



# MINERVA

## DP6303 M.2 PCIe 4.0 GF with ReDriver for OCulink 4i Adapter

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

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# DP6303 Adapter

## 1. Overview

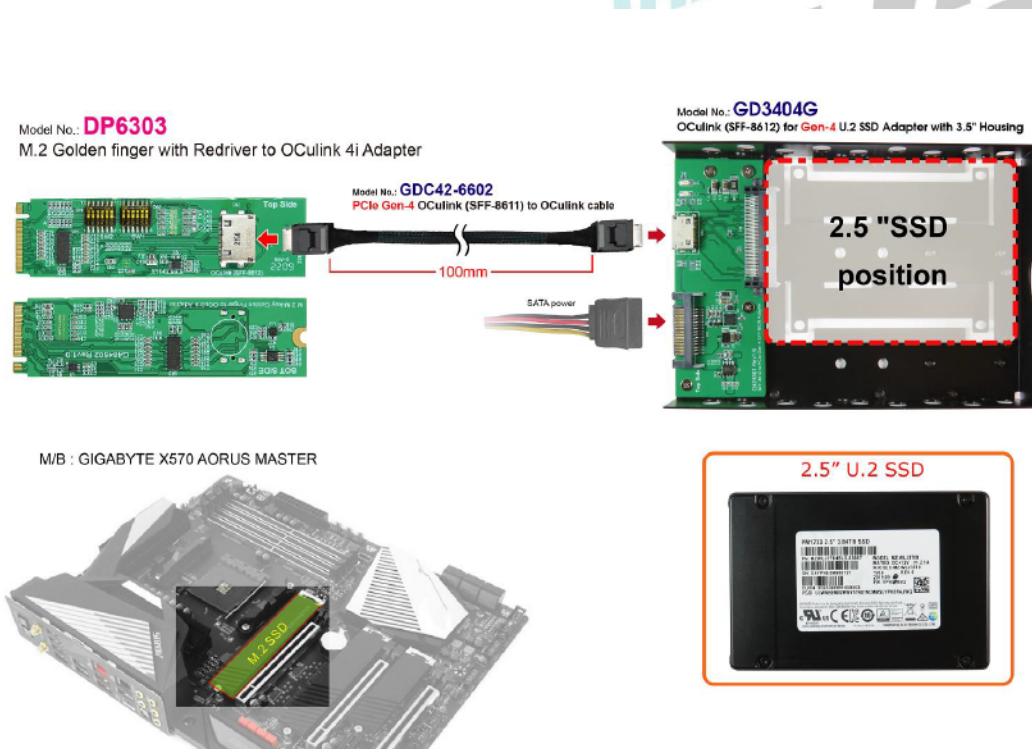
This DP6303 adapter may provide PCIe Gen4, 16GT/s high-speed signal extension to OCulink 4i.

## 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  
AIC: DP6303 M.2 PCIe 4.0 with Redriver to OCulink 4i  
Adapter: GD3404G OCulink to U.2 PCIe 4.0 Adapter  
Cable: SFF-8611 4i Male to Male, **100cm** Cable  
OS : Microsoft **Windows 10 64bit OS**

2.2 Test target: DP6303 Adapter, GD3404G Adapter and **Samsung PM1733 U.2 4TB NVMe SSD**



# DP6303 Adapter

## 2.3 Install Hardware

Inserts U.2 NVMe SSD into GD3404G adapter converter's U.2 connector, and then with coppers, and screws to fix SSDs. (Please refer to the Installation Notes). Connects GD3404G converter to DP6303 adapter(M.2 PCIe Gen4 with Redriver to OCulink 4i), Using **SFF-8611 4i Male to Male cable** and plugs DP6303 into M.2 M-key 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 U.2 NVMe SSD, formatted to NTFS Mode. Don't install any program.

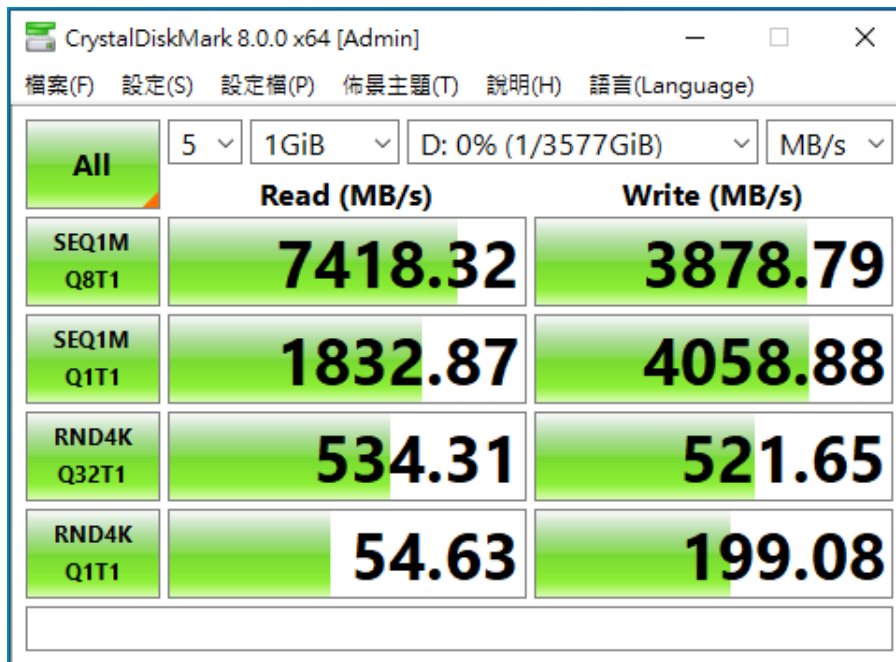


# DP6303 Adapter

## 2.5 CrystalDiskMark 8.0 x64 performance test

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

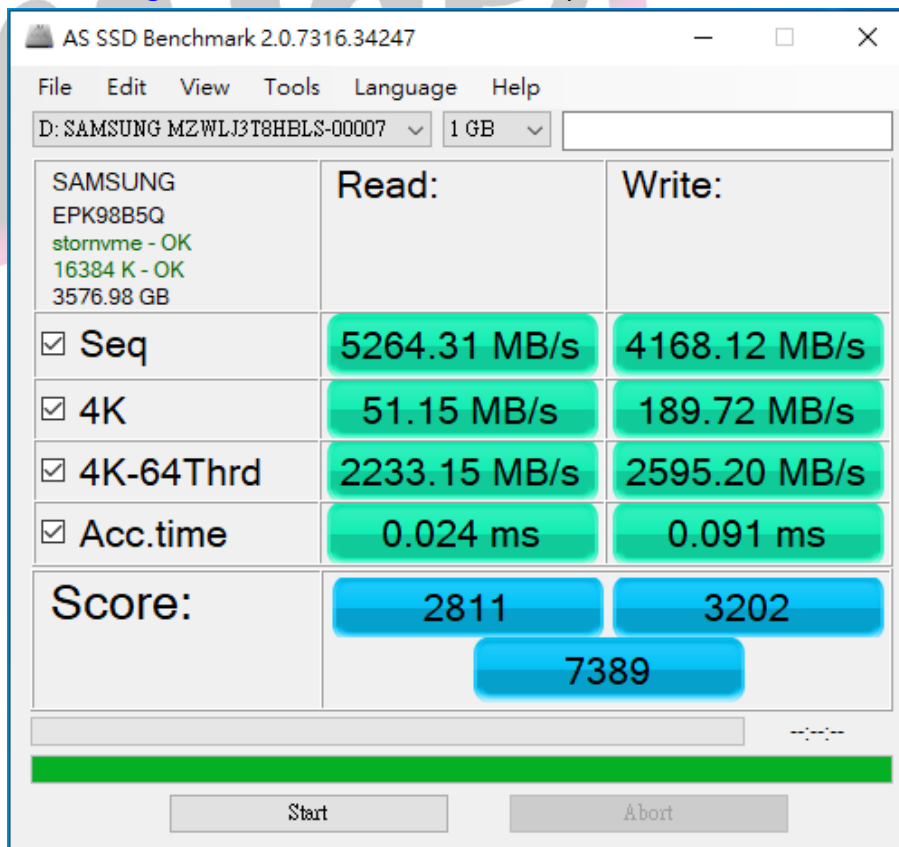
2.5.1 Samsung PM1733 U.2 NVMe SSD / 4TB performance as below:



## 2.6 AS SSD Benchmark 2.0.7 performance test

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

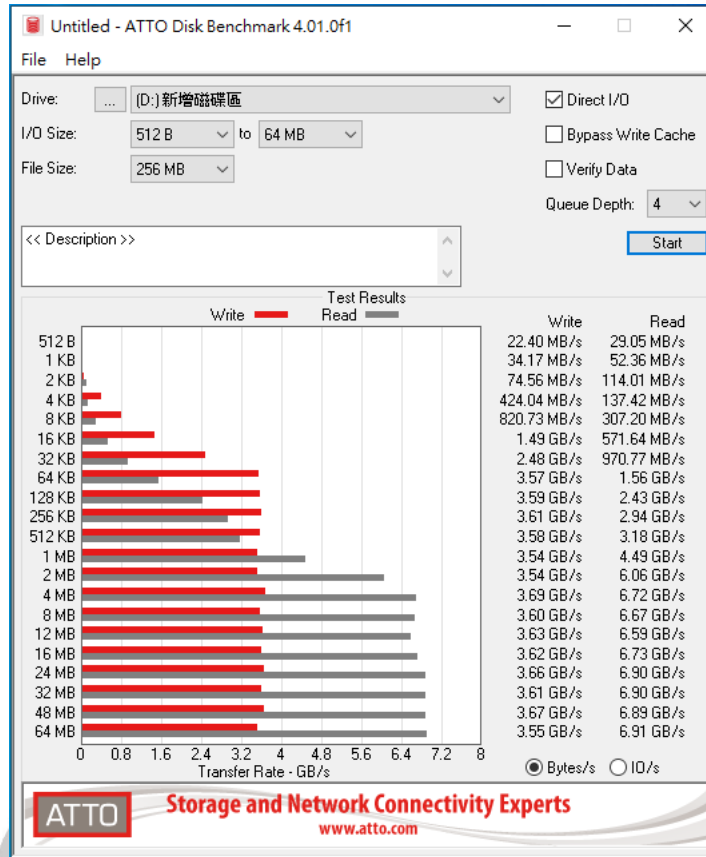
2.6.1 Samsung PM1733 U.2 NVMe SSD / 4TB performance as below:



# DP6303 Adapter

## 2.7 ATTO Disk Benchmark 4.01 performance test

### 2.7.1 Samsung PM1733 U.2 NVMe SSD / 4TB performance as below:



## 2.8 AnvilBenchmark\_V110\_B337

### 2.8.1 Samsung PM1733 U.2 NVMe SSD / 4TB performance as below:

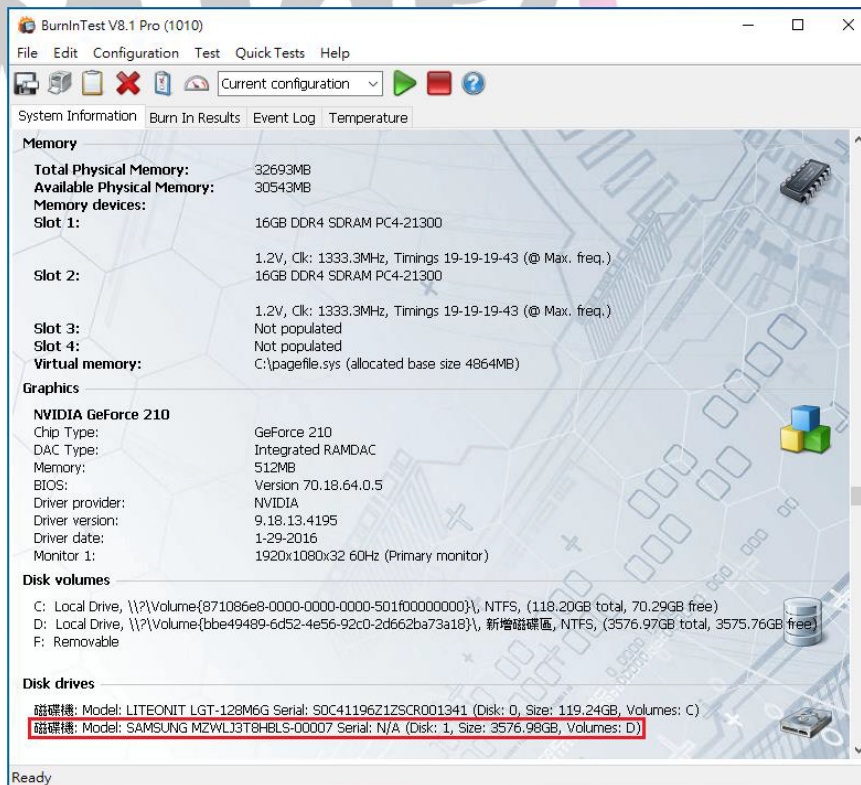
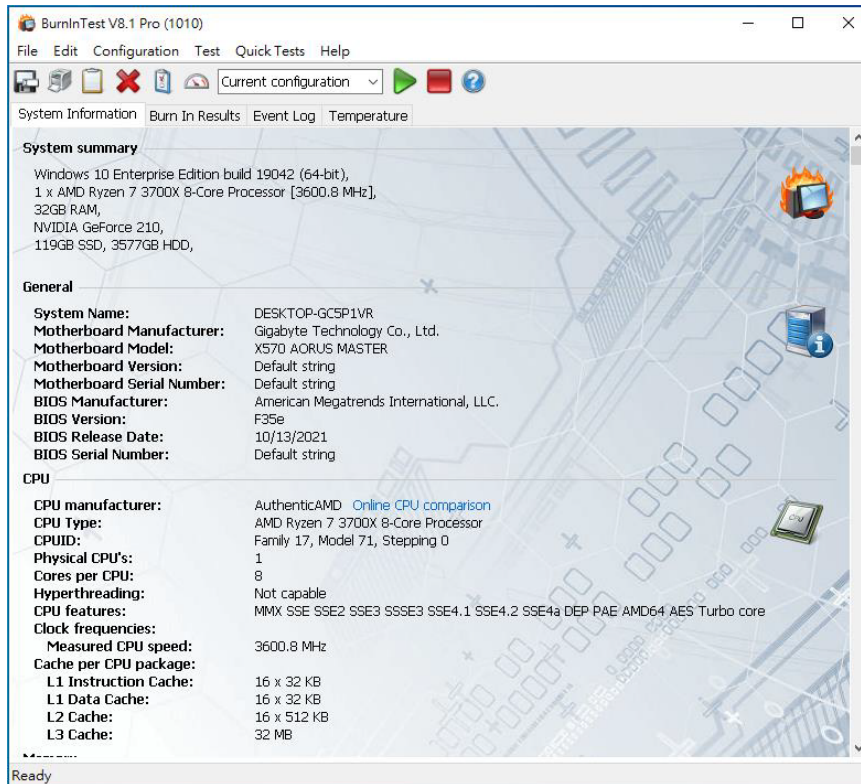


# DP6303 Adapter

## 3. Burn In Tests and Results

### 3.1 BurnInTest v8.1 Pro for Samsung PM1733 U.2 NVMe SSD / 4TB

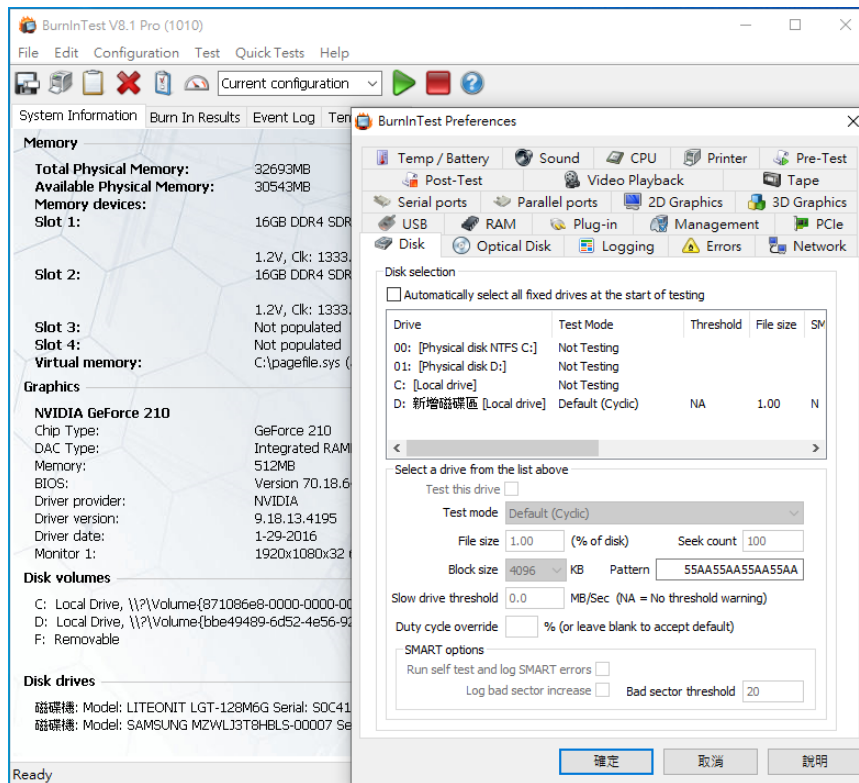
#### 3.1.1 System Information as below:



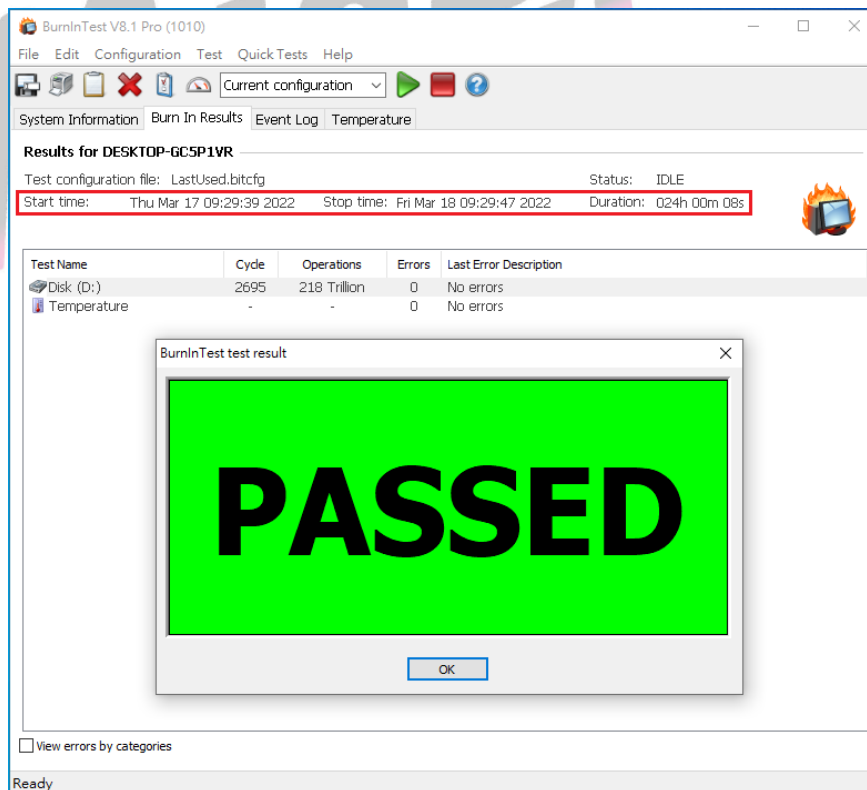


# DP6303 Adapter

## 3.1.2 Disk test mode( 10 ways cycle test)



## 3.1.3 24-hour Burn-in test PASSED



# DP6303 Adapter

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## 4. Summary

- 4.1 U.2 NVMe SSD is PCIe Gen4 16GT/s, 4 Lanes Interface, I/O speed, max. to 64Gbps.
- 4.2 DP6303 adapter I/O performance is based on U.2 NVMe SSD.
- 4.3 GD3404G adapter I/O performance is based on U.2 NVMe SSD.

