MINERVA

DP8202 PCIe x8 with ReDriver for M.2 NVMe Dual-port AIC

Performance & Burn In Test Rev 1.0

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4. **Summary**

DP8202 Add-in card

1. Overview

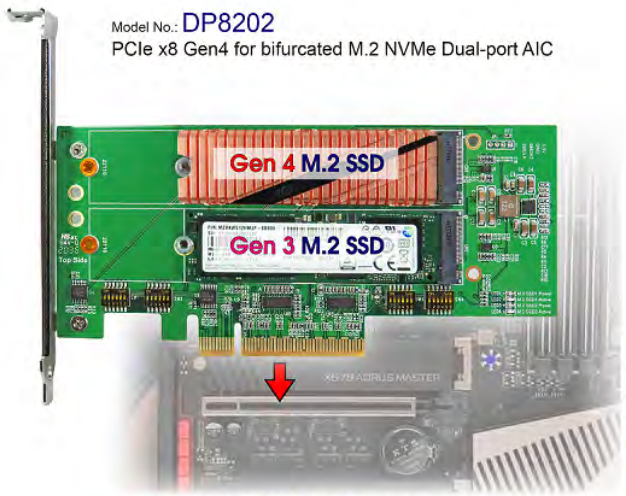
DP8202 Add-in card, providing two M.2 M-key connector can be M.2 (PCI-e I/F NVMe) SSD pluged into it and uses heat sink strip to M2 SSD, then DP8202 can plug in PCIe slot of M/B.

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: DP8202 PCIe x8 to Daul-port M.2 NVMe AIC
OS : Microsoft **Windows 10 64bit OS**

2.2 Test target: DP8202 AIC with GIGABYTE **Gen4 512GB** SSD & Samsung **Gen3 512GB** SSD



(Gen 4) GIGABYTE M.2 (GP-ASM2NE6100TTTD) / 512GB

Bottom side

(Gen 3) Samsung SM961 M.2 NVMe SSD /512GB

M/B : X570 AORUS MASTER

2.3 Install Hardware

Inserts M.2 SSD into DP8202 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 DP8202 into **PCIe slot of X570 AORUS MASTER.**

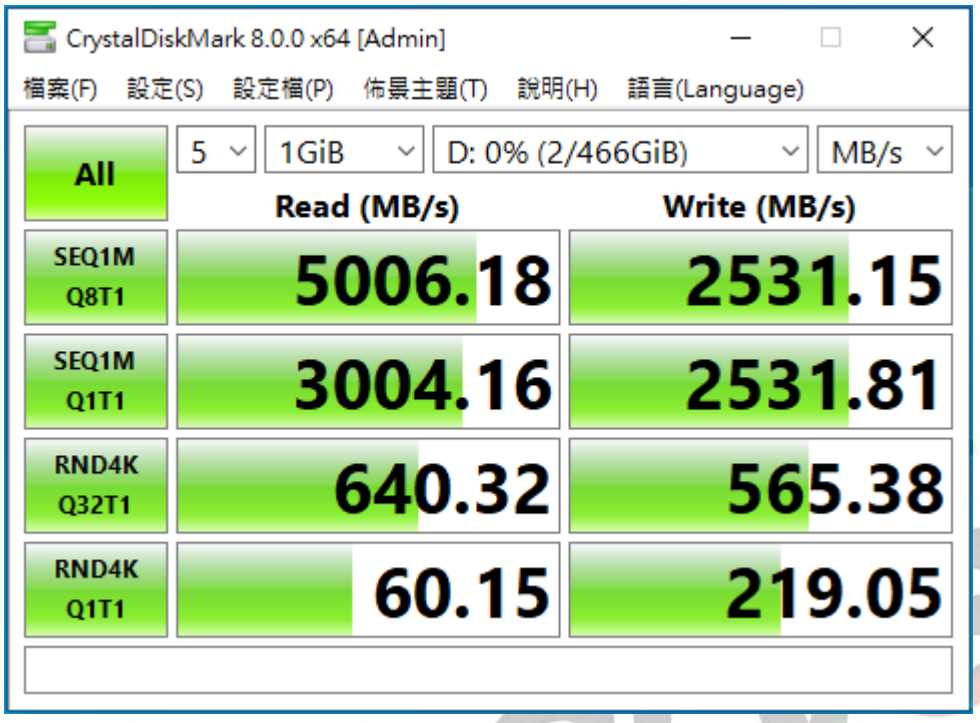
2.4 BIOS & Windows 10 OS environment setup

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.

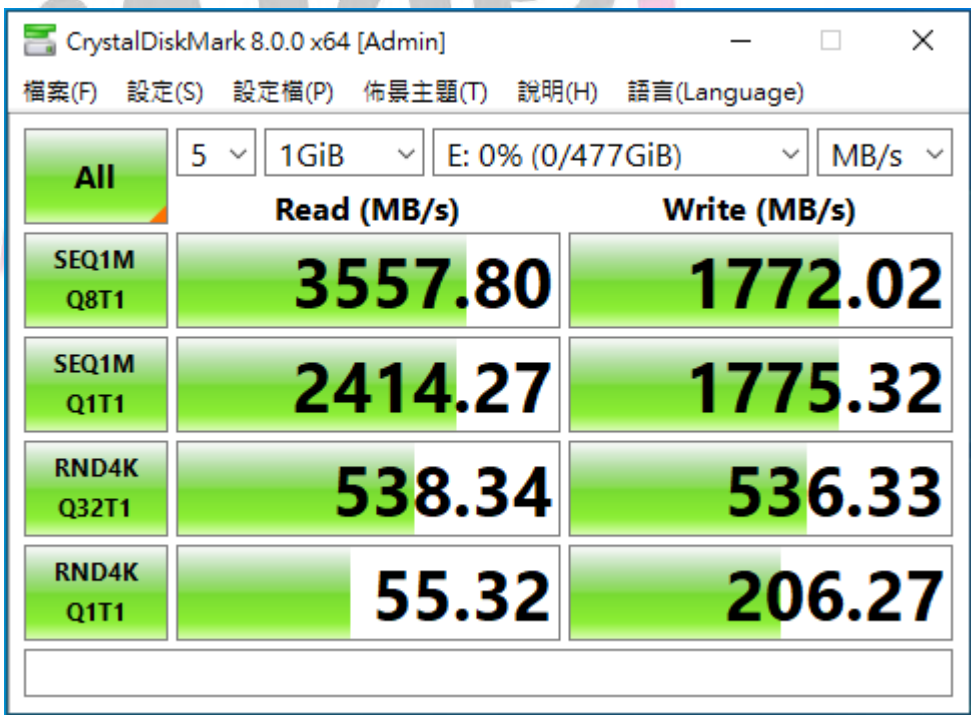
2.5 CrystalDiskMark 8.0.0 x64 performance test

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

2.5.1 GIGABYTE Gen4 512GB SSD performance as below:



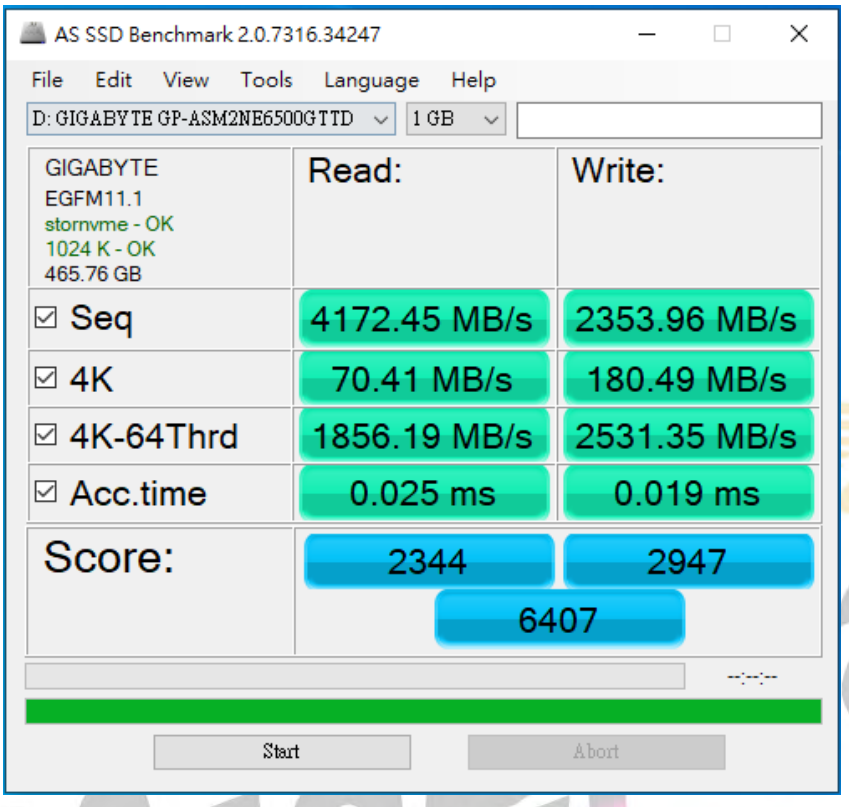
2.5.2 Samsung Gen3 512GB SSD performance as below:



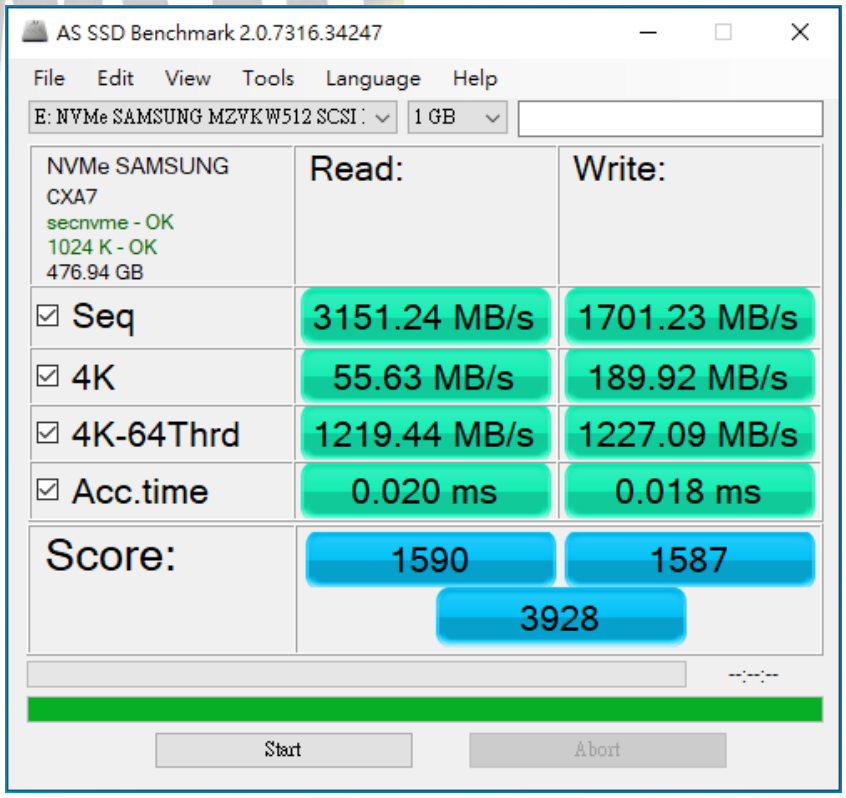
2.6 AS SSD Benchmark 2.0.7 performance test

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

2.6.1 GIGABYTE Gen4 512GB SSD performance as below:

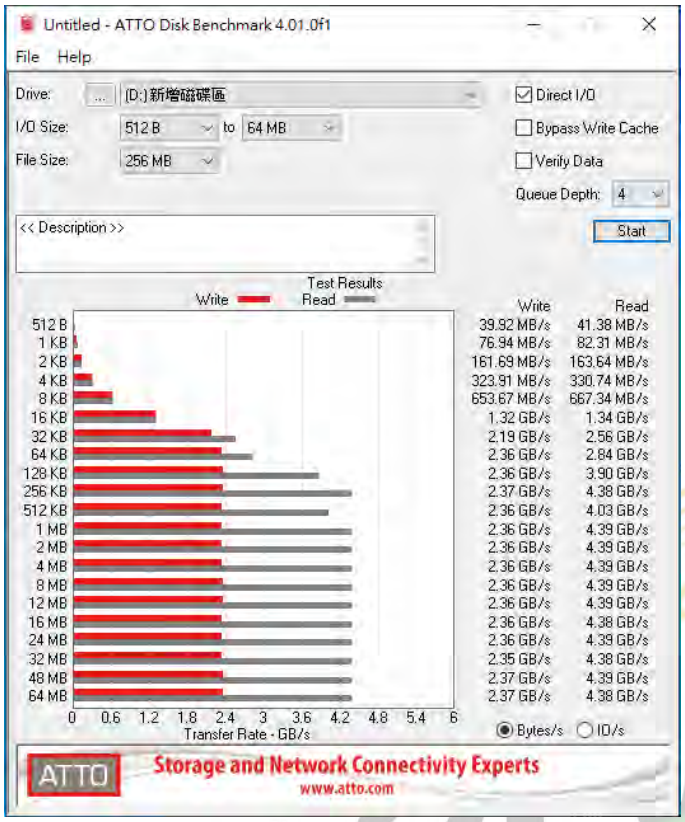


2.6.2 Samsung Gen3 512GB SSD performance as below:

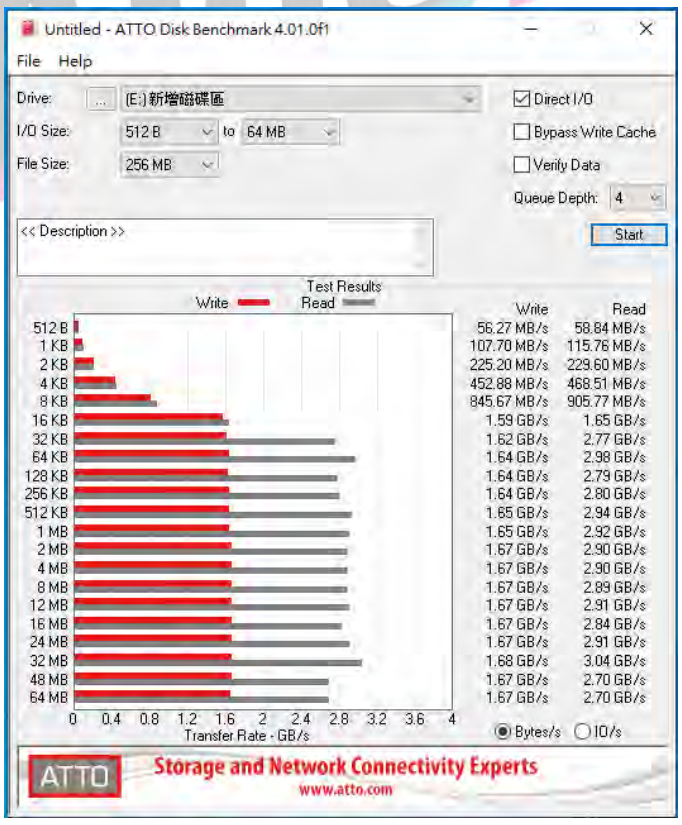


2.7 ATTO Disk Benchamrk 2.47 performance test

2.7.1 GIGABYTE Gen4 512GB SSD performance as below:



2.7.2 Samsung Gen3 512GB SSD performance as below:



2.8 AnvilBenchmark_V110_B337

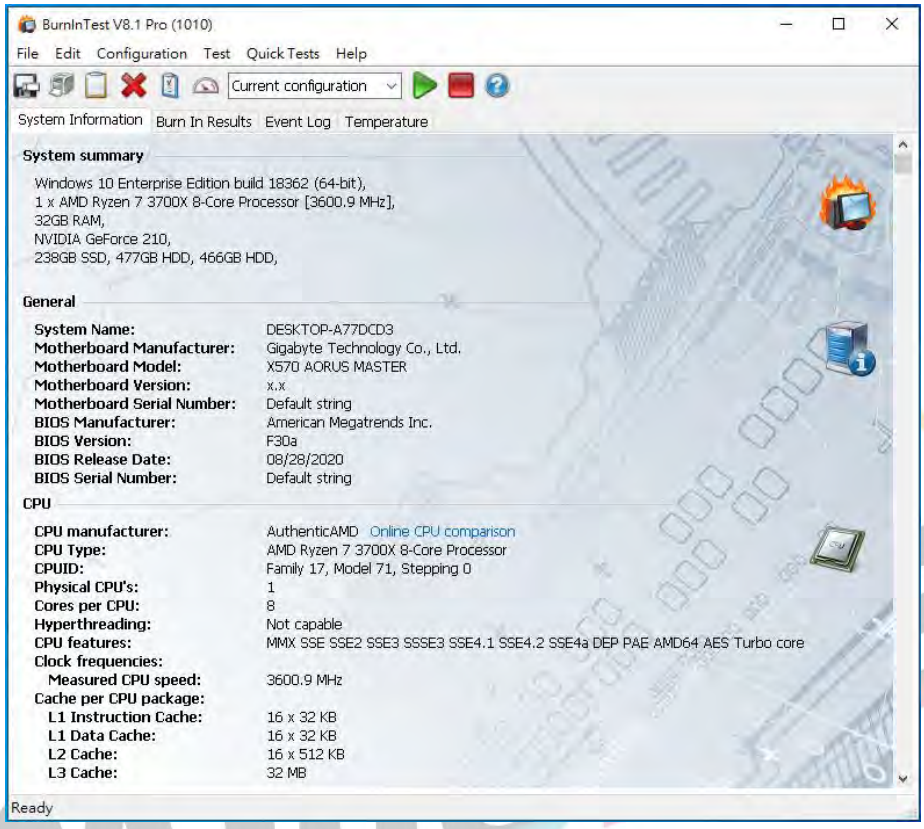
2.8.1 GIGABYTE Gen4 512GB SSD performance as below:

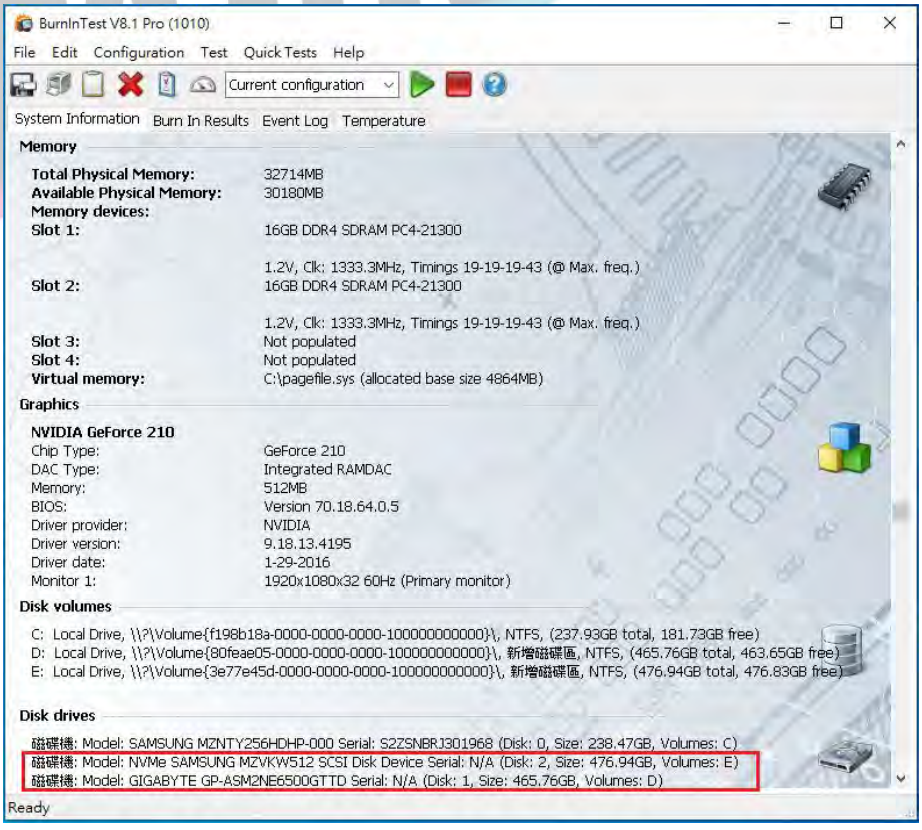
2.8.2 Samsung Gen3 512GB SSD performance as below:

3. Burn In Tests and Results

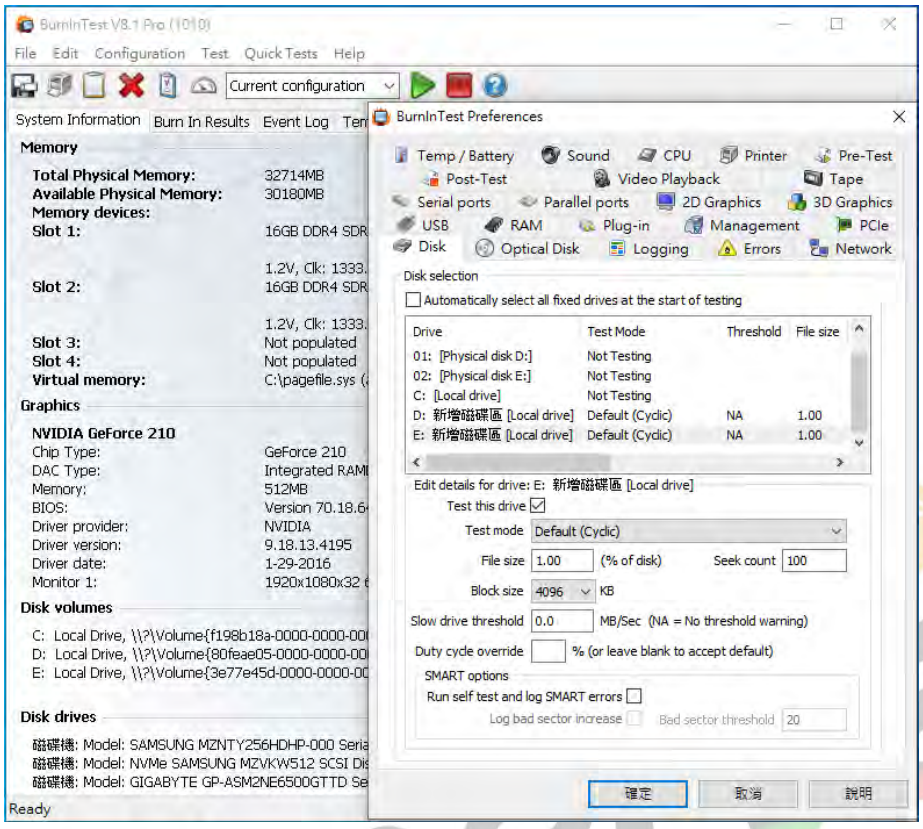
3.1 BurnInTest v8.1 Pro for Sam/512GB & GIGABYTE/512GB

3.1.1 system information as below:

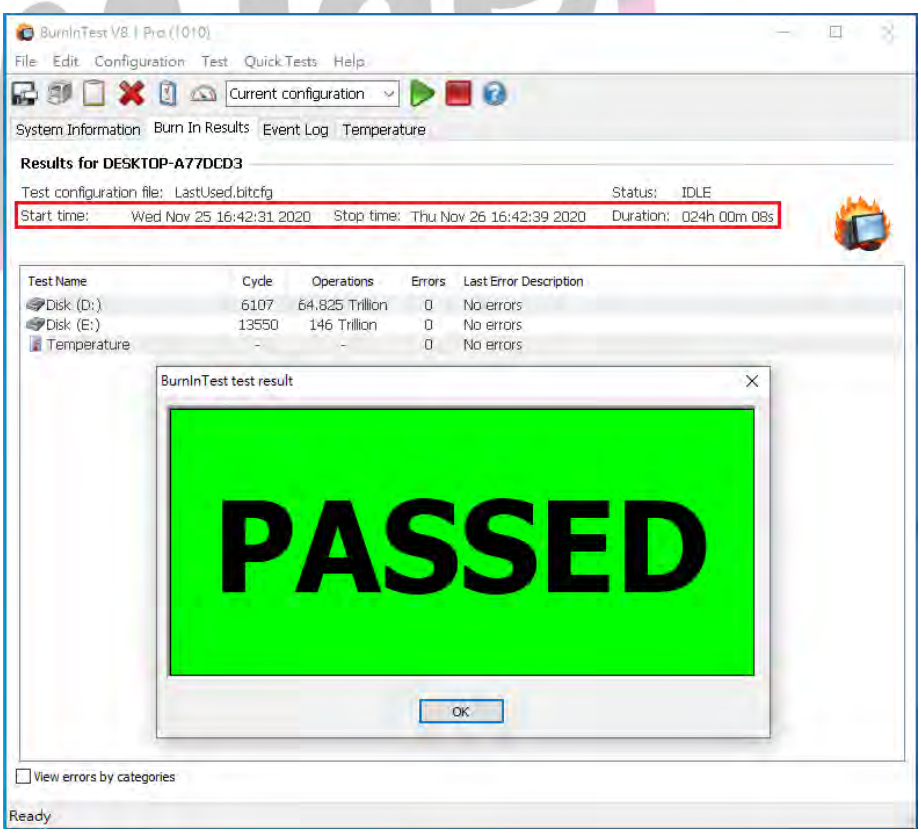




3.1.2 Disk test mode(10 ways cycle test)



3.1.3 24-hour Burn-in test PASSED



4. Summary

4.1 M.2 SSD is PCIe Gen4 / 4 Lanes Interface, I/O speed, max. to 64Bb/s.
4.2 M.2 SSD is PCIe Gen3 / 4 Lanes Interface, I/O speed, max. to 32Bb/s.
4.2 DP0802 adapter I/O performance is based on M.2 NVMe PCIe SSD.