The Global Leader in Specialized Storage and Memory Solutions

WE BUILD WITH YOU

LOW-CAPACITY STORAGE SOLUTIONS

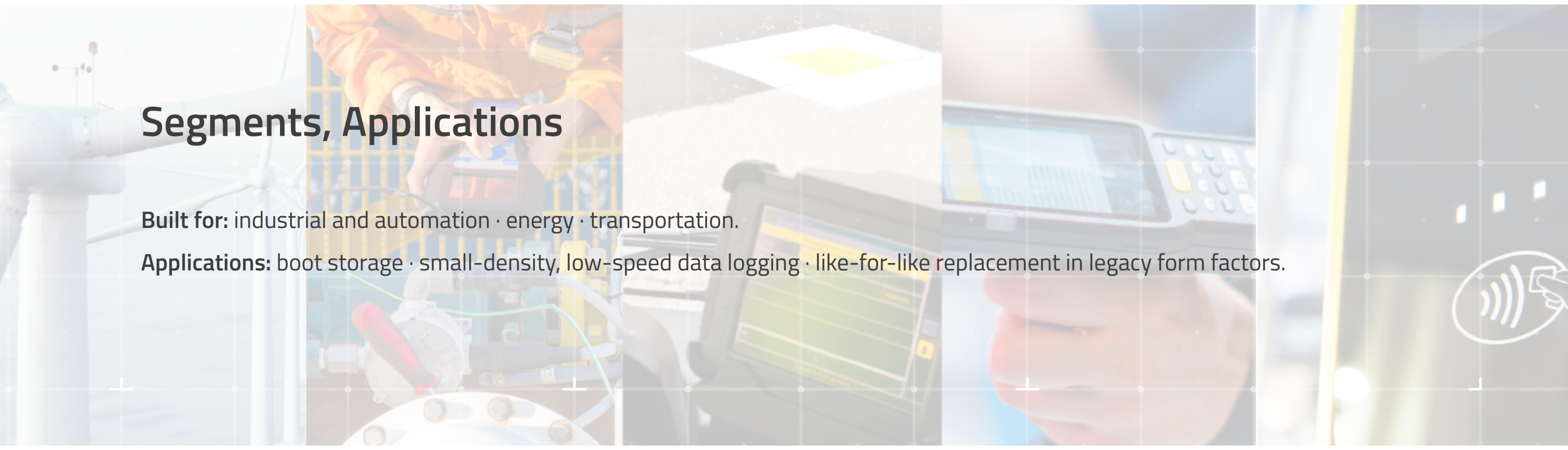
Secured supply for the sockets the industry is leaving behind — industrial SD/microSD, USB and e.MMC from 4 GB to 128 GB.

PRODUCT FLYER

Why This Family Exists

As NAND production migrates to high-layer, high-density nodes driven by AI demand, the legacy 2D MLC and low-density 3D dies behind low-capacity storage are reaching end-of-life across the industry. Minimum purchasable capacities keep climbing — but the boot and logging sockets in deployed industrial, energy and transportation systems still need 4, 8 or 32 GB, in the form factors they were qualified with.

ATP has secured supply of 2D MLC and 3D TLC NAND to continue manufacturing exactly those configurations, at cost-per-GB economics that make sense at low densities. Deployed designs keep their qualified storage.
No forced redesign. No oversized substitute.



Segments, Applications

Built for: industrial and automation · energy · transportation.

Applications: boot storage · small-density, low-speed data logging · like-for-like replacement in legacy form factors.

SD and microSD Cards

The S600 and S700 series carry the most common legacy socket in industrial systems.
MLC variants preserve continuity for designs qualified on MLC behavior;
3D TLC covers grown capacity needs; pSLC mode serves sustained-write logging duty.

Product Line	NAND Type	Capacities	Op. Temperature
S600Sc	2D MLC	4 / 8 GB	–25°C to 85°C
S600Si / S600Sc	3D TLC	32 / 64 GB	–40°C to 85°C / –25°C to 85°C
S700Pi / S700Pc	3D TLC (pSLC mode)	16 GB	–40°C to 85°C / –25°C to 85°C

USB 2.0 NANODURA

The B600 series keeps USB-based boot and service-port storage available for legacy equipment — the drive that stays in the machine, not the one in your pocket.

Product Line	NAND Type	Capacities	Op. Temperature
B600Sc	2D MLC	4 / 8 GB	0°C to 70°C

e.MMC, Standard Footprint

The E600 and E700 series serve soldered-down boot and logging storage in the standard BGA footprint — with LDPC error correction supporting 3D TLC behavior over long service life, and pSLC configurations where the write duty demands endurance headroom.

Product Line	NAND Type	Capacities	Op. Temperature
E600Si / E600Sc	3D TLC	32 / 64 / 128 GB	–40°C to 85°C / –25°C to 85°C
E700Pi / E700Pc	3D TLC (pSLC mode)	10 / 21 / 40 GB	–40°C to 85°C / –25°C to 85°C

Choosing the Right Configuration

- **2D MLC (4–8 GB):** the continuity choice. The same NAND class many legacy designs were qualified on — staying on MLC minimizes what changes.
- **3D TLC (32–128 GB):** the default where capacity needs have grown. For boot-and-occasional-logging duty, standard 3D TLC holds comfortable endurance margin.
- **pSLC (10–40 GB):** for sustained write duty — continuous event logging, frequent metadata churn. Less capacity per die, more endurance headroom. Specify it where the writes are, not everywhere.
- **Temperature grades:** “i” = industrial, –40°C to 85°C; “c” = commercial, –25°C to 85°C (0°C to 70°C on NANODURA). Specify from the deployment environment's actual extremes.

Product Line	SD/SDHC/SDXC Card			microSD/microSDHC/microSDXC Card			USB 2.0 NANODURA
	Premium	Superior		Premium	Superior		Superior
	S700Pi / S700Pc	S600Si / S600Sc	S600Sc[2]	S700Pi / S700Pc	S600Si / S600Sc	S600Sc[2]	B600Sc
Interface	UHS-I		HS mode	UHS-I		HS mode	USB 2.0 (480 Mbps)
Flash Type	3D TLC (pSLC mode)	3D TLC	MLC	3D TLC (pSLC mode)	3D TLC	MLC	MLC
Form Factor	SD Card			microSD Card			USB Type-A
Operating Temperature	-40°C to 85°C / -25°C to 85°C		-25°C to 85°C	-40°C to 85°C / -25°C to 85°C		-25°C to 85°C	0°C to 70°C
Power Loss Protection Options	Firmware Based						
Optional SED Features	-						
Capacity	8 GB to 64 GB	32 GB to 256 GB	4 GB to 8 GB	8 GB to 64 GB	32 GB to 256 GB	4 GB to 8 GB	4 GB to 8 GB
Performance							
Sequential Read (MB/s) up to	98	98	20	95	98	20	26
Sequential Write (MB/s) up to	67	71	10	76	72	10	10
Endurance and Reliability							
Endurance (TBW)[1] up to	1,164 TB	465 TB	20 TB	1,164 TB	465 TB	20 TB	9.6TB
Reliability MTBF @ 25°C	>3,000,000 hours	>2,000,000 hours	>3,000,000 hours	>3,000,000 hours	>2,000,000 hours	>3,000,000 hours	>2,000,000 hours
Reliability Number of Insertions	20,000 (SDA spec minimum 10,000)						10,000 minimum
Others							
Dimensions (mm)	32.0 x 24.0 x 2.1			15.0 x 11.0 x 1.0			34 x 12.2 x 4.5
Certifications	CE, FCC, UKCA, RoHS						
Warranty	5 years	3 years		5 years	3 years		3 years

1 Under highest Sequential write value. May vary by density, configuration and applications.
2 Product specifications may be subject to change

Product Line	e.MMC Standard			
	Premium	Superior	Premium	Superior
	E700Pi	E600Si	E700Pc	E600Sc
Flash Type	3D TLC (pSLC mode)	3D TLC	3D TLC (pSLC mode)	3D TLC
IC Package	153-ball FBGA			
JEDEC Specification	v5.1, HS400			
Power Loss Protection Options	Firmware Based			
Operating Temperature	-40°C to 85°C		-25°C to 85°C	
Capacity	10 GB to 40 GB	32 GB to 128 GB	10 GB to 40 GB	32 GB to 128 GB
Performance				
Sequential Read/ Write up to (MB/s) (Max.)	290 / 225			
Bus Speed Modes	x1 / x4 / x8			
ICC (Typical RMS in Read/Write) mA (Max.)	100 / 110			
ICCQ (Typical RMS in Read/Write) mA (Max.)	105 / 100			
Endurance and Reliability				
Endurance TBW (Max.)[1]	1,360 TB	110 TB	1,360 TB	110 TB
Reliability MTBF @ 25°C	>2,000,000 hours			
Others				
Dimensions (mm)	11.5 x 13.0 x 1.2			
Certifications	RoHS, REACH			
Warranty	One Year			

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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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