

## 2.5" SATA Solid State Drive

### General Description

The SATA Flash Drive FSD8/16/32/64/28GC25M series is a Serial ATA interface solid state drive (SSD) that features a flash disk controller chip and NAND type flash memory devices. This 2.5 inch form factor SSD series is available in 8GB, 16GB, 32GB, 64GB and 128GB capacities. The drive uses a 5-volt power supply and supports SATA data transfer. This SATA SSD Drive is geared specifically to military and industrial markets for use in such products as avionics, video on demand, ATM, factory automation machines, POS terminals, measuring products, ticket vending machines, parking systems and other industrial products that require high tolerance to environmental conditions.

### Features

- Capacity: 8GB to 128GB
- Form factor: 2.5 inch type (HDD compatible)
- SATA interface: Serial ATA command set compatible
- Power supply: Vcc=5.0V +/-5%
- Operating temperature:  Commercial: 0C to +70C
- Performance:
  - Sequential Read Rate:  65MB/sec (max)
  - Sequential Write Rate:  50MB/sec (max)
  - Sequential Read IOPS:  58,675 IOPS
  - Access Time:   0.1ms
- Shock: 1500G (operating)
- Vibration: 16G (operating)

### Specifications

- Compatibility: Full SATA hard disk compatible
- OS Support: All
- Package: Complete metal housing
- Reliability:
  - MTBF: >1,000,000 hours
  - Data reliability: Built-in EDC/ECC function
  - Patent pending Wear-leveling algorithms
- Endurance: 
  - Read: Unlimited
  - Write/Erase: >140 years @ 50GB write-erase /day



Designed and Manufactured in USA

### Ordering Information

Capacity	Model No.
8GB	FSD8GC25M
16GB	FSD16GC25M
32GB	FSD32GC25M
64GB	FSD64GC25M
128GB	FSD28GC25M

## 2.5" SATA Solid State Drive

### 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 Receive
S6	TxP	
S7	GND	

#### Power Segment

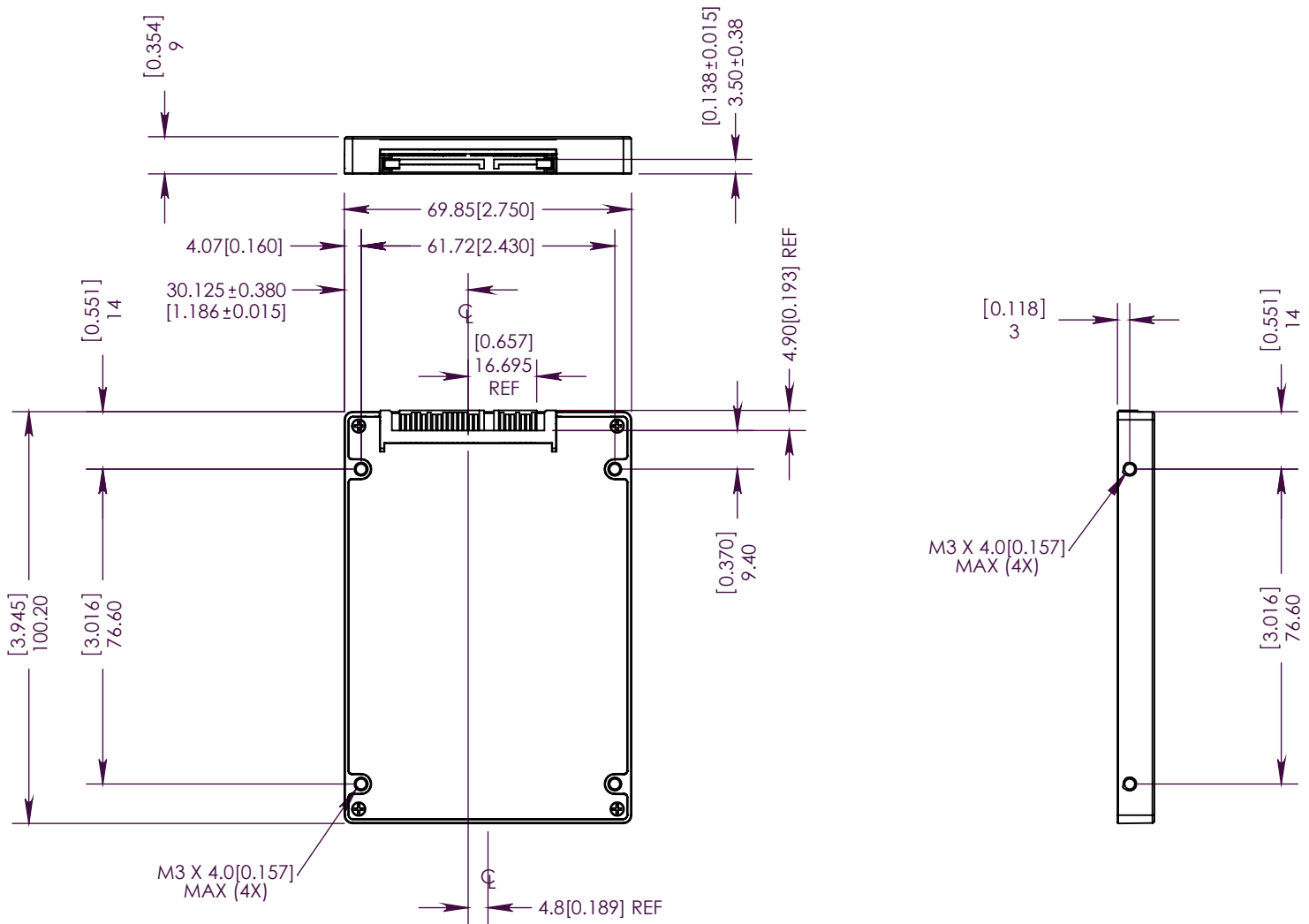
Pin	Signal Name	Description
P1	Not Used (3.3V)	N/A
P2	Not Used (3.3V)	N/A
P3	Not Used (3.3V Precharge)	
P4	GND	1st mate
P5	GND	2nd mate
P6	GND	
P7	5V Precharge	5V Power
P8	5V Precharge	5V Power
P9	5V Precharge	
P10	GND	
P11	Reserved	
P12	GND	1st mate
P13	Not Used (12V Precharge)	N/A
P14	Not Used (12V)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

#### Revision History

Aug 17, 2007 □ Rev-A Preliminary Product Specification Released  
March 21, 2008 Rev-B Revised Photo and Dimension Drawings

## 2.5" SATA Solid State Drive

### Mechanical Specifications (32GB and below capacities)



## 2.5" SATA Solid State Drive

### Mechanical Specifications (64GB and above capacities)

