

Industrial SSD & DRAM Solutions for Factory Automation Applications



Factory automation provides a compelling way to boost quality, efficiency, sustainability and security. Developing truly independent automated facilities requires not only components with incredible reliability and robust designs, but also excellent data integrity. In order to meet the demands of the factory automation industry, Apacer offers high-performance industrial SSD and memory solutions, and provides a variety of value-adding technologies to help ensure **reliability, stability** and **data integrity**.

Featured Technologies for Factory Automation Applications



Anti-Sulfuration

Apacer's world's first patented anti-sulfuration DRAM modules and anti-sulfuration SSDs with the industry's highest level of anti-corrosion ANSI/ISA 71.04 G3 Certification can meet the needs of industrial products facing harsh environments.



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 over 33 times more than MLC or industrial 3D TLC.



Data Integrity

- CoreSnapshot



Power Stability

- CorePower
- DataDefender™



Longevity

- SLC-liteX
- Over-provisioning
- Fixed BOM
- 6+6 PCN/EOL Policy



Survivability

- Anti-Sulfuration
- Conformal Coating
- Nano Coating (IP57)
 - Sidefill
- Wide Temperature

Recommended Industrial SSD Solutions



Model	SV240-25	SV25P-25	SV25V-25	PV250-M280	SV25P-M280	PV220-M242	SH250-M242	SV250-300
Features	DataDefender	DataDefender, CorePower	DataDefender Plus	DataDefender, Sidefill	DataDefender, CorePower, Sidefill	DataDefender, Sidefill	DataDefender, High Endurance, SLC-liteX, Sidefill	DataDefender, Write Protect Switch
Form Factor	2.5"	2.5"	2.5"	M.2 2280	M.2 2280	M.2 2242	M.2 2242	JEDEC MO-300
Interface	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)	PCIe Gen4 x4	SATA 3.2 (6Gb/s)	PCIe Gen3 x4	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)
Connector	(7+15) pin male	(7+15) pin male	(7+15) pin male	M.2 M Key	M.2 B & M Key	M.2 M Key	M.2 B & M Key	52-pin mSATA
NAND Flash Type	3D TLC							
Capacity	120~1920GB	120~960GB	120~960GB	240~3840GB	120~960GB	240~960GB	40~320GB	120~960GB
External DRAM	Yes	No	No	No	No	No	No	No
Max. R/W Performance (MB/sec)	560/505	550/500	560/485	3700/3490	555/490	2390/2210	550/485	560/470
Standard Operating Temp. (°C)	0 ~ +70	0 ~ +70	0 ~ +70	240~3840GB: 0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70
Wide Temp. (°C)	-40 ~ +85	-40 ~ +85	-40 ~ +85	240~1920GB: -40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85
MTBF (Hours)	>3,000,000							
SED	AES256 Support	Support	Support	Support	Support	Support	Support	Support
	TCG Opal 2.0 Support	-	-	-	Support	Support	Support	Support
Firmware PLP	Support	Support	Support	Support	Support	Support	Support	Support
Hardware PLP	-	Support	-	-	Support	-	-	-
Recommended Applications	IPC	AGV, AMR	AGV, AMR, RPC, CNC System	AGV, AMR	Auto Inspection Equipment	Motor Automation	CNC System	Wire Processing System, Semiconductor Manufacturing Equipment



Model	PV25P-CFX	SV250-CFast	Industrial CF6A	CH110-SD	CH120-MSD	UV110-UFDS	UH110-UFM1
Features	High Endurance	DataDefender, Write Protect Switch	High Endurance	High Endurance, SLC-liteX	High Endurance, SLC-liteX	ESD Air ± 15KV; Contact ± 8KV Prevention	High Endurance, SLC-liteX
Form Factor	Cfexpress 2.0 Type B	CFast	CompactFlash Type I	SDHC/SDXC	Micro SD	USB Flash Drive	USB Disk Module
Interface	PC Card Memory Mode; PC Card I/O Mode; True IDE Mode	SATA 3.2 (6Gb/s)	PC Card Memory Mode; PC Card I/O Mode; True IDE Mode	SD 4.0	SD 6.1	USB 3.2 Gen1	USB 2.0
Connector	-	(7+17) pin	50-pin	-	-	USB Type-A	10-pin USB (2 x 5 header)
NAND Flash Type	3D TLC	3D TLC	SLC	3D TLC	3D TLC	3D TLC	3D TLC
Capacity	240~960GB	120~960GB	256MB ~ 32GB	SDHC: 8~64GB	16~128GB	128~256GB	32~64GB
External DRAM	No	No	No	No	No	No	No
Max. R/W Performance (MB/sec)	3740/2940	560/470	60/65	95/80	90/80	270/185	37/32
Standard Operating Temp. (°C)	0 ~ +70	0 ~ +70	0 ~ +70	-25 ~ +85	-25 ~ +85	0 ~ +70	0 ~ +70
Wide Temp. (°C)	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85
MTBF (Hours)	>3,000,000	>3,000,000	>2,000,000	>3,000,000	>3,000,000	>3,000,000	>3,000,000
SED	AES256 Support	Support	-	-	-	-	-
	TCG Opal 2.0 Support	Support	-	-	-	-	-
Firmware PLP	Support	Support	Support	Support	Support	-	-
Hardware PLP	Support	-	-	-	-	-	-
Recommended Applications	Semiconductor Manufacturing Equipment, Factory Machine Controller	Factory Machine Controller	Semiconductor Manufacturing Equipment, Factory Machine Controller	CMC Machine, Plastic Injection Machine	Robot, Semiconductor Manufacturing Equipment, Inspection equipment	AIO Inspection System, Factory Machine	Welding, Solar Energy, Charging, Farming Ventilation

Recommended Industrial DRAM Solutions



Module Type	UDIMM	SODIMM	ECC UDIMM	ECC SODIMM	UDIMM	SODIMM	ECC UDIMM	ECC SODIMM
Memory Technology	DDR4	DDR4	DDR4	DDR4	DDR5	DDR5	DDR5	DDR5
Frequency	2133/2400/2666/2933/3200				4800/5600			
Density	2GB/4GB/8GB/16GB/32GB		4GB/8GB/16GB/32GB		8GB / 16GB / 32GB		16GB / 32GB	
Voltage	1.2v	1.2v	1.2v	1.2v	1.1V	1.1V	1.1V	1.1V
Pin Count	288-Pin	260-Pin	288-Pin	260-Pin	288-Pin	262-Pin	288-Pin	262-Pin
Width	64-Bit	64-Bit	72-Bit	72-Bit	64-Bit	64-Bit	72-Bit	72-Bit
PCB Height	1.23"	1.18"	1.23"	1.18"	1.23"	1.18"	1.23"	1.18"
Operating / Wide Temperature. (°C)	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85	TC= 0 to 85 / -40 to 85
Value-added Technology								

*Optional