



# MINERVA

GDC72-9101 MINI SAS HD 8X to MINI SAS HD 4X/x2 Y-Cable, 50cm

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## Performance & Burn In Test Rev 1.0

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# PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

## 1. Overview

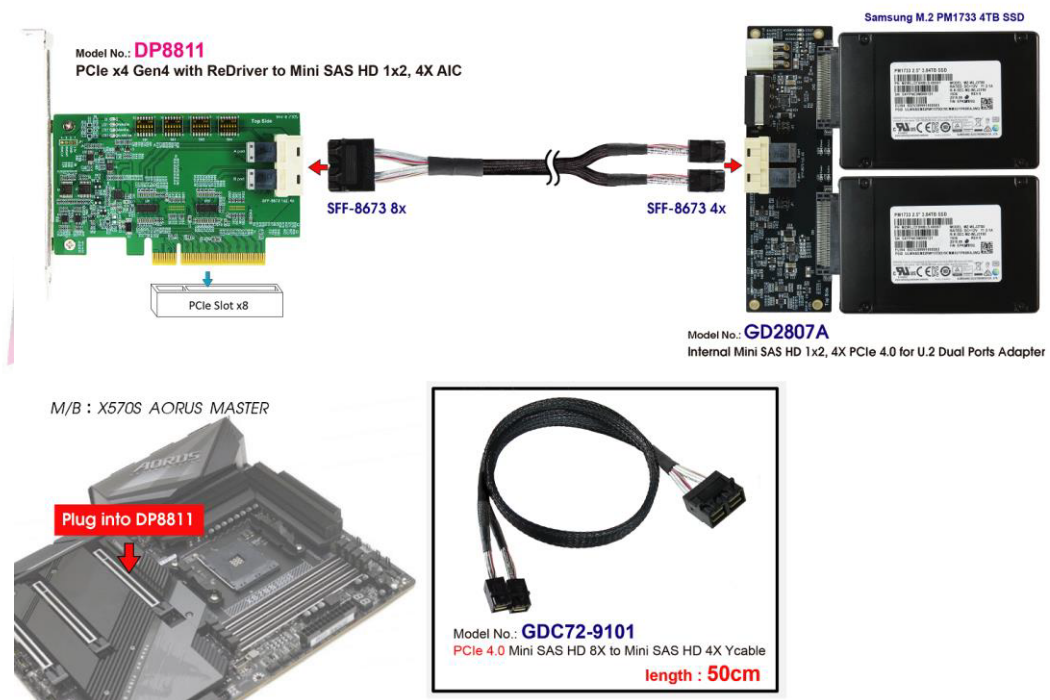
The cable is compliant with PCIe 4.0 spec with x8 link width and supports PCIe 4.0 common clock mode. The PCIe PERST#, SMBus, WAKE#, CLKREQ# signals connect to Mini SAS HD 1x2, 4X(SFF-8673) sideband pins.

## 2. Tools and Results of Performance Measurement

### 2.1 Test Platform

M/B : GIGABYTE **X570S 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  
Add in Card: DP8811 PCIe x8 with ReDriver to Mini SAS HD 1x2, 4X(SFF-8673) AIC  
Cable: PCIe Gen4 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, **50cm**  
Adapter: GD2807A Mini SAS HD 1x2, 4X(SFF-8673) to U.2 dual port adapter  
OS : Microsoft **Windows 10 64bit OS**

### 2.2 Test target: **GDC72-9101** Cable with GD2807A adapter, Samsung U.2 NVMe SSD/ **4TB**



## PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

### 2.3 Install Hardware

First inserts the U.2 SSD into the GD2807A U.2 connector and connects to the DP8811 PCIe x8 with ReDriver to Mini SAS HD 1x2, 4X(SFF-8673) AIC using the **GDC72-9201, 50cm cable**, and Plugs DP8811 AIC into PCIe x16 Slot of GIGABYTE **X570S AORUS MASTER**.

### 2.4 BIOS & Windows 10 OS environment setup

2.4.1 Primary SATA NVMe SSD install Windows 10 OS.

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



## PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

### 2.5 CrystalDiskMark 8.0.0 x64 performance test

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

2.5.1 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive D: performance as below:

The screenshot shows the CrystalDiskMark 8.0.0 x64 [Admin] interface. The drive selected is D: (0% / 1/3577GiB). The test results are as follows:

	Read (MB/s)	Write (MB/s)
SEQ1M Q8T1	7419.59	4183.39
SEQ1M Q1T1	1934.40	4039.45
RND4K Q32T1	531.01	445.94
RND4K Q1T1	54.42	199.65

2.5.2 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive E: performance as below:

The screenshot shows the CrystalDiskMark 8.0.0 x64 [Admin] interface. The drive selected is E: (0% / 1/3577GiB). The test results are as follows:

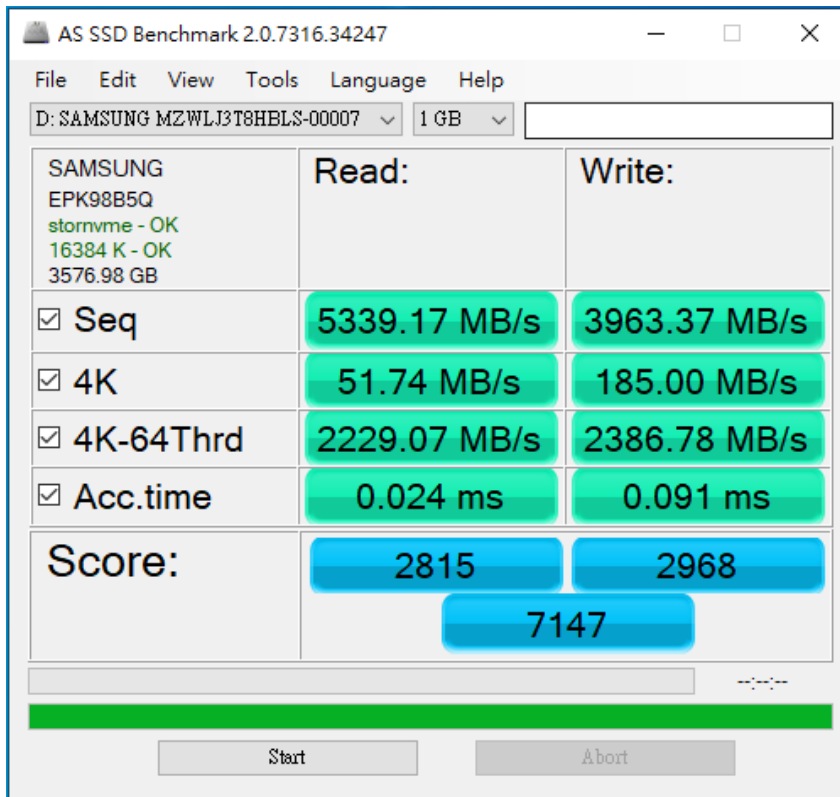
	Read (MB/s)	Write (MB/s)
SEQ1M Q8T1	7417.69	4147.10
SEQ1M Q1T1	1797.51	4041.98
RND4K Q32T1	534.10	448.69
RND4K Q1T1	55.07	190.77

# PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

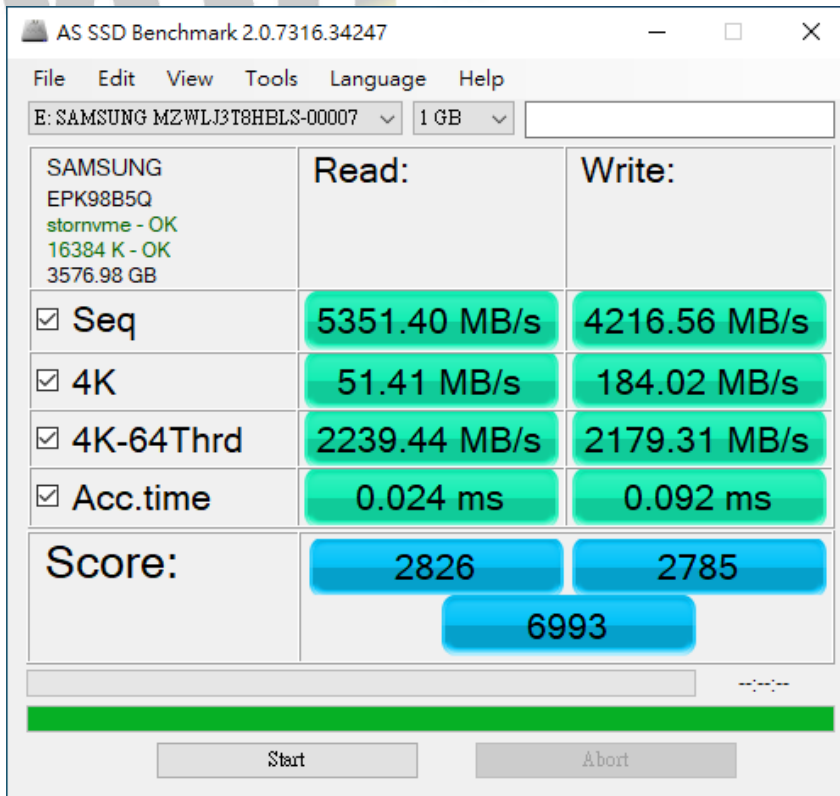
## 2.6 AS SSD Benchmark 2.0 performance test

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

2.6.1 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive D: performance as below:



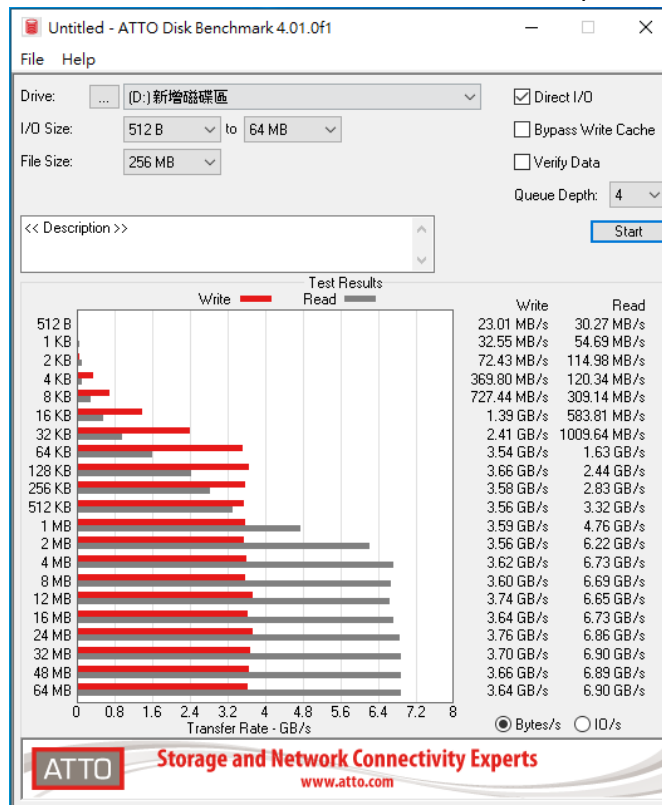
2.6.2 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive E: performance as below:



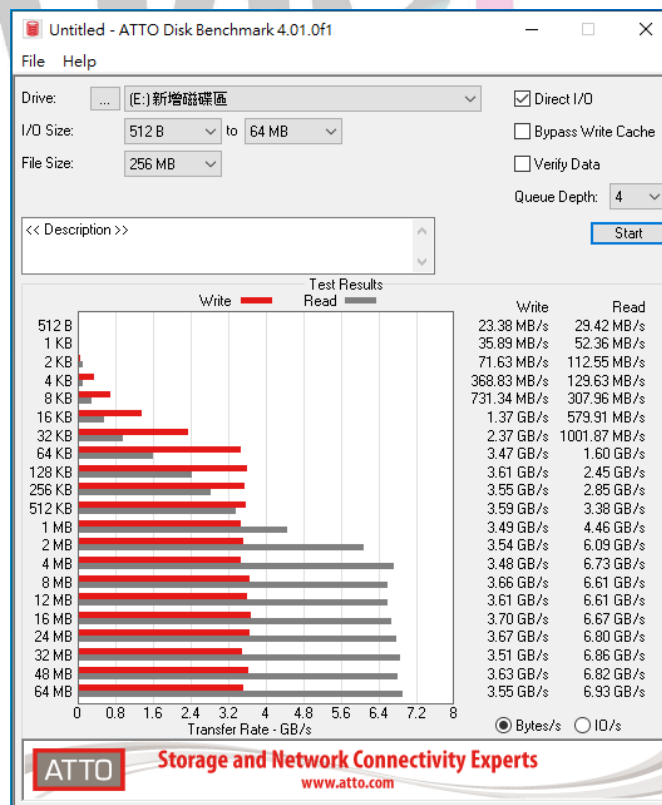
# PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

## 2.7 ATTO Disk Benchmark 4.01 performance test

### 2.7.1 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive D: performance as below:



### 2.7.2 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive E: performance as below:



# PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

## 2.8 AnvilBenchmark\_V110\_B337

### 2.8.1 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive D: performance as below:



### 2.8.2 SAMSUNG PM1733 U.2 NVMe SSD/ 4TB in Drive E: performance as below:



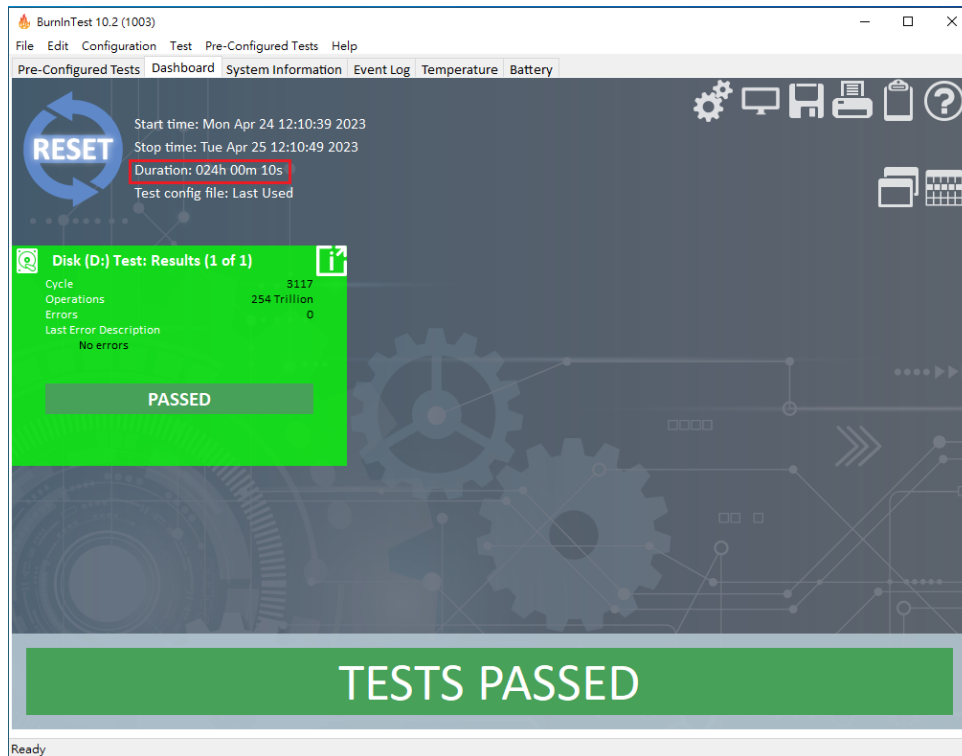


# PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

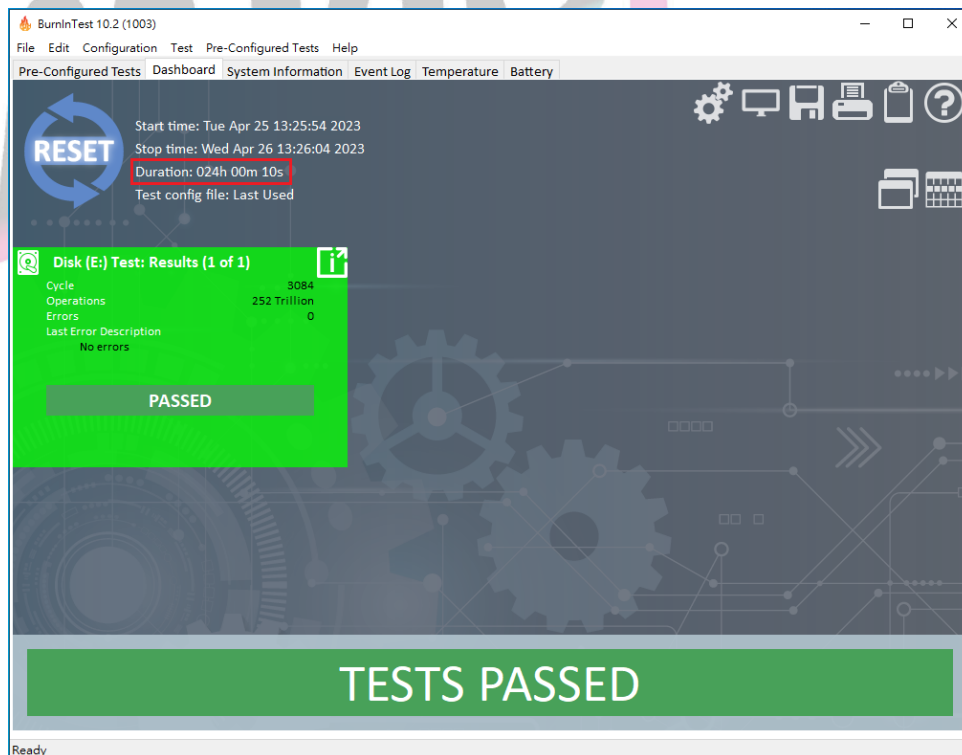
## 3. Burn In Tests and Results

### 3.1 BurnInTest v10.2 Pro

#### 3.1.1 24-hour Burn-in test **PASSED** in Drive D: performance as below:



#### 3.1.2 24-hour Burn-in test **PASSED** in Drive E: performance as below:





## PCIe 4.0 SFF-8673 8X to SFF-8673 4X/x2 Y-Cable, 50cm

### 4. Summary

- 4.1 U.2 NVMe SSD is PCIe 4.0 / 4 Lanes Interface, I/O speed, max. to 64Gbps.
- 4.2 GDC72-9101 I/O performance is based on U.2 NVMe SSD.

