

**Apacer Professional Solutions (SSD & DRAM)** 

# Access Limitless Creativity to Spark Your Vision



#### In a World

### Where Data Drives Every Decision,

Apacer leads the charge in technology innovation, providing state-of-the-art SSD and DRAM solutions tailored to both consumer and industrial needs. From purpose-driven applications to immersive entertainment, we ensure seamless data storage, fast processing, and unmatched reliability for a wide spectrum of use cases.

At Apacer, we go beyond delivering products — we partner with you to solve challenges, optimize performance, and future-proof your operations. With our commitment to excellence and a focus on empowering businesses and individuals, we help you unlock the full potential of your data.

Access the Best — Where Reliability Meets Innovation.

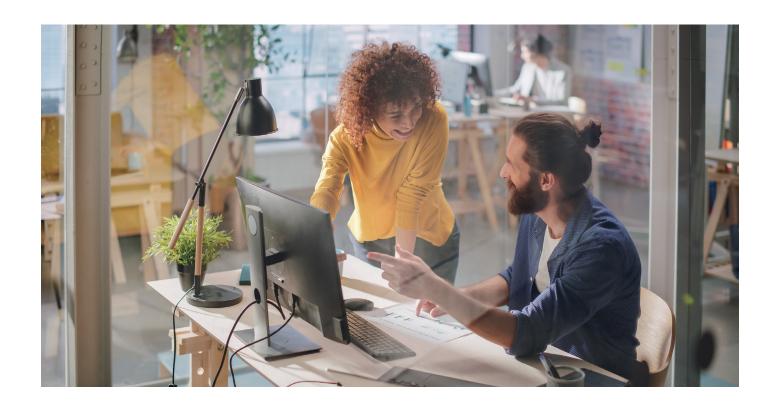
"At Apacer, innovation is at the heart of everything we do. We're unlocking the full potential of data, no matter where it resides, and delivering transformative solutions that drive business growth and enrich lives worldwide."

#### **Gibson Chen**

President of Apacer







## **Access Creativity to Transform Your Professional Workspace**

In today's digital era, success hinges on tools that boost productivity, streamline data management, and ensure security. Our high-performance storage solutions—SSDs, DRAM, microSD cards, and CFexpress cards—are crafted to tackle even the most demanding projects. By enhancing workflow and workplace efficiency, we empower you to bring your vision to life and achieve your goals with confidence and precision.



Apacer provides a comprehensive 9-tailed storage solutions designed to meet your specific business needs and future demands. Our Innovations optimize performance, enhance work efficiency, and drive business growth.



#### **Retail POS Systems**

#### **Faster Transactions, Reliable Operations**

Apacer SSD and microSD cards ensure quick transactions and 24/7 reliability, minimizing downtime and enhancing the customer experience.



#### All-in-One Systems (AIO)

#### **Efficient Multitasking, Seamless Use**

Apacer SSD and DRAM provide high-speed, responsive performance for compact AIO systems, ideal for work or entertainment.



#### **NAS Systems**

#### **Efficient Storage, Reliable Access**

Apacer SSD delivers high speed and durability for small office NAS systems, improving workflow and data access.



#### **Kiosks**

#### **Durable Performance in Public Spaces**

Built for high-traffic areas, Apacer SSD and microSD cards offer exceptional durability and consistent performance for unattended kiosks.



#### **PC Upgrades**

#### **Extend Lifespan, Boost Speed**

Upgrade your PC with Apacer SSD and DRAM for faster boot times, smoother multitasking, and more storage.



#### **Thin Clients**

#### **Energy-Efficient, Streamlined Solutions**

Optimize virtual workspaces with Apacer SSD and DRAM, offering lag-free performance for cloud-based applications.





#### **Mini PCs**

#### **Compact Power, Big Performance**

Apacer SSD and DRAM provide efficient, highperformance solutions for space-saving mini PCs.



#### **Dash Cams**

#### **Reliable Storage for Critical Moments**

Designed for continuous recording, Apacer microSD cards deliver exceptional durability and reliable performance, ensuring vital footage is safely stored.



#### **Photography**

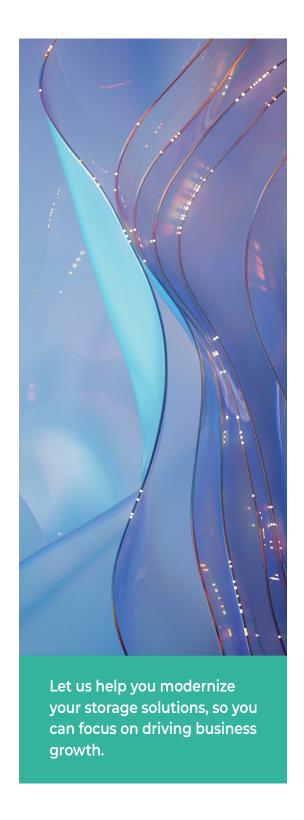
#### **High-Speed, Dependable Storage**

Apacer CFexpress cards provide fast data transfer speeds and robust durability, making them perfect for capturing high-resolution photos and videos in demanding conditions.



## Purpose-built SSD Technologies for Modern Workforce Applications

Apacer offers high-performance storage solutions designed to meet the needs of professionals. Built for reliability, endurance, and speed, our purpose-built SSD ensures smooth and seamless operation, whether you're managing demanding tasks, handling large files, or creating on the go. Elevate your work with storage you can depend on.





#### Longevity



#### **Page Mapping**

#### **Optimize Performance by Flash Management**

Apacer Page Mapping can reduce block erase frequency to boost random access speeds, extend the SSD's lifespan, and ensure optimal performance.

### **Data Integrity**



#### Smart Read Refresh™

#### **Ensure Data Access Over Time**

Apacer Smart Read Refresh provides a more durable experience. The data will be rewritten to a different block to prevent read disturb errors and reduce the risk of corruption or loss.

#### Value-added



#### **Apacer SSD Utility**

#### **Proactive SSD Health Management for Continuity**

Apacer's SSD Utility provides a user-friendly interface for real-time SSD health monitoring and workload analysis, preventing failures from excessive tasks in demanding environments.



#### S.M.A.R.T.

#### **Self-monitoring System to Monitor SSD Status**

Apacer S.M.A.R.T. is an early warning system to help users avoid unexpected downtime and offers real-time indicators of SSD health and potential issues.

#### **Durability**



#### **Thermal Throttling**

#### **Ensure Performance Under Heat**

Apacer's Thermal Throttling dynamically adjusts frequency to manage device temperature, sustaining performance and enhancing data reliability during overheating conditions.



## UDIMM

#### **Features**

- JEDEC-compliant Design Ensures seamless compatibility in purpose-built systems.
- Power Management IC (PMIC) (DDR5 Voltage: 1.1V) Efficiently regulates system power load, ensuring stable and reliable power delivery.





**DDR5 UDIMM** 

**DDR4 UDIMM** 

Model	PC5-44800	PC5-38400	PC4-25600	PC4-21300
Form Factor	DDR5 UDIMM	DDR5 UDIMM	DDR4 UDIMM	DDR4 UDIMM
Capacity	8GB/16GB/32GB	8GB/16GB/32GB	8GB/16GB/32GB	4GB/8GB/16GB/32GB
Frequency (MT/s)	5600	4800	3200	2666
Voltage	1.1V	1.1V	1.2V	1.2V
CL Timing	CL46	CL40	CL22	CL19
Pin	288-Pin	288-Pin	288-Pin	288-Pin





DDR4 UDIMM

**DDR3 UDIMM** 

Model	PC4-19200	PC4-17000	PC3-12800	PC3-10600
Form Factor	DDR4 UDIMM	DDR4 UDIMM	DDR3 UDIMM	DDR3 UDIMM
Capacity	4GB/8GB/16GB	4GB/8GB/16GB	2GB/4GB/8GB	2GB/4GB/8GB
Frequency (MT/s)	2400	2133	1600	1333
Voltage	1.2V	1.2V	1.35V/1.5V	1.35V/1.5V
CL Timing	CL17	CL15	CL11	CL11
Pin	288-Pin	288-Pin	240-Pin	240PIN



## SODIMM

#### **Features**

- JEDEC-compliant Design Ensures seamless compatibility in purpose-built systems.
- Power Management IC (PMIC) (DDR5 Voltage: 1.1V) Efficiently regulates system power load, ensuring stable and reliable power delivery.





**DDR5 SODIMM** 

**DDR4 SODIMM** 

Model	PC5-44800	PC5-38400	PC4-25600	PC4-21300
Form Factor	DDR5 SODIMM	DDR5 SODIMM	DDR4 SODIMM	DDR4 SODIMM
Capacity	8GB/16GB/32GB	8GB/16GB/32GB	8GB/16GB/32GB	4GB/8GB/16GB/32GB
Frequency (MT/s)	5600	4800	3200	2666
Voltage	1.1V	1.1V	1.2V	1.2V
CL Timing	CL46	CL40	CL22	CL19
Pin	262-Pin	262-Pin	260-Pin	260-Pin





**DDR4 SODIMM** 

**DDR3 SODIMM** 

Model	PC4-19200	PC4-17000	PC3-12800	PC3-10600
Form Factor	DDR4 SODIMM	DDR4 SODIMM	DDR3 SODIMM	DDR3 UDIMM
Capacity	4GB/8GB/16GB	4GB/8GB/16GB	2GB/4GB/8GB	2GB/4GB/8GB
Frequency (MT/s)	2400	2133	1600	1333
Voltage	1.2V	1.2V	1.35V/1.5V	1.35V/1.5V
CL Timing	CL17	CL15	CLII	CL11
Pin	260-Pin	260-Pin	204-Pin	240PIN



## **PCle SSD**

#### **Features**

- TRIM Support Improves compatibility, endurance and performance.
- S.M.A.R.T. Support and Apacer SSD Utility Self-monitoring system to monitor SSD status.
- Heat Spreader (PB4480 & PD4480) Avoid SSD overheating and ensure stable performance.







Model	PB5480*	PB4480	PD4480
Capacity	ITB/2TB	256GB/512GB/ 1TB/2TB/4TB	256GB/512GB/1TB/2TB
Interface	PCIe Gen5 x4 NVMe 2.0	PCle Gen4 x4 NVMe 1.4	PCIe Gen4 x4 NVMe 1.4
NAND Flash	3D NAND	3D TLC	3D NAND
Sequential Read/ Write (MB/s) (Max)**	10300/8600	5000/4400	3600/3000
Operating Temperature (℃)	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C
Terabytes Written (TBW)	600/1200	200/400/800/ 1600/3200	200/400/800/1600
MTBF (Hours)	>2,000,000	>2,000,000	>2,000,000
Dimensions (mm)	(L)30.00 x (W)22.00 x (H)2.38	(L)30.00 x (W)22.00 x (H)2.43	Single side: (L)30.00 x (W)22.00 x (H)2.43 Double side: (L)30.00 x (W)22.00 x (H)3.78
Warranty	3 years or TBW, whichever occurs first		

<sup>\*</sup>Apacer provides ready-to-use heat dissipation devices if a cooling solution is required for this model.

<sup>\*\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.









Model	PB3480	PE4430	PE4430-R
Capacity	256GB/512GB/1TB/2TB	1TB/2TB	1TB/2TB
Interface	PCIe Gen3 x4 NVMe 1.3	PCIe Gen4 x4	PCIe Gen4 x4
NAND Flash	3D NAND	3D NAND	3D NAND
Sequential Read/ Write (MB/s) (Max)**	3500/2550	5500/5200	5500/5200
Operating Temperature (°C)	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C
Terabytes Written (TBW)	200/400/600/1200	512/1024	700/1400
MTBF (Hours)	>2,000,000	>2,000,000	>2,000,000
Dimensions (mm)	(L)80.00 x (W)22.00 x (H)2.25	(L)30.00 x (W)22.00 x (H) 2.43mm	(L)30.00 x (W)22.00 x (H) 2.43mm
Warranty	3 years or TBW, v	whichever occurs first	5 years or TBW, whichever occurs first

<sup>\*</sup>Apacer provides ready-to-use heat dissipation devices if a cooling solution is required for this model.



<sup>\*\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.

## 2.5" SATA SSD

#### **Features**

- TRIM Support Improves compatibility, endurance and performance.
- S.M.A.R.T. Support and Apacer SSD Utility Self-monitoring system to monitor SSD status.



Model	PBSS25	
Capacity	256GB/512GB/1TB/2TB/4TB/8TB	
Interface	SATA III	
NAND Flash	3D NAND	
Sequential Read/Write (MB/s) (Max)*	550/520	
Operating Temperature (°C)	0°C ~ 70°C	
Terabytes Written (TBW)	180/360/450/900/1350/1800	
MTBF (Hours)	>2,000,000	
Dimensions (mm)	(L)99.90 x (W)69.90 x (H)6.90	
Warranty	3 years or TBW, whichever occurs first	

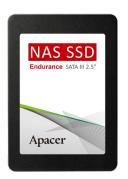
<sup>\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.



## **NAS SSD**

#### **Features**

- Tailored Specifically for NAS Systems Easily upgrade NAS systems for reliable 24/7 year-round performance.
- High Durability, Performance and Reliability Quickly access high-resolution digital files in a secure NAS environment.
- Power Saving Implemented Reduce energy consumption for longer-lasting performance.







Model	PPSS25-R	PP3480-R	PB4480-R
Capacity	256GB/512GB/1TB/2TB	256GB/512GB/1TB/2TB	512GB/1TB/2TB/4TB
Interface	SATA III	PCIe Gen3 ×4	PCle Gen4 ×4
NAND Flash	3D TLC	3D TLC	3D TLC
Sequential Read/Write (MB/s) (Max)*	560/510	2450/2000	5000/4400
Operating Temperature (℃)	0°C ~ 70°C	0℃ ~ 70℃	0°C ~ 70°C
Terabytes Written (TBW)	385/820/2065/3750	500/1000/2000/4000	500/1000/2000/4000
MTBF (Hours)	>2,000,000	>2,000,000	>2,000,000
Dimensions (mm)	(L)100.00 x (W)69.85 x (H)7.00	(L)80.00 x (W)22.00 x (H)2.15	(L)80.00 x (W)22.00 x (H)2.43
Warranty	5 years or TBW, whichever occurs first		

<sup>\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.



## **CFexpress Card**

#### **Features**

- Apacer Professional High-endurance Series Ultra-high-speed access, optimized for image capture.
- S.M.A.R.T. Support and Apacer SSD Utility Self-monitoring system to monitor CFexpress card status.



Model	PB42CF-R	
Capacity	512GB/1TB/2TB/4TB	
Interface	PCIe Gen4 x2 CFexpress Type B	
NAND Flash	3D NAND	
Sequential Read/Write (MB/s) (Max)*	3700/3100	
Operating Temperature (℃)	-12°C ~ 72°C	
Terabytes Written (TBW)	450/900/1800/3600	
MTBF (Hours)	>2,000,000	
Dimensions (mm)	(L)38.50 x (W)29.60 x (H)3.80	
Warranty	5 years or TBW, whichever occurs first	

<sup>\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.



## microSD Card

#### **Features**

- Fixed Controller/Fixed BOM Ensure product reliability and compatibility.
- Up to 40,000 Hours of Non-stop Operation Provide long continuous recording without any dropped frames.
- Waterproof, Anti-drop, Anti-magnetic, and Anti-X-ray Protect precious data in demanding environments.







Model	Endurance	PMA131/PMA231	PRA233/PRA212
BOM Control	Fixed Controller	Fixed BOM*	Fixed BOM*
Capacity	32GB/64GB/128GB/256GB	PMA131 : 8GB PMA231 : 16GB/32GB/64GB/128GB/ 256GB/512GB	PRA233 : 32GB PRA212 : 64GB
Standard	SD5.1 UHS-1	SD6.1 UHS-1	SD6.1 UHS-1
Speed Class	UHS Speed : Class 1/Class 3 Speed Class : Class 10 Video Speed Class : V10/V30 Application Performance Class: A1	UHS Speed : Class 1/Class 3 Speed Class : Class 10 Video Speed Class : V10/V30 Application Performance Class: A2	UHS Speed : Class 3 Speed Class : Class 10 Video Speed Class : V30 Application Performance Class: A2
Sequential Read/Write (MB/s) (Max)**	100/80	100/85	100/45
Operating Temperature (℃)	-25℃ ~ 85℃	-25℃ ~ 85℃	-25°C ~ 85°C
Dimensions (mm)	(L)15.00 × (W)11.00 × (H)1.00	(L)15.00 × (W)11.00 × (H)1.00	(L)15.00 x (W)11.00 x (H)1.00
Warranty		3 years limited	

<sup>\*</sup>Fixed BOM, including controller, flash and firmware.

<sup>\*\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.



## **USB Drive**

#### **Features**

- Fixed Controller Ensure product reliability and compatibility.
- ECC Engine Ensure reliable data integrity with error detection and correction.
- Power Saving Implemented Reduce energy consumption for longer-lasting performance.
- Advanced Wear-leveling Algorithms Ensure having lower erase counts to extend SSD lifespan.





Model	PAH355	PAH356
Capacity	32GB/64GB/128GB	32GB/64GB/128GB
Interface	SuperSpeed USB 3.2 Gen1 (5Gb/s)*, backward compatible with USB 2.0	SuperSpeed USB 3.2 Gen1 (5Gb/s)*, backward compatible with USB 2.0
Color	Black	Black
Material	Plastic	Plastic
Power Consumption**	Active mode <500 mA	Active mode <500 mA
System Supported	- Windows 11/10/8.1/8 - macOS 10.6.X or above - Linux Kernel 2.6.X or above	- Windows 11/10/8.1/8 - macOS 10.6.X or above - Linux Kernel 2.6.X or above
Connector	USB-A	USB-A
Dimensions (mm)	(L)56.05 x (W)18.00 x (H)8.50	(L)53.89 x (W)20.91 x (H)8.80
Weight	7.8g	8.5g
Warranty	3 years	limited

<sup>\*</sup>The performance may vary due to host hardware, software, usage and storage capacity.



<sup>\*\*</sup>Power consumption is measured using CrystalDiskMark 8.0.4 with file size 1000 MB.

## Unlock your business's potential in the digital era with Apacer.

## Learn more at <u>www.apacer.com</u>.



LinkedIn



Website



Contact us

#### **Global Presence**

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