# Performance & Burn In Test Rev. 1. 0

## Table of Contents

## 1. Overview

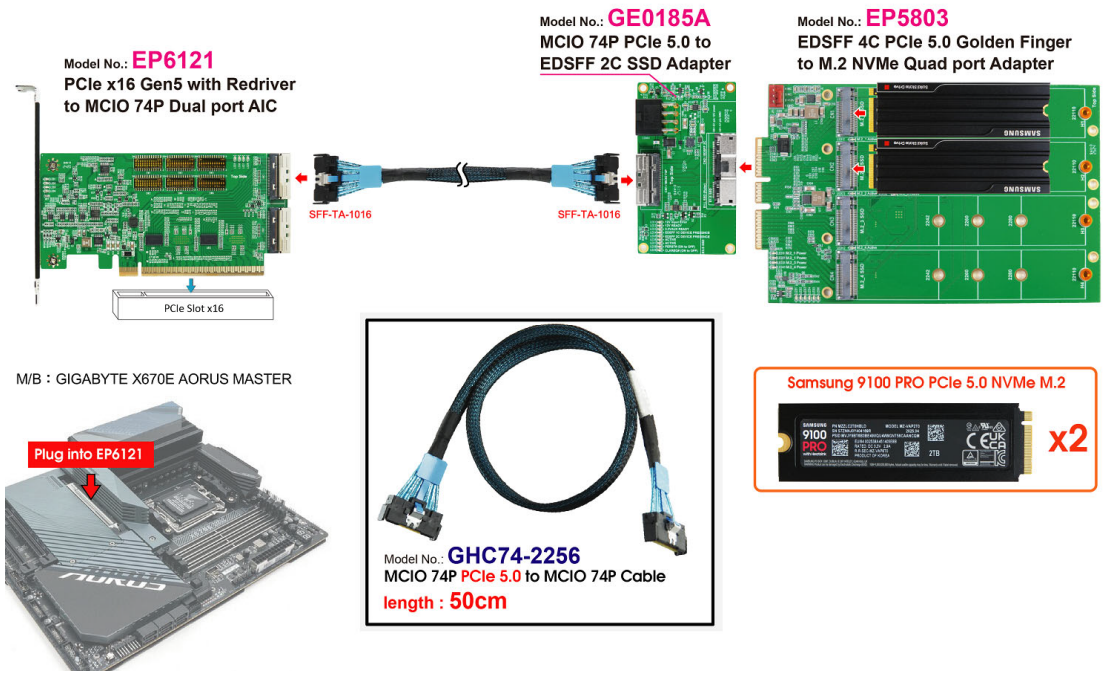
The GE0185A Adapter, providing EDSFF 2C connector can be connected to MCIO 74P for PCIe 5.0, 16GT/s 8-Lane interface.

## 2. Tools and Results of Performance Measurement

### 2.1 Test Platform:

| | |
|---|---|
| M/B : | GIGABYTE **X670E AORUS MASTER** |
| CPU : | AMD **Ryzen 5, 7600X 6-Core** |
| Memory : | Kingston **KF556C36BBEK2**, DDR5-5600MT/s, **64GB**(32GB DIMM*2) |
| ATX Power : | Apexgaming AN-550, **550W ATX**, 12V V2.2 Power Supply |
| AIC: | EP6121 PCIe x16 Gen 5 with Redriver to MCIO 74P dual port ADD-in Card |
| Adapter: | GE0185A MCIO 74P PCIe 5.0 to EDSFF(Gen-Z) 2C Adapter |
| Adapter: | EP5803 EDSFF(Gen-Z) 4C PCIe 5.0 to M.2 quad port Adapter |
| Cable: | MCIO 74P Male to Male for PCIe 5.0, **50cm** Cable |
| OS : | Microsoft **Windows 11 64bit OS** |

2.2 Test target: GE0185A Adapter & SAMSUNG PCIe 5.0 M.2 9100 PRO **2TB** SSD



## 2.3 Install Hardware

Inserts M.2 NVMe SSD into EP5803 adapter converter's M.2 connector, and then connects EP5803 to GE0185A adapter. Using MCIO 74P Male to Male for PCIe 5.0, **50cm** Cable for EP6121 AIC(PCIe x16 Gen 5 with Redriver to MCIO 74 dual port ADD-in Card) and GE0185A adapter connection. The EP6121 plugs into GIGABYTE **X670E AORUS MASTER** mainboard.

## 2.4 BIOS & Windows 11 OS environment setup

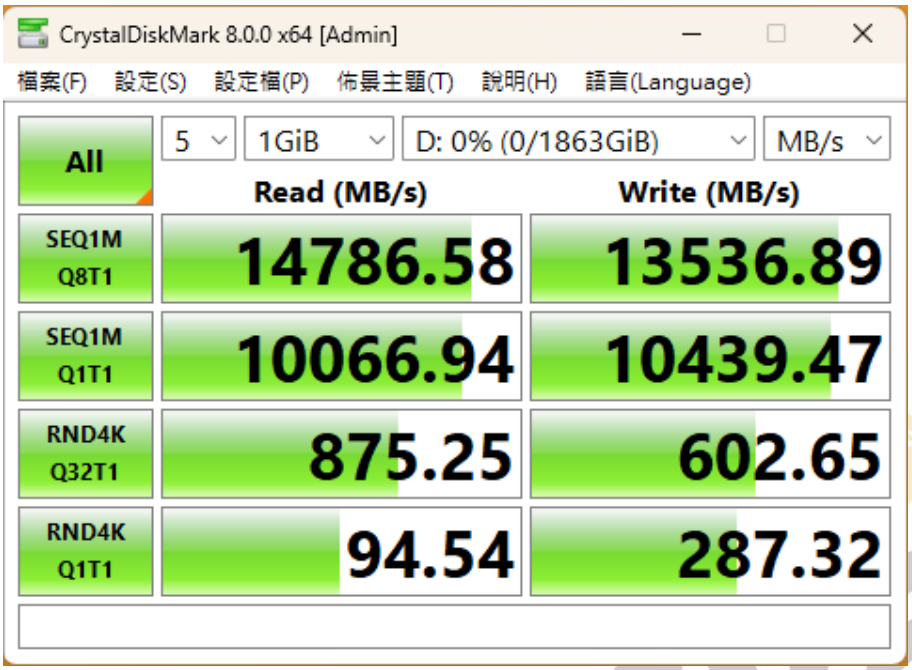
2.4.1 Primary SATA SSD installed Windows 11 OS.

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

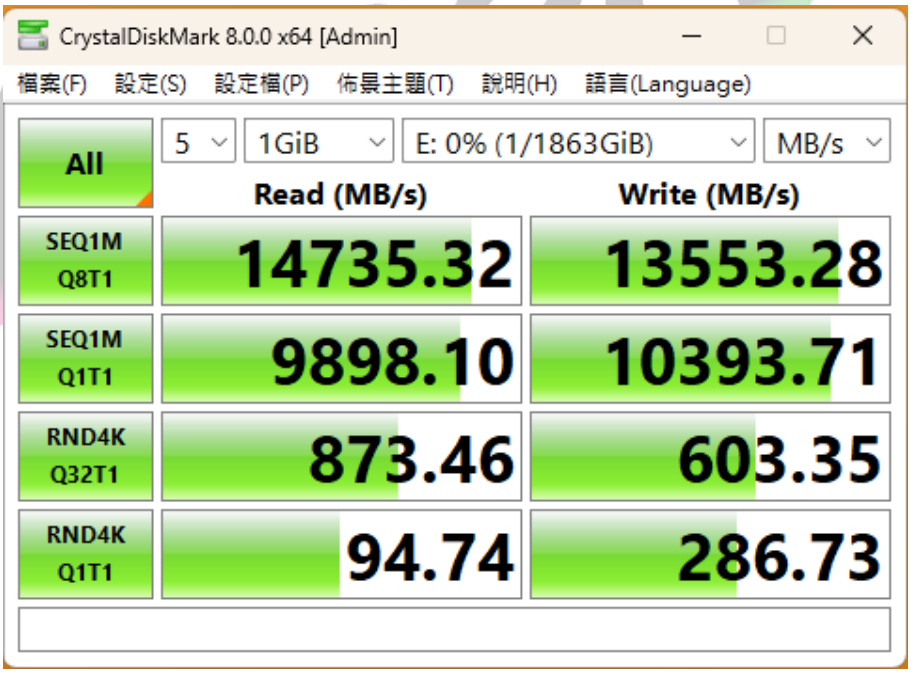
## 2.5 CrystalDiskMark 8.0 x64 performance test

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

2.5.1 SAMSUNG M.2 9100 PRO 2TB SSD in **Drive D:** performance as below:



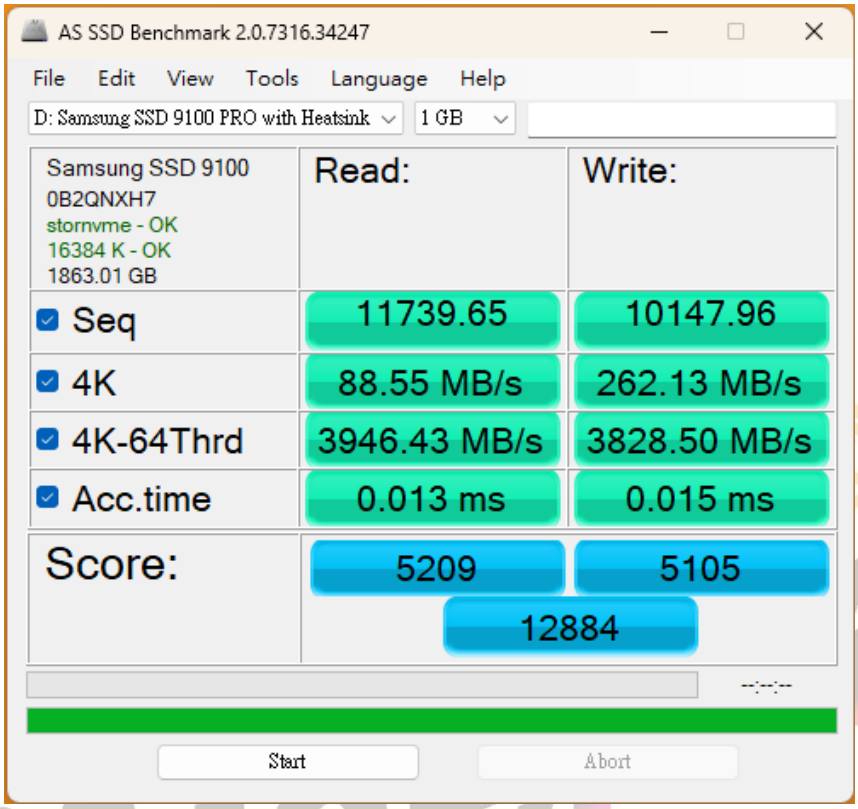

2.5.2 SAMSUNG M.2 9100 PRO 2TB SSD in **Drive E:** performance as below:



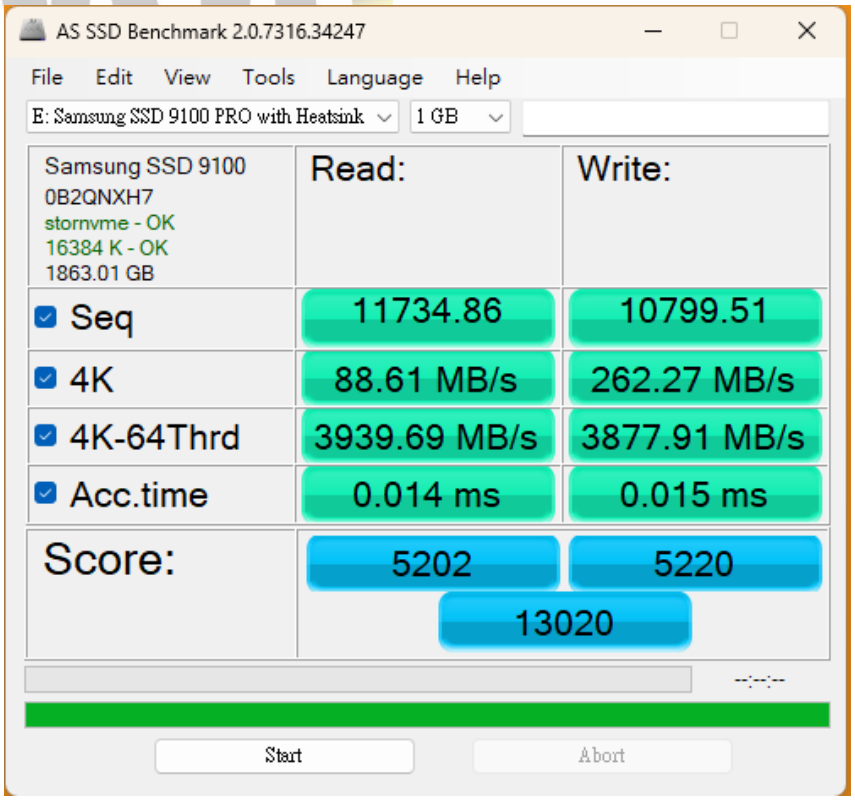
## 2.6 AS SSD Benchmark 2.0.7 performance test

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

2.6.1 SAMSUNG M.2 9100 PRO 2TB SSD in **Drive D:** performance as below:

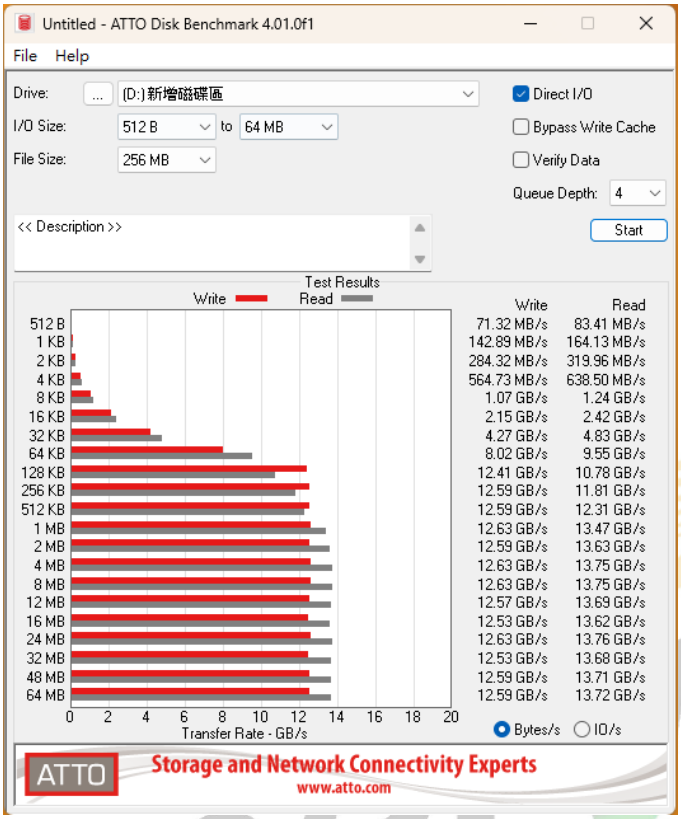



2.6.2 SAMSUNG M.2 9100 PRO 2TB SSD in **Drive E:** performance as below:

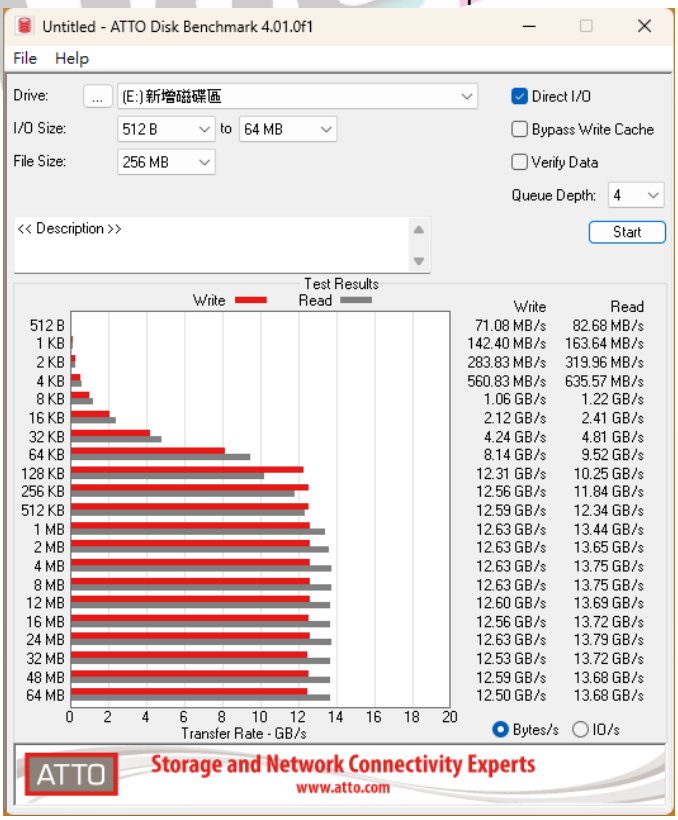


2.7 ATTO Disk Benchamrk 4.01 performance test

2.7.1 SAMSUNG M.2 9100 PRO 2TB SSD in Drive D: performance as below:




2.7.2 SAMSUNG M.2 9100 PRO 2TB SSD in Drive E: performance as below:



## 2.8 AnvilBenchmark_V110_B337

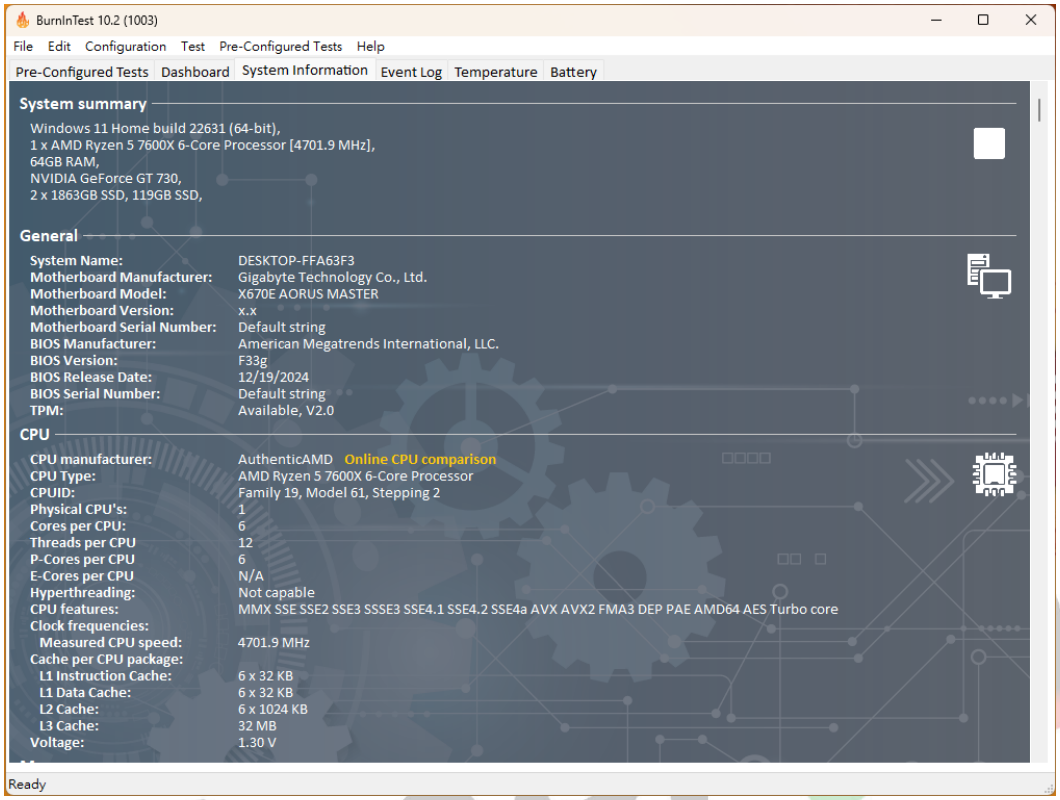
### 2.8.1 SAMSUNG M.2 9100 PRO 2TB SSD in Drive D: performance as below:

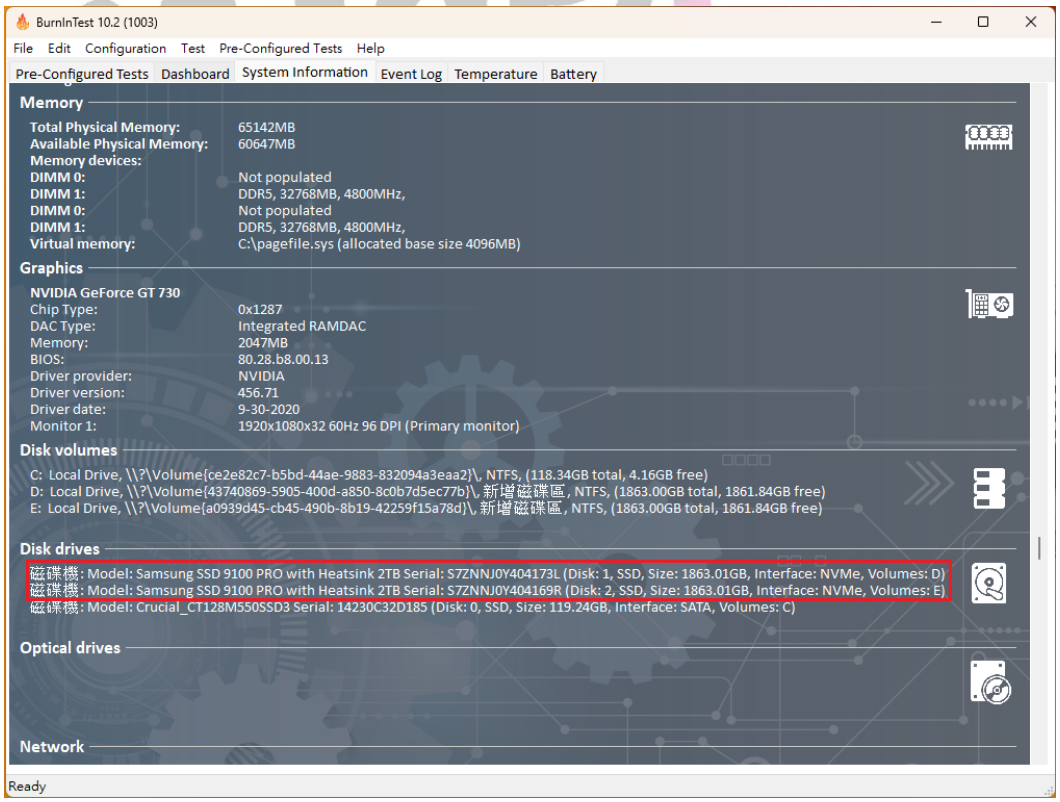

### 2.8.2 SAMSUNG M.2 9100 PRO 2TB SSD in Drive E: performance as below:

## 3. Burn In Tests and Results

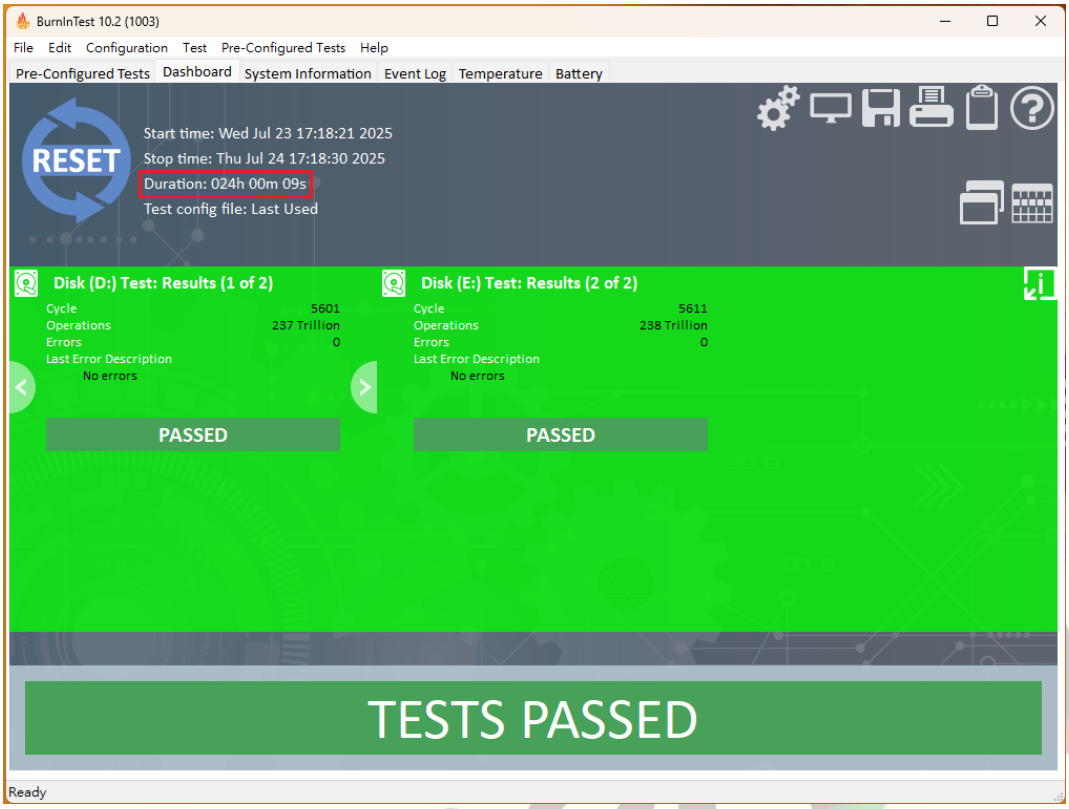
### 3.1 BurnInTest v10 Pro for GE0185A Adapter

#### 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 Gen 5, 32GT/s, 4 Lanes Interface, I/O speed is 128Gbps max.

4.2 GE0185A adapter I/O performance is based on M.2 NVMe SSD.