

N200, MO-297 Slim SATA

SMART Modular Technologies' N200 MO-297 slim SATA solid state drive brings the advantages of non-volatile memory to embedded computing applications. The N200 product provides an economic yet highly reliable mass storage a slim SATA form factor which is available in both commercial and industrial temperature ranges. The slim SATA is available in capacities ranging from 32GB to 256GB. In fixed applications, lower power dissipation can reduce cooling requirements and costs in blade or server environments.

The slim SATA 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. The new slim SATA N200 SATA III offers sequential and random read/write performance in high capacity drives for transaction intensive applications.

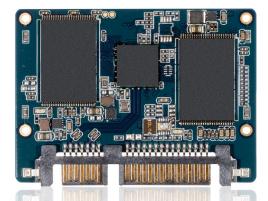
SMART's slim SSDs are offered with Triple Level Cell (TLC) 3D NAND. They provide enhanced reliability by incorporating on-board error detection and correction and static wear leveling algorithms to provide reliable operation over the product life.

Features & Benefits

- Advanced wear leveling 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

N200 Product Family Overview

Capacity	Sequential
MO-297 Slim SATA TLC	
32GB to 256GB	Up to 550MB/s (64GB - 256GB) Up to 300MB/s (32GB)



Applications

- NAS / SAN storage systems
- x86 server-storage appliances
- · Distributed scale-out cloud servers
- Telecom and networking routers and switches
- ATCA compute blades
- Industrial control
- · Single board computers for defense, gaming and industrial control applications
- Printers

Specifications

	MO-297 Slim SATA TLC
Performance	
Host Interface Rate	6Gb/s (Backwards compatible to 3Gb/s & 1.5Gb/s)
Capacities	32GB to 256GB
Sequential Read (maximum)	Up to 550MB/s (64GB - 256GB) Up to 300MB/s (32GB)
Sequential Write (maximum)	Up to 490MB/s (256GB) Up to 450MB/s (128GB) Up to 255MB/s (64GB) Up to 125MB/s (32GB)
Reliability	
Data Reliability	< 1 Non-Recoverable Error in 10 ¹⁶ bits read
Data Retention	10 years >90% life remaining 1 year at the end of life
Endurance (JEDEC Client Workload) ¹	32GB: 17 TBW 64GB: 42 TBW 128GB: 75 TBW 256GB: 180 TBW
Error Correction	LDPC (Equivalent to 200 bits/4KB)
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° to 70°C Industrial: -40° to 85°C
Storage Temperature	-40°C to 85°C
Humidity	40°C, Operation: 90% RH, Storage: 93% RH
Altitude	24,384 m [80,000 ft]
Physical	
Length	39.0 mm
Width	54.0 mm
Height	4.0 mm

Ordering Information

Part Number	Density	
MO-297 Slim SATA Commercial Operating Temperature		
SVSLM6256GNT51	256GB	
SVSLM6128GNT51	128GB	
SVSLM6064GNT51	64GB	
SVSLM6032GNT51	32GB	
MO-297 Slim SATA Industrial Operating Temperature		
SVSLM6128GNTI51	128GB	
SVSLM6064GNTI51	64GB	
SVSLM6032GNTI51	32GB	

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 $^{1}\mbox{Endurance}$ is directly related to the User Specific Workload

