



## Datasheet

# mSATA / mSATA mini SSD

## Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage (MSA520 not supported)
- Supports Intel® Smart Response Technology (ISRT) and DEVSLP (MSA370)
- SuperMLC technology of Transcend to make the MLC NAND act as high-speed SLC NAND (MSA510)
- Optional support for Write Protect and Hardware Purge security functions
- Supports AHCI mode, TRIM commands and NCQ

## Introduction

Supporting the next-generation SATA interface and built around a powerful controller, Transcend's mSATA and mSATA mini SSDs deliver blazing-fast performance and long-term reliability. The compact mSATA form factor is just one-eighth the size of a standard 2.5" SSD, making it perfect for use in space-constricted portable devices such as ultrabooks, tablet PCs, and slim servers. Fully compliant with mSATA specifications, Transcend's mSATA mini SSD delivers the full performance benefits of SSD technology while measuring just 26.8 x 29.85 x 3.85mm, ideal for use in small form factor devices such as industrial PCs, tablets, ultra-light notebooks, vehicle PCs, road surveillance recording devices, and other embedded storage applications.

# Specifications

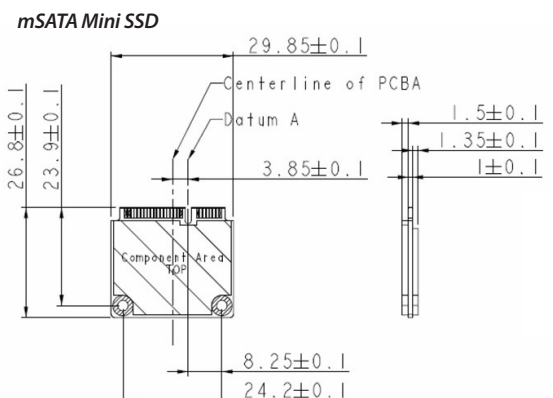
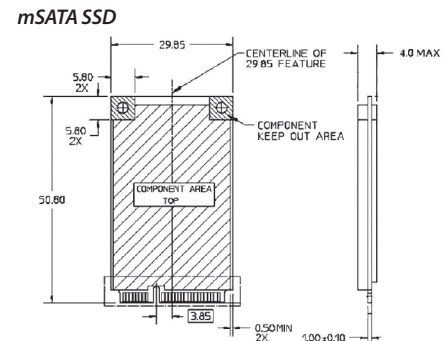
	MSA370I	MSA370	MSA510	MSM360	MSA570	MSA520	MSM610
Interface	SATA III 6Gb/s				SATA II 3Gb/s		
Flash Type	MLC		SUPER MLC	MLC	SLC		MLC
Connector	mSATA 52-pin						
Form Factor	MO-300						
Capacity	32~64GB	16GB~1TB	32~64GB	16~128GB	4~16GB	4GB	8~32GB
Sequential Read*	570 MB/s			510 MB/s	570 MB/s	97 MB/s	170 MB/s
Sequential Write*	470 MB/s			160 MB/s	470 MB/s	87 MB/s	40 MB/s
Operating Temperature	-40°C~85°C		0°C~70°C**				
Storage Temperature	-40°C~85°C						
Humidity	0%~95%						
Shock	1,500G, 0.5ms, 3 axis						
Vibration	3G, 5Hz to 800Hz (Operating) / 5G, 5Hz to 800Hz (Non-Operating)						
Operating Voltage	3.3V±5%						
Power Consumption	2.5W (active), 0.5W (idle)				1.4W (active), 0.65W (idle)		
Dimensions	MSA Series : 50.8 x 29.85 x 4.85(max)mm / MSM Series : 26.8 x 29.85 x 3.85(max)mm						
MTBF	1,000,000hrs / 1,500,000hrs (MSA570/MSA370/MSA370I)						
Warranty	3-year Limited						

\*Max. Performance  
\*\*optional: -40°C~85°C

## Ordering Information

<b>MSM610 MLC</b> (mSATA Mini SSD)	TS8GMSM610	8GB	<b>MSA510 SUPER MLC</b>	TS32GMSA510	32GB
	TS16GMSM610	16GB		TS64GMSA510	64GB
	TS32GMSM610	32GB		TS16GMSA370	16GB
<b>MSM360 MLC</b> (mSATA Mini SSD)	TS16GMSM360	16GB	<b>MSA370 Series MLC</b>	TS32GMSA370	32GB
	TS32GMSM360	32GB		TS32GMSA370I	32GB
	TS64GMSM360	64GB		TS64GMSA370	64GB
<b>MSA570 SLC</b>	TS128GMSM360	128GB	TS64GMSA370I	64GB	
	TS4GMSA570	4GB	TS128GMSA370	128GB	
	TS8GMSA570	8GB	TS256GMSA370	256GB	
<b>MSA520 SLC</b>	TS16GMSA570	16GB	TS512GMSA370	512GB	
	TS4GMSA520	4GB	TS1TMSA370	1TB	

## Drawing



## Contact information

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