

N200 | SATA | M.2 2280 SSD

SMART'S N200 SATA M.2 2280 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 2280 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
- Double-sided Layout
- 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 | 32GB to 256GB | Up to 550MB/s Read |
| M.2 2280 SSD | | 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 2280 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 61K IOPS | |
| Random Write (maximum) | Up to 80K IOPS | |
| Reliability | | |
| MTBF | > 1,500,000 hours | |
| | 256GB: 120 TBW | |
| Endurance | 128GB: 60 TBW | |
| | 120GB: 60 TBW | |
| (JEDEC Client Workload) ¹ | 64GB: 30 TBW | |
| | 32GB: 15 TBW | |
| Error Correction | LDPC | |
| Power | | |
| Input Voltage | VCC: 3.3 V ± 5% | |
| Environmental | | |
| Ohaali | 1500 g half-sine, 0.5 msec, 1 shock along each axis | |
| Shock | X, Y, Z in each direction | |
| Vibration | 20G 80-2000Hz, 1.52mm 20-80Hz, 3 axis | |
| Operating Temperature | Commercial: 0°C to +70°C | |
| Operating Temperature | Industrial: -40°C to +85°C | |
| Storage Temperature | -40°C to +85°C | |
| Humidity | 40°C, Operation: 90% RH, Storage: 93% RH | |
| Physical | | |
| Length | 80.0 mm | |
| Width | 22.0 mm | |
| Height | 3.8 mm | |

¹Endurance is directly related to the User Specific Workload.

Ordering Information

| Part Number | Density | |
|---|---------|--|
| N200 SATA M.2 2280 SSD Commercial Operating Temperature (0°C to +70°C) | | |
| SVM2SH6128GNTD1 | 128GB | |
| SVM2S86120GNTD1 | 120GB | |
| N200 SATA M.2 2280 SSD Industrial Operating Temperature (-40°C to +85°C) | | |
| SVM2S86256GNTIE1 | 256GB | |
| SVM2S86064GNTIE1 | 64GB | |
| SVM2S86032GNTIE1 | 32GB | |

SMART Modular Technologies

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

*Product images are for promotional purposes only. Labels may not be representative of the actual product.

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