DHI-SSD-C970

NVMe M.2 PCIe Gen4x4 Solid State Drive

· High-quality 3D NAND Flash memory chip.

· PCIe Gen4.0x4. Data transmission speed up to 5035 MB/s.

· NVMe1.4 protocol.

· 4K LDPC.

· Reliable and fast end-to-end data.

System Overview

As a new generation of NVMe SSD high-performance product, Dahua C970 series adopts high-performance PCIe Gen4.0 controller, and original high-quality 3D NAND Flash memory chip. It has a 4-channel high-speed data transmission system, and data transmission speed up to 5035 MB/s. Based on the advanced hybrid intelligent temperature control algorithm, this product with stable controller and flash memory chip ensures high efficiency for a long time even while taking a heavy workload on the read/write state.

Scene

Designed for tech-savvy high-end users, gamers and professionals, Dahua C970 series NVMe M.2 SSD is suitable for use in environments with heavy workloads, such as with video creating and editing.
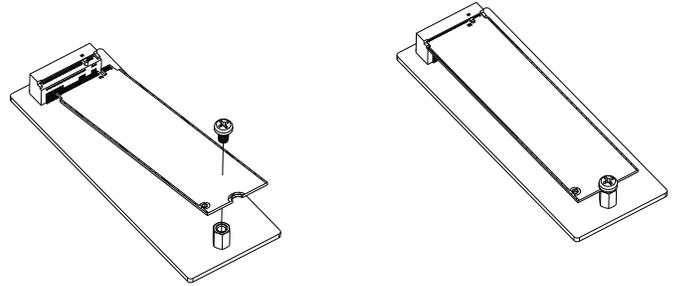
Technical Specification

Technical

Product Model	DHI-SSD-C970N256G	DHI-SSD-C970N512G	DHI-SSD-C970N1TB	DHI-SSD-C970N2TB
Capacity[1]	256 GB	512 GB	1 TB	2 TB
Form Factor	M.2 2280			
Port	PCIe Gen 4.0 × 4			
Net Weight	Max. 8 g (0.02 lb)			
Product Dimensions	80.00 mm × 22.00 mm × 2.25 mm (3.15" × 0.87" × 0.09")			
Packaging Dimensions	130 mm × 104 mm × 17 mm (5.12" × 4.09" × 0.67")			
Memory Component	3D NAND			
Power Consumption[2]	3250 mW (max) 1450 mW (idle)	3850 mW (max) 1450 mW (idle)	4650 mW (max) 1500 mW (idle)	4660 mW (max) 1500 mW (idle)

S.M.A.R.T	Yes			
TRIM	Yes			
Garbage Collection	Yes			
Sequential Read[2]	Up to 4,600 MB/s	Up to 5,035 MB/s	Up to 4,450 MB/s	Up to 4,800 MB/s
Sequential Write[2]	Up to 1,400 MB/s	Up to 2,600 MB/s	Up to 4,280 MB/s	Up to 4,400 MB/s
4K Random Read[2]	Up to 205000	Up to 391400	Up to 677800	Up to 225000
4K Random Write[2]	Up to 310000	Up to 548300	Up to 763600	Up to 180200
MTBF	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	10–200Hz, 0.5G			
Shock Resistance	1500G&0.5 ms (half sine wave)			
TBW	500 TB	1000 TB	2000 TB	4000 TB
Warranty[3]	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 speed data comes from Dahua Memory Lab. System confguraton of performance test: Chip-AMD R9 5950X 16-Core Processor 3.40GHz, ASRock B550M, 8G-DDR4, operatng systemWindows 10 x64, testng tool-CrystalDiskMark 8.0.4. 3. Warranty period or maximum write amount (TBW), whichever comes first. 4. High performance SLC cache has been enabled. *Above data based on internal testing of Zhejiang Huayixin Technology Co., Ltd Laboratory.			

Ordering Information

Type	Model	Description
C970 Series	DHI-SSD-C970N256G	Dahua M.2 2280 PCIe Gen4x4 Dramless SSD DHI-SSD-C970N256G
	DHI-SSD-C970N512G	Dahua M.2 2280 PCIe Gen4x4 Dramless SSD DHI-SSD-C970N512G
	DHI-SSD-C970N1TB	Dahua M.2 2280 PCIe Gen4x4 Dramless SSD DHI-SSD-C970N1TB
	DHI-SSD-C970N2TB	Dahua M.2 2280 PCIe Gen4x4 Dramless SSD DHI-SSD-C970N2TB

Installation

Dimensions (mm[inch])