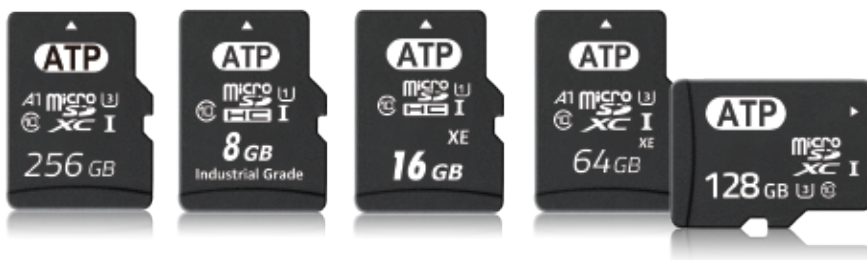




# ATP microSD/microSDHC/microSDXC Card Industrial Grade

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



These tiny yet feature-rich and reliable removable storage solutions are used extensively in data logging, navigation and surveillance systems, in-vehicle infotainment (IVI), drive recorders, and other demanding applications.

To ensure data integrity, ATP microSD cards feature AutoRefresh read disturb protection and Dynamic Data Refresh data retention management technologies to prevent errors in frequently read and seldom-accessed areas. The Sudden Power-Off Recovery (SPOR) mechanism recovers valid data during voltage fluctuations or power loss events.

ATP microSD cards in 3D triple level cell (TLC) NAND flash come in capacities up to 256 GB. They feature 4KB page management and SLC caching algorithm, which allows 1/2 random access time and low latency compared with traditional solutions. These cards meet Android A1 application performance (SDA spec) and consume less power, making them suitable for small handheld devices with limited battery life.

## Key Features

- SD Life Monitor
- Advanced Wear Leveling
- SiP (System in Package)
- AutoRefresh technology
- Dynamic Data Refresh
- Power failure protection
- Industrial temperature
- Joint Validation
- 100% MP Level Test

## Applications

- Industrial PC
- Medical devices
- Automation
- Automotive IVI systems
- Test and Measurement
- Surveillance systems
- Drive recorders
- Navigations
- Network cameras
- Mobile/Handheld computers

Technologies & Add-On Services		Life Monitor	Sudden Power-Off Recovery	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Secure Erase	Industrial Temperature	System in Package	Complete Drive Test	Joint Validation
Product Line	Premium	Δ	•	•	•	Δ	•	•	•	•	Δ
	Superior	Δ	•	•	•	•	•	Δ	•	•	Δ
	Value			•					•		

Δ: Customization option available on a project basis.



## Specifications

Product Name		microSD/microSDHC/microSDXC				
Product Line		Premium			Superior	
Naming		S800Pi	S700Pi	S700Pi	S700Sc	S700Sc
Flash Type		SLC	iTemp SLC mode	iTemp 3D SLC mode	SLC mode	3D SLC mode
Density		512 MB to 8 GB	4 GB to 16 GB	8 GB to 64 GB	4 GB to 16 GB	8 GB to 64 GB
Performance	Sequential Read up to (MB/s)	80	76	98	76	98
	Sequential Write up to (MB/s)	39	54	62	54	62
Interface		512 MB~2 GB, HS mode 4 GB~8 GB, UHS-I	UHS-I		UHS-I	
Operating Temperature		-40°C to 85°C			-25°C to 85°C	
Reliability	TBW* (max.)	192 TB	256 TB	640 TB	256 TB	640 TB
	MTBF @ 25°C	>5,000,000 hours	>3,000,000 hours			
	Number of Insertions	20,000 (SDA spec minimum 10,000)				
Dimensions: L x W x H (mm)		15.0 x 11.0 x 1.0				

Product Name		microSD/microSDHC/microSDXC				
Product Line		Superior				Value
Naming		S600Si	S600Sc	S600Sia	S600Sc	S600Vc
Flash Type		iTemp MLC / 3D TLC	MLC	iTemp 3D TLC	3D TLC	3D TLC
Density		8 GB to 256 GB	8 GB to 32 GB	32 GB to 256 GB	32 GB to 256 GB	32 GB to 128 GB
Performance	Sequential Read up to (MB/s)	98	68	98	98	100
	Sequential Write up to (MB/s)	61	24	61	61	78
Interface		UHS-I				
Operating Temperature		-40°C to 85°C	-25°C to 85°C	-40°C to 85°C	-25°C to 85°C	-25°C to 85°C
Reliability	TBW* (max.)	154 TB	39 TB	154 TB	154 TB	36 TB
	MTBF @ 25°C	>2,000,000 hours				>1,000,000 hours
	Number of Insertions	20,000 (SDA spec minimum 10,000)				
Dimensions: L x W x H (mm)		15.0 x 11.0 x 1.0				

\* Under highest Sequential write value. May vary by density, configuration and applications.

To learn more about this product, contact your ATP Representative.

ATP Global Footprint

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