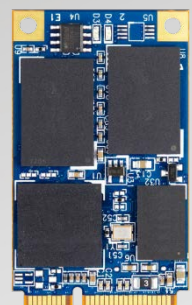


Apacer

The Most **Reliable**  
Storage For Industries



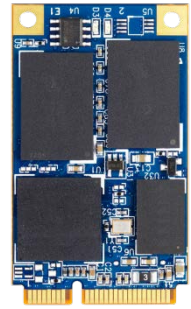
**mSATA A1-M**



## mSATA A1-M

### Overview

Apacer's mSATA A1-M modular SSD is only one-third the size of credit card. With dimensions of 50.8 x 29.8mm and the product thickness being only that of a single PCB panel, it can streamline the space on the motherboard and free itself from the limit of the dimensions of the traditional mechanical hard-disk foot-print. In terms of product performance, the mSATA A1-M delivers excellent numbers. It uses high-speed ONFi 2.2 DDR NAND Flash memory and the cache memory of plug-in DDRII, realizing maximum sequential read/write speeds of 475/430 MB/sec and IOPs of up to 65K, providing remarkable performance.



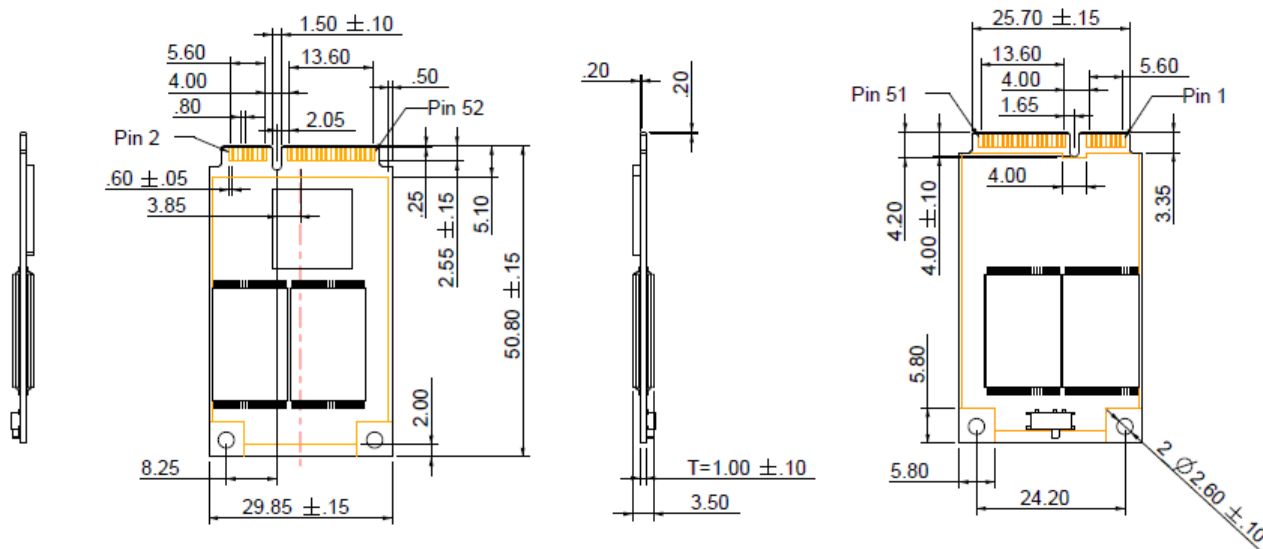
### Feature

- Mini PCIe form factor(50.8x29.8mm)
- Compliant with JEDEC MO-300 standard
- High IOPs (4K Random Write): 65K
- Global wear-leveling and Block Management
- Built-in ATA Secure Erase and S.M.A.R.T. Functions
- TRIM command support
- Support Device Sleep (DEVSLP)

## Specifications

<b>Model</b>	mSATA A1-M
<b>Interface</b>	SATA 3.0 (6Gb/s)
<b>Connector</b>	52-pin mSATA
<b>Form Factor</b>	MO-300 (Mini PCIe)
<b>NAND Flash Type</b>	MLC
<b>Capacity</b>	32GB~256GB
<b>External DRAM</b>	Yes
<b>Sustained Read Performance (MB/sec)</b>	Up to 475
<b>Sustained Write Performance (MB/sec)</b>	Up to 430
<b>ECC Engine</b>	Built-in 40-bit per 1K bytes BCH ECC
<b>IOPs (4K Random Write)</b>	Up to 83K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-40~ + 85
<b>Storage Temperature ( °C )</b>	-40~ + 100
<b>Thermal sensor</b>	Optional
<b>Shock</b>	Operation: 50G, 11ms Non-operation: 1500G, 0.5ms
<b>Vibration</b>	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 15 G, 10 ~ 2000 Hz/sine
<b>Operating Voltage</b>	3.3V+-5%
<b>Power Consumption</b>	Standard Type: Active mode: 410 mA & Idle mode: 195 mA High-speed Type: Active mode: 890 mA & Idle mode: 160 mA
<b>Dimension (L x W x H )</b>	50.80 x 29.85 x 2.4 mm
<b>MTBF (hours)</b>	>1,000,000

## Mechanical Specification



Unit: mm

## Ordering Info

Operation Temp.	8GB	16GB	32GB	64GB	128GB	256GB
Standard	APSDM032GM4 AN-6BTM	APSDM064GM4 AN-6BTM	APSDM032GM4 AN-6BTM	APSDM064GM9 AN-6BTM	APSDM128GM9 AN-6BTM	APSDM256GM9 AN-6BTM
Extended	APSDM008GM4 AN-6BTMW	APSDM016GM4 AN-6BTMW	APSDM032GM4 AN-6BTMW	APSDM064GM9 AN-6BTMW	APSDM128GM9 AN-6BTMW	-

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