

■ ■ **MasterDrive SX Series**

SATA Solid State Drive

SATA-II speeds with MLC Flash



Super Talent's MasterDrive SX series SSD brings the solid state drive to a wholenew audience. No longer just for the military, enterprise and elite users, the MasterDrive SX SSD is truly affordable. And Super Talent doesn't strip out features to bring down the price. With no-compromise features like SATA-II technology for exceptionally fast read speeds of up to 220MB/sec, and the same resistance to shock and vibration as all Super Talent's SSDs, the MasterDrive SX SSD delivers the performance and reliability today's mobile enthusiasts demand.

Super Talent's Flash management techniques increase reliability and endurance, and continue to provide unprecedented vibration and shock tolerance. Our software and hardware testing ensures utmost quality of each MasterDrive SX SSD. Super Talent offers a 1 year warranty for the MasterDrive SX SSD.

Physical Specifications

Form Factor	2.5"
*Capacity	64GB - 256GB
Dimension	69.85mm x 100.20mm x 9.50mm
SATA Interface	Serial ATA-II
NAND Flash	MLC
Cache	128MB DRAM Cache
Power Supply	5.0Vcc ± 5%
Package	Complete metal housing

Endurance Specifications

Read		
Write	64GB	35.1 yrs @ 50GB write-erase/day
	128GB	70.1 yrs @ 50GB write-erase/day
	256GB	140.2 yrs @ 50GB write-erase/day

Reliability Specifications

MTBF	+1,000,000 hours
Data Reliability	Built-in EDC/ECC function
Data Integrity	5 years
Wear Leveling Algor.	Patent Pending

Performance Specifications

Seq. Read	220 MB/sec (max)
Seq. Write	200 MB/sec (max)
Access Time	0.1ms

*64GB model:200 MB/sec Read, 120 MB/sec Write

Environmental Specifications

Operating Shock	1500G
Operating Vibration	16G
Operating Temp.	0°C to +70°C

Ordering Information

64GB	SAM64GM25S
128GB	SAM28GM25S
256GB	SAM56GM25S

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SATA Flash Drive Pin Assignment

Power Segment

PIN	Signal Name	Description
P1	Not Used (3.3V)	N/A
P2	Not Used (3.3V)	N/A
P3	Not Used (3.3V Precharge)	
P4	GND	1st mate
P5	GND	2nd mate
P6	GND	
P7	5V Precharge	5V Power
P8	5V Precharge	5V Power
P9	5V Precharge	
P10	GND	
P11	Reserved	
P12	GND	1st mate
P13	Not Used (12V Precharge)	N/A
P14	Not Used (12V)	
P15	Not Used (12V)	

Signal Segment

PIN	Signal Name	Description
P1	GND	
P2	RxP	Differential Signal pair for Receive
P3	Rxn	
P4	GND	
P5	TxN	Differential Signal pair for Transmit
P6	TxP	
P7	GND	

Revision History

June 15, 2009 Rev-A Product Specification Released

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Mechanical Descriptions

