

## 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	SV24P-25	SV250-25	SV25V-25	PV25P-M280	SV25P-M280	PH250-M242	SH250-M242	SV250-300
Features	CorePower	DataDefender	DataDefender Plus	CorePower, Sidefill	CorePower, Sidefill	DataDefender, SLC-liteX, Sidefill	DataDefender, 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 Gen4 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	240~1920 GB	120~1920 GB	120~960GB	240~3840GB	120~960GB	160~320 GB	40~320GB	120~1920GB
External DRAM	Yes	No	No	No	No	No	No	No
Max. R/W Performance (MB/sec)	560/510	560/500	560/485	3700/3490	560/510	3740/2855	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 TCG Opal 2.0	Support	Support	Support	Support	Support	Support	Support
Firmware PLP	Support	Support	Support	Support	Support	Support	Support	Support
Hardware PLP	Support	-	-	Support	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	SV25P-CFast	Industrial CF6A	Industrial SD H2-SL	CH120-MSD	UV110-UFD5	UH110-UFD7	UH110-UFM1
Features	CorePower	DataDefender, Write Protect Switch	High Endurance	SLC-liteX	SLC-liteX	ESD Air ± 15KV; Contact ± 8KV Prevention	Type-C Connector, SLC-liteX	SLC-liteX
Form Factor	CFexpress 2.0 Type B	CFast	CompactFlash Type I	SDHC	Micro SD	USB Flash Drive	USB Flash Drive	USB Disk Module
Interface	PCIe Gen4 x2	SATA 3.2 (6Gb/s)	PC Card Memory Mode; PC Card I/O Mode; True IDE Mode	SD 3.0	SD 6.1	USB 3.2 Gen1	USB 3.2 Gen1	USB 2.0
Connector	-	(7+17) pin	50-pin	-	-	USB Type-A	USB Type-C	10-pin USB (2 x 5 header)
NAND Flash Type	3D TLC	3D TLC	SLC	MLC	3D TLC	3D TLC	3D TLC	3D TLC
Capacity	240~960GB	120~960GB	256MB ~ 32GB	4~16GB	16~128GB	128~256GB	32~64GB	32~64GB
External DRAM	No	No	No	No	No	No	No	No
Max. R/W Performance (MB/sec)	3740/2940	560/505	60/65	90/55	90/80	270/185	270/195	37/32
Standard Operating Temp. (°C)	0 ~ +70	0 ~ +70	0 ~ +70	-25 ~ +85	-25 ~ +85	0 ~ +70	0 ~ +70	0 ~ +70
Wide Temp. (°C)	-40 ~ +85	-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	>3,000,000
SED	AES256 TCG Opal 2.0	Support	-	-	-	-	-	-
Firmware PLP	Support	Support	Support	Support	Support	-	-	-
Hardware PLP	Support	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	IPC, AIO Inspection System	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