



# MINERVA

## DP9504 PCIe x4 Gen 4 with ReDriver for Gen-Z 1C AIC

---

### Performance & Burn In Test Rev. 1. 0

#### Table of Contents

---

1. Overview
2. Performance Measurement Tools and Results
  - 2.1 Test Platform
  - 2.2 Test target and U.2 NVMe SSD
  - 2.3 Install Hardware
  - 2.4 BIOS & Windows 10 OS environment setup
  - 2.5 CrystalDiskMark 8.0 x64 performance test
  - 2.6 AS SSD Benchmark 2.0.7 performance test
  - 2.7 ATTO Disk Benchamrk 4.0.1 performance test
  - 2.8 AnvilBenchmark\_V110\_B337 Benchmark performance test
3. Burn In Tests and Results
  - 3.1 BurnInTest v8.1 Pro burn in test
4. Summary

100

## DP9504 Rev1.2 Host Bus Adapter

### 2.3 Install Hardware

The M.2 NVMe SSD Inserts into Dp4203 adapter and connects DP4203 adapter to the DP9504 AIC, using Gen-Z 1C male to Female **with Power Cord cable**. The DP9504 plugs into PCIe Slot of GIGABYTE **X570 AORUS MASTER**

### 2.4 BIOS & Windows 10 OS environment setup

- 2.4.1 Primary SATA SSD installed Windows 10 OS.
- 2.4.2 M.2 NVMe SSD, formatted to NTFS Mode. Don't install any program.

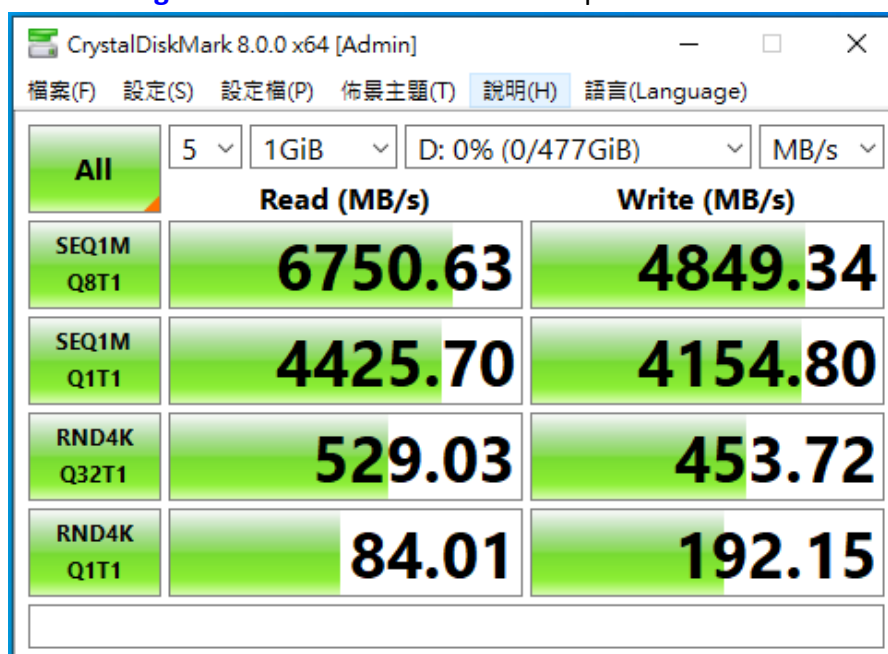


## DP9504 Rev1.2 Host Bus Adapter

### 2.5 CrystalDiskMark 8.0 x64 performance test

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

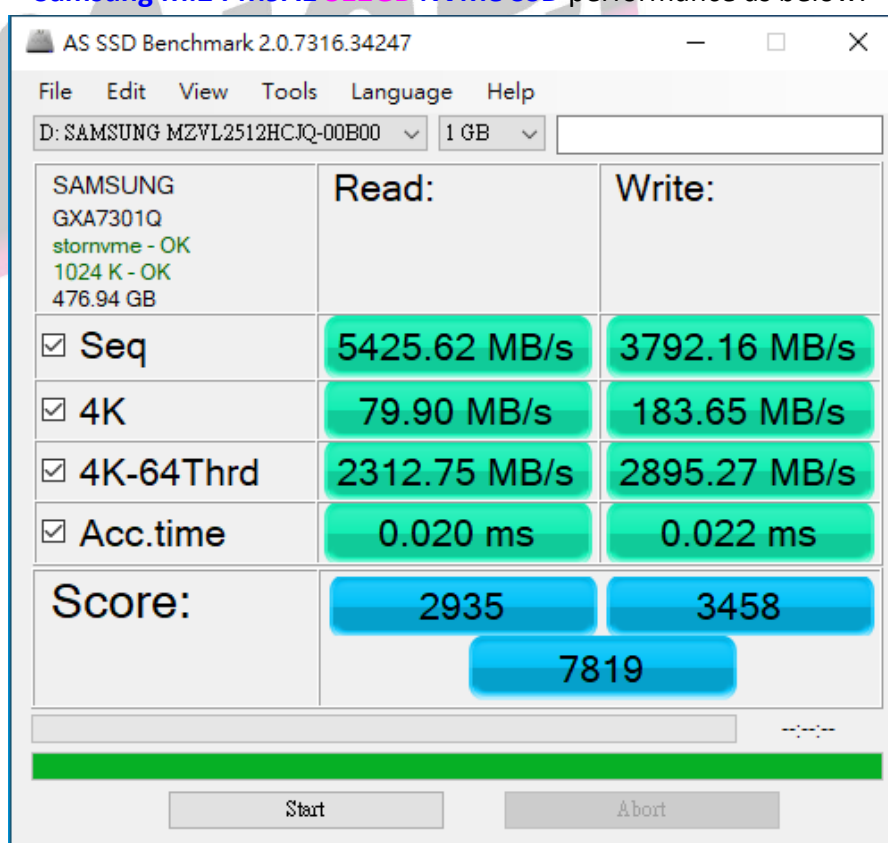
#### 2.5.1 Samsung M.2 PM9A1 512GB NVMe SSD performance as below:



### 2.6 AS SSD Benchmark 2.0.7 performance test

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

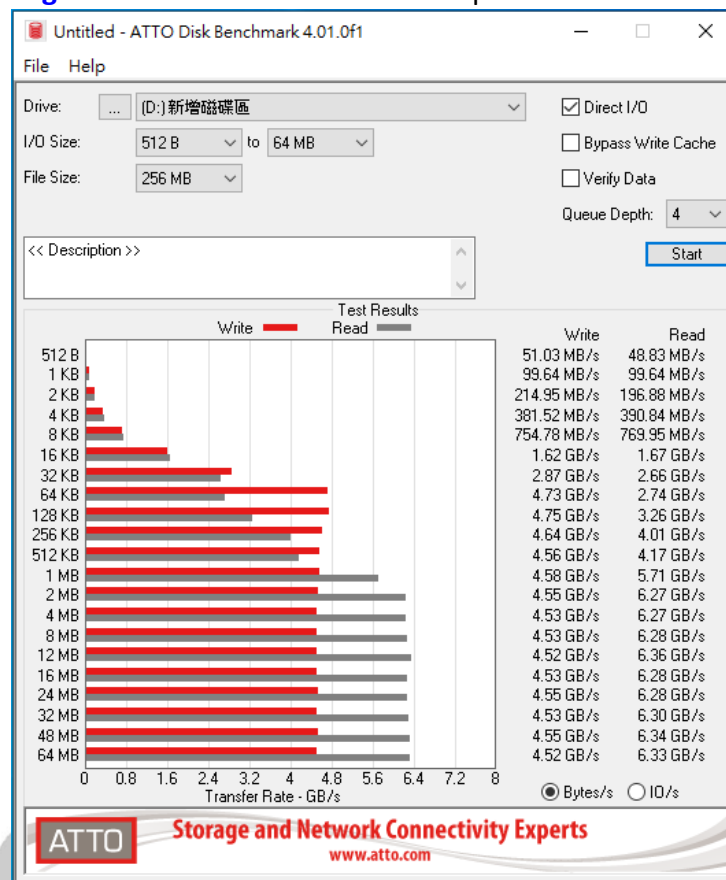
#### 2.6.1 Samsung M.2 PM9A1 512GB NVMe SSD performance as below:



# DP9504 Rev1.2 Host Bus Adapter

## 2.7 ATTO Disk Benchmark 4.01 performance test

### 2.7.1 Samsung M.2 PM9A1 512GB NVMe SSD performance as below:



## 2.8 AnvilBenchmark\_V110\_B337

### 2.8.1 Samsung M.2 PM9A1 512GB NVMe SSD performance as below:



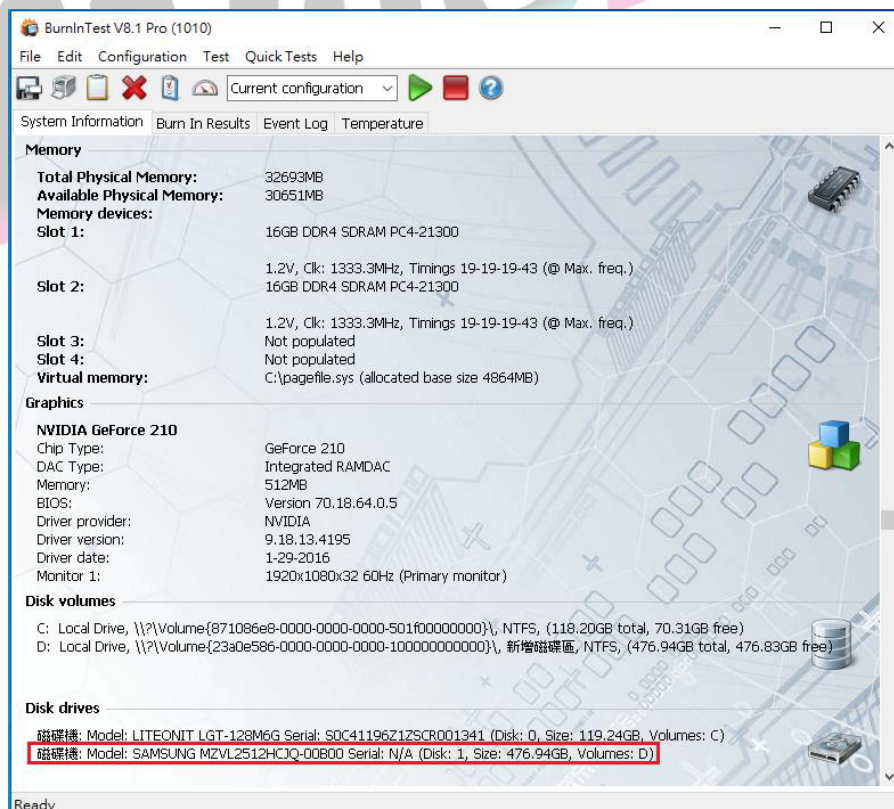
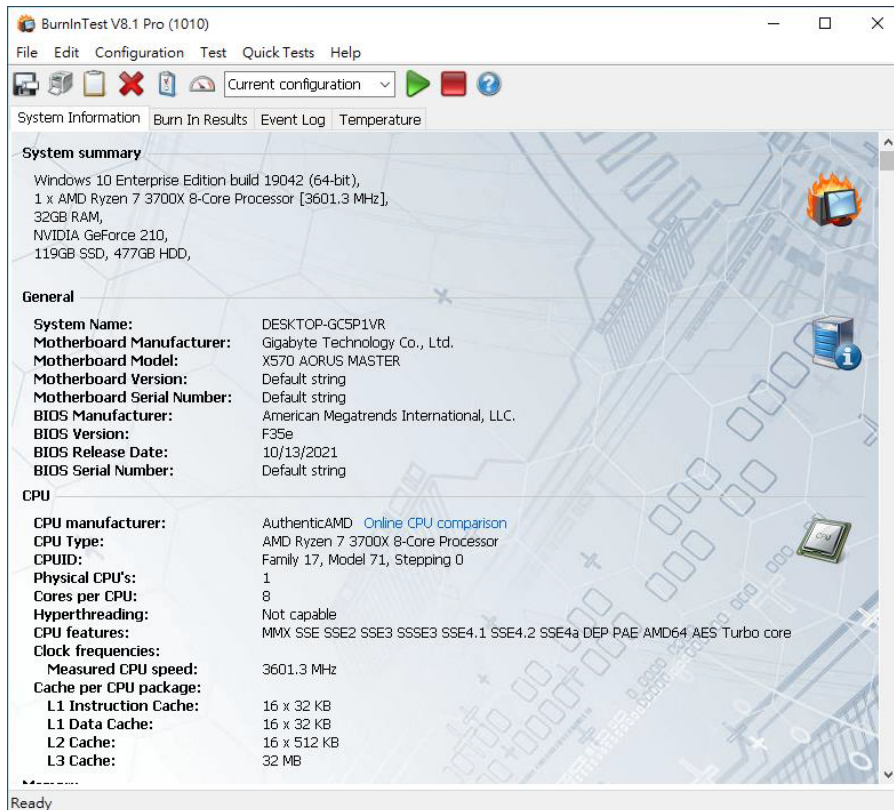


# DP9504 Rev1.2 Host Bus Adapter

## 3. Burn In Tests and Results

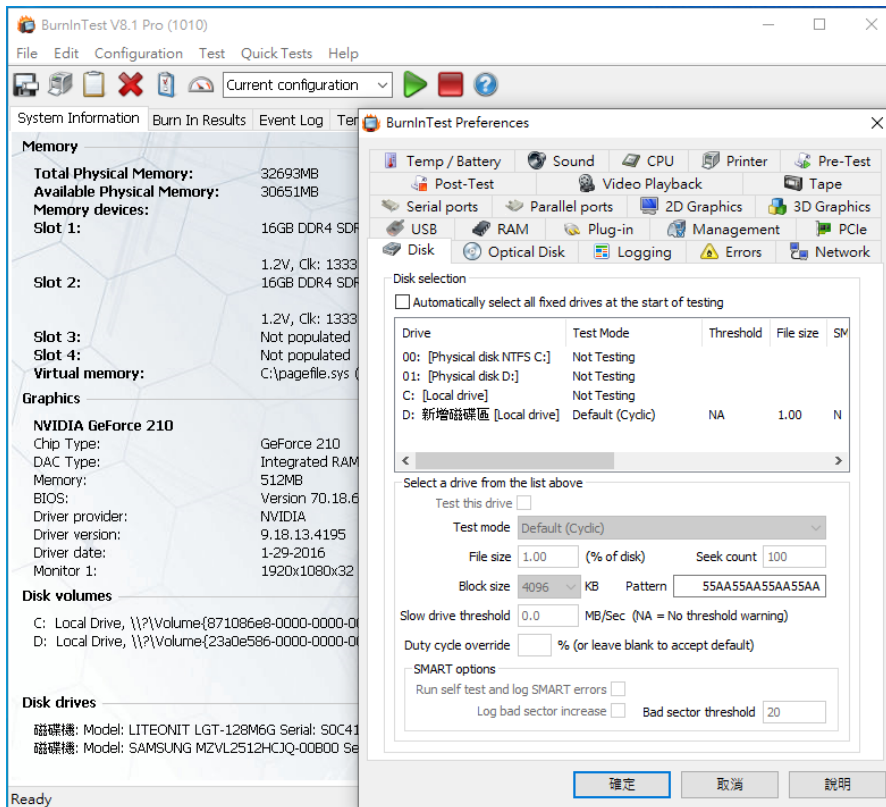
### 3.1 BurnInTest v8.1 Pro for Samsung M.2 PM9A1 512B NVMe SSD

#### 3.1.1 System Information as below:

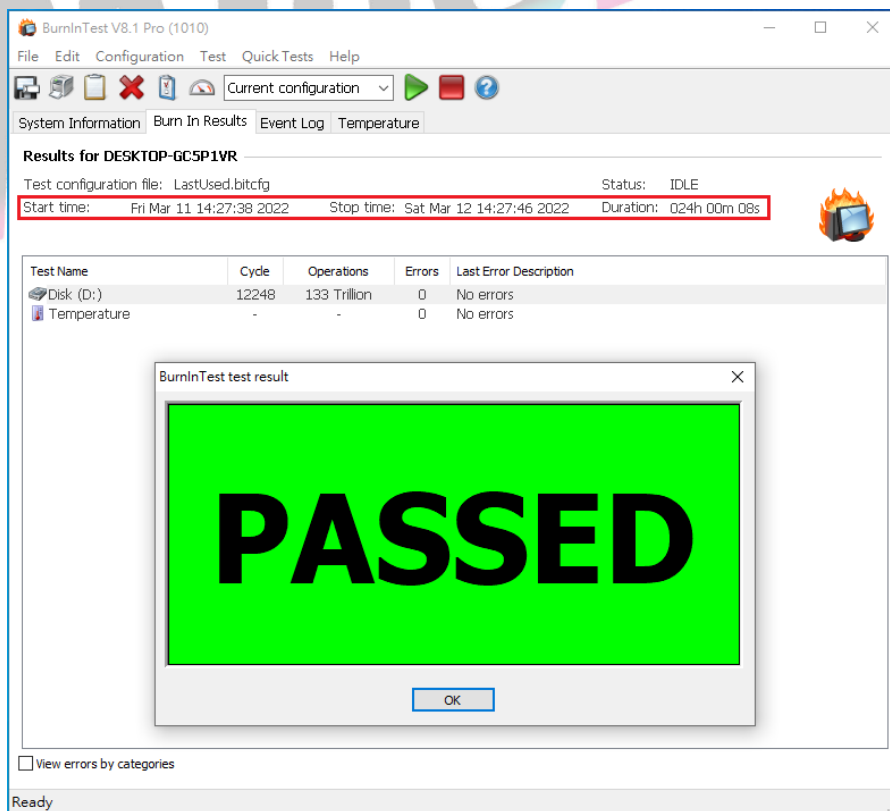


# DP9504 Rev1.2 Host Bus Adapter

### 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 NVMe SSD is PCIe Gen 4, 16GT/s, I/O speed, max. to 64Gbps.
- 4.2 DP9504 Host Bus Adapter I/O performance is based on M.2 NVMe SSD.
- 4.3 DP4203 Adapter I/O performance is based on M.2 NVMe SSD.

