2017/9/11	I598878

Anti-sulfuration test



High Endurance Solutions



Value-Added Application



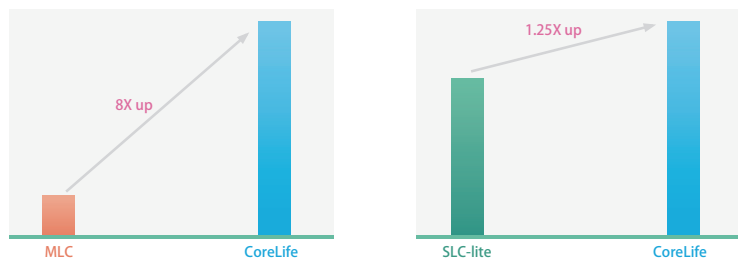
CoreLife Technology

Increases the lifetime up to 8 times

CoreLife SSD product line equipped with all new optimized SLC-lite firmware technology, to meet the specific needs of industrial SSD.

- Equipped with exclusive optimized SLC-lite technology and auto-adjust NAND technology to stabilize performance and enhance durability
- Intelligently adjusts the frequency of Garbage Collection and average Wear Leveling to enhance product durability
- Efficiently uses block space to lower Write Amplification, unleash the optimal R/W performance, and extend SSD life cycle
- Excellent sustained random write performance is ideal for huge volumes of small data writing applications, such as slot machines in gambling industry, Kiosk and automatic ticket gates in transportation industry and IoT applications.

Lifetime



TCG Opal 2.0

Advanced encryption mechanism for data security

- AES 256-bit encryption
- 100 % Hardware encryption
- Fast data encryption

Form Factor	2.5"	M.2 2280	M.2 2242	MO-300	MO-297	CFast
Model	SM230-25	SM230-M280	SM230-M242	SM230-300	SM230-297	SM230-CFast
Interface	SATA 3.0 (6Gb/s)	SATA 3.0 (6Gb/s)	SATA 3.0 (6Gb/s)	SATA 3.0 (6Gb/s)	SATA 3.0 (6Gb/s)	SATA 3.0 (6Gb/s)
Connector	(7+15) pin	M.2 B & M key	M.2 B & M key	52-pin	(7+15) pin	(7+17) pin
NAND Flash Type	MLC	MLC	MLC	MLC	MLC	MLC
Capacity	32GB~1TB *	32GB~1TB *	8GB~256GB	32GB~512GB	32GB~512GB	8GB~256GB
Max. R/W Performance (MB/sec)	530/520	560/510	555/470	560/510	560/495	560/450
Standard Operating Temperature (°C)	0~+70	0~+70	0~+70	0~+70	0~+70	0~+70
Extended Operating Temperature (°C)	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85

* AES 256 is supported on 32GB~1TB model.

TCG Opal 2.0 is supported on 32GB~512GB model.



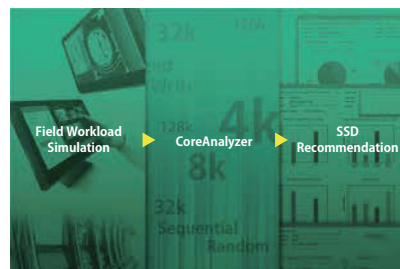
Value-Added Application



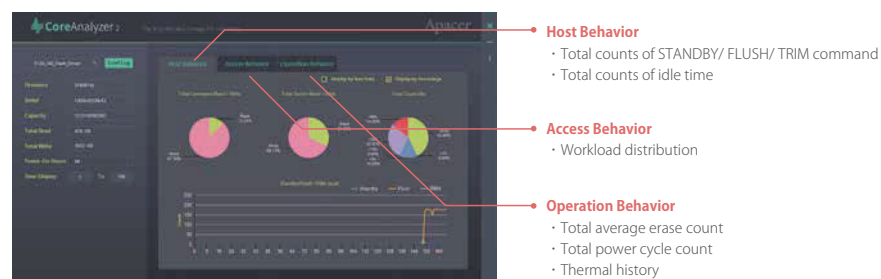
CoreAnalyzer 2

Monitoring real user behavior within the system and analyzes R/W activities in real time

- Records and analyzes user behavior in real time to provide most suitable SSD solution for the system
- Comprehensive knowledge of the system operating mode, which can be used as reference for system software
- Optimizes system use efficiency based on the analysis results
- Increases the recording capacity from 72 hours to 168 hours



In comparison with CoreAnalyzer 1, functionality of CoreAnalyzer 2 is enhanced with new features added as below:

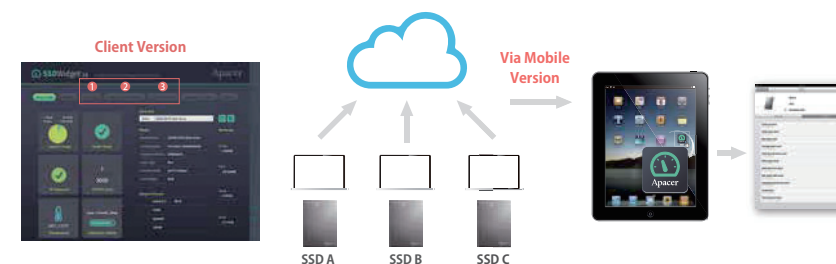


SSDWidget 2.0

Intelligent and comprehensive monitoring and maintaining software

The latest SSDWidget 2.0 features advanced monitoring that allows users to get more detailed read and write records for further user behavior analysis. The SSD self-test and performance optimization are also included.

- Brand new intuitive user interface
- Dynamic monitoring on data R/W activities
- Records and analyzes data R/W activities and allocation within one week
- Remote and cross-platform monitoring on SSD usage
- Drive optimization
- Supports ATA Security Erase feature
- Supports S.M.A.R.T. Self-Test function
- Checks Partition Alignment mechanism
- Monitors SSD health status



In comparison with SSDWidget1.0, functionality of SSDWidget2.0 is enhanced with new features added as below:

- ① Dynamic Workload**
 - Current Read Workload
 - Current Write Workload
- ② Test Tool**
 - SMART Short Self-Test
 - SMART Extend Self-Test
 - Secure Erase
 - Drive optimization
- ③ CoreAnalyzer**
 - Total Command Read/Write
 - Total Sector Read/Write
 - Total Sequential & Random Read/Write
 - 4K Alignment
 - Length of Read
 - Length of Wead



The Most Reliable

Storage and Memory
For
Industries

Global Presence

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