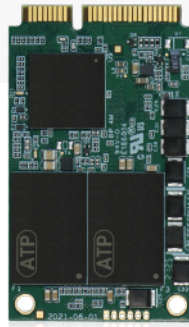




mSATA

The Global Leader in Specialized Storage and Memory Solutions



Key Features

- MCU-based Power Loss Protection Design with Level 4 (data-in-flight) protection*
- Self-Encrypting Drive (SED) with AES 256-bit encryption, TCG Opal 2.0*
- LDPC & RAID Data Recovery
- End-to-End Data Path Protection
- TRIM / Global Wear Leveling support













* May vary by product and project support

Just roughly the size of a business card, ATP's mSATA SSDs offer up to 1 TB capacity and the same speed and efficiency of SATA. They are designed to fit in systems with space constraints and high-performance requirements such as embedded and networking applications.

Two mounting holes keep the mSATA module securely installed, protecting it from shock and vibration. ATP mSATA SSDs are available in industrial temperature ratings for trustworthy performance in sub-freezing or extremely hot settings. Available on select mSATA SSDs, ATP's advanced power loss protection (PLP) technology, which combines hardware and/or software solutions to prevent data corruption and storage device damage when power glitches, losses and failures occur.

Specifications

SATA III mSATA SSD							
Product Line	Premium			Superior			Value
	A800Pi	A750Pi	A700Pi	A650Si	A650Sc	A600Si	A600Sc
Interface	SATA III 6 Gb/s						
Flash Type	SLC	3D TLC (pSLC mode)		3D TLC			
Form Factor	MO-300A						
Operating Temperature (Tcase) ¹	-40°C to 85°C	-40°C to 85°C		-40°C to 85°C	0°C to 70°C	-40°C to 85°C	0°C to 70°C
Power Loss Protection Options	Hardware + Firmware Based						Firmware Based
Optional SED Features	AES 128/256-bit Encryption	AES 256-bit Encryption, TCG Opal 2.0					-
Capacity	8 GB to 128 GB	40 GB to 160 GB		120 GB to 480 GB			32 GB to 1 TB
Performance							
Sequential Read (MB/s) up to	530	560		560	560		560
Sequential Write (MB/s) up to	430	520		480	510		525
Random Reads IOPS up to	76,000	90,000	94,000	100,000	100,000		72,000
Random Writes IOPS up to	-	88,000	85,000	90,000	88,000		85,000
Endurance and Reliability							
Endurance (TBW) ² up to	10,667 TB	9,600 TB	6,400 TB	2,327 TB		1,396 TB	1,530 TB
Reliability MTBF @ 25°C	>2,000,000 hours						
Others							
Dimensions (mm)	50.8 x 29.85 x 3.5						
Certifications	CE, FCC, UKCA, RoHS, REACH	CE, FCC, BSMI, UKCA, RoHS, REACH					
Warranty	5 years			2 years			

Technologies & Add-On Services	 S.M.A.R.T.	 Firmware-based Power Loss Protection	 Hardware-based Power Loss Protection	 AutoRefresh	 Advanced Wear Leveling	 Dynamic Data Refresh	 Auto-Read Calibration	 Secure Erase	 TCG Opal 2.0	 Industrial Temperature	 Anti-Sulfur Resistors	 Conformal Coating
Premium	○	○	○	○	○	○	○	▲	○	○	▲	▲
Superior	○	○	○	○	○	○	○	▲	○	▲	▲	▲
Value	○	○	—	○	○	○	—	—	—	—	—	—

¹ Case Temperature, the composite temperature as indicated by SMART temperature attributes.

² 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	Capacity ₁	Operating Temperature ₂	Power Loss Protection ₃	SED ₄	P/N
A800Pi	8GB	-40°C to 85°C	Hardware + Firmware Based	-	AF8GSSHI-VACXP
A800Pi	16GB	-40°C to 85°C	Hardware + Firmware Based	-	AF16GSSHI-VACXP
A800Pi	32GB	-40°C to 85°C	Hardware + Firmware Based	-	AF32GSSHI-VACXP
A800Pi	64GB	-40°C to 85°C	Hardware + Firmware Based	-	AF64GSSHI-VACXP
A800Pi	128GB	-40°C to 85°C	Hardware + Firmware Based	-	AF128GSSHI-VAAXP
A650Sc	120GB	0°C to 70°C	Hardware + Firmware Based	-	AF120GSTHI-7BCXP
A650Sc	240GB	0°C to 70°C	Hardware + Firmware Based	-	AF240GSTHI-7BCXP
A650Sc	480GB	0°C to 70°C	Hardware + Firmware Based	-	AF480GSTHI-7BCXP
A600Vc	32GB	0°C to 70°C	Firmware Based	-	AF32GSTHI-2BAXX
A600Vc	64GB	0°C to 70°C	Firmware Based	-	AF64GSTHI-2BAXX
A600Vc	128GB	0°C to 70°C	Firmware Based	-	AF128GSTHI-2BAXX
A600Vc	256GB	0°C to 70°C	Firmware Based	-	AF256GSTHI-2BAXX
A600Vc	512GB	0°C to 70°C	Firmware Based	-	AF512GSTHI-2BAXX
A600Vc	128GB	0°C to 70°C	Firmware Based	-	AF128GSTHI-2BBXX
A600Vc	256GB	0°C to 70°C	Firmware Based	-	AF256GSTHI-2BBXX
A600Vc	512GB	0°C to 70°C	Firmware Based	-	AF512GSTHI-2BBXX
A600Vc	1TB	0°C to 70°C	Firmware Based	-	AF1TSTHI-2BBXX

1 Amount of actual usable storage that can be utilized.

2 Refers to Case Temperature range during device operation, as indicated by SMART temperature attributes.

3 Hardware + Firmware-based power loss protection design with Level 4 (data-in-flight) protection; Firmware-based power loss protection design with Level 1 (data-at-rest) protection.

4 Allows data written to and read from the SSD to be constantly and automatically encrypted and decrypted. Conforms to TCG Opal 2.0 and uses AES 256-bit HW encryption.

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

v1.0 012023

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