



MINERVA

DP8206 PCIe x8 Gen4 for M.2 NVMe Dual port AIC

Performance & Burn In Test Rev. 1. 0

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DP8206 Add-in card

1. Overview

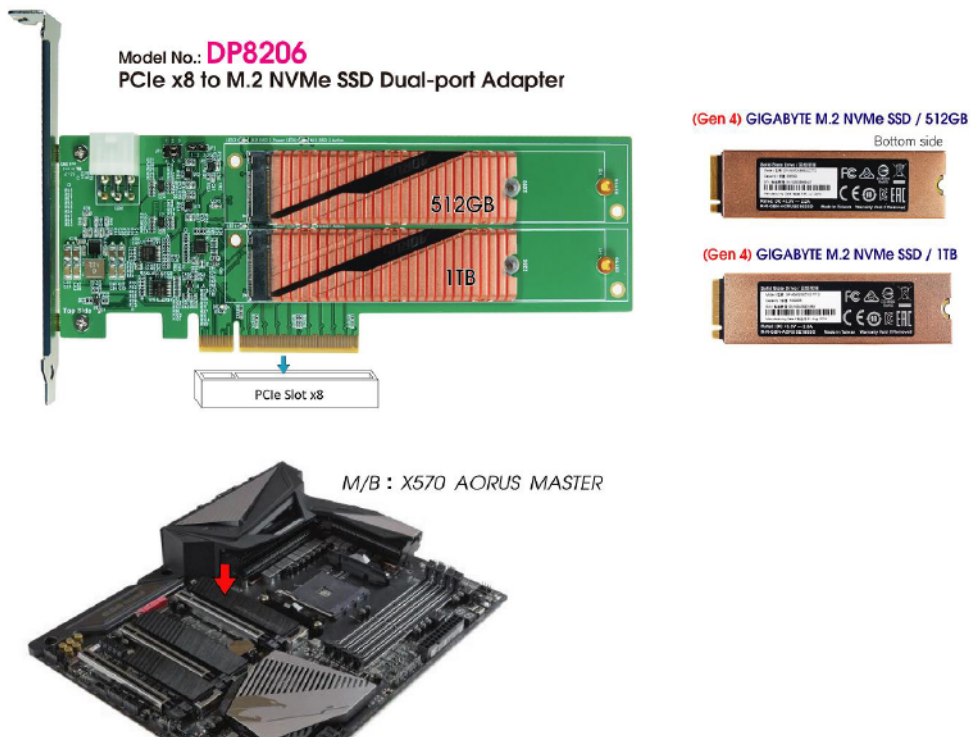
DP8206 Add-in card, providing two M.2 M-key connector can be M.2 NVMe SSD plugged into it and uses heat sink strip to M2 SSD, then DP8206 can plug in PCIe slot of M/B.

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
- Adapter: DP8206 PCIe x8 to Dual port M.2 NVMe AIC
- OS : Microsoft **Windows 10 64bit OS**

2.2 Test target: DP8206 AIC with GIGABYTE **Gen4 1TB** SSD & **512GB** SSD



DP8206 Add-in card

2.3 Install Hardware

Inserts M.2 SSD into DP8206 Add-in card's M.2 M-key connector, and then with coppers, and screws to fix SSDs. (Please refer to the Installation Notes). Plugs DP8206 into **PCIe slot of X570 AORUS MASTER**.

2.4 BIOS & Windows 10 OS environment setup

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

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

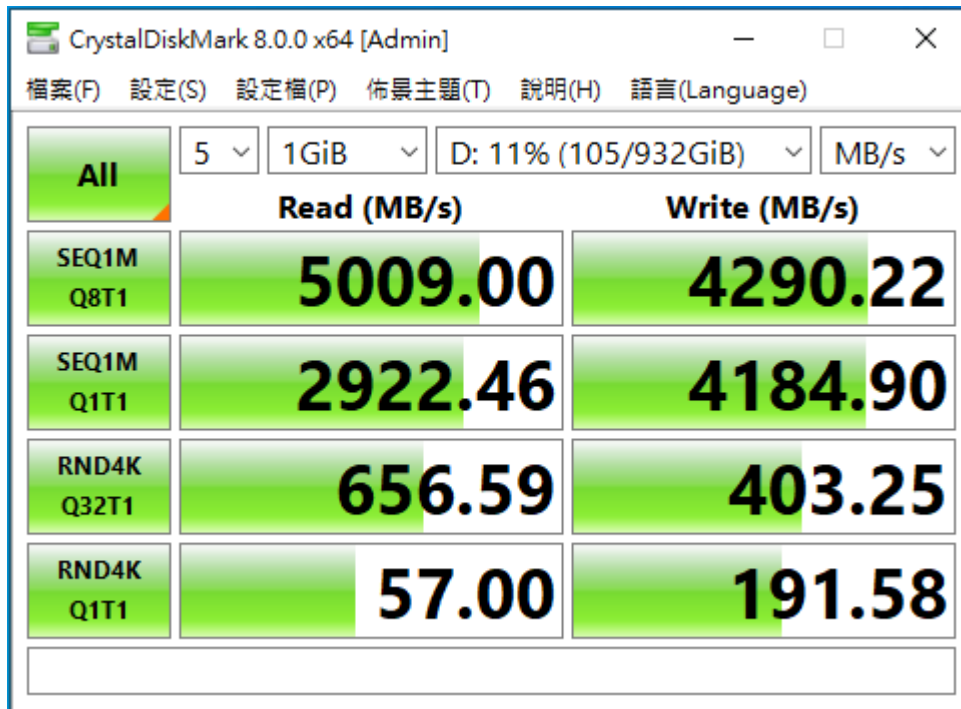


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2.5 CrystalDiskMark 8.0.0 x64 performance test

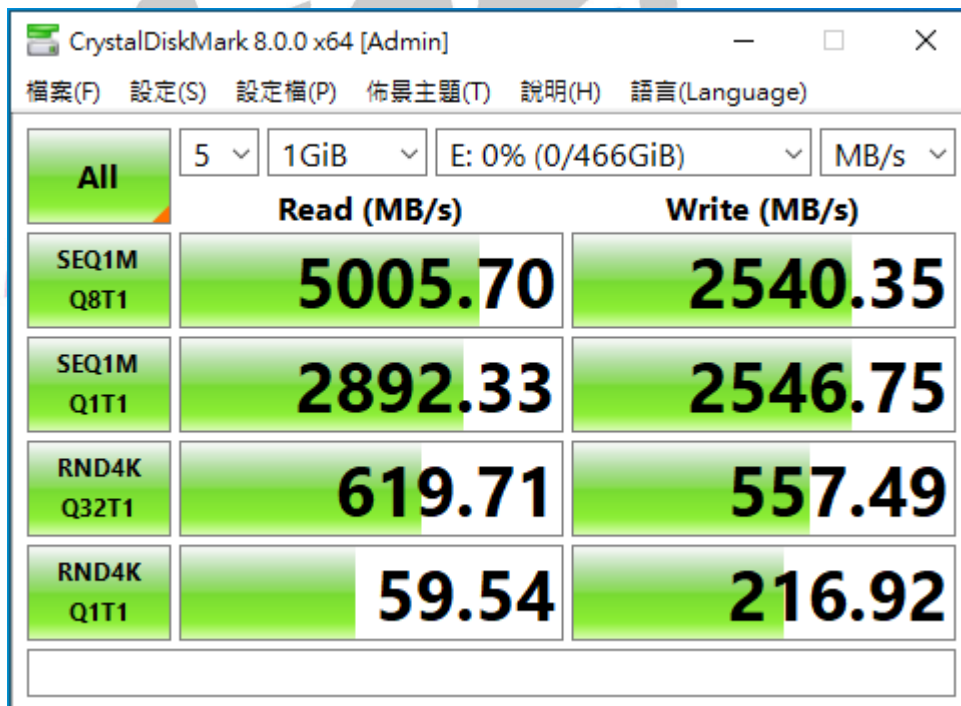
※Benchmark (Sequential **Read & Write** / default = **1MB**)

2.5.1 GIGABYTE **Gen4 1TB** SSD performance as below:



	Read (MB/s)	Write (MB/s)
SEQ1M Q8T1	5009.00	4290.22
SEQ1M Q1T1	2922.46	4184.90
RND4K Q32T1	656.59	403.25
RND4K Q1T1	57.00	191.58

2.5.2 GIGABYTE **Gen4 512GB** SSD performance as below:



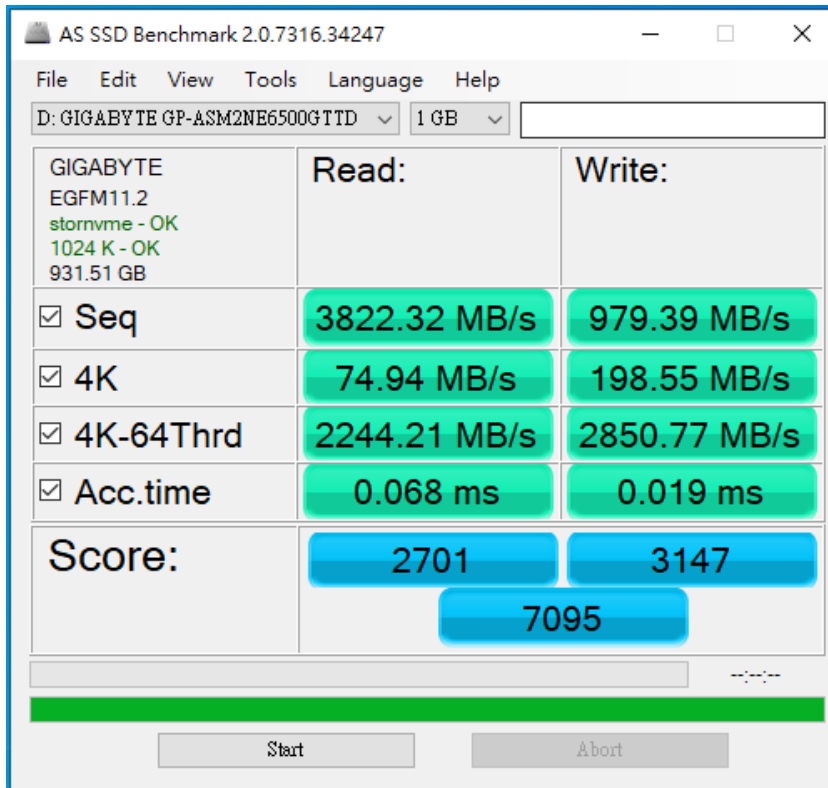
	Read (MB/s)	Write (MB/s)
SEQ1M Q8T1	5005.70	2540.35
SEQ1M Q1T1	2892.33	2546.75
RND4K Q32T1	619.71	557.49
RND4K Q1T1	59.54	216.92

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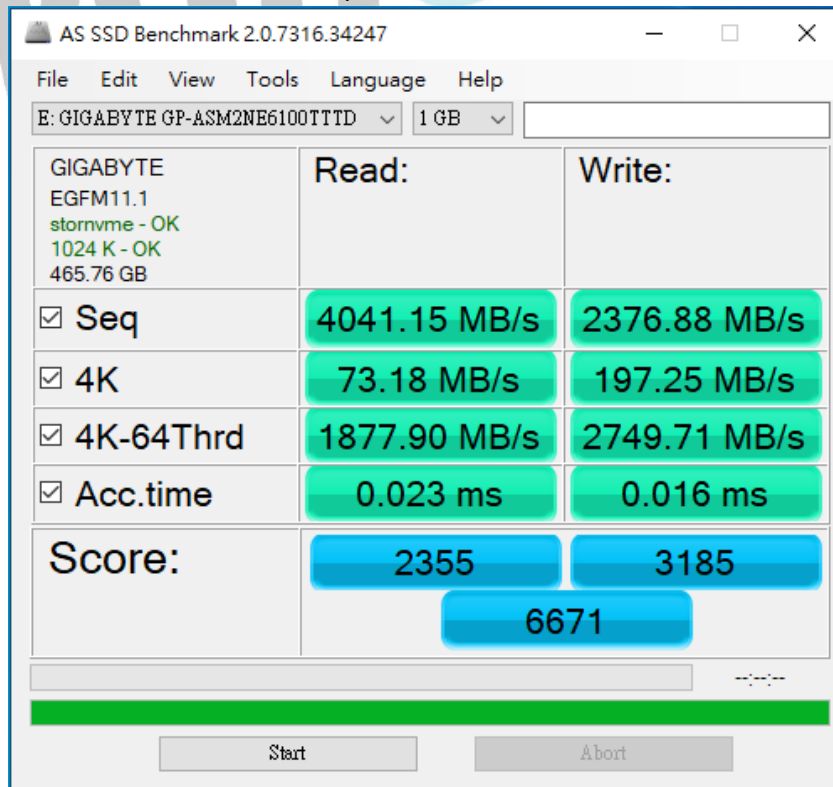
2.6 AS SSD Benchmark 2.0.7 performance test

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

2.6.1 GIGABYTE Gen4 1TB SSD performance as below:



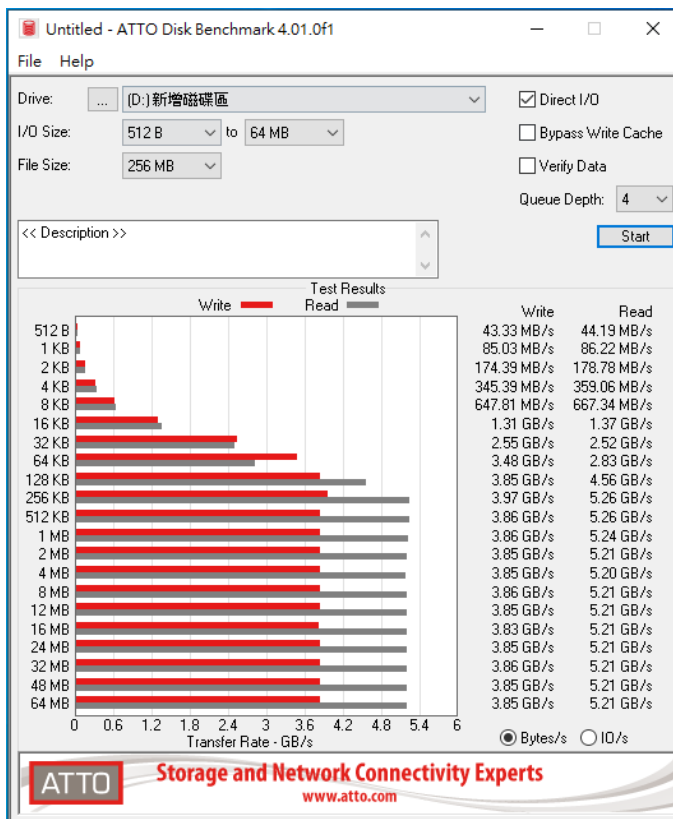
2.6.2 GIGABYTE Gen4 512GB SSD performance as below:



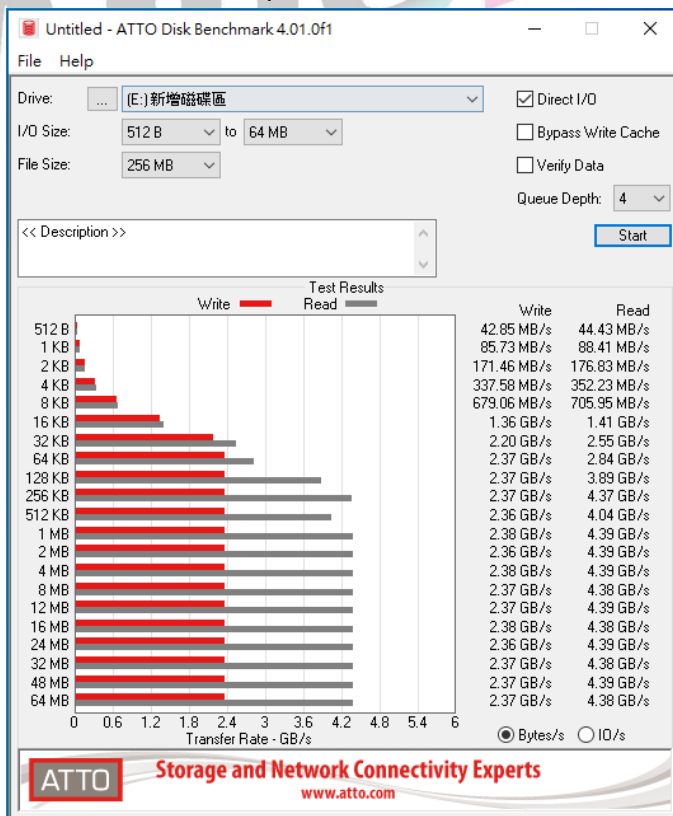
DP8202 Add-in card

2.7 ATTO Disk Benchmark 2.47 performance test

2.7.1 GIGABYTE Gen4 1TB SSD performance as below:



2.7.2 GIGABYTE Gen4 512GB SSD performance as below:



DP8202 Add-in card

2.8 AnvilBenchmark_V110_B337

2.8.1 GIGABYTE Gen4 1TB SSD performance as below:



2.8.2 GIGABYTE Gen4 512GB SSD performance as below:

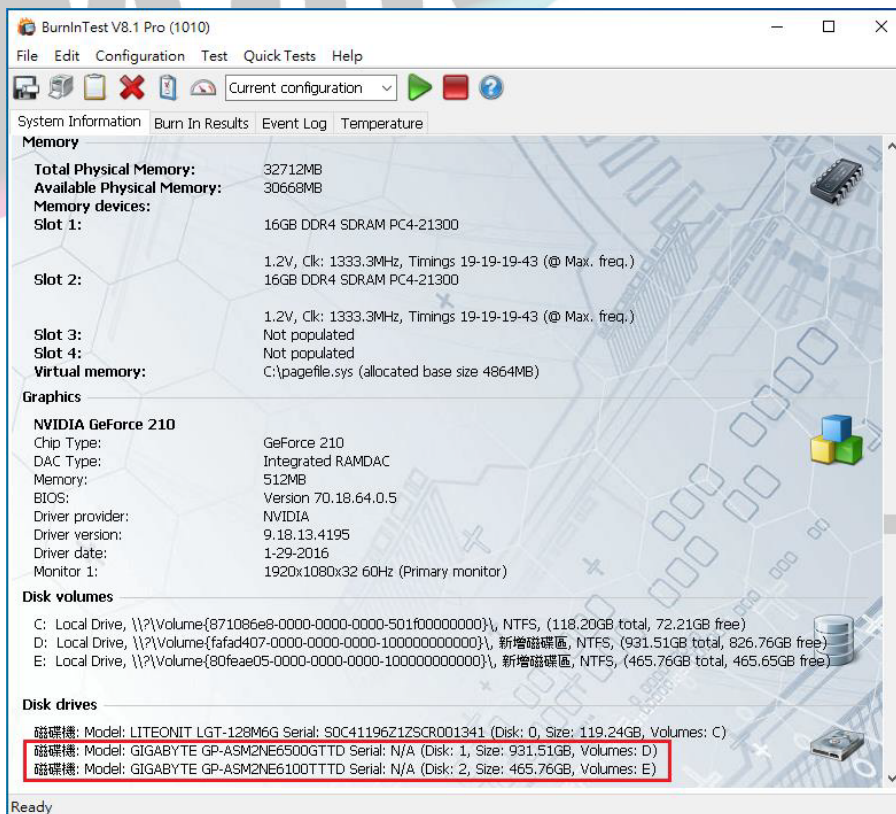
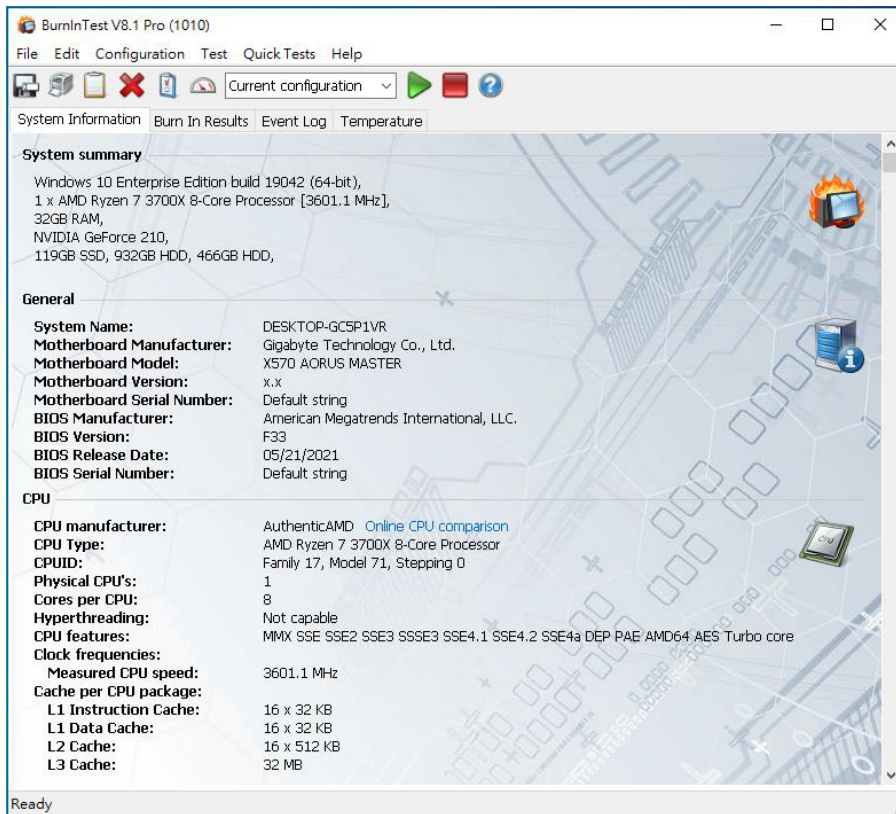


DP8202 Add-in card

3. Burn In Tests and Results

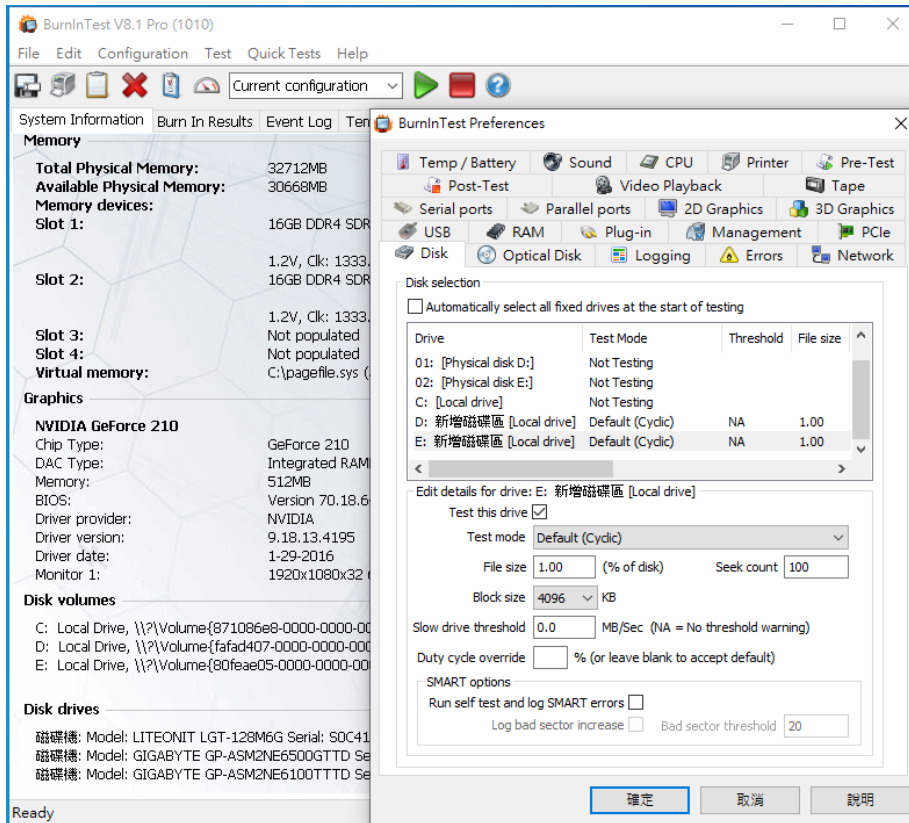
3.1 BurnInTest v8.1 Pro

3.1.1 system information as below:

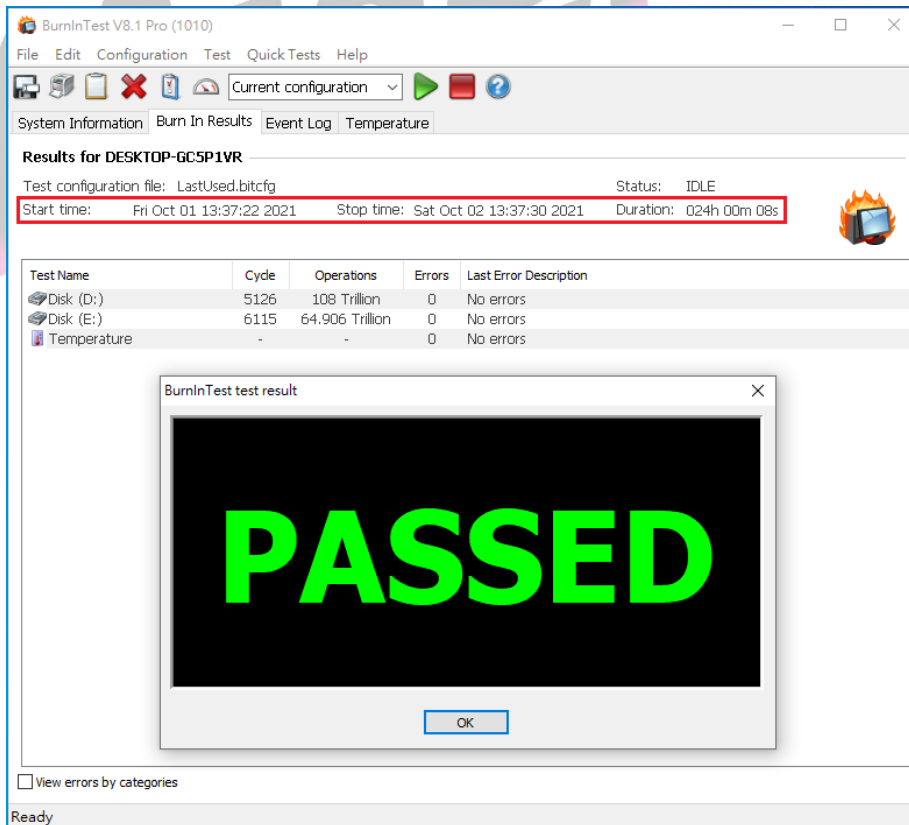


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3.1.2 Disk test mode (10 ways cycle test)



3.1.3 24-hour Burn-in test PASSED



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4. Summary

- 4.1 M.2 SSD is PCIe Gen4 / 4 Lanes Interface, I/O speed, max. to 64Gb/s.
- 4.2 DP8206 adapter I/O performance is based on M.2 NVMe PCIe SSD.

