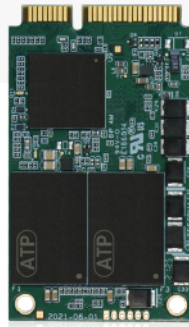




SATA III mSATA SSD

The Global Leader in Specialized Storage and Memory Solutions



KEY FEATURES

- Power Loss Protection: MCU-based* with data-at-rest and in-flight protection
- PLP Diag* (Self-Diagnosing Capacitor Check)
- EcoFlush* (Flush Cache Optimization Technology)
- Data Retention: Up to 10 years at 55 °C (pSLC)*
- Security: Self-Encrypting Drive (SED) with AES 256-bit encryption, TCG Opal 2.0*
- LDPC & RAID Data Recovery
- End-to-End Data Path Protection

* 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

Product Line	Premium		Superior	Value
	A800Pi	A750Pi	A650Si / A650Sc	A600Vi / A600Vc
Interface	SATA III 6 Gb/s			
Flash Type	SLC	3D TLC (pSLC mode)	3D TLC	
Form Factor	MO-300A			
Operating Temperature	-40°C to 85°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	80 GB to 320 GB	240 GB to 960 GB	128 GB to 1 TB
Performance				
Sequential Read (MB/s) up to	530	560		
Sequential Write (MB/s) up to	430	510	525	
Random Reads IOPS up to	77,000	92,000	104,000	70,500
Random Writes IOPS up to	75,000	85,000	90,000	92,500
Endurance and Reliability				
Endurance (TBW) ¹ up to	10,666 TB	29,620 TB	10,240 TB	1,530 TB
Reliability MTBF @ 25°C	>2,000,000 hours	>3,000,000 hours		>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		3 years	

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

Technologies	S.M.A.R.T./ Life Monitor	PLP Diag	AcuCurrent	EcoFlush	Industrial Temperature	Firmware-Based Power Loss Protection	Hardware-Based Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Auto-Read Calibration	ETEDP	SED	Software Secure Erase	Hardware Secure Erase	Hardware Write Protect
Premium A800Pi	○				○	○	○	○	○	○			○	○		
Premium A750Pi	○	○	▲	○	○	○	○	○	○	○	○	○	○	○	▲	▲
Superior A650Si / A650Sc	○	○	▲	○	○	○	○	○	○	○	○	○	○	○	▲	▲
Value A600Vi / A600Vc	○				○	○		○	○	○	○					

▲: 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	-	FS8G00MSAP5VAPI
A800Pi	16GB	-40°C to 85°C	Hardware + Firmware Based	-	FS16G0MSAP5VAPI
A800Pi	32GB	-40°C to 85°C	Hardware + Firmware Based	-	FS32G0MSAP5VAPI
A800Pi	64GB	-40°C to 85°C	Hardware + Firmware Based	-	FS64G0MSAP6VAPI
A800Pi	128GB	-40°C to 85°C	Hardware + Firmware Based	-	FS128GMSAP7VAPI
A650Si	240GB	-40°C to 85°C	Hardware + Firmware Based	-	FT240GMSAAPQBPI
A650Si	480GB	-40°C to 85°C	Hardware + Firmware Based	-	FT480GMSAAPQBPI
A650Si	960GB	-40°C to 85°C	Hardware + Firmware Based	-	FT960GMSAAPQBPI
A650Si	240GB	-40°C to 85°C	Hardware + Firmware Based	✓	FT240GMSAAPQBPI
A650Si	480GB	-40°C to 85°C	Hardware + Firmware Based	✓	FT480GMSAAPQBPI
A650Si	960GB	-40°C to 85°C	Hardware + Firmware Based	✓	FT960GMSAAPQBPI
A650Sc	240GB	0°C to 70°C	Hardware + Firmware Based	-	FT240GMSAAPQBPC
A650Sc	480GB	0°C to 70°C	Hardware + Firmware Based	-	FT480GMSAAPQBPC
A650Sc	960GB	0°C to 70°C	Hardware + Firmware Based	-	FT960GMSAAPQBPC
A650Sc	240GB	0°C to 70°C	Hardware + Firmware Based	✓	FT240GMSAAPQBSC
A650Sc	480GB	0°C to 70°C	Hardware + Firmware Based	✓	FT480GMSAAPQBSC
A650Sc	960GB	0°C to 70°C	Hardware + Firmware Based	✓	FT960GMSAAPQBSC
A600Vc	32GB	0°C to 70°C	Firmware Based	-	FT32G0MSAAH2BFC
A600Vc	64GB	0°C to 70°C	Firmware Based	-	FT64G0MSAAH2BFC
A600Vc	128GB	0°C to 70°C	Firmware Based	-	FT128GMSAAH2BFC
A600Vc	256GB	0°C to 70°C	Firmware Based	-	FT256GMSAAH2BFC
A600Vc	512GB	0°C to 70°C	Firmware Based	-	FT512GMSAAH2BFC
A600Vc	128GB	0°C to 70°C	Firmware Based	-	FT128GMSAAN2BFC
A600Vc	256GB	0°C to 70°C	Firmware Based	-	FT256GMSAAN2BFC
A600Vc	512GB	0°C to 70°C	Firmware Based	-	FT512GMSAAN2BFC
A600Vc	1TB	0°C to 70°C	Firmware Based	-	FT1T00MSAAN2BFC

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.



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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 for latest information

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ATP TAIWAN (HQ)

TEL: +886-2-2659-6368
sales-apac@atpinc.com

ATP USA

TEL: +1-408-732-5000
sales@atpinc.com

ATP EUROPE

TEL: +49-89-374-9999-0
sales-europe@atpinc.com

ATP JAPAN

TEL: +81-3-6260-0797
sales-japan@atpinc.com

ATP CHINA

TEL: +86-21-5080-2220
sales@cn.atpinc.com

ATP INDIA

sales-india@atpinc.com