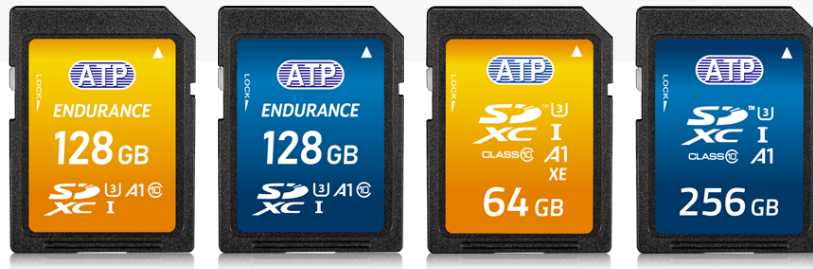




# SD/SDHC/SDXC Card

The Global Leader in Specialized Storage and Memory Solutions



## Key Features

- SD Life Monitor
- High endurance
- Low latency
- Read Disturb Protector
- Power failure protection
- Industrial temperature
- 100% MP Level Test

ATP SD cards are the ideal storage format for industrial and automotive applications as they can be conveniently inserted into and easily removed from small host devices for convenient data transfer and storage expansion.

Made to perform dependably under rigorous conditions, ATP SD cards are designed with extensive longevity, which is typically required in industrial applications such as automation, networking, health care and more.

ATP SD cards also deliver the quality, durability and reliability to meet the requirements of major automotive OEM/Tier 1 suppliers, system developers and service providers for higher levels of data accuracy, consistency and integrity in applications such as maps/navigation systems, in-vehicle infotainment (IVI), Advanced Driver Assistance Systems (ADAS), and other data-intensive applications. These solutions can withstand extreme temperatures, dust and shock/vibration, and maintain data integrity under power cycling or sudden power-off events.

Now available in 3D triple-level cell (TLC) NAND flash with A1 Performance Class rating, ATP SD cards undergo endurance, data retention and wide temperature tests and are certified according to international, automotive-specific and temperature-related standards.

# Specifications

SD/SDHC/SDXC Card							
Product Line	Premium			Superior			
	S800Pi	S750Pi	S700Pi	S750Sc	S700Sc	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	SD Card						
Operating Temperature	-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	8 GB to 32 GB	8 GB to 64 GB	8 GB to 32 GB	8 GB to 64 GB	32 GB to 128 GB	
Performance							
Sequential Read (MB/s) up to	68	99	95	99	95	96	
Sequential Write (MB/s) up to	39	82	70	82	70	57	
Endurance and Reliability							
Endurance (TBW) <sup>1</sup> up to	192 TB	1,745 TB	1,164 TB	1,745 TB	1,164 TB	582 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)	32.0 x 24.0 x 2.1						
Certifications	CE, FCC, UKCA, RoHS						
Warranty	5 years			3 years	2 years	3 years	

SD/SDHC/SDXC Card				
Product Line	Superior			
	S600Si	S600Sc	S600Sia/Sca	S600Sc
Interface	UHS-I			
Flash Type	3D TLC	MLC	MLC / 3D TLC	3D TLC
Form Factor	SD Card			
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
Power Loss Protection Options	Firmware Based			
Optional SED Features	-			
Capacity	32 GB to 512 GB	8 GB to 16 GB	8 GB to 64 GB	32 GB to 512 GB
Performance				
Sequential Read (MB/s) up to	96	68	96	
Sequential Write (MB/s) up to	66	23	65	66
Endurance and Reliability				
Endurance (TBW) <sup>1</sup> up to	1,396 TB	19 TB	307 TB	1,396 TB
Reliability MTBF @ 25°C	>2,000,000 hours			
Reliability Number of Insertions	20,000 (SDA spec minimum 10,000)			
Others				
Dimensions (mm)	32.0 x 24.0 x 2.1			
Certifications	CE, FCC, UKCA, RoHS			
Warranty	2 years			

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	▲	○	○	○	○	▲	○	▲	○	○	▲

<sup>1</sup> Under highest Sequential write value. May vary by density, configuration and applications.  
 ▲: Customization option available on a project basis.

Hot Items Ordering Information				
Product Line	Flash Type	Capacity	Operating Temperature	P/N
S750Pi	3D pSLC	8 GB ~ 32 GB	-40°C~85°C	AF8GSD4A-EBAIM
				AF16GSD4A-EBAIM
				AF32GSD4A-EBAIM
S750Sc	3D pSLC	8 GB ~ 32 GB	-25°C~85°C	AF8GSD4A-EBAXM
				AF16GSD4A-EBAXM
				AF32GSD4A-EBAXM
S650Si	3D TLC	32 GB ~ 128 GB	-40°C~85°C	AF32GSD4-EBAIM
				AF64GSD4-EBAIM
				AF128GSD4-EBAIM
S650Sc	3D TLC	32 GB ~ 128 GB	-25°C~85°C	AF32GSD4-EBAXM
				AF64GSD4-EBAXM
				AF128GSD4-EBAXM

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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