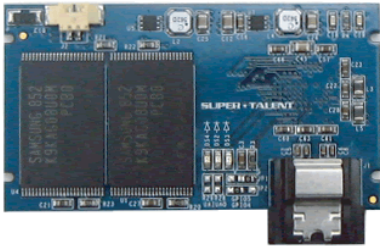


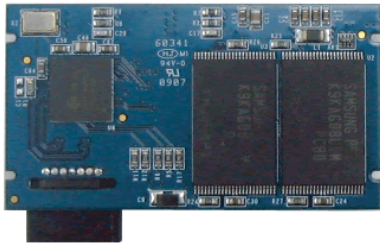
■ ■ 7-pin SATA FDM with Right Side Connector

SATA Flash Disk Module

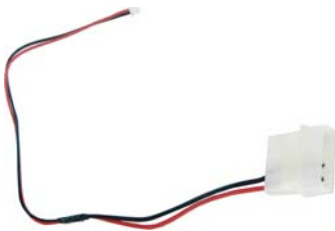
Front Side



Back Side



Power Cable



Super Talent's SATA Flash Disk Modules (FDM) provide high performance non-volatile storage in a compact form factor, with standard SATA interfaces, making them a perfect fit for embedded applications. This FDM mounts vertically, has a 7-pin SATA data interface, and ships with a 10" 2-wire power cable which connects at the top of the module through the micro-connector. This product features sequential read speeds up to 100MB/sec, and sequential write speeds up to 60MB/sec. The FDM has no moving parts and is capable of withstanding extreme environments. This FDM uses SLC flash to suffice applications with the greatest reliability and cycling requirements.

Target Markets Include

- Industrial PC
- Thin Clients
- Gaming Machines
- Embedded Computing

Endurance Specifications

Device	Read	Sequential Write Max (MB/Sec)
8GB SLC	Unlimited	43.8 yrs @ 50GB write-erase/day
16GB SLC		87.7 yrs @ 50GB write-erase/day

Performance Specifications

Device	Sequential Read Max (MB/Sec)	Sequential Write Max (MB/Sec)
SM8GA5R7R	100	60
SM16A6R7R	100	60

- Access Time: 0.1 ms

Ordering Information

Capacity	Flash	Part Number
8GB	SLC	SM8GA5R7R
16GB	SLC	SM16A6R7R

Physical Specifications

Form Factor	7-pin SATA FDM right connector
*Capacity	8GB – 16GB
Dimension	55.0mm x 33.0mm
Interface	Serial ATA 3.0Gb (SATA-II)
Flash	SLC
Power Supply	5.0Vcc ± 5%
Package	Assembled PCB

Reliability Specifications

MTBF	>1,000,000 hours
Data Integrity	10 years
Write-erase cycles	100,000 typical
Warranty	3 years
Error Correction	Built-in ECC/EDC Functionality
Wear Leveling Algorithm	Patent Pending

Environmental Specifications

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

■ ■ **7-pin SATA FDM with Right Side Connector**

SATA Flash Disk Module

SATA Flash Drive Pin Assignment

Signal Segment

PIN	Signal Name	Description
S1	GND	
S2	RxP	Differential Signal pair for Receive
S3	RxN	
S4	GND	
S5	TxN	Differential Signal pair for Transmit
S6	TxP	
S7	GND	

Revision History

April 6, 2009 Rev-A Preliminary Product Specification Released

■ ■ 7-pin SATA FDM with Right Side Connector

SATA Flash Disk Module

Mechanical Outline Drawing

