N200 | SATA | M.2 2242 SSD

SMART's N200 SATA M.2 2242 SSDs provide an economic yet highly reliable mass storage in a M.2 form factor which is available in both commercial and industrial temperature ranges. The N200 product line is a SATA III solid state storage solution that offers excellent sequential read/write performance. It is suitable for embedded applications that require lower drive capacity and utilize the drive for boot up code and OS code storage.

SMART's N200 SATA M.2 2242 SSDs are offered with Triple-Level Cell (TLC) 3D NAND. They provide enhanced reliability by incorporating on-board error detection and correction, and static Wear-Leveling algorithms to provide reliable operation over the product life.

Features & Benefits

- DRAM-less Controller Design
- Advanced Static and Dynamic Wear-Leveling
- Advanced Error Detection/Correction Circuitry for Superior Data Reliability
- Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) Support
- Supports for 48bit LBA Addressing with Larger Maximum Transfer Size

Applications

- Communications
- Embedded Computing
- Industrial
- Networking
- Personal PC
- POS
- Servers
- Storage

Product Family Overview

Form Factor	Capacity	Sequential Performance
2.5" SSD	256GB to 1TB	Up to 550MB/s Read Up to 490MB/s Write
M.2 2242 SSD M.2 2280 SSD	32GB to 256GB	Up to 550MB/s Read Up to 465MB/s Write
mSATA SSD	32GB to 128GB	Up to 550MB/s Read Up to 360MB/s Write

Specifications

	N200 | SATA | M.2 2242 SSD
NAND Type	TLC
Performance	
Host Interface Rate (maximum)	SATA 3.0 6Gb/s
Capacities	32GB to 256GB
Sequential Read (maximum)	Up to 550 MB/s
Sequential Write (maximum)	Up to 465 MB/s
Random Read (maximum)	Up to 67K IOPS
Random Write (maximum)	Up to 77K IOPS
Reliability	
MTBF	> 1,500,000 hours
Endurance (JEDEC Client Workload)[1]	256GB: 120 TBW 128GB: 60 TBW 64GB: 30 TBW 32GB: 15 TBW
Error Correction	LDPC
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 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
Width	22.0 mm
Height	3.8 mm

[1]Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
N200 | SATA | M.2 2242 SSD **Commercial Operating Temperature (0°C to +70°C)**	
SVM2S46256GNTD1	256GB
SVM2S46128GNTD1	128GB
N200 | SATA | M.2 2242 SSD **Industrial Operating Temperature (-40°C to +85°C)**	
SVM2S46128GNTIE1	128GB
SVM2S46064GNTIE1	64GB
SVM2S46032GNTIE1	32GB

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