ATP microSD/microSDHC/microSDXC Card Industrial Grade
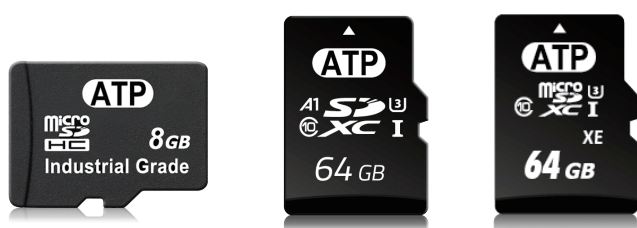
Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications

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

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.

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 NAND SLC mode	SLC mode	3D NAND SLC mode
Density	512 MB to 8 GB	4 GB to 16 GB	8 GB to 64 GB	4 GB to 32 GB	8 GB to 64 GB
Performance — Sequential Read up to (MB/s)	82	88	99	96	99
Performance — Sequential Write up to (MB/s)	39	78	64	85	64
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	512 TB	640 TB
Reliability — MTBF @ 25°C	>5,000,000 hours	>3,000,000 hours			
Reliability — 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	S600Si	S700Sc	S600Vc
Flash Type	iTemp MLC	MLC	iTemp 3D NAND MLC	3D NAND MLC	3D NAND TLC
Density	8 GB to 32 GB	8 GB to 64 GB	16 GB to 128 GB	16 GB to 128 GB	32 GB to 128 GB
Performance — Sequential Read up to (MB/s)	79	96	99	99	80
Performance — Sequential Write up to (MB/s)	75	81	64	64	76
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.)	39 TB	77 TB	154 TB	154 TB	77 TB
Reliability — MTBF @ 25°C	>2,000,000 hours				>1,000,000 hours
Reliability — 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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