

Apacer

The Most **Reliable**
Storage For Industries



SM210-M280



SM210-M280

Overview

SM210-M280 is the next generation modularized Solid State Drive (SSD) with the shape of M.2 form factor, aimed to be the more suitable for laptop and server with standard width at only 22.00 mm. SM210-M280 appears in M.2 2280 mechanical dimensions and is believed to be the leading add-in storage solution for future host computing systems. The M.2 SSD is designed with SATA-based connector pinouts, providing full compliance with the latest SATA Revision 3.2 interface specifications. Aside from SATA compliance, SM210-M280 delivers exceptional performance and power efficiency. Regarding reliability, SM210-M280 is built with a powerful SATA controller that supports on-the-module ECC as well as efficient wear leveling scheme. In terms of power efficiency, SM210-M280 is compliant with SATA 6.0 Gbps interface standard so that it can operate on SATA power management modes, which greatly save on power consumption.



Feature

- SATA 3 (6Gb/s) interface
- M.2 (NGFF) Connector
- Global wear-leveling and block management
- Built-in ATA secure erase and S.M.A.R.T. functions
- Single side design

Specifications

Model	SM210-M280
Interface	SATA 3.0 (6Gb/s)
Connector	M.2 B & M key
Form Factor	2280
NAND Flash Type	MLC
Capacity	32GB~256GB
External DRAM	Yes
Sustained Read Performance (MB/sec)	Up to 510
Sustained Write Performance (MB/sec)	Up to 475
ECC Engine	Built-in up to 40-bit per 1K bytes BCH ECC
IOPs (4K Random Write)	45K
Standard Operating Temperature (°C)	0 ~ + 70
Extended Operating Temperature (°C)	-40 ~ + 85
Storage Temperature (°C)	-40 ~ + 100
Thermal Sensor	Optional
Shock	Operation: 50G, 11ms Non-operation: 1500G, 0.5ms
Vibration	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 15G, 10 ~ 2000 Hz/sine
Operating Voltage	3.3 V ± 5%
Power Consumption	Active mode: 745 mA & Idle mode: 75 mA
Dimension (L x W x H)	Single side: 80.00 x 22.00 x 2.23 (mm) Double side: 80.00 x 22.00 x 3.58 (mm)
MTBF (hours)	>1,000,000

