MINERVA

DP9710 PCIe x4 Gen4 with ReDriver for Mini SAS HD(SFF 8673)

Performance & Burn In Test   Rev. 1. 0

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# DP9710 Add-in Card

1. Overview

This add-in card built-in ReDriver provides PCIe x4 Gen4, 16GT/s high-speed signals extension to Mini SAS HD 1x1, 4X(SFF-8673).

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
AIC: DP9710 PCIe x4 Gen 4 with Redriver to SFF-8673 Add-in Card
Cable: SFF-8673 PCIe 4.0 to U.2(SFF-8639), **100cm** Cable
OS : Microsoft **Windows 10 64bit OS**

2.2 Test target: DP9710 AIC & **Samsung U.2 NVMe 4TB SSD**
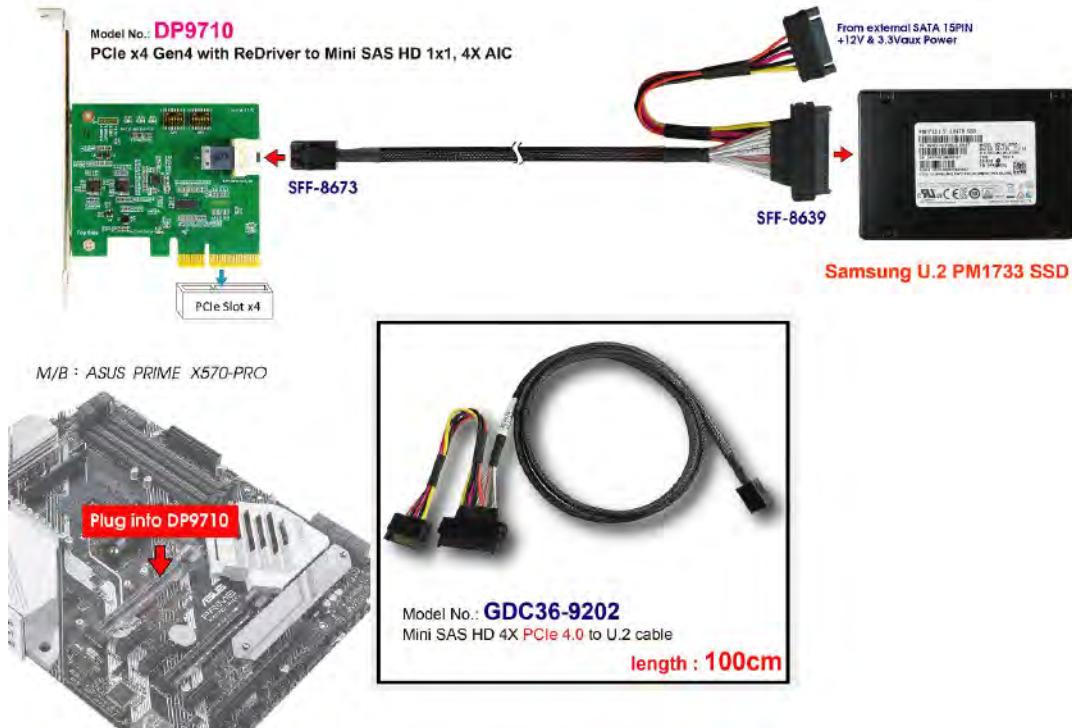
2.3   Install Hardware

Inserts U.2 NVMe SSD into GDC36-9202 cable's U.2 connector, and then Connects to DP9710 ADD-in Card (PCIe x4 Gen4 with Redriver to MNI SAS HD). The DP9710 AIC plugs into PCIe Slot of **ASUS PRIME X570-PRO**

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.

DP9710 Add-in Card

2.5 CrystalDiskMark 8.0 x64 performance test

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

2.5.1 **Samsung U.2 NVMe 4TB SSD** performance as below:
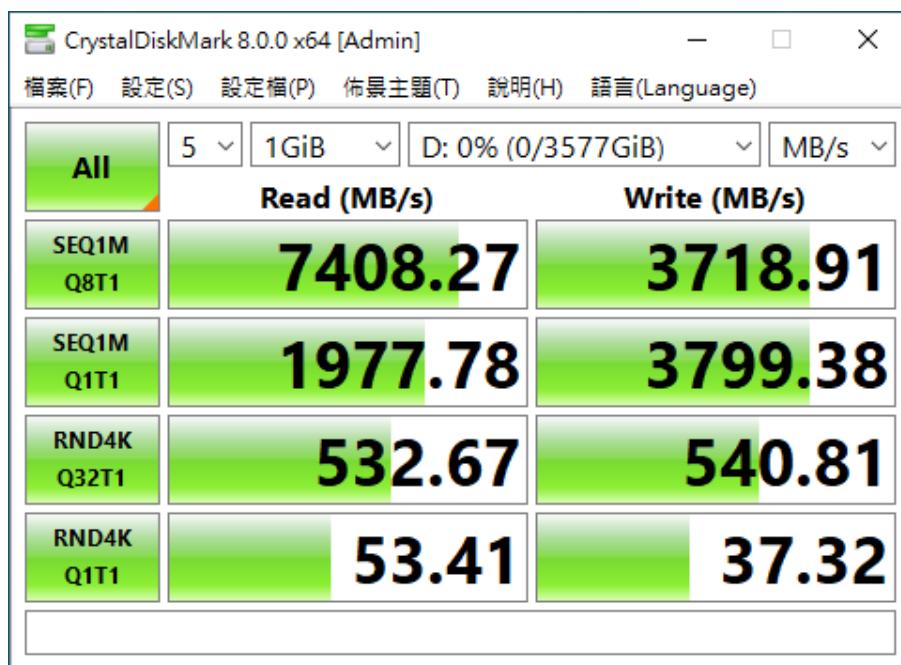
2.6 AS SSD Benchmark 2.0.7 performance test

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

2.6.1 **Samsung U.2 NVMe 4TB SSD** performance as below:
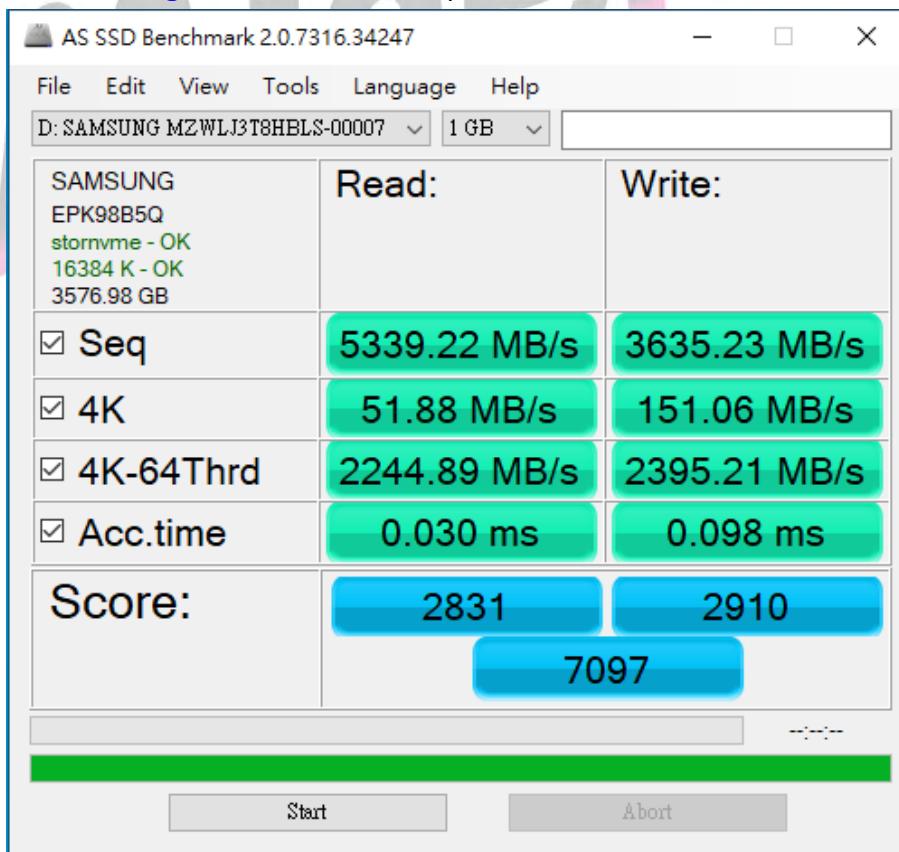
2.7 ATTO Disk Benchamrk 4.01 performance test

    2.7.1   **Samsung U.2 NVMe 4TB SSD** performance as below:
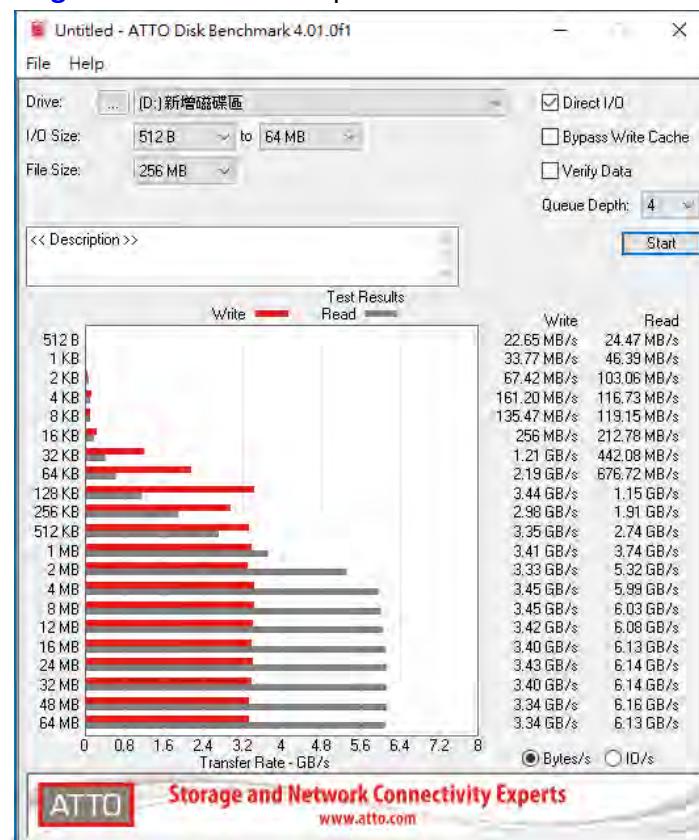
2.8 AnvilBenchmark_V110_B337

    2.8.1   **Samsung U.2 NVMe 4TB SSD** performance as below:

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3. Burn In Tests and Results

3.1 BurnInTest v10.2 Pro for Samsung U.2 NVMe 4TB SSD

3.1.1 System Information as below:
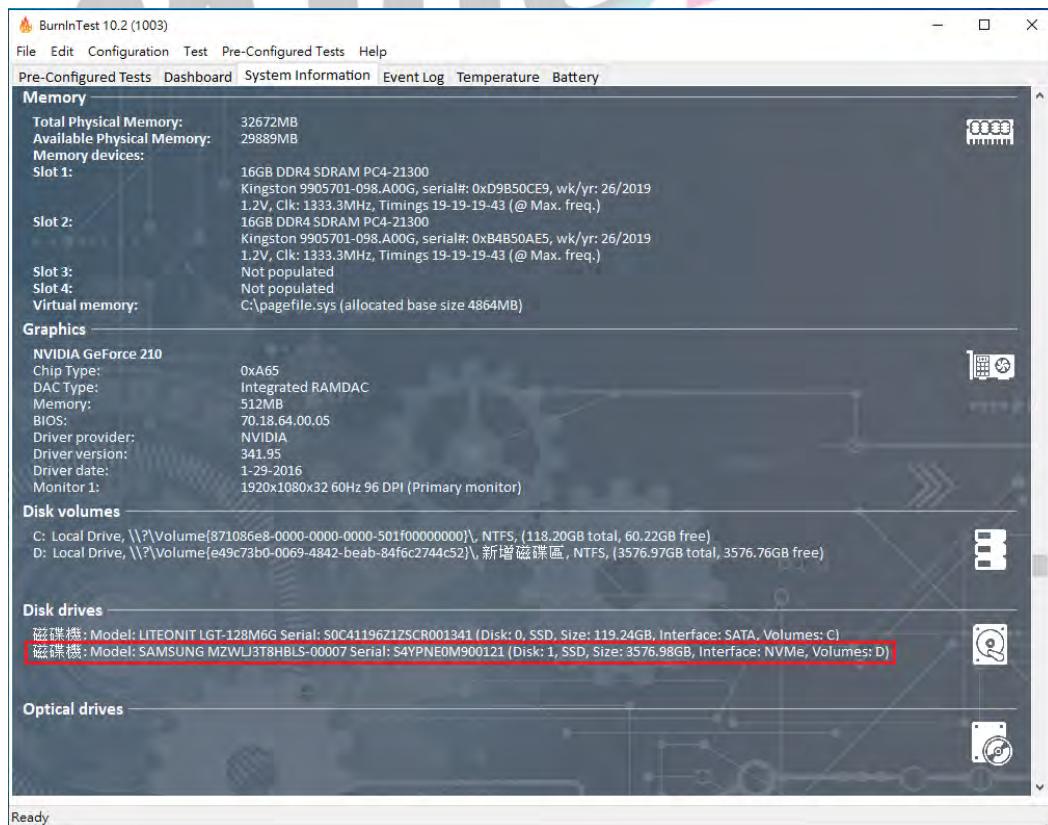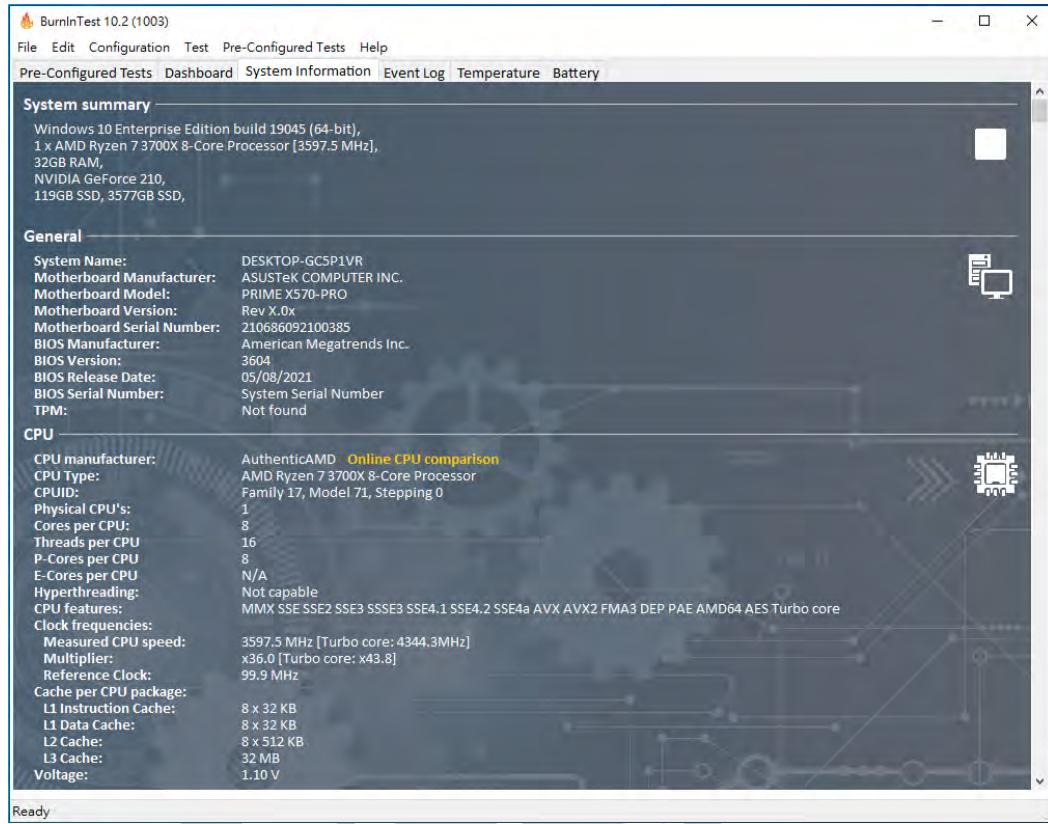
3.1.2   24-hour Burn-in test PASSED
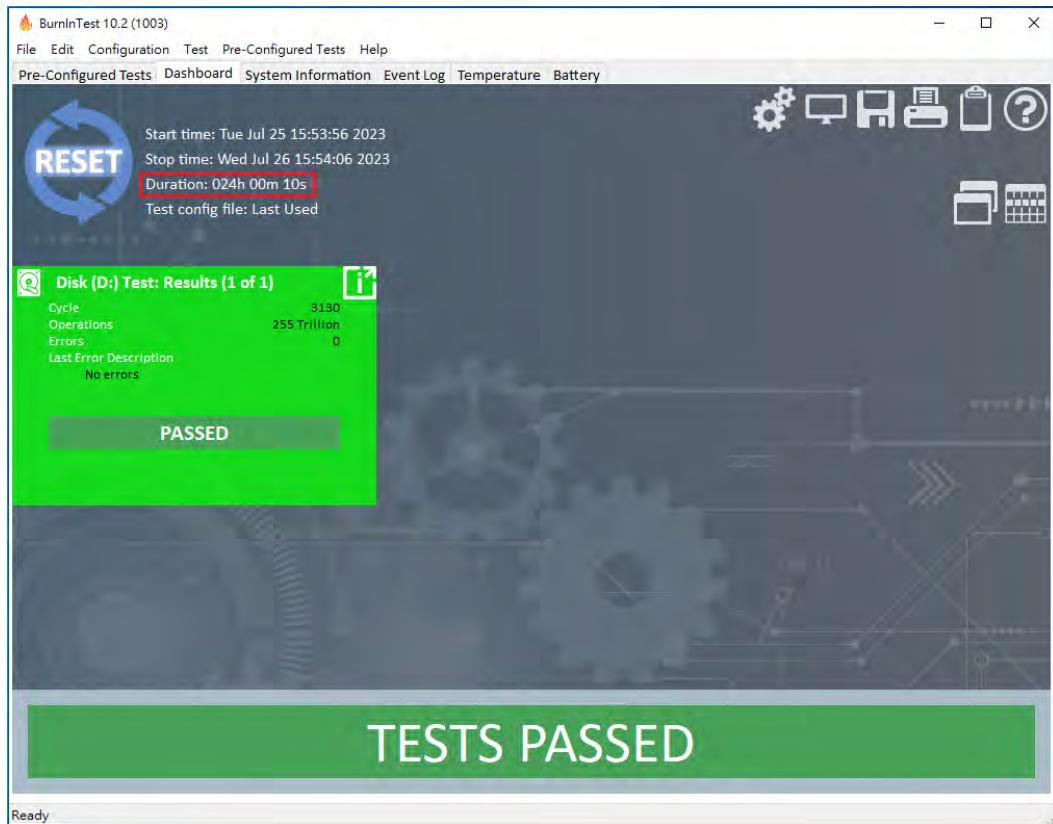
4. Summary

4.1   U.2 NVMe SSD is PCIe Gen4, 16GT/s , 4 Lanes Interface, I/O speed, max. to 64Gbps.

4.2   DP9710 AIC I/O performance is based on U.2 NVMe SSD.