

Industrial SSD & DRAM Solutions for Gaming Applications



Confidentiality and data protection of game play data and programming patterns in storage applications are of primary concern and cannot be compromised. In order to meet the high-end image processing and strict security demands of the gaming industry, Apacer offers high-performance industrial SSD and memory solutions, and implements critical security features without sacrificing our well-known reliability benchmarks.



Featured Technologies for Gaming Devices

SLC liteX

Apacer's 3D NAND SLC-liteX technology breaks through the limitations of existing technology and provides up to 100,000 P/E cycles, which is 33 times more than MLC or industrial 3D TLC.

Write Protect

Write protect can prevent drives from unauthorized datawriting via a hardware switch/pin or vendor software command.

Data Security

- AES 256-bit Encryption
- Signed Firmware
- TCG Opal 2.0
- Write Protect

Reliability & Endurance

- DataDefender™
- Page Mapping
- SLC-liteX
- Over-provisioning
- Thermal Throttling
- Wide Temperature

Data Integrity

- DataRAID™
- Smart Read Refresh™

Longevity

- Double-barreled Solution
- Fixed BOM
- 6+6 PCN/EOL Policy

Recommended Industrial SSD Solutions

High Endurance 3D NAND SLC-liteX SSD Series (Reaching up to 100,000 P/E Cycles)

Model	SH250-25	PH250-M280	PH250-M242	PH250-CFX	UH110-UFD4	CH210-MSD
Features	AES 256-bit Encryption	AES 256-bit Encryption, DataDefender™	AES 256-bit Encryption, DataDefender™	AES 256-bit Encryption, DataDefender™, Write Protect	Write Protect	Smart Read Refresh™
Form Factor	2.5"	M.2 2280	M.2 2242	CFexpress 2.0 Type B	USB Flash Drive	microSD
Interface	SATA 3.2 (6Gb/s)	PCIe Gen4 x4	PCIe Gen4 x4	PCIe Gen4 x4	USB 3.1 Gen1	SD 5.0
Connector	(7+15) pin	M.2 M Key	M.2 M Key	-	USB Type A Plug	-
NAND Flash Type	3D TLC					
Capacity	10~320 GB	160GB ~ 640GB	160GB ~ 320GB	160GB ~ 320GB	4~8 GB	16~64 GB
External DRAM	No	No	No	No	-	-
Max. R/W Performance (MB/sec)	560/520	3325/3020	3500/2885	2900/1500	265/50	90/70
Standard Operating Temp. (°C)	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70
Wide Temp. (°C)	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85	Not support
MTBF (Hours)	>3,000,000	>3,000	>3,000	>3,000	>3,000,000	>3,000,000
Recommended Applications	Jackpot Controller				Electronic Gaming Machine	Jackpot Controller & EGM

Industrial SSD Solutions

Model	PT220-M280	PV220-M280	ST250-25	PT250-M280	PT250-M242	PV250-CFX
Features	High Performance, DataDefender™	High Performance, DataDefender™, Heatsink (Option)	DataDefender™	High Performance, Sidefill, Heatsink (Option)	High Performance	AES 256-bit Encryption, Write Protect
Form Factor	M.2 2280	M.2 2280	2.5"	M.2 2280	M.2 2242	CFexpress 2.0 Type B
Interface	PCIe Gen3 x4	PCIe Gen3 x4	SATA 3.2 (6Gb/s)	PCIe Gen4 x4	PCIe Gen4 x4	PCIe Gen3 x2
Connector	M.2 M Key	M.2 M Key	(7+15) pin male	M.2 M Key	M.2 M Key	-
NAND Flash Type	3D TLC					
Capacity	128GB ~ 2TB	240GB ~ 960GB	128GB ~ 2TB	256GB ~ 2TB	256GB ~ 1TB	240GB ~ 960GB
External DRAM	No	No	No	No	No	No
Max. R/W Performance (MB/sec)	2400/2240	2390/2205	560/510	3680/3400	3500/2885	2900/1500
Standard Operating Temp. (°C)	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70
Wide Temp. (°C)	-	-40 ~ +85	-	-	-	-40 ~ +85
MTBF (Hours)	>3,000,000	>3,000,000	>3,000,000	>3,000,000	>3,000	>3,000
Recommended Applications	Electronic Gaming Machine					

Recommended Industrial DRAM Solutions

Module Type	UDIMM	SODIMM	ECC UDIMM	ECC SODIMM
Memory Technology	DDR5			
Frequency	4800/5600			
Density	8GB/16GB/32GB	8GB/16GB/32GB	16GB/32GB	16GB/32GB
Voltage	1.1v	1.1v	1.1v	1.1v
Pin Count	288-Pin	262-Pin	288-Pin	262-Pin
Width	64-Bit	64-Bit	72-Bit	72-Bit
PCB Height	1.23"	1.18"	1.23"	1.18"
Operation Temperature (°C)	TC = 0 ~ +85	TC = 0 ~ +85	TC = 0 ~ +85	TC = 0 ~ +85
Value-added Technology				