



MINERVA

PCIe Gen4 OCulink 4i to OCulink 4i cable, Length: 100cm

Performance & Burn In Test Rev. 1. 0

Table of Contents

1. Overview

2. Performance Measurement Tools and Results

2.1 Test Platform

2.2 GD3404A, GD1401A Adapter, M.2 NVMe SSD and OCulink 4i cable

2.3 Install Hardware

2.4 BIOS & Windows 10 OS environment setup

2.5 CrystalDiskMark 7.0 x64 performance test

2.6 AS SSD Benchmark 2.0.7 performance test

2.7 ATTO Disk Benchamrk 4.0.1 performance test

2.8 AnvilBenchmark_V110_B337 Benchmark performance test

3. Burn In Tests and Results

3.1 BurnInTest v8.1 Pro burn in test

4. Summary

PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

1. Overview

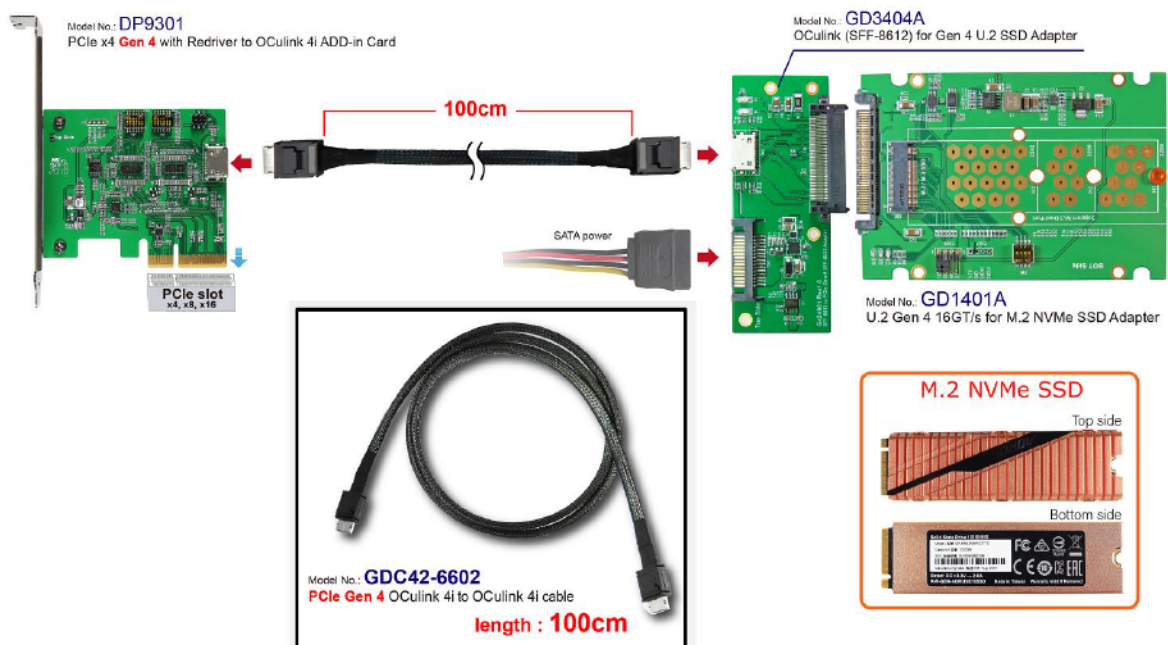
This cable supports PCIe Gen 4, 16GT/s high-speed signals transmission. Its length is 100cm.

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: DP9301 PCIe x4 to OCulink 4i Add-In Card
Adapter: GD3404A SFF-8612 4i to U.2 Storage Adapter
Adapter: GD1401A U.2 to M.2 Storage Adapter
Cable: SFF-8611 4i to SFF-8611 4i Cable, **100cm**
OS : Microsoft **Windows 10 64bit OS**

2.2 Test target: GD3404A adapter, GD1401A adapte and **M.2 NVMe 1TB** SSD



PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

2.3 Install Hardware

Insert GD1401A adapter(with M.2 NVMe SSD) into GD3404A converter's U.2 female connector. Connect GD3404A to DP9301 AIC(PCIe x4 Gen 4 to OCulink) using SFF-8611 to SFF-8611 cable, plugs DP9301 AIC into **PCIe slot of 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.

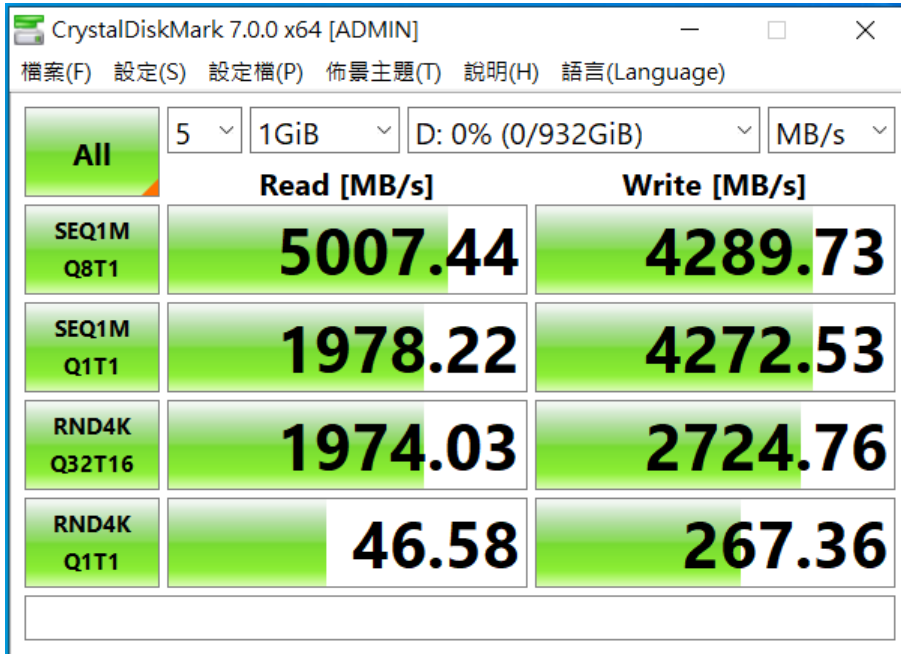


PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

2.5 CrystalDiskMark 7.0.0 x64 performance test

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

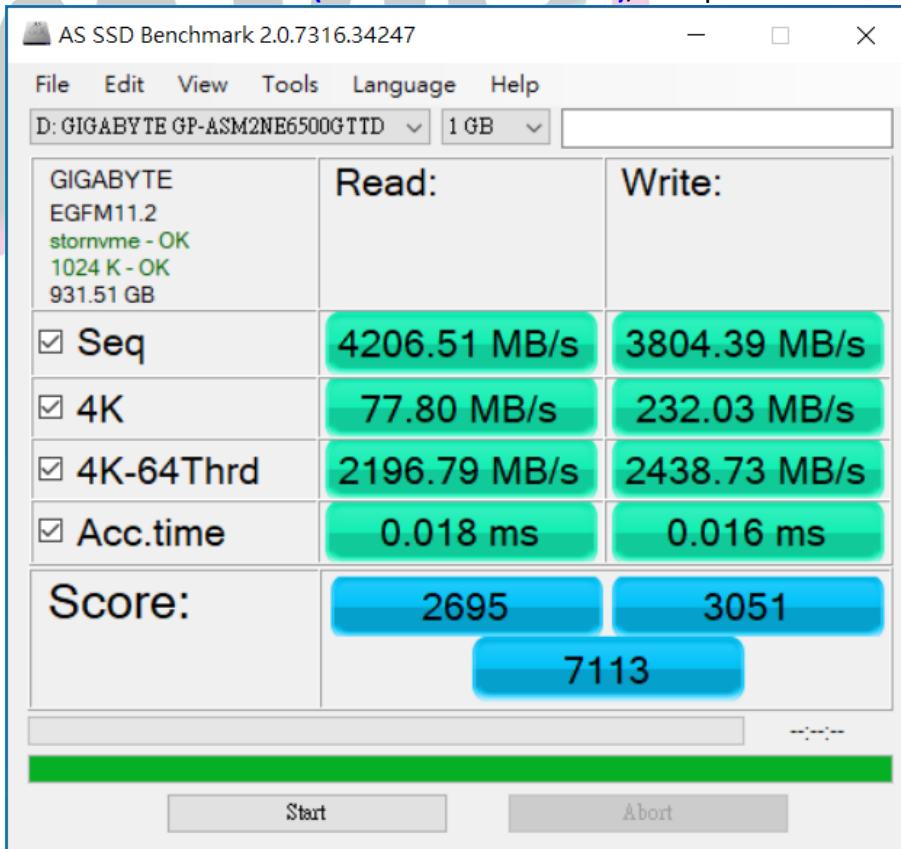
2.5.1 GIGABYTE M.2 Gen4(GP-ASM2NE6100TTD)/ 1TB performance as below:



2.6 AS SSD Benchmark 2.0.7 performance test

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

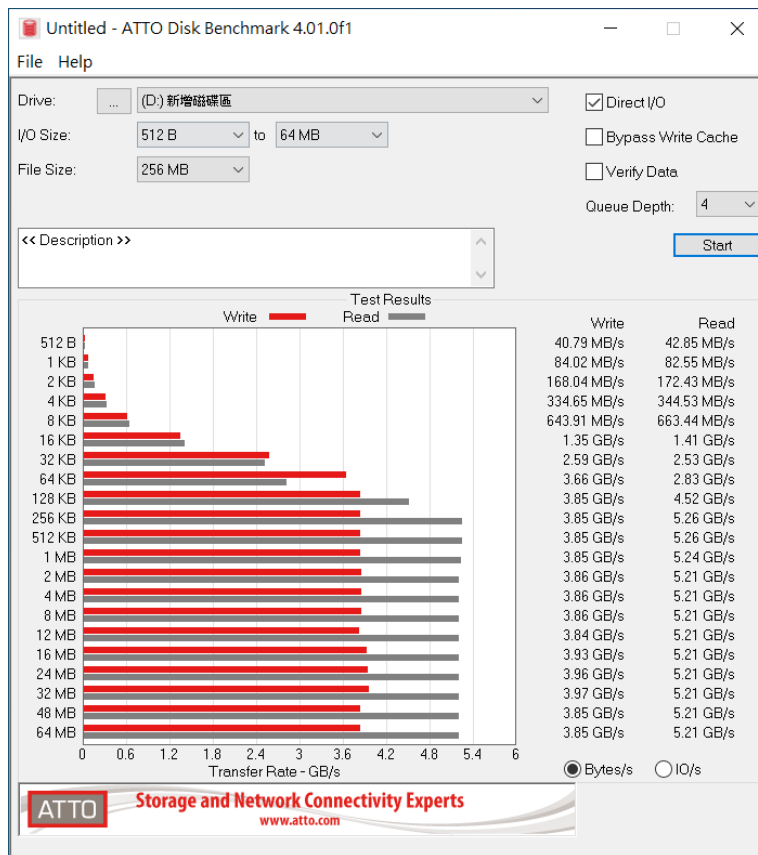
2.6.1 GIGABYTE M.2 Gen4(GP-ASM2NE6100TTD)/ 1TB performance as below:



PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

2.7 ATTO Disk Benchmark 4.0.1 performance test

2.7.1 GIGABYTE M.2 Gen4(GP-ASM2NE6100TTD)/ 1TB performance as below:



2.8 AnvilBenchmark_V110_B337

2.8.1 GIGABYTE M.2 Gen4(GP-ASM2NE6100TTD)/ 1TB performance as below:

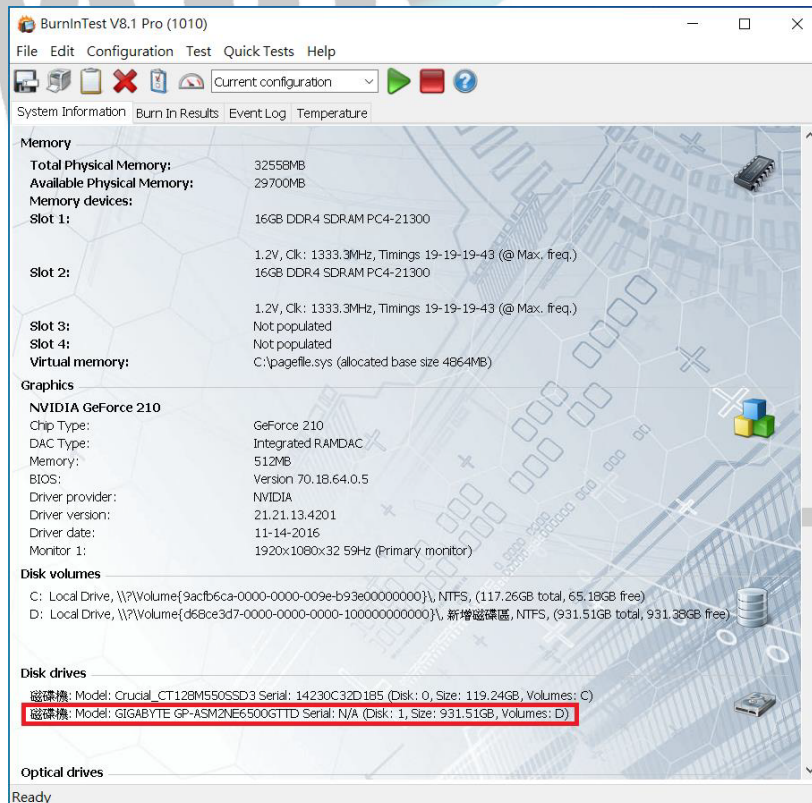
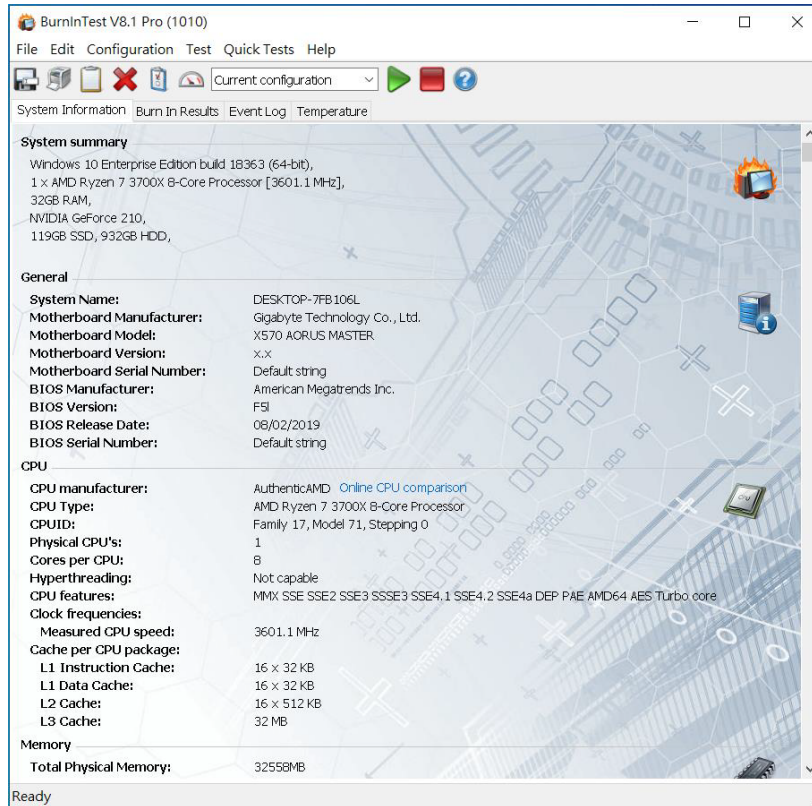


PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

3. Burn In Tests and Results

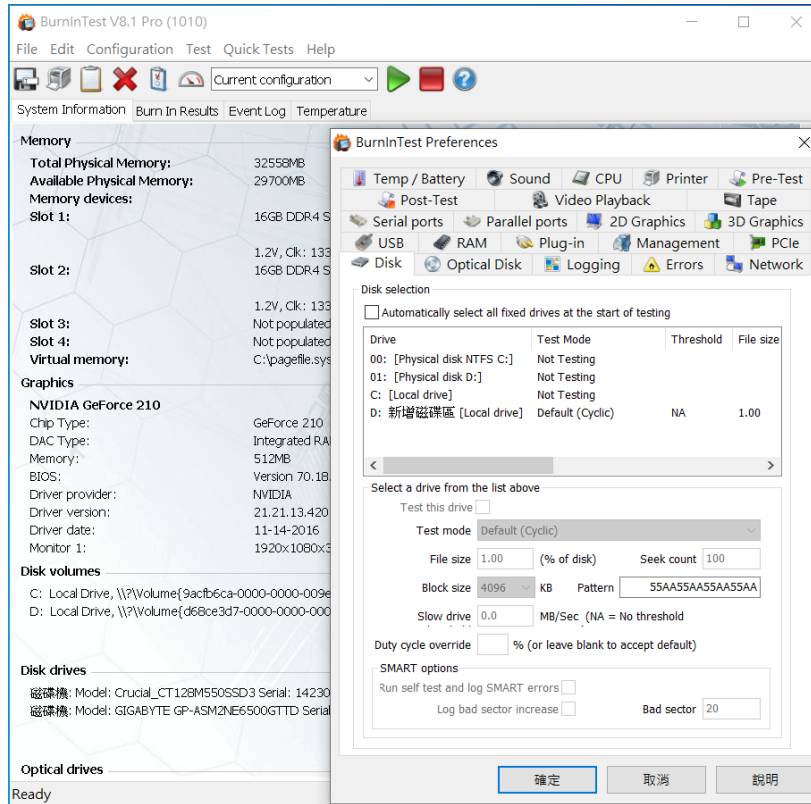
3.1 BurnInTest v8.1 Pro for GIGABYTE M.2 Gen4(GP-ASM2NE6100TTD)/ 1TB SSD

3.1.1 system information as below:

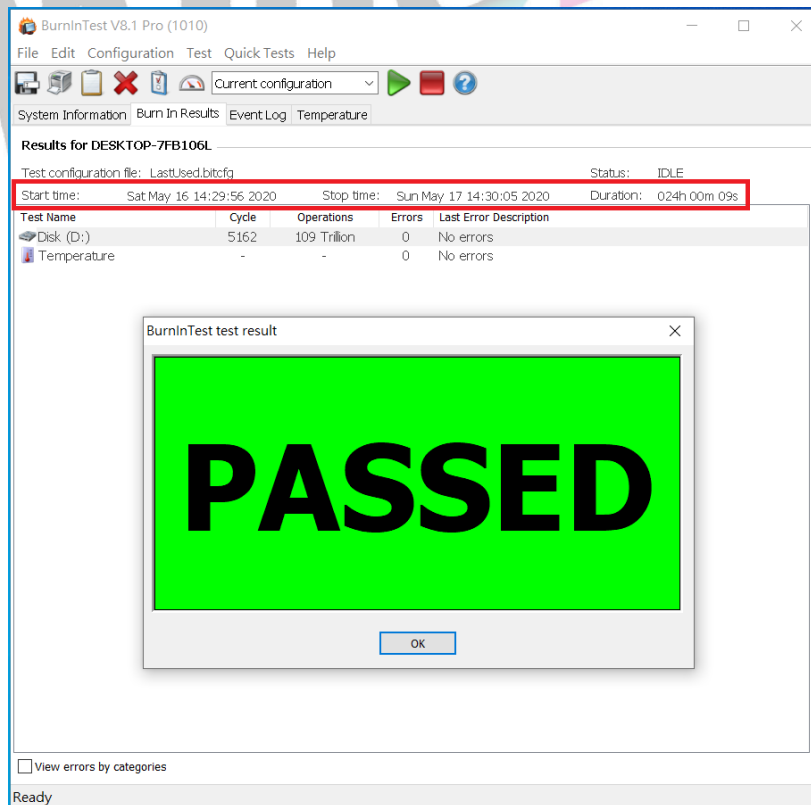


PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

3.1.2 Disk test mode(10 ways cycle test)



3.1.3 24-hour Burn-in test PASSED



PCIe 4.0 SFF-8611 4i to SFF-8611 4i 100cm cable

4. Summary

- 4.1 M.2 SSD is PCIe Gen4 / 4 Lanes Interface, I/O speed, max. to 64Gbps.
- 4.2 GD3404A, GD1401A adapter I/O performance is based on M.2 NVMe SSD.

