

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 5000 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 IG5220, 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 5000 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

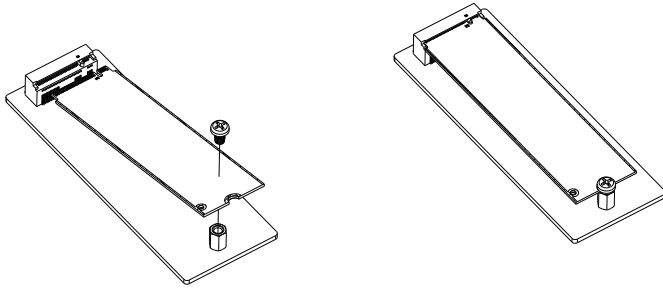
Product Model	DHI-SSD-C970N256G	DHI-SSD-C970N512G	DHI-SSD-C970N1TB
Capacity ¹	256 GB	512 GB	1 TB
Form Factor	M.2 2280		
Port	PCIe Gen 4.0 × 4		
Net Weight	Max. 8 g (0.02 lb)		
Product Dimensions	80.00 mm × 22.00 mm × 2.25 mm (3.15" × 0.87" × 0.09")		
Packaging Dimensions	140.5 mm × 105.5 mm × 15.50 mm (5.53" × 4.15" × 0.61")		
Memory Component	3D NAND		
Power Consumption	3250 mW (max) 1450 mW (idle)	3850 mW (max) 1450 mW (idle)	4650 mW (max) 1500 mW (idle)
S.M.A.R.T	Yes	Yes	Yes
TRIM	Yes	Yes	Yes
Garbage Collection	Yes	Yes	Yes

Sequential Read ²	Up to 4,600 MB/s	Up to 5,000 MB/s	Up to 5,000 MB/s
Sequential Write ²	Up to 1,400MB/s	Up to 2,800 MB/s	Up to 4,700 MB/s
4K Random Read ²	Up to 205,000	Up to 395,000	Up to 495,000
4K Random Write ²	Up to 310,000	Up to 620,000	Up to 750,000
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	7-800 Hz, 3.08 G		
Shock Resistance	1500G&0.5 ms (half sine wave)		
TBW	500 TB	1000 TB	2000 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 configuration of performance test: Chip-AMD R9 5950X 16-Core Processor 3.40GHz, ASRock B550M, 8G-DDR4, operating system-Windows 10 x64, testing tool-CrystalDiskMark 6.0.0. 3. Warranty period or maximum write amount (TBW), whichever comes first. 4. High performance SLC cache has been enabled.		

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 DH-SSD-C970N1TB

Installation



Dimensions (mm[inch])

