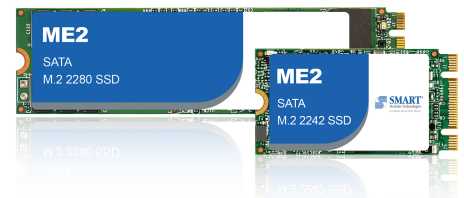




ME2 | SATA | M.2 2242 & 2280 SSDs

SMART's ME2 SATA M.2 SSDs incorporate the latest generation 3D NAND-technology and SMART Modular's proprietary NVMSentry™ firmware to deliver high performance SSD products with endurance up to one drive writes per day (1 DWPD) for five years. The new ME2 SSDs offer better cost per bit over previous 64-layer and 96-layer NAND generations without sacrificing performance and reliability. Further optimization of the NVMSentry firmware also yields enhancements in read and write consistency over wide ranges of application workloads.

SMART's ME2 SATA M.2 SSDs are available in both industrial and commercial temperature grades and have versions that implement SMART's SafeDATA™ power-loss, data-protection technology for graceful handling of power fluctuations and sudden power loss events.



Features & Benefits

- The Latest Generation 3D NAND Technology
- Quality of Service (QoS) with 3 Nines of Latency Consistency
- 1 DWPD For Five Years
- SEU Mitigation
- SMART's Proprietary NVMSentry Firmware
- SafeDATA Power-Loss, Data-Protection Technology
- TCG OPAL 2.0 and AES 256 Encryption
- End-to-End Data Path Protection
- Support I-Temp (-40°C to +85°C)

Applications

- Aerospace
- AI
- HPC
- Medical
- Surveillance

Product Family Overview

Form Factor	Capacity	Sequential Performance
2.5" SSD	240GB to 1920GB	
M.2 2242 SSD	240GB to 960GB	
M.2 2280 SSD	240GB to 1920GB	Up to 540MB/s Read
mSATA SSD	240GB to 1920GB	Up to 460MB/s Write
Slim SATA SSD	240GB to 1920GB	

Specifications

	M.2 2242 SSD	M.2 2280 SSD
NAND Type	eTLC	
Performance		
Host Interface Rate (maximum)	SATA 3.0 6Gb/s	
Capacities	240GB to 960GB	240GB to 1920GB
Sequential Read (maximum)	Up to 540 MB/s	
Sequential Write (maximum)	Up to 460 MB/s	
Random Read (maximum)	Up to 77K IOPS	
Random Write (maximum)	Up to 70K IOPS	
Reliability		
MTBF	> 2,000,000 hours	
Endurance (JEDEC Enterprise Workload) ¹	960GB: 2275 TBW 480GB: 1015 TBW 240GB: 510 TBW	1920GB: 3755 TBW 960GB: 2275 TBW 480GB: 1015 TBW 240GB: 510 TBW
DWPD	1	
SafeDATA	Optional	
Error Correction	LDPC	
Data Security		
Encryption	AES-256, TCG OPAL 2.0	
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	42.0 mm	80.0 mm
Width	22.0 mm	22.0 mm
Height	3.65 mm	3.65 mm

¹Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
ME2 SATA M.2 2242 SSD	
Commercial Operating Temperature (0°C to +70°C)	
SRM24960GFCM2AC4	960GB
SRM24480GFCM2AC4	480GB
SRM24240GFCM2AC4	240GB
ME2 SATA M.2 2242 SSD	
Industrial Operating Temperature (-40°C to +85°C)	
SRM24960GFIM2AC4	960GB
SRM24480GFIM2AC4	480GB
SRM24240GFIM2AC4	240GB
ME2 SATA M.2 2242 SSD (SEU Mitigation)	
Commercial Operating Temperature (0°C to +70°C)	
SRM24960GFCM2BC4	960GB
SRM24480GFCM2BC4	480GB
SRM24240GFCM2BC4	240GB
ME2 SATA M.2 2242 SSD (SEU Mitigation)	
Industrial Operating Temperature (-40°C to +85°C)	
SRM24960GFIM2BC4	960GB
SRM24480GFIM2BC4	480GB
SRM24240GFIM2BC4	240GB
ME2 SATA M.2 2280 SSD	
Commercial Operating Temperature (0°C to +70°C)	
SRM281920FCM2AC4	1920GB
SRM28960GFCM2AC4	960GB
SRM28480GFCM2AC4	480GB
SRM28240GFCM2AC4	240GB
ME2 SATA M.2 2280 SSD	
Industrial Operating Temperature (-40°C to +85°C)	
SRM281920FIM2AC4	1920GB
SRM28960GFIM2AC4	960GB
SRM28480GFIM2AC4	480GB
SRM28240GFIM2AC4	240GB
ME2 SATA M.2 2280 SSD (SafeDATA)	
Commercial Operating Temperature (0°C to +70°C)	
SRM281920F1M2AC4	1920GB
SRM28960GF1M2AC4	960GB
SRM28480GF1M2AC4	480GB
SRM28240GF1M2AC4	240GB
ME2 SATA M.2 2280 SSD (SafeDATA)	
Industrial Operating Temperature (-40°C to +85°C)	
SRM281920F2M2AC4	1920GB
SRM28960GF2M2AC4	960GB
SRM28480GF2M2AC4	480GB
SRM28240GF2M2AC4	240GB

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Ordering Information

Part Number	Density
ME2 SATA M.2 2280 SSD (SEU Mitigation)	
Commercial Operating Temperature (0°C to +70°C)	
SRM281920FCM2BC4	1920GB
SRM28960GFCM2BC4	960GB
SRM28480GFCM2BC4	480GB
SRM28240GFCM2BC4	240GB
ME2 SATA M.2 2280 SSD (SEU Mitigation)	
Industrial Operating Temperature (-40°C to +85°C)	
SRM281920FIM2BC4	1920GB
SRM28960GFIM2BC4	960GB
SRM28480GFIM2BC4	480GB
SRM28240GFIM2BC4	240GB
ME2 SATA M.2 2280 SSD (SafeDATA & SEU)	
Commercial Operating Temperature (0°C to +70°C)	
SRM281920F1M2BC4	1920GB
SRM28960GF1M2BC4	960GB
SRM28480GF1M2BC4	480GB
SRM28240GF1M2BC4	240GB
ME2 SATA M.2 2280 SSD (SafeDATA & SEU)	
Industrial Operating Temperature (-40°C to +85°C)	
SRM281920F2M2BC4	1920GB
SRM28960GF2M2BC4	960GB
SRM28480GF2M2BC4	480GB
SRM28240GF2M2BC4	240GB



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

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