alhua
TECHNOLOGY

DHI-SSD-C800N
M.2 SATA SSD

- Adopts high-quality wafer level chip
- Supports SATA III protocol with transmission speed up to 550 MB/s
- View information through S.M.A.R.T
- Provides better read and write performance with TRIM and NCQ
- Low power consumption management
- Large TBW

System Overview

As a new generation of SATA M.2 SSD product launched by Dahua, DHI-SSD-C800N series adopts high-quality 3D wafer level chip and high-performance controller. It is consumer-grade solid state drive designed for desktops and notebooks supporting SATA M.2 port. The product can process data efficiently and store data stably. In multi-tasking, it can ensure high speed and stability.

Scene

The product is applicable to desktops, notebooks, all-in-one computers that support SATA M.2 port.
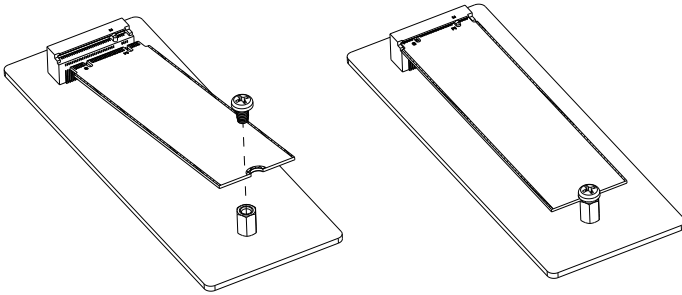
Technical Specification

Product Model	DHI-SSD-C800N256G	DHI-SSD-C800N512G	DHI-SSD-C800N1TB
Capacity[1]	256 GB	512 GB	1 TB
Form Factor	SATA M.2 2280		
Port	6 Gb/s SATA		
Net Weight	Max. 7 g (0.02 lb)		
Product Dimensions[2]	80.00 mm × 22.00 mm × 2.20 mm (3.15" × 0.87" × 0.09")		
Packaging Dimensions	140.50 mm × 105.50 mm × 15.50 mm (5.53" × 4.15" × 0.61")		
Memory Component	3D TLC	3D TLC	3D TLC
Power Consumption[3]	1.60W (max.) 0.48W (idle)	1.65W (max.) 0.54W (idle)	1.70W (max.) 0.52W (idle)
S.M.A.R.T	Yes		
TRIM	Yes		
Garbage Collection	Yes		
Sequential Read[3]	Up to 550 MB/s	Up to 550 MB/s	Up to 550 MB/s
Sequential Write[3]	Up to 500 MB/s	Up to 500 MB/s	Up to 500 MB/s

4K Random Read[3]	Up to 54000	Up to 64000	Up to 76000
4K Random Write[3]	Up to 79000	Up to 79000	Up to 79000
MTBF	1,500,000 hours	1,500,000 hours	1,500,000 hours
Operating Temperature	0°C to +70°C (+32°F to +158°F)		
Storage Temperature	-40°C to +85°C (-40°F to +185°F)		
Operating Humidity	5%–95% (non-condensing)		
Vibration Resistance	10–1000Hz, 2.78G		
Shock Resistance	1500G/0.5 ms (half sine wave)		
TBW	100 TB	200 TB	400 TB
Warranty[4]	3-year limited warranty		
Reference Information	1. Capacity calculation: 1 GB = 1 billion bytes (IDEMA). Actual available capacity might be reduced (due to formatting, partition, operating system applications, or other necessary usage). 2. The dimensions are after installing cooling plate. 3. System configuration of performance test: Intel Z390 Chipset, Intel Core i9-9900KF@3.6GHz, 16GB DDR4,; operating system-Windows 10 x64; testing tool-CrystalDiskMark 6.0.0. 4. Warranty period or maximum write amount (TBW), whichever comes first. 5. High performance SLC cache has been enabled.		

Ordering Information

Type	Model	Description
C800 Series	DHI-SSD-C800N256G	M.2 SATA Solid State Drive DHI-SSD-C800N256G
	DHI-SSD-C800N512G	M.2 SATA Solid State Drive DHI-SSD-C800N512G
	DHI-SSD-C800N1TB	M.2 SATA Solid State Drive DHI-SSD-C800N1TB

Installation

Dimensions (mm[inch])