MINERVA

PCIe Gen4 OCulink 4i to U.2(SFF-8639) cable, Length: 100cm

Performance & Burn In Test Rev. 1. 0

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PCIe 4.0 SFF-8611 4i to U.2 SFF-8639 100cm cable

1. Overview

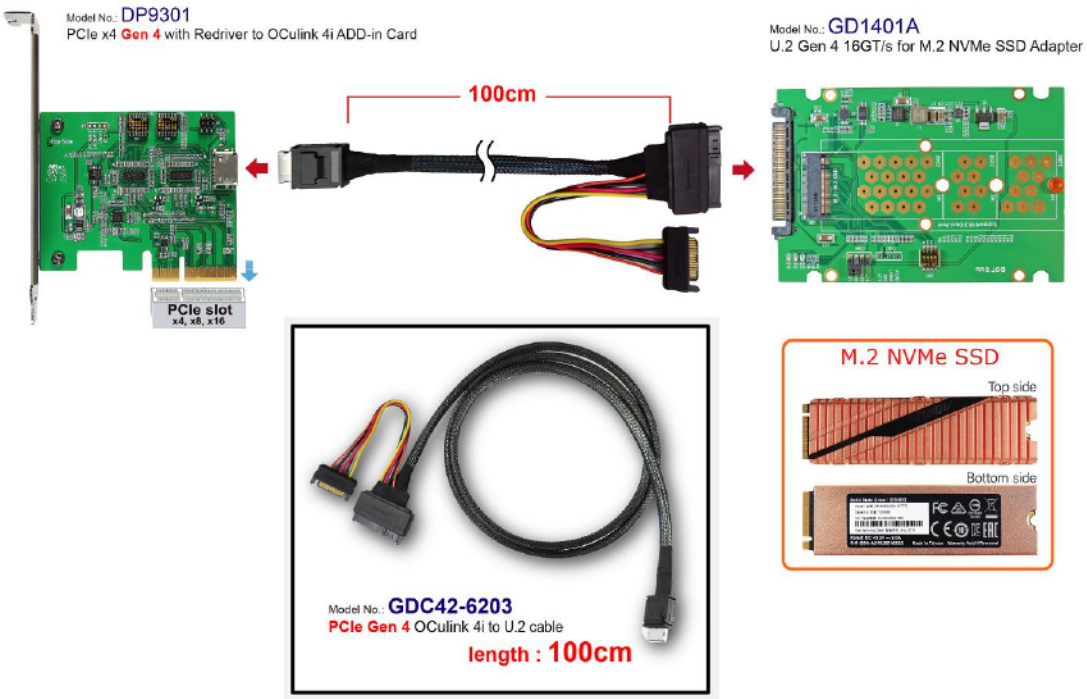
This cable supports PCIe Gen 4, 16GT/s high-speed signals transmission. Its length is **100cm**.

2. Tools and Results of Performance Measurement

2.1 Test Platform

M/B :	GIGABYTE **X570 AORUS MASTER**
CPU :	AMD **Ryzen 7, 3700X 8-Core**
Memory :	Kingston **KVR26N19D8/16,** DDR4-2666MHz, **32GB**(16GB DIMM*2)
ATX Power :	COOLER MASTER G750M, **750W ATX**, 12V V2.2 Power Supply
AIC:	PD9301 PCIe x4 Gen 4 with Redriver to OCulink 4i ADD-in Card
Adapter:	GD1401A U.2 PCIe Gen 4 to M.2 NVMe SSD 2.5" Adapter
Cable:	SFF-8611 to U.2(SFF-8639) PCIe Gen 4 Cable
OS :	Microsoft **Windows 10 64bit OS**

2.2 Test target: **OCulink 4i to U.2 100cm cable**+GD1401A Adapter & **Gigabyte 1TB NVMe SSD**



2.3 Install Hardware

Inserts M.2 NVMe SSD into GD1401A adapter converter's M.2 M-key connector, and then with coppers, and screws to fix SSDs. (Please refer to the Installation Notes). Connects GD1401A converter to PD9301 AIC(PCIe x4 Gen4 with Redriver to OCulink 4i Add-in Card), Using SFF-8611 4i to U.2(SFF-8639) 100cm cable and plugs PD9301 into GIGABYTE **X570 AORUS MASTER**

2.4 BIOS & Windows 10 OS environment setup

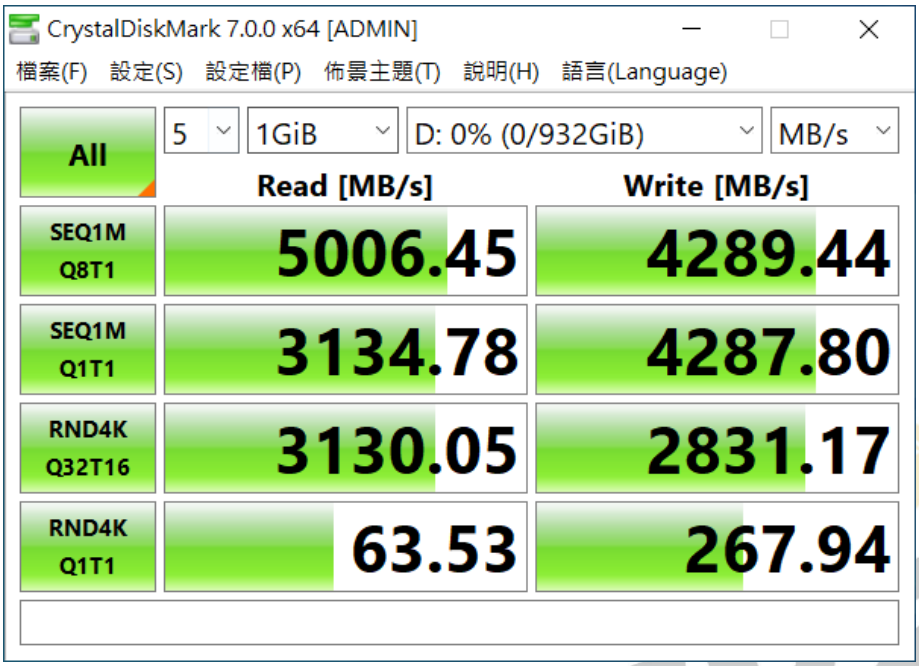
2.4.1 Primary SATA SSD installed Windows 10 OS.

2.4.2 M.2 NVMe SSD, formatted to NTFS Mode. Don't install any program.

2.5 CrystalDiskMark 7.0 x64 performance test

※ Benchmark (Sequential Read & Write / default = 1MB)

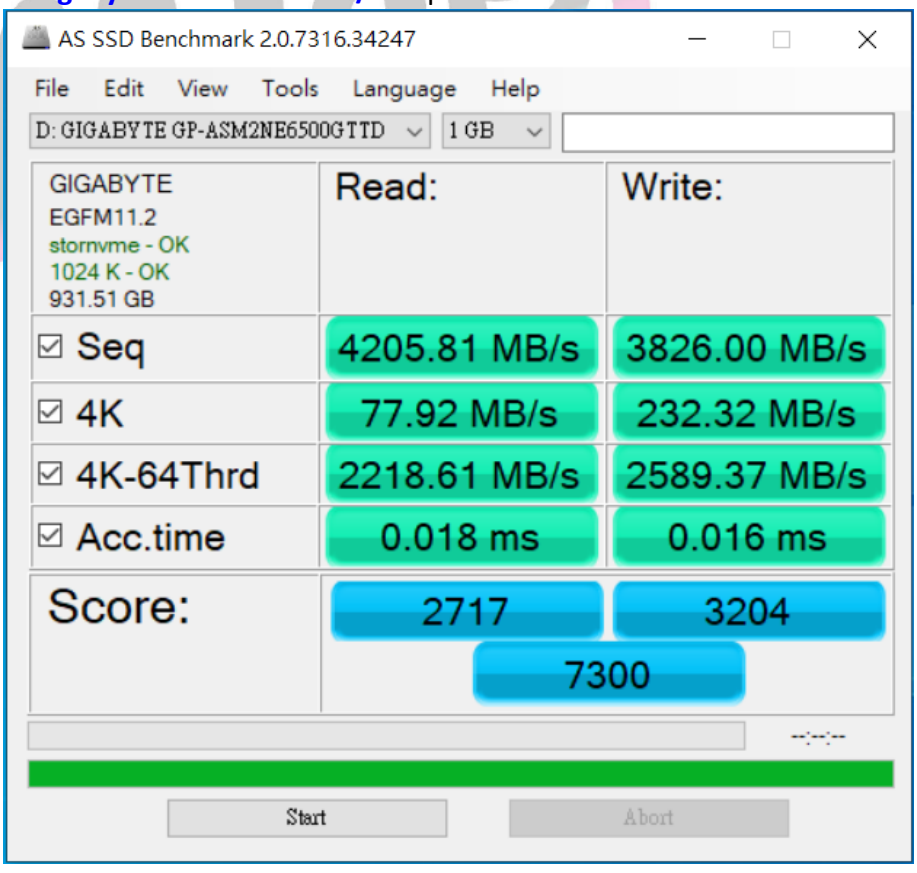
2.5.1 **Gigabyte M.2 NVMe SSD/1TB** performance as below:



2.6 AS SSD Benchmark 2.0.7 performance test

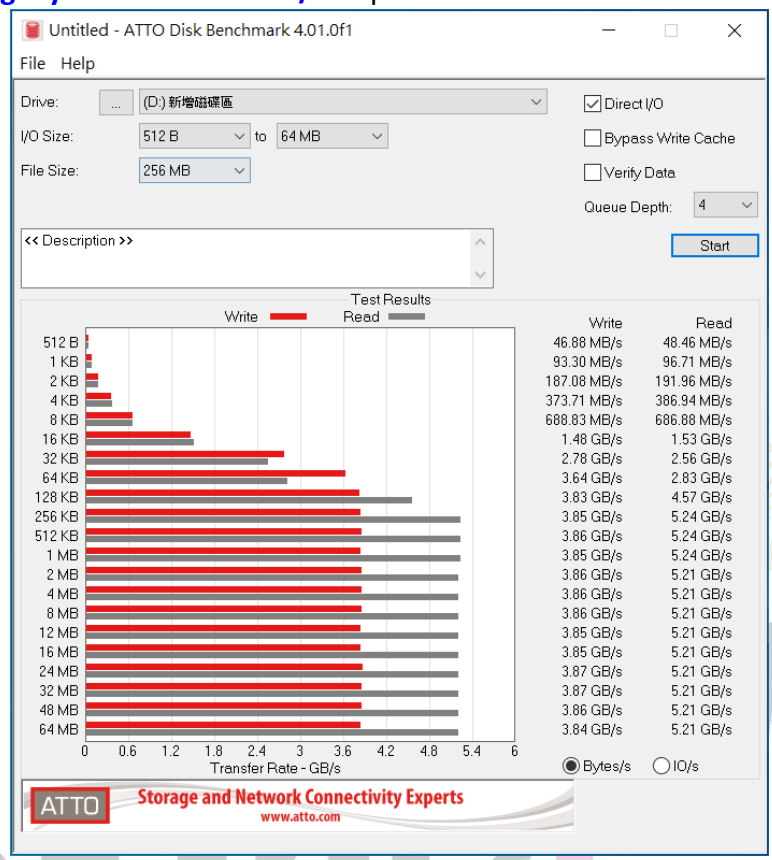
※ Benchmark (Read & Write by MB/s, default block size = 16MB)

2.6.1 **Gigabyte M.2 NVMe SSD/1TB** performance as below:



2.7 ATTO Disk Benchamrk 4.01 performance test

2.7.1 **Gigabyte M.2 NVMe SSD/1TB** performance as below:



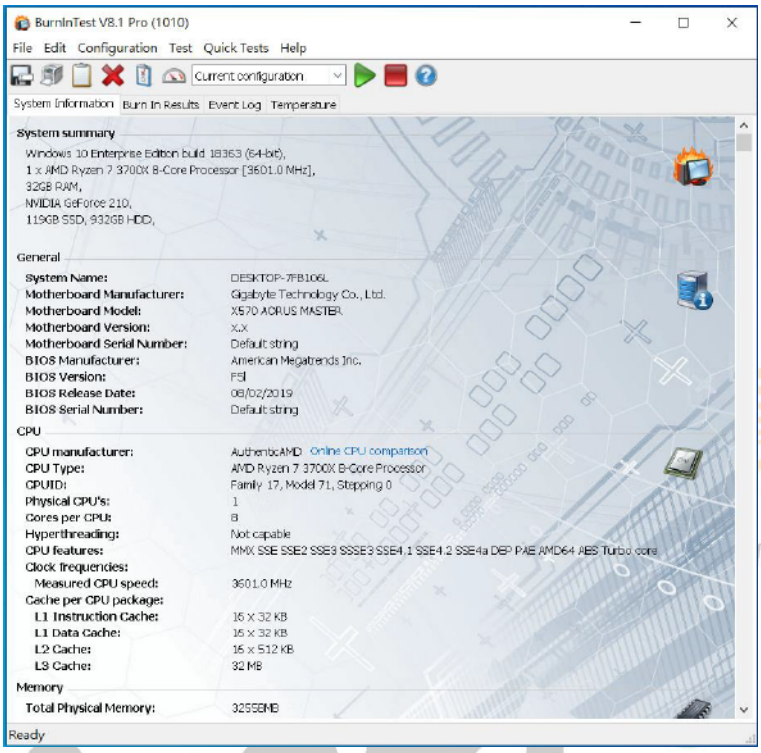
2.8 AnvilBenchmark_V110_B337

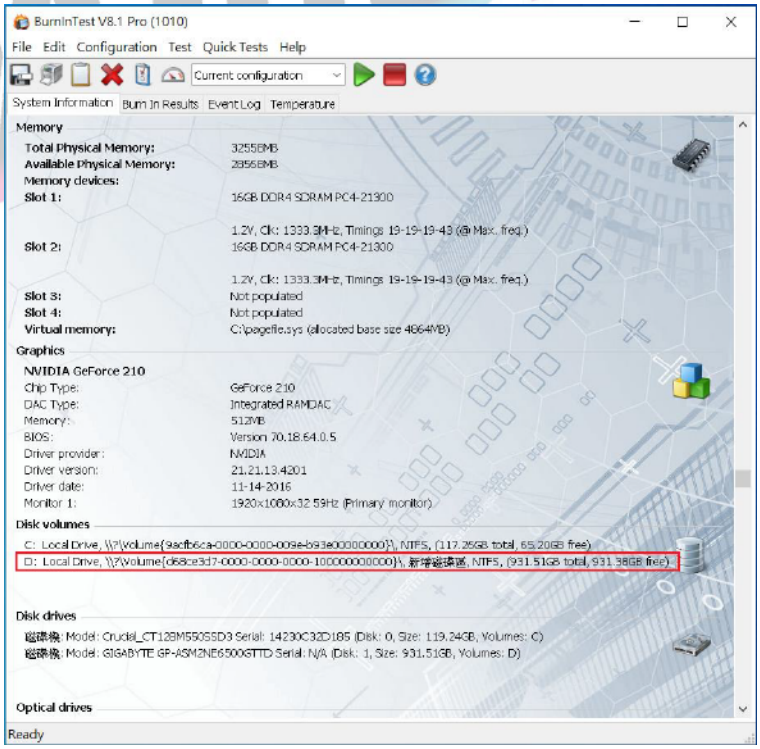
2.8.1 **Gigabyte M.2 NVMe SSD/1TB** performance as below:

3. Burn In Tests and Results

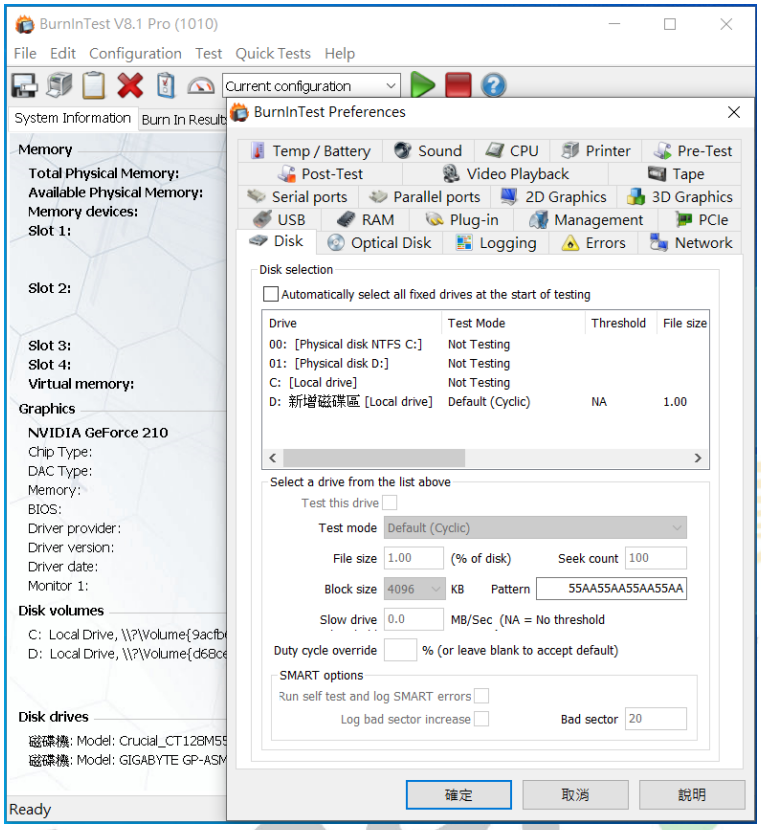
3.1 BurnInTest v8.1 Pro for Gigabyte M.2 NVMe SSD/1TB

3.1.1 System Information as below:

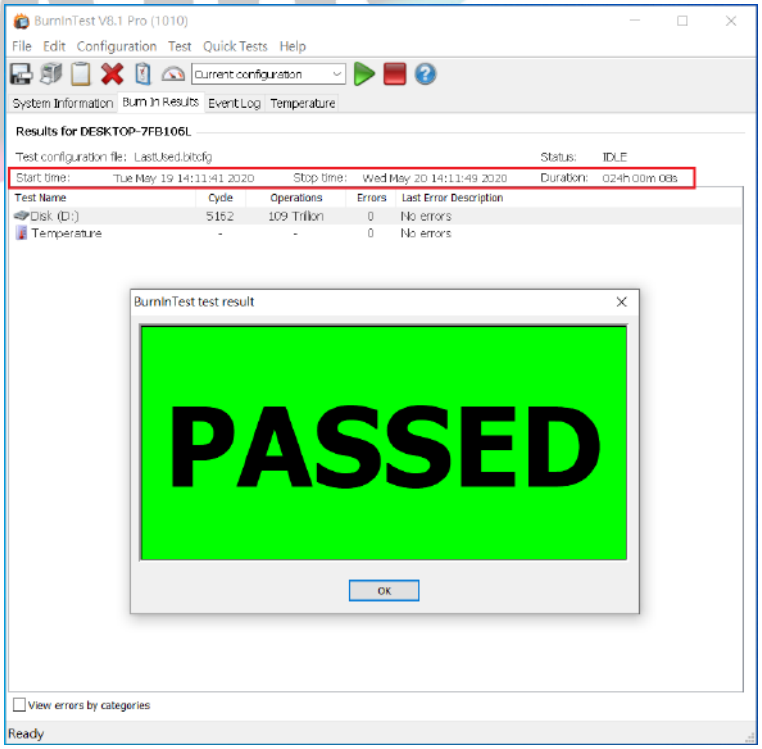




3.1.2 Disk test mode(10 ways cycle test)



3.1.3 24-hour Burn-in test PASSED



4. Summary

4.1 M.2 NVMe SSD is PCIe Gen 4, 16GT/s , 4 Lanes Interface, I/O speed, max. to 64Gbps.

4.2 GD1401A adapter I/O performance is based on M.2 NVMe SSD.

4.3 GDC42-6203 100cm Cable performance is based on M.2 NVMe SSD.