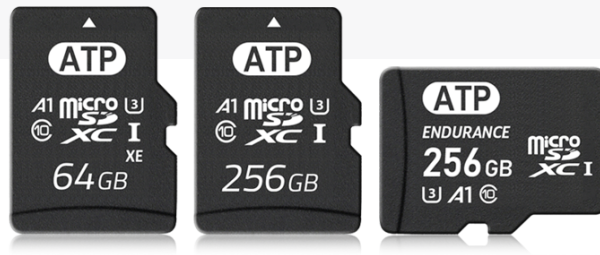




microSD/microSDHC/microSDXC Card

The Global Leader in Specialized Storage and Memory Solutions



KEY FEATURES

- SD Life Monitor
- Dynamic Data Refresh
- Power failure protection
- Industrial temperature
- 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.

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.

Technologies & Add-On Services	S.M.A.R.T.	Firmware-based Power Loss Protection	AutoRefresh	Advanced Wear Leveling	Dynamic Data Refresh	Auto-Read Calibration	Secure Erase	Industrial Temperature	SiP	Complete Drive Test	Joint Validation
Premium	▲	○	○	○	▲	—	○	○	○	○	▲
Superior	▲	○	○	○	○	▲	○	▲	○	○	▲

▲: Customization option available on a project basis.

Specifications

microSD/microSDHC/microSDXC Card							
Product Line	Premium					Superior	
	S800Pi	S750Pi	S750Pc	S700Pi	S700Pc	S650Si	S650Sc
Interface	512 MB to 2 GB, HS mode 4 GB to 8 GB, UHS-I		UHS-I				
Flash Type	SLC	3D TLC (pSLC mode)		3D TLC (pSLC mode)		3D TLC	
Form Factor	microSD Card						
Operating Temperature	-40°C to 85°C		-25°C to 85°C	-40°C to 85°C	-25°C to 85°C	-40°C to 85°C	-25°C to 85°C
Power Loss Protection Options	Firmware Based						
Optional SED Features	-						
Capacity	512 MB to 8 GB	16 GB to 128 GB		8 GB to 64 GB		64 GB to 512 GB	
Performance							
Sequential Read (MB/s) up to	68	97		96		97	
Sequential Write (MB/s) up to	39	82		76		76	
Endurance and Reliability							
Endurance (TBW) ¹ up to	192 TB	12,670 TB		1,164 TB		2,000 TB	
Reliability MTBF @ 25°C	>5,000,000 hours	>3,000,000 hours		>3,000,000 hours		>2,000,000 hours	
Reliability Number of Insertions	20,000 (SDA spec minimum 10,000)						
Others							
Dimensions (mm)	15.0 x 11.0 x 1.0						
Certifications	CE, FCC, UKCA, RoHS						
Warranty	5 years					2 years	

microSD/microSDHC/microSDXC Card			
Product Line	Superior		
	S600Si	S600Sc	S600Sc
Interface	UHS-I		
Flash Type	3D TLC	MLC	
Form Factor	microSD Card		
Operating Temperature	-40°C to 85°C	-25°C to 85°C	
Power Loss Protection Options	Firmware Based		
Optional SED Features	-		
Capacity	32 GB to 256 GB	8 GB to 32 GB	
Performance			
Sequential Read (MB/s) up to	97	68	
Sequential Write (MB/s) up to	62	24	
Endurance and Reliability			
Endurance (TBW) ¹ up to	153 TB	38 TB	
Reliability MTBF @ 25°C	>2,000,000 hours		
Reliability Number of Insertions	20,000 (SDA spec minimum 10,000)		
Others			
Dimensions (mm)	15.0 x 11.0 x 1.0		
Certifications	CE, FCC, UKCA, RoHS		
Warranty	2 years		

¹ Under highest Sequential write value. May vary by density, configuration and applications.

Product spec and its related information are subject to change without advance notice. Please refer to www.atpinc.com for latest information

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