

## CFast card

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



ATP CFast cards combine the convenient and trusted format of CompactFlash with the speed, capacity and performance of SATA III, while maintaining backward compatibility with other SATA versions.

They are recommended as boot and storage devices in embedded and industrial applications such as avionics/aerospace, automation, marine navigation, telecommunication/networking and medical equipment where mission-critical data requires the highest level of reliability, durability and data integrity.

Special features and technologies include: optional Power Loss Protection, which provides a hardware-based backup power circuit and/or firmware-based solution during a power failure; Advanced Wear Leveling for higher endurance and longer product life span; ECC (error correction code) and AutoRefresh technologies, which correct and monitor the error bit levels to ensure data integrity in frequently read areas, and S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) function for easy monitoring of various device health parameters to help predict storage failure for preventive action.

Technologies & Add-On Services	S.M.A.R.T.	Hardware-based Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Secure Erase	Industrial Temperature	Anti-Sulfur Resistors	Conformal Coating
Premium	•	•	•	•	•	•	•	Δ	Δ
Superior	•	•	•	•	•	•	Δ	Δ	Δ

 $\Delta :$  Customization option available on a project basis.

## **Specifications**

		CFast Card					
Product Line		A800Pi	A600Si	A600Sc			
Interface		SATA III 6 Gb/s					
Flash Type		SLC	MLC	MLC			
Form Factor			CFast Type I	CFast Type I			
Operating Temperature (Tcase) <sup>1</sup>		-40°C to 85°C	-40°C to 85°C	0°C to 70°C			
Power Loss Protection Options		Hardware + Firmware Based					
Optional SED Features			-				
Capacity		8 GB to 32 GB	16 GB to 128 GB	16 GB to 128 GB			
Performance							
Performance	Sequential Read (MB/s) up to	500	510	510			
	Sequential Write (MB/s) up to	300	175	175			
	Random Read IOPS (4K, QD32) up to	35,800	29,400	29,400			
	Random Writes IOPS (4K, QD32) up to	-	42,160	42,160			
End	urance and Reliability						
Endurance (TBW) <sup>2</sup> up to		2,667 TB	267 TB	320 TB			
Reliability MTBF @ 25°C		>2,000,000 hours					
Data Retention @ 40°C³		10 years (with 10% P/E Cycles)	5 years (with 10% P/E Cycles)				
Reliability Number of Insertions		10,000 minimum					
Others							
Power Consumption		3.3V Input Power					
Dimensions: L x W x H (mm)		36.4 x 42.8 x 3.6					
Certifications		CE, FCC					
Warranty		5 years	2 years				

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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<sup>&</sup>lt;sup>1</sup> Case Temperature, the composite temperature as indicated by SMART temperature attributes. <sup>2</sup> Under highest Sequential write value. May vary by density, configuration and applications. <sup>3</sup> Data retention value may vary across different temperature ranges. It is based on experimental results and should be used only for reference.