MINERVA

GDC47-7402 PCIe 4.0 MCIO 74P to 4ix2,100cm Y-Cable

Performance & Burn In Test Rev 1.0

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PCIe 4.0 MCIO 74P to SFF-8654 4ix2 Y-Cable

1. Overview

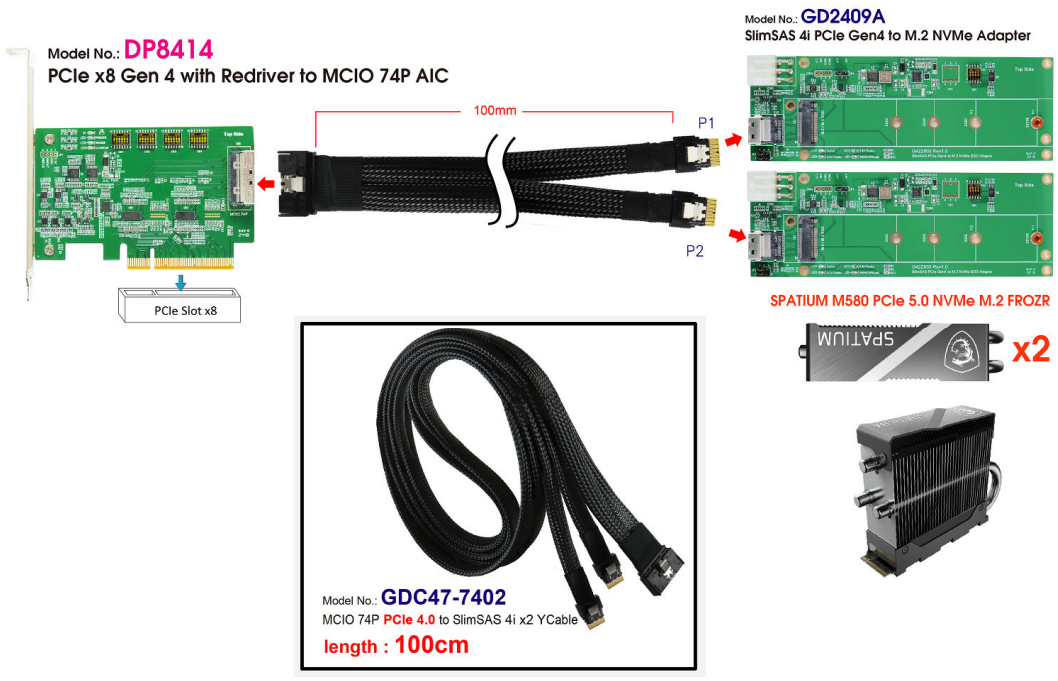
The cable can provide PCIe 4.0 performance. It connects to Host AIC and device. The AIC is built-in PCIe x8 Gen4 ReDriver, may support CTLE boosts up to 13 dB at 8 GHz. And it extends PCIe signals to Device adapter.

2. Tools and Results of Performance Measurement

2.1 Test Platform

M/B :	**ASUS PRIME X570-PRO**
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
Add in Card:	DP8414 PCIe x8 Gen 4 to MCIO 74P AIC
Cable:	PCIe 4.0 MCIO 74P to SlimSAS(SFF-8654) 4ix2, **100cm** Y-Cable
Adapter:	GD2409A SlimSAS(SFF-8654) 4i PCIe 4.0 to M.2 adapter x2
OS :	Microsoft **Windows 10 64bit OS**

2.2 Test target: DP8414, GD2409A adapter x2 with GIGABYTE M.2 1TB SSD X2



2.3 Install Hardware

First inserts the M.2 SSD into the GD2409A M.2 connector, then with copper nuts, and screws to fix SSDs. (Please refer to the Installation Notes). Using the **GDC47-7402 Cable** to connect the GD2409A adapter to the DP8414 AIC card (PCIe x8 Gen 4 to MCIO 74P) and Plugs DP8414 AIC into **ASUS PRIME X570-PRO**.

2.4 BIOS & Windows 10 OS environment setup

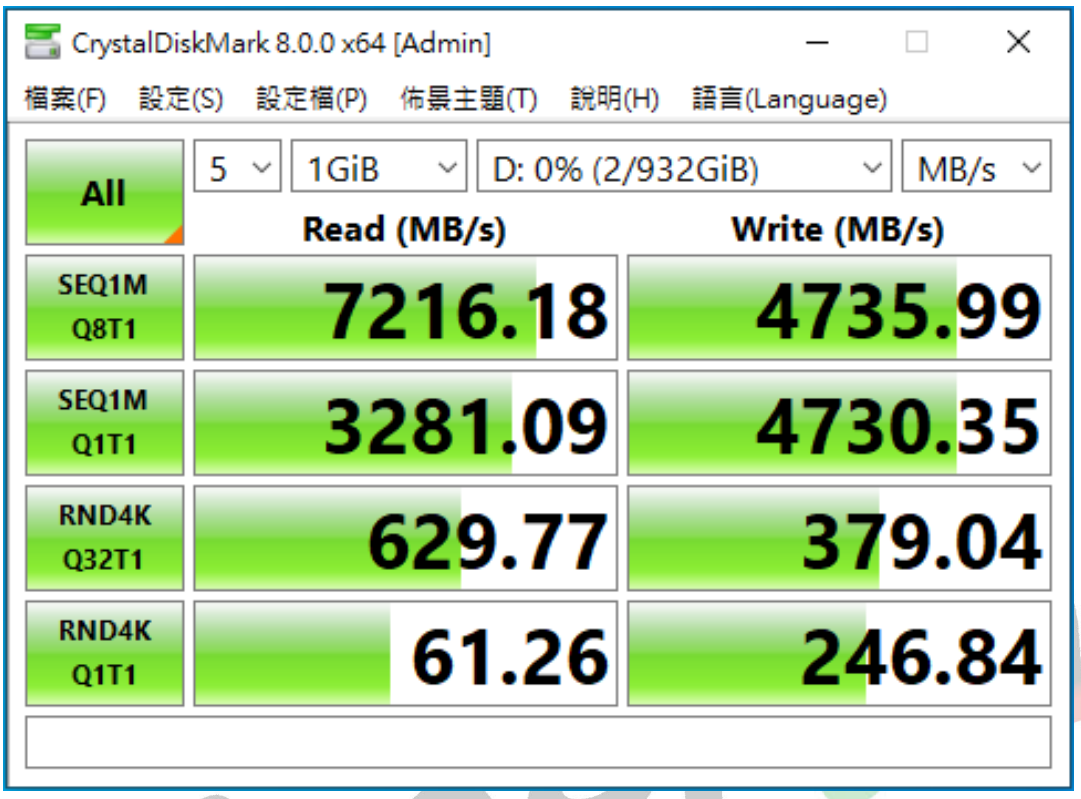
2.4.1 Primary SATA NVMe SSD install Windows 10 OS.

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

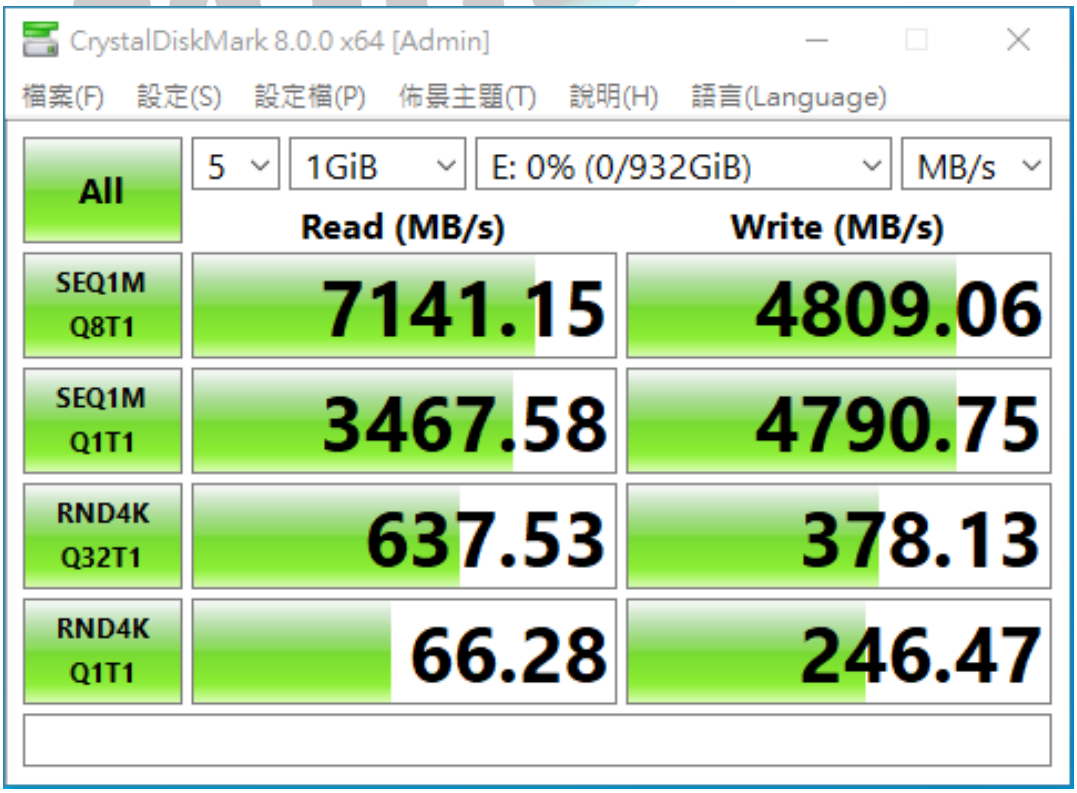
2.5 CrystalDiskMark 8.0.0 x64 performance test

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

2.5.1 **M.2 NVMe Gigabyte / 1TB in Drive D:** performance as below:



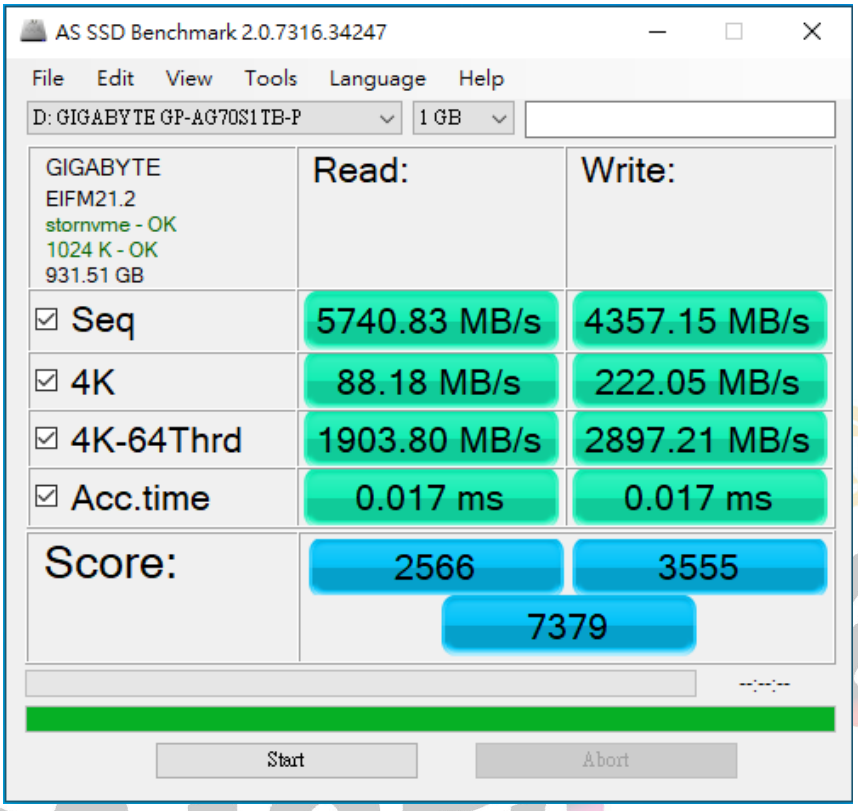
2.5.2 **M.2 NVMe Gigabyte / 1TB in Drive E:** performance as below:



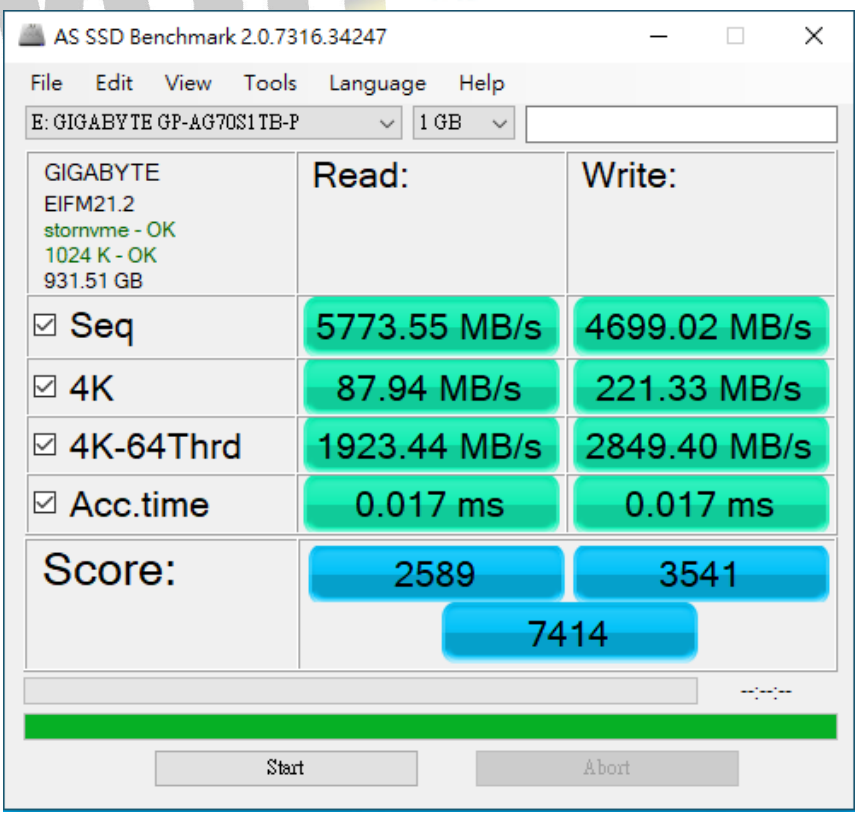
2.6 AS SSD Benchmark 2.0 performance test

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

2.6.1 M.2 NVMe Gigabyte / 1TB in **Drive D:** performance as below:

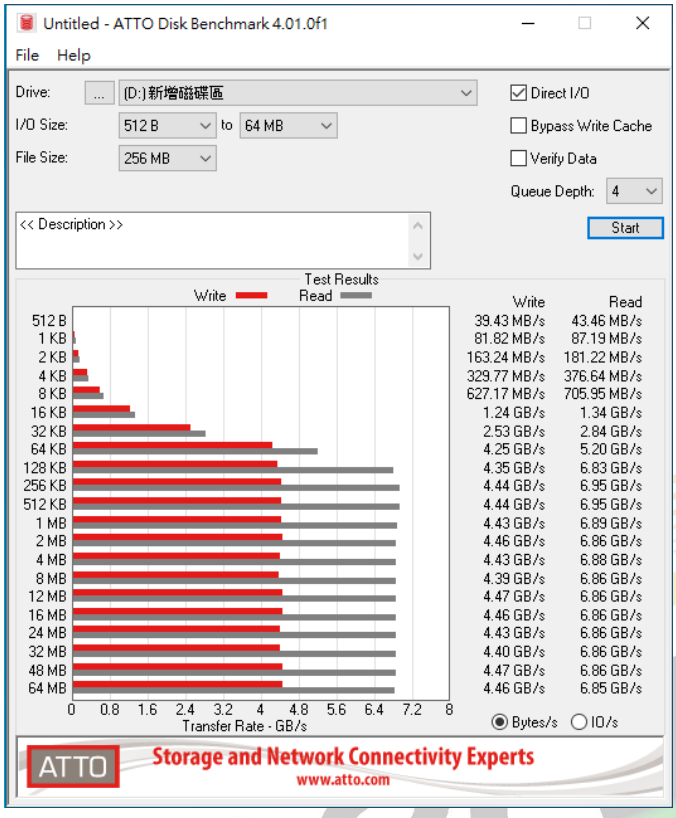


2.6.2 M.2 NVMe Gigabyte / 1TB in **Drive E:** performance as below:

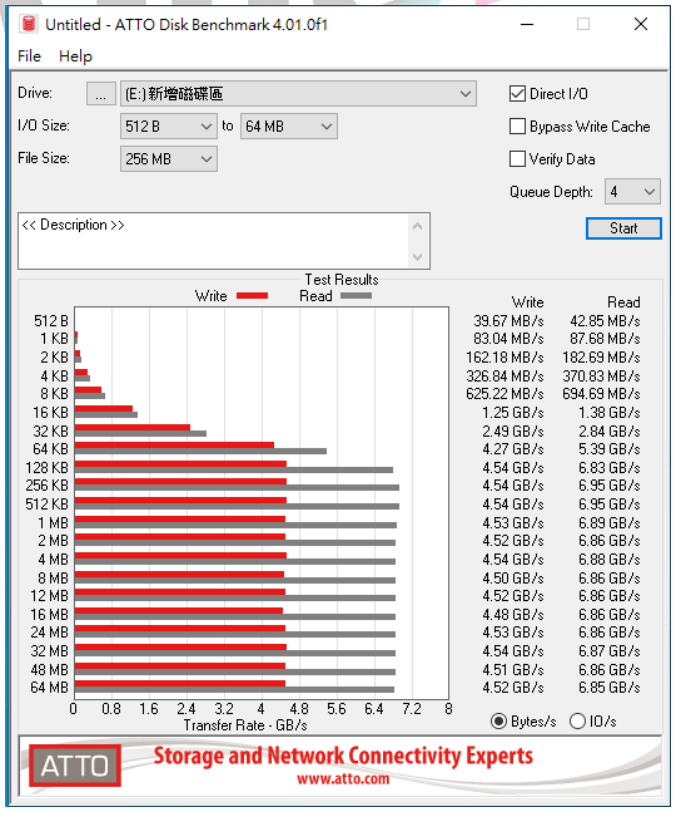


2.7 ATTO Disk Benchamrk 4.01 performance test

2.7.1 M.2 NVMe Gigabyte / 1TB in **Drive D:** performance as below:



2.7.2 M.2 NVMe Gigabyte / 1TB in **Drive E:** performance as below:



2.8 AnvilBenchmark_V110_B337

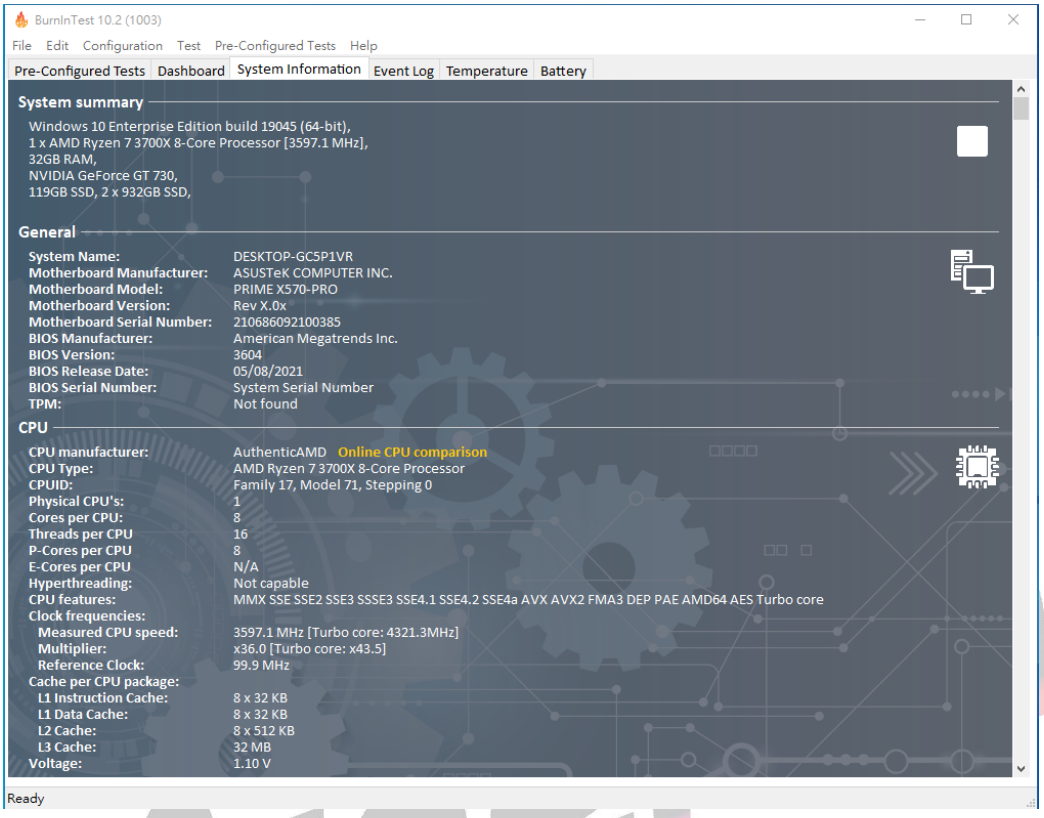
2.8.1 M.2 NVMe Gigabyte / 1TB in **Drive D:** performance as below:

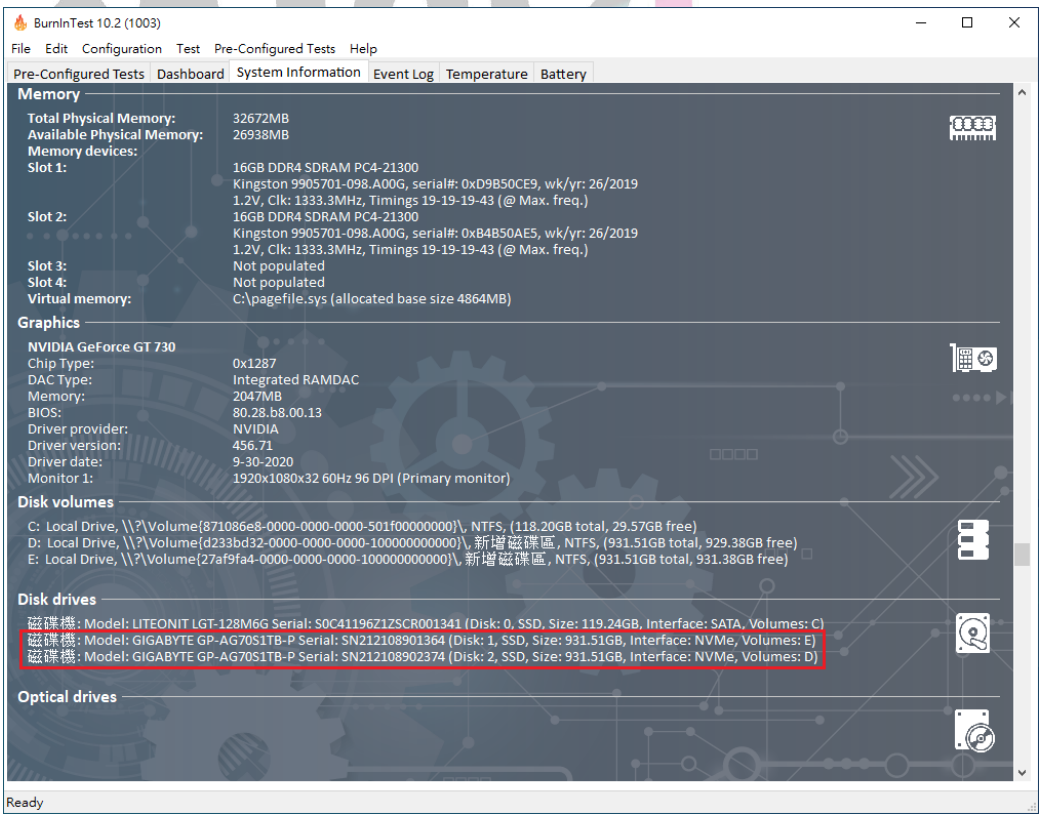
2.8.2 M.2 NVMe Gigabyte / 1TB in **Drive E:** performance as below:

3. Burn In Tests and Results

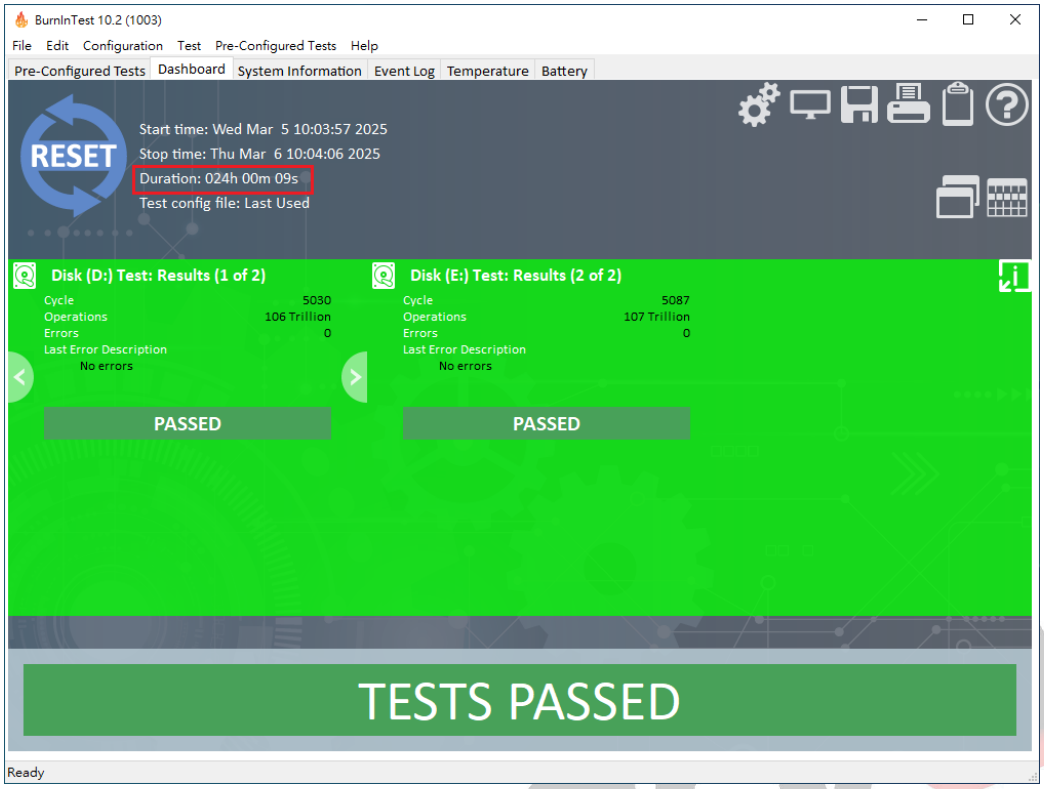
3.1 BurnInTest v10.2 Pro

3.1.1 System information as below:





3.1.2 24-hour Burn-in test PASSED



4. Summary

4.1 M.2 NVMe SSD is PCIe Gen4 / 4 Lane Interface, I/O speed, max. to 64Gbps.

4.2 GDC74-5402 cable, I/O performance is based on NVMe SSD.