



# MINERVA

## GD9801G SlimSAS 8i to M.2 Dual port with 3.5”Housing

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### Performance & Burn In Test Rev 1.2

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# GD9801G Rev1.2 Converter Card

## 1. Overview

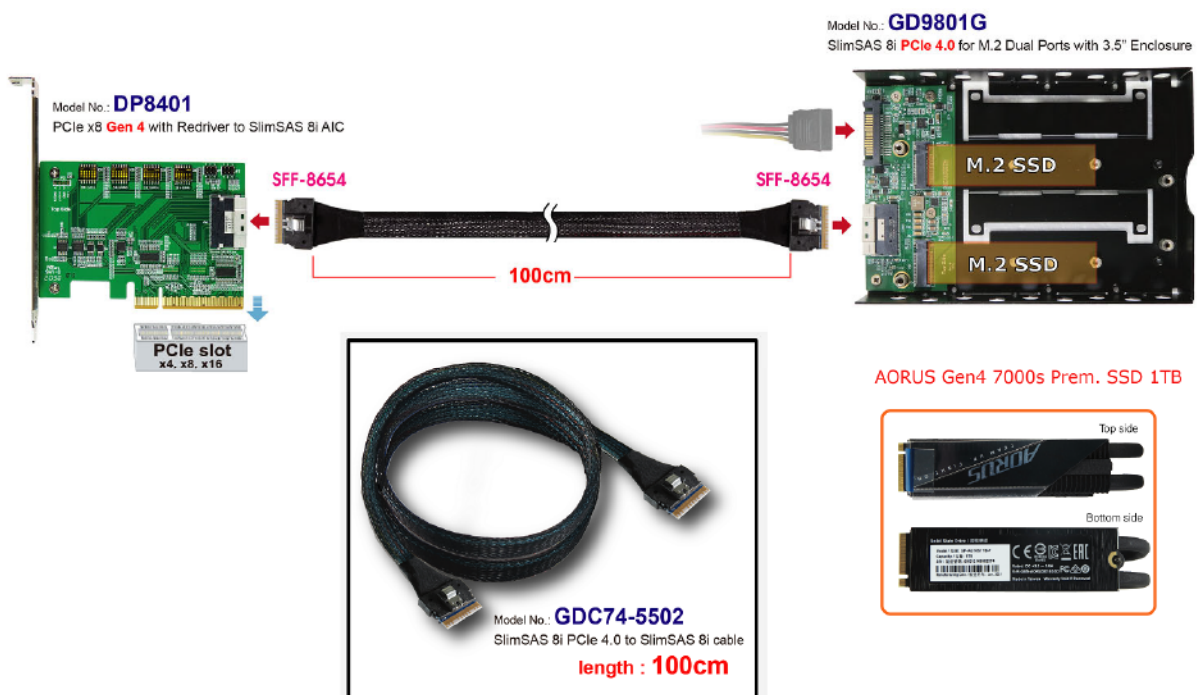
This adapter is built-in SlimSAS 8i(SFF-8654) connector and M.2 M-key connector dual port, which can be inserted into two M.2 NVMe SSDs. It is designed for use by supporting PCIe 4.0 x8, x16 bifurcation AIC and SFF-9402 pinout PCIe Switch RAID Card.

## 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: **DP8401 PCIe x8 Gen 4 to SlimSAS 8i(SFF-8654) AIC**  
Cable: **PCIe 4.0 SlimSAS 8i(SFF-8654) male to male, 100cm Cable**  
Adapter: **GD9801G SlimSAS 8i(SFF-8654) to M.2 dual port adapter**  
OS : **Microsoft Windows 10 64bit OS**

### 2.2 Test target: GD9801G adapter and GIGABYTE M.2 1TB NVMe SSD x2pcs



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## 2.3 Install Hardware

First inserts the M.2 SSD into the GD9801G M.2 connector, then with copper nuts, and screws to fix SSDs. (Please refer to the Installation Notes). Connect the GD9801G adapter to the DP8401 AIC card (PCIe x8 Gen4 to SFF-8654 8i), using the **GDC74-5502 Cable** and Plugs DP8401 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.

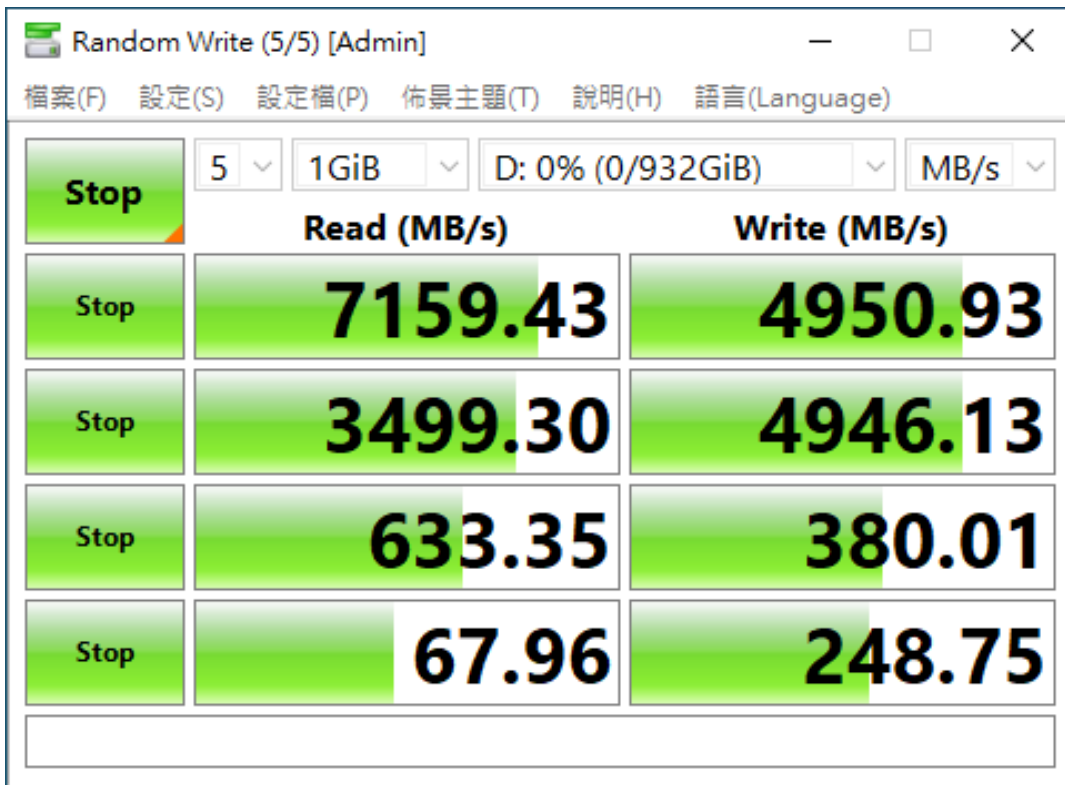


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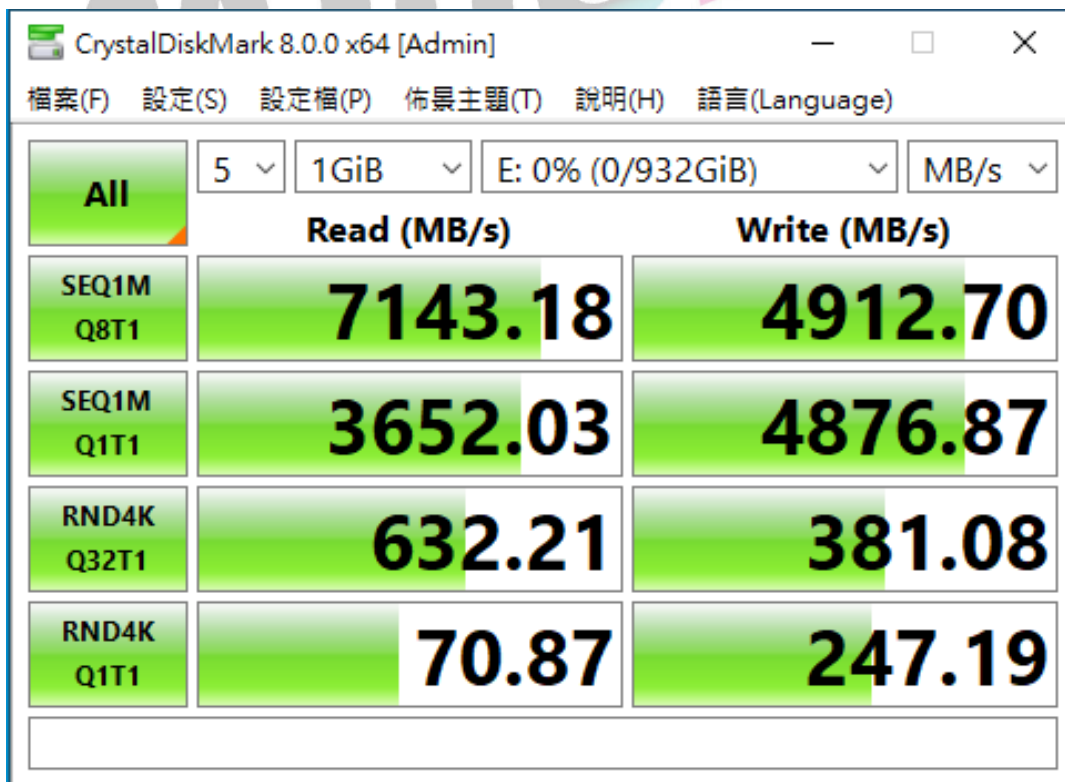
## 2.5 CrystalDiskMark 8.0.0 x64 performance test

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

2.5.1 **M.2 NVMe GP-AG70S1TB-P / 1TB** in **Drive D:** performance as below:



2.5.2 **M.2 NVMe GP-AG70S1TB-P / 1TB** in **Drive E:** performance as below:

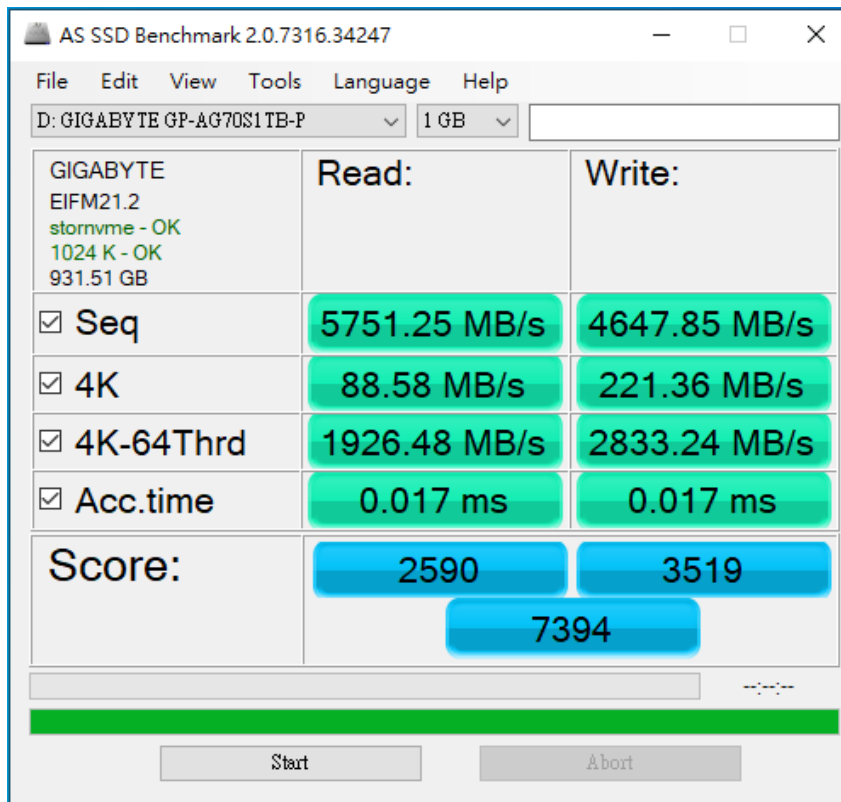


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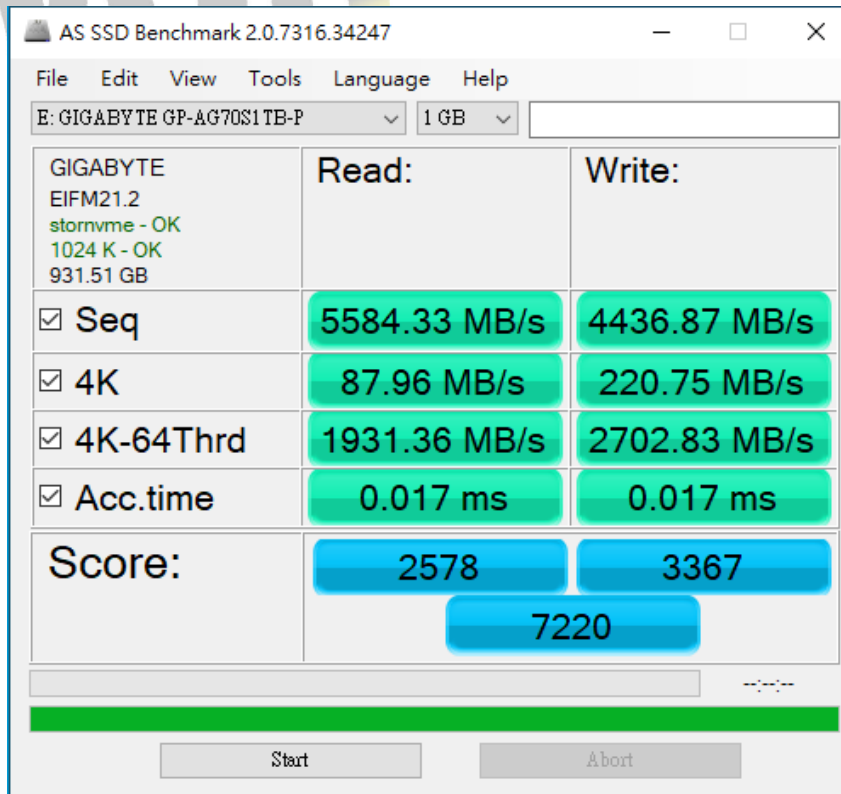
## 2.6 AS SSD Benchmark 2.0 performance test

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

2.6.1 **M.2 NVMe GP-AG70S1TB-P / 1TB** in **Drive D**: performance as below:



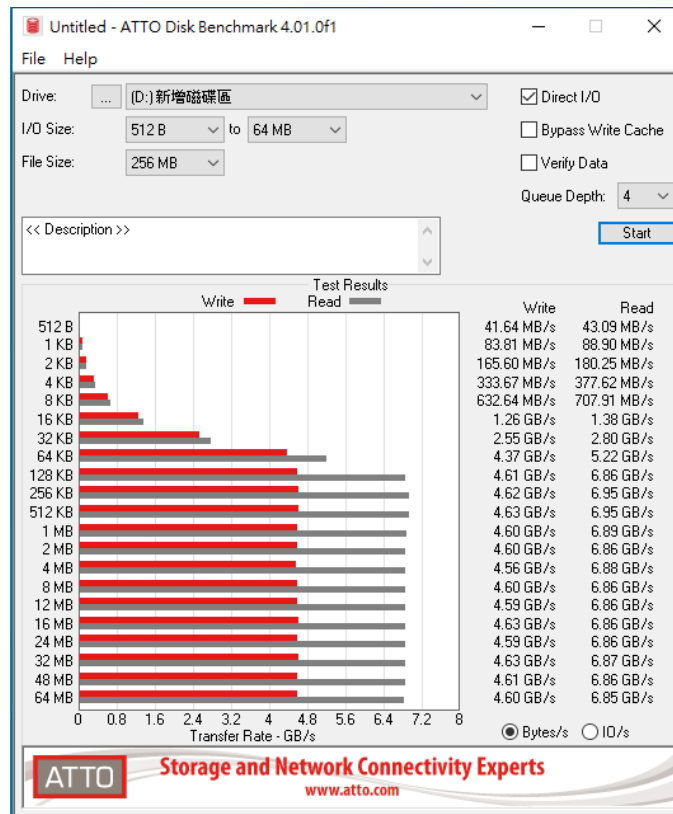
2.6.2 **M.2 NVMe GP-AG70S1TB-P / 1TB** in **Drive E**: performance as below:



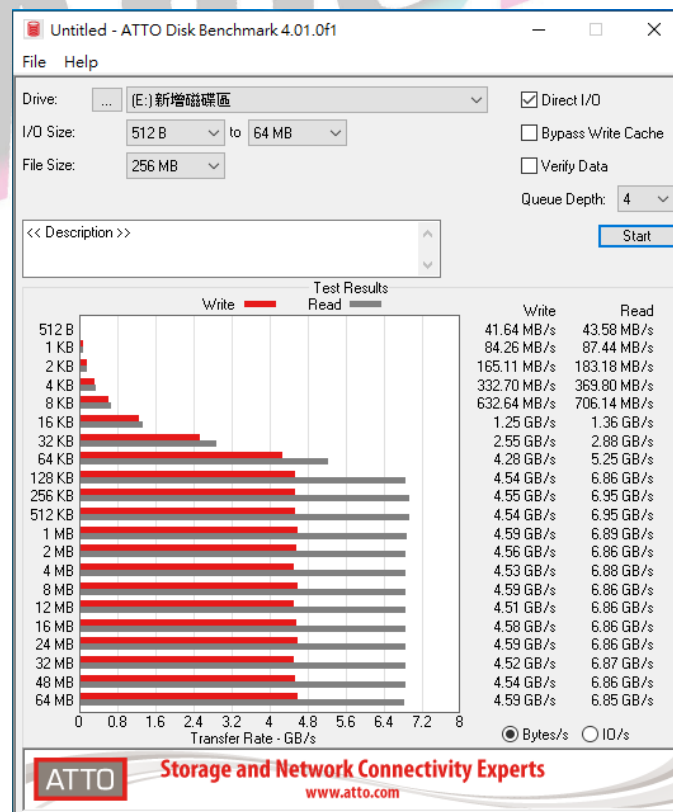
# GD9801G Rev1.2 Converter Card

## 2.7 ATTO Disk Benchmark 4.01 performance test

2.7.1 **M.2 NVMe GP-AG70S1TB-P / 1TB** in **Drive D:** performance as below:



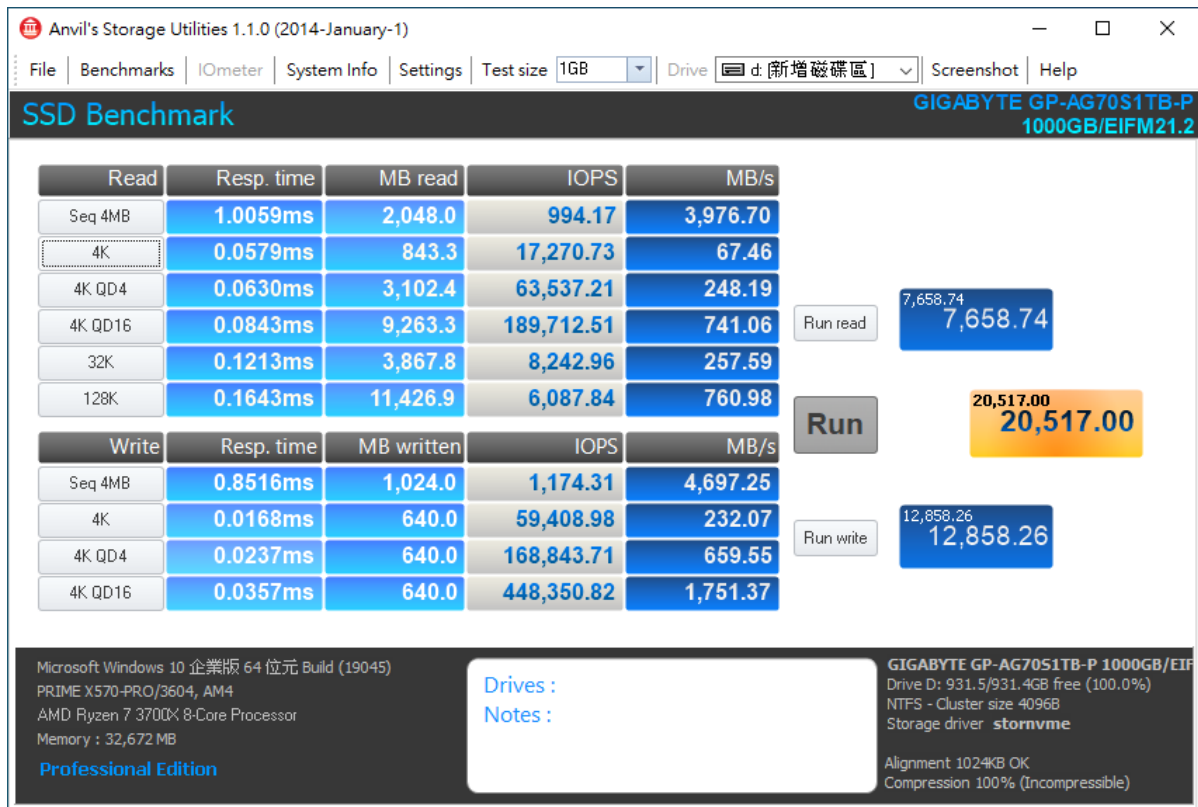
2.7.2 **M.2 NVMe GP-AG70S1TB-P / 1TB** in **Drive E:** performance as below:



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## 2.8 AnvilBenchmark\_V110\_B337

### 2.8.1 M.2 NVMe GP-AG70S1TB-P / 1TB in Drive D: performance as below:



### 2.8.2 M.2 NVMe GP-AG70S1TB-P / 1TB in Drive E: performance as below:



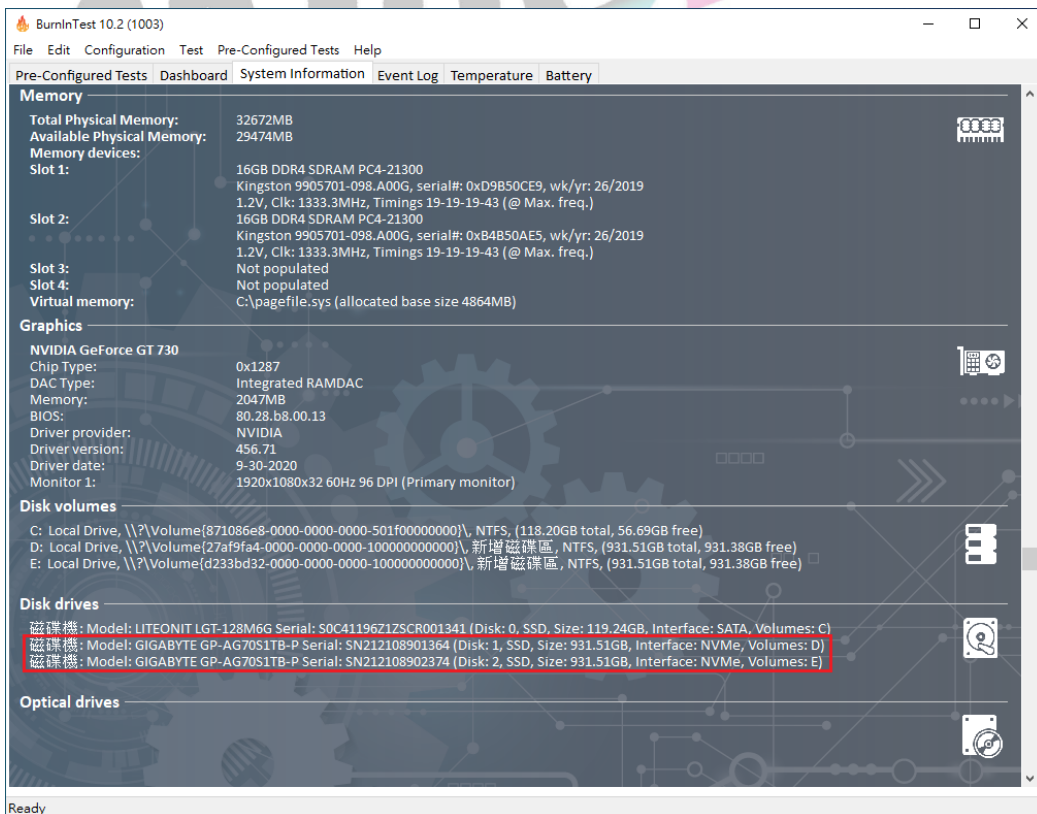
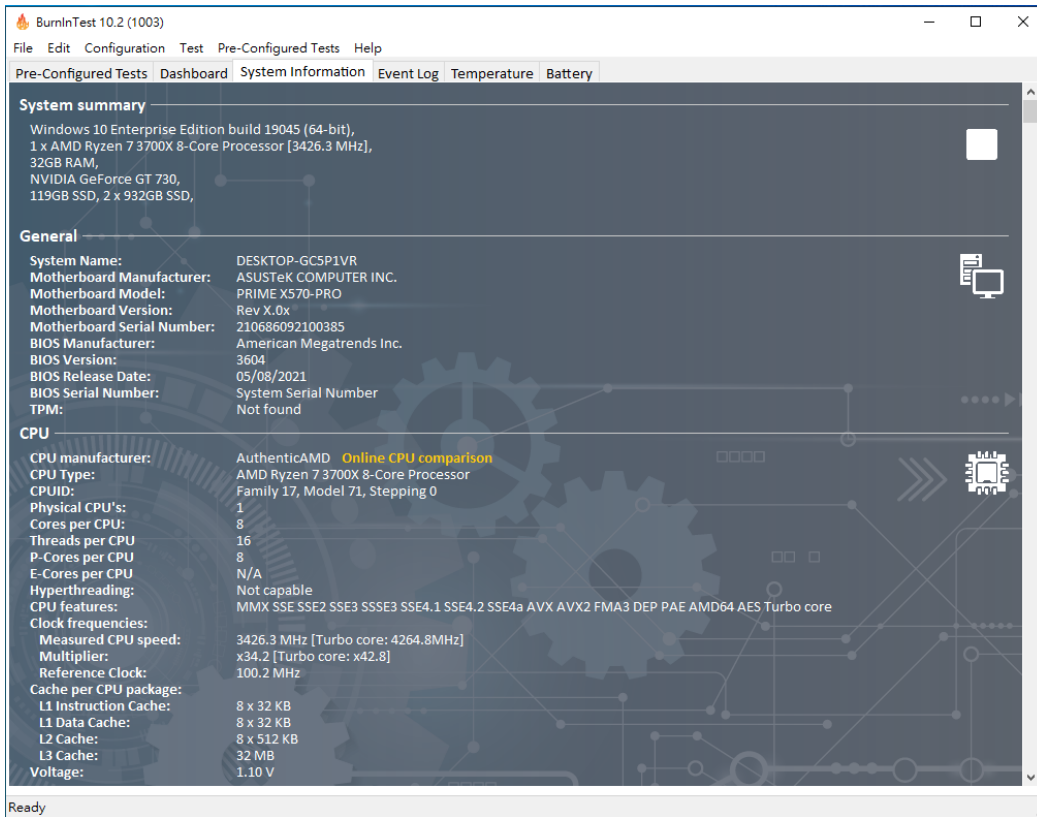


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## 3. Burn In Tests and Results

### 3.1 BurnInTest v10.2 Pro

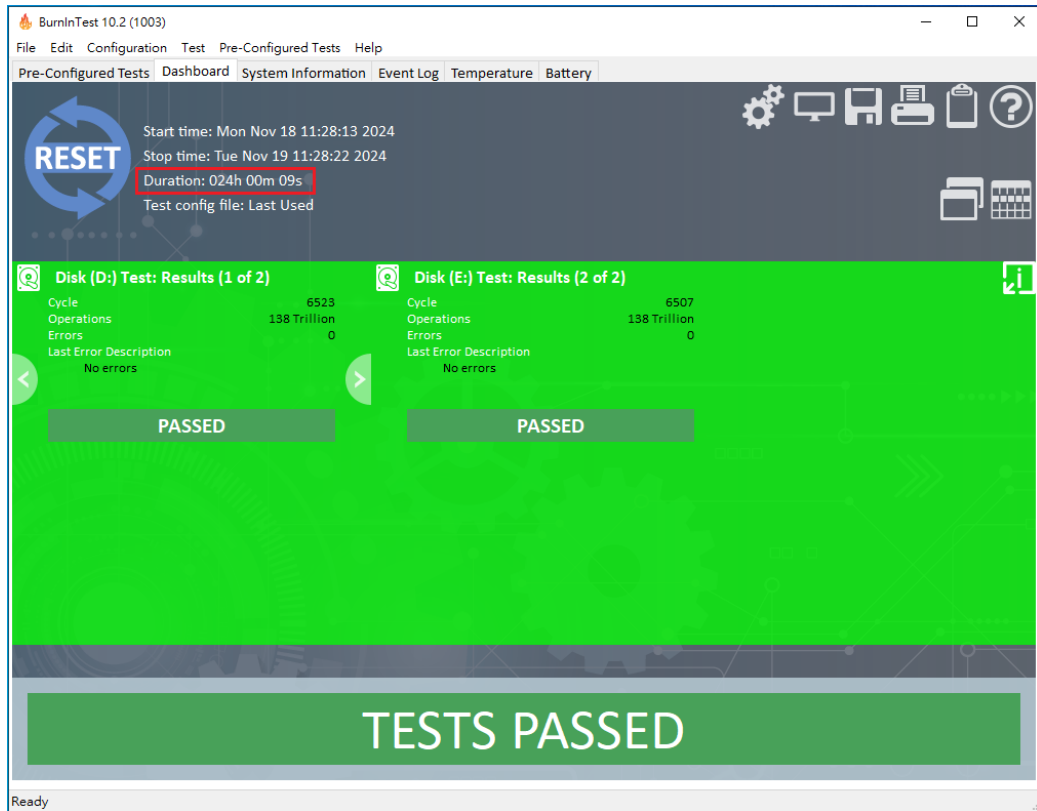
#### 3.1.1 System information as below:





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## 3.1.1 24-hour Burn-in test **PASSED**



## 4. Summary

- 4.1 M.2 NVMe SSD is PCIe 4.0 / 4 Lanes Interface, I/O speed, max. to 64Gbps.
- 4.2 GD9801G adapter I/O performance is based on NVMe SSD.