

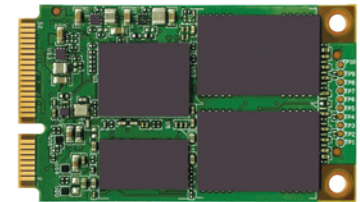


DuraFlash™

ME2 | mSATA (MO-300A)

SMART's DuraFlash ME2 mSATA solid state drives offer highly reliable mass storage in a mSATA form factor which is available in both commercial and industrial temperature ranges. Incorporating SMART's proprietary NVMSentry™ firmware along with a best-in-class SSD controller, the ME2 mSATA SSDs offer exceptional performance while providing the flexibility and optionality for mission critical applications.

SMART's mSATA SSDs are offered with Triple-Level Cell (TLC) 3D NAND. They provide enhanced reliability by incorporating on-board error detection and correction, and static and dynamic wear-leveling algorithms to provide reliable operation over the product life.



Features & Benefits

- 1 DWPD Version Available with eTLC NAND
- AES 256 Encryption and ATA Security Features Commands for Data Security and Data Sanitize
- End-to-End Data Path Protection
- 3D NAND Technology with High Endurance
- Support I-Temp (-40°C to +85°C)

Applications

- Automotive
- Embedded Computing
- Gaming
- Industrial
- Medical
- Transportation

Product Family Overview

Capacity	Sequential Performance
mSATA (MO-300A)	
240GB to 1920GB	Up to 560MB/s Read; Up to 520MB/s Write

Specifications

ME2 mSATA (MO-300A)	
NAND Type	TLC
Performance	
Host Interface Rate (maximum)	SATA 3.0 6Gb/s
Capacities	240GB to 1920GB
Sequential Read (maximum)	Up to 560 MB/s
Sequential Write (maximum)	Up to 520 MB/s
Random Read (maximum)	Up to 70K IOPS
Random Write (maximum)	Up to 80K IOPS
Reliability	
MTBF	> 2,000,000 hours
Endurance (JEDEC Enterprise Workload) ¹	1920GB: 800 TBW 960GB: 410 TBW 480GB: 200 TBW 240GB: 105 TBW
DWPD	0.3
Error Correction	LDPC
Data Security	
Encryption	AES-256, ATA Security Features Commands
Power	
Input Voltage	VCC: 3.3 V ± 5%
Environmental	
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Vibration	20G rms 80-2000Hz, 1.52mm 20-80Hz, 3 axis
Operating Temperature	Commercial: 0°C to +70°C Industrial: -40°C to +85°C
Storage Temperature	-40°C to +85°C
Humidity	40°C, Operation: 90% RH, Storage: 93% RH
Physical	
Length	50.80 mm
Width	29.85 mm
Height	3.80 mm

¹Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
mSATA (MO-300A)	
Commercial Operating Temperature (0°C to +70°C)	
SRMST1920TCM2A71	1920GB
SRMST960GTCM2A71	960GB
SRMST480GTCM2A71	480GB
SRMST240GTCM2A71	240GB
mSATA (MO-300A)	
Industrial Operating Temperature (-40°C to +85°C)	
SRMST1920TIM2A71	1920GB
SRMST960GTIM2A71	960GB
SRMST480GTIM2A71	480GB
SRMST240GTIM2A71	240GB



For more information, please visit: www.smartm.com

Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231
F: (+1) 510-623-1434 • E: info@smartm.com

Latin America:

T: (+55) 11 4417-7200 • E: sales.br@smartm.com

Asia/Pacific:

T: (+65) 6678-7670 • E: sales.asia@smartm.com

EMEA:

T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

Customer Service:

T: (+1) 510-623-1231 • E: customers@smartm.com