

■ ■ DuraDrive AT Series

SATA Solid State Drive



Super Talent's DuraDrive AT SSD series represent the next generation in data storage. Thanks to a unique Flash disk control chip and premium NAND Flash memory, DuraDrive AT SSDs combine unprecedented vibration and shock tolerance with impressive speeds. Super Talent's patented Flash management techniques increase reliability and endurance, and through our software and hardware testing ensures quality of each DuraDrive AT SSD. The DuraDrive AT series is available in a wide range of form factors and capacities to fit any application.

The Dura Drive AT SSD is geared specifically for applications that require high tolerance to environmental conditions. Example industries include:

- Military / Aerospace
- Embedded / Industrial Systems
- Enterprise Computing
- Medical Industry
- Casino Gaming

Physical Specifications

Form Factor	1.8" / 2.5" / 3.5"	
*Capacities	1.8"	8GB – 64GB
	2.5"	8GB - 128GB
	3.5"	16GB – 256GB
Dimension	1.8"	69.9mm x 60mm x 9mm(12.8mm)
	2.5"	69.9mm x 100.2mm x 9mm(12.8mm)
	3.5"	101.6mm x 146.05mm x 14mm
SATA Interface	Serial ATA command set compatible	
Power Supply	5.0V _{cc} ± 5%	
Package	Complete metal housing	

Performance Specifications

Sequential Read Rate	65 MB/sec (max)
Sequential Write Rate	50 MB/sec (max)
Sequential Read IOPS	58,675 IOPS
Access Time	0.1 ms

Environmental Specifications

Shock (operating)	1500G	
Vibration (operating)	16G	
Altitude (operating)	120,000 ft	
Operating Temp.	Industrial	-40°C to +85°C
	Commercial	0°C to +70°C

Endurance Specifications

Read	Unlimited	
Write	8GB	43.8 yrs @ 50GB write-erase/day
	16GB	87.7 yrs @ 50GB write-erase/day
	32GB	175.3 yrs @ 50GB write-erase/day
	64GB	350.7 yrs @ 50GB write-erase/day
	128GB	701.4 yrs @ 50GB write-erase/day
	256GB	1,402 yrs @ 50GB write-erase/day

Reliability Specifications

MTBF	+1,000,000 hours
Data Reliability	Built-in EDC/ECC function
Data Integrity	10 years
Wear Leveling Algorithm	Patent Pending

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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	1 st mate
P5	GND	2 nd mate
P6	GND	
P7	5V Precharge	5V Power
P8	5V Precharge	5V Power
P9	5V Precharge	
P10	GND	
P11	Reserved	
P12	GND	1 st mate
P13	Not Used (12V Precharge)	N/A
P14	Not Used (12V)	
P15	Not Used (12V)	

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	

Ordering Information - 1.8" Form Factor

Capacity	Industrial Temp	Commercial Temp
8GB	FSD8GC18I	FSD8GC18M
16GB	FSD16GC18I	FSD16GC18M
32GB	FSD32GC18I	FSD32GC18M
64GB	FSD64GC18I	FSD64GC18M

Ordering Information - 2.5" Form Factor

Capacity	Industrial Temp	Commercial Temp
8GB	FSD8GC25I	-
16GB	FSD16GC25I	-
32GB	FSD32GC25I	FSD32GC25M
64GB	FSD64GC25I	FSD64GC25M
128GB	FSD28GC25I	FSD28GC25M

Ordering Information - 3.5" Form Factor

Capacity	Industrial Temp	Commercial Temp
8GB	FSD8GC35I	FSD8GC35M
16GB	FSD16GC35I	FSD16GC35M
32GB	FSD32GC35I	FSD32GC35M
64GB	FSD64GC35I	FSD64GC35M
128GB	FSD28GC35I	FSD28GC35M
256GB	FSD56GC35I	FSD56GC35M

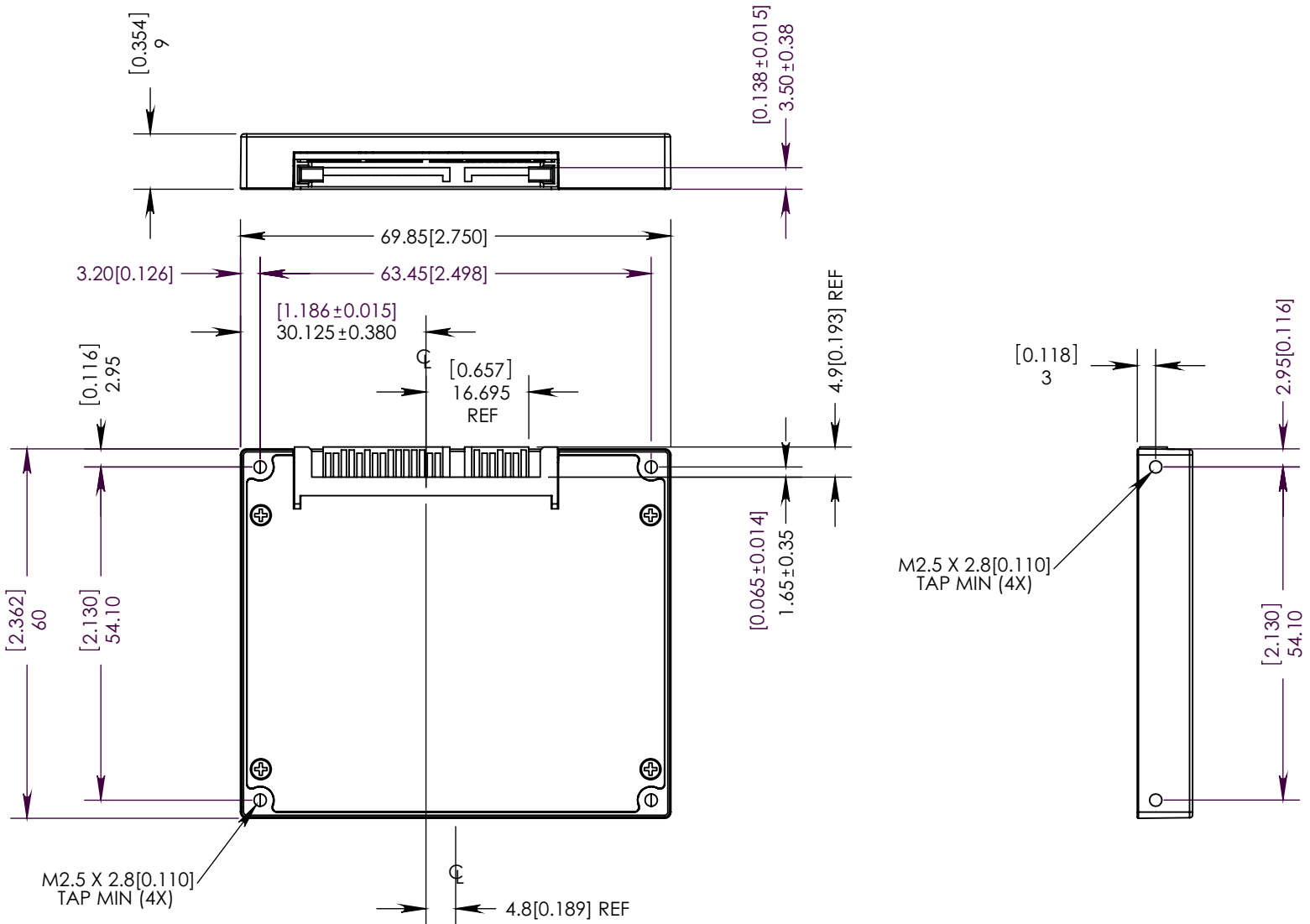
Revision History

April 2, 2008 Rev-A Preliminary Product Specification Released
 October 1, 2008 Rev-B Removed 8GB and 16GB capacities for 2.5" FF

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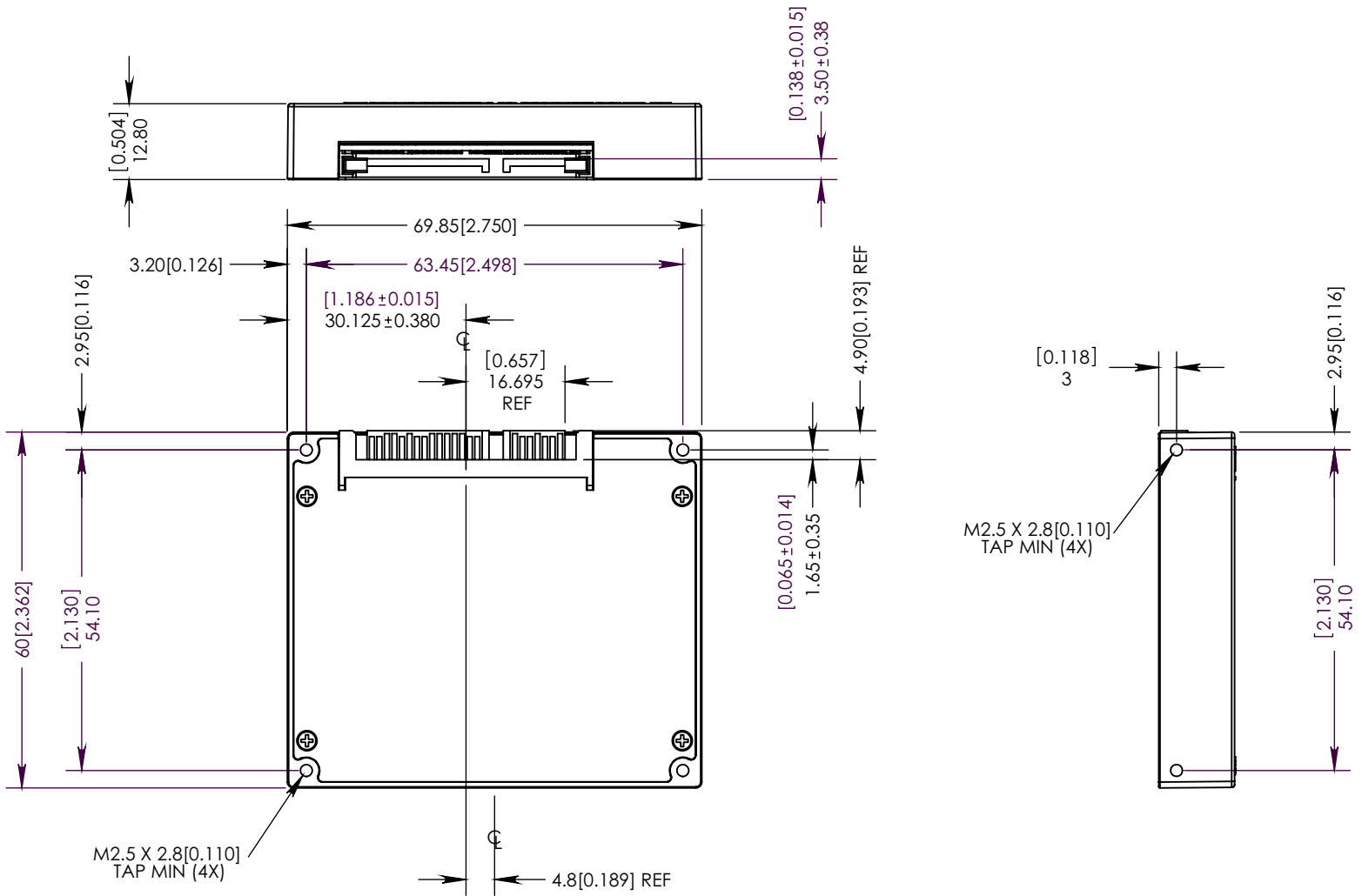
Mechanical Specifications for 1.8" DuraDrive AT SSD (low capacity)



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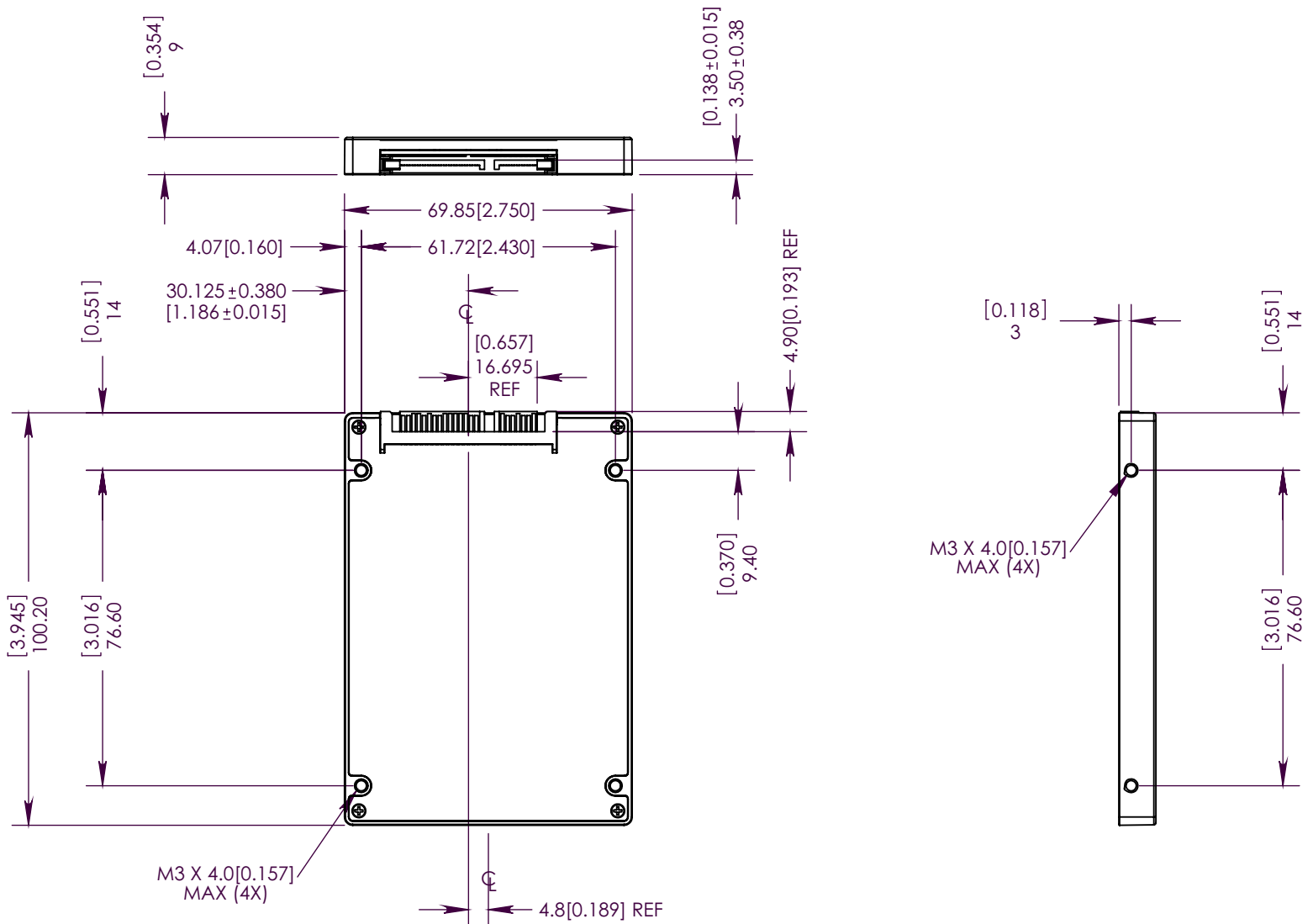
Mechanical Specifications for 1.8" DuraDrive AT SSD (high capacity)



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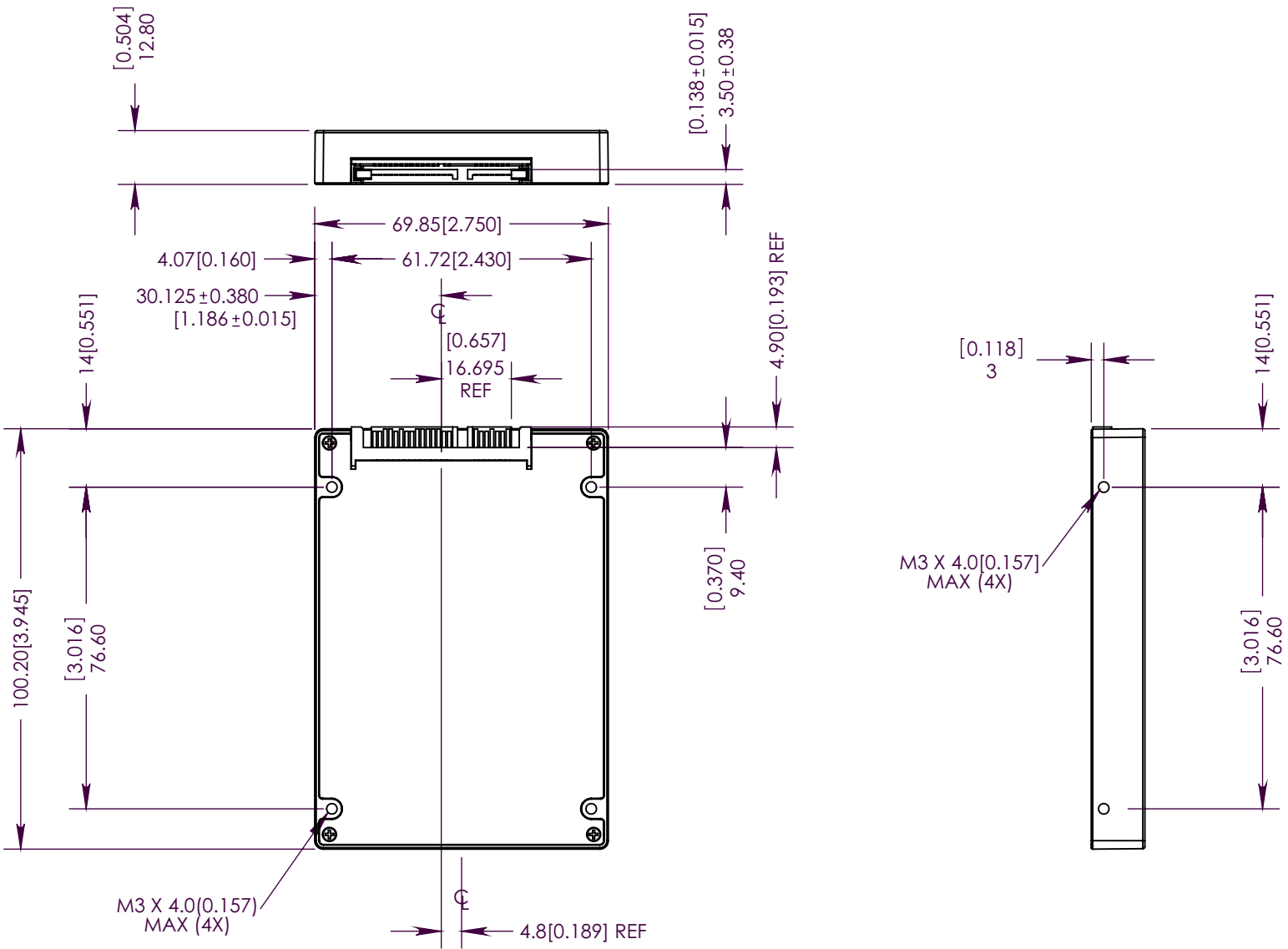
Mechanical Specifications for 2.5" DuraDrive AT SSD (low capacity)



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Mechanical Specifications for 2.5" DuraDrive AT SSD (high capacity)



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Mechanical Specifications for 3.5" DuraDrive AT SSD

