

# mSATA

## mSATA Solid State Drive

Viking Technology mSATA SSD is an embedded solid state drive solution that delivers outstanding performance in a standard form factor – and less than half the size of a 2.5” SSD. With its 6Gb SATA II interface and sustained performance of up to 260 MB/s, mSATA is ideal for telecommunications, embedded server & storage systems, field computing, gaming and many industrial applications.

mSATA SSD features intelligent write management techniques to optimize endurance, and offers densities of 25GB, 60GB and 120GB. mSATA's exclusive advanced controller features protection against catastrophic flash page and block failures, as well as data path CRC error detection for unparalleled data integrity.



**HALF THE SIZE OF A 2.5” HDD**  
mSATA SSD allows for superior performance in a fraction of the space, making it ideal for industrial, military, and embedded applications.



**SATA INTERFACE**  
Utilizing industry standard SATA interface, mSATA allows for interoperable connectivity to a wide majority of systems.

## FEATURES

- Advanced SMART command support
- SLC and MLC support
- Advanced ECC data integrity
- Built-in AES-256 encryption
- Ruggedized Military environment testing

## APPLICATIONS

- Telecommunications
- Industrial & Embedded
- ATCA, VME, PMC, AMC
- Gaming & Digital Signage
- Medical & Field Equipment
- Server & Storage
- Ruggedized Tablets

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## mSATA PRODUCT SPECIFICATIONS

### Capacity

SLC	16GB - 64GB (Raw)
MLC	32GB - 256GB (Raw)

### Performance

Sustained Read / Write	Up to 250MB/s
Sustained Random R/W	Up to 30,000 IOPS
Interface	Standard SATA 6Gb/3Gb

### Environmental

Shock	50g, 11ms, 3 shocks applied in each direction, 3 axes
Vibration	16.4g rms 10-2,000 Hz, 3 axes
Temperature	0°C to +70°C (commercial)
Test Standard	MIL-STD-810
Compliance	FCC, CE, TUV

### Dimensions

Form factor	JEDEC MO-297A
Dimensions (mm)	50.8 (L) x 29.85 (W) x .85 (D)
Interface	Standard SATA 6Gb

### Power

Voltage	3.3V + 10%
Active	<1.2 watts
Idle	<0.9 watts

### Reliability

ECC	Up to twelve 9-bit symbol per 512 byte sector
Bit Error Rate (BER)	<1 in 10 <sup>17</sup> bits read
Tiered Error Protection	Data recovery from page, block, and whole die failures
Endurance	5 years

For part numbers and capacity options, please email us at [sales@vikingtechnology.com](mailto:sales@vikingtechnology.com).

## Global Locations

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