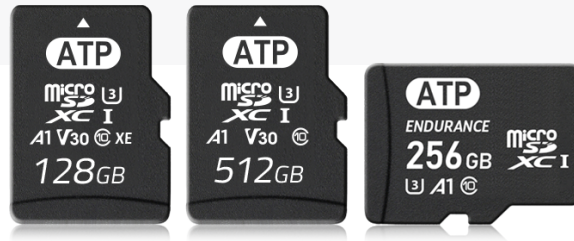




# microSD/microSDHC/microSDXC Card

The Global Leader in Specialized Storage and Memory Solutions



## KEY FEATURES

- High endurance
- Compliant with Video Speed Class V30\*
- Robust data integrity\* (AutoRefresh and Dynamic Data Refresh)
- Power Loss Protection for data at rest
- I-Temp operable\* ( -40°C to 85°C)
- Continuous supply of SLC NAND to support existing (legacy) platforms
- Water/Dustproof and ESD-resistant
- System-in-Package design
- SD Life Monitor\*

\* May vary by product and project support

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.

ATP microSD cards in 3D triple level cell (TLC) NAND flash come in capacities up to 512 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.

Specifications

Product Line	Premium		Superior
	S800Pi	S750Pi / S750Pc	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
Form Factor	microSD Card		
Operating Temperature	-40°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	32 GB to 512 GB
		Performance	
Sequential Read (MB/s) up to	81	95	95
Sequential Write (MB/s) up to	39	80	70
Endurance and Reliability			
Endurance (TBW) <sup>1</sup> up to	192 TB	12,670 TB	5,500 TB
Reliability MTBF @ 25°C	>5,000,000 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		3 years

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

Technologies		S.M.A.R.T/ Life Monitor	Industrial Temperature	SiP	Firmware-Based Data-At-Rest Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Auto-Read Calibration	Content Preload	Joint Validation and Test
Premium	S750Pi / S750Pc	▲	○	○	○	○	○	○	○	▲	▲
Superior	S650Si / S650Sc	▲	○	○	○	○	○	○	○	▲	▲

▲: Customization option available on a project basis.



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WE BUILD WITH YOU

Product spec and its related information are subject to change without advance notice.

Please refer to [www.atpinc.com](http://www.atpinc.com) for latest information

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