



MINERVA

IR4265 Interposer Card

Performance & Burn In Test Rev. 1. 0

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4. Summary

IR4265 Interposer Card

1. Overview

This riser card provides U.2 SSD to U.3, Gen-Z interface. Or U.3, Gen-Z SSD to U.2 interface. Also provides hot swap power protection to avoid destroying SSD.

2. Tools and Results of Performance Measurement

2.1 Test Platform

M/B : GIGABYTE **Z170X UD5 TH**
CPU : Intel **i5-6500**, 3.2GHz/ 6M Cache/ LGA1150
Memory : Kingston **KVR21N15D8/8**, **DDR4-2133MHz**, **16G**(8GB DIMM*2)
ATX Power : COOLER MASTER G750M, **750W ATX**, 12V V2.2 Power Supply
Graphic : Z170 Chipsets built-in **HD Graphics 530**
Adapter: PE0404 PCIe to SFF-8643 Mini SAS HD Adapter
CABLE: U.3(SFF-8639) to SFF-8643 Mini SAS HD Cable
OS : Microsoft **Windows 10 64bit OS**

2.2 Test target: IR4265 Interposer & Intel P3700 U.2(SFF-8639) 400GB SSD



2.3 Install Hardware

Insert U.2 SSD into IR4265 Interposer's U.2 female connector. Connects IR4265 converter to PE0404 adapter(PCI-e 4-lane to Mini SAS HD SFF-8643) using **SFF-8643 to U.3(SFF-8639)** cable, plugs PE0404 into **PCI-e slot of Z170X UD5 TH**.

2.4 BIOS & Windows 10 OS environment setup

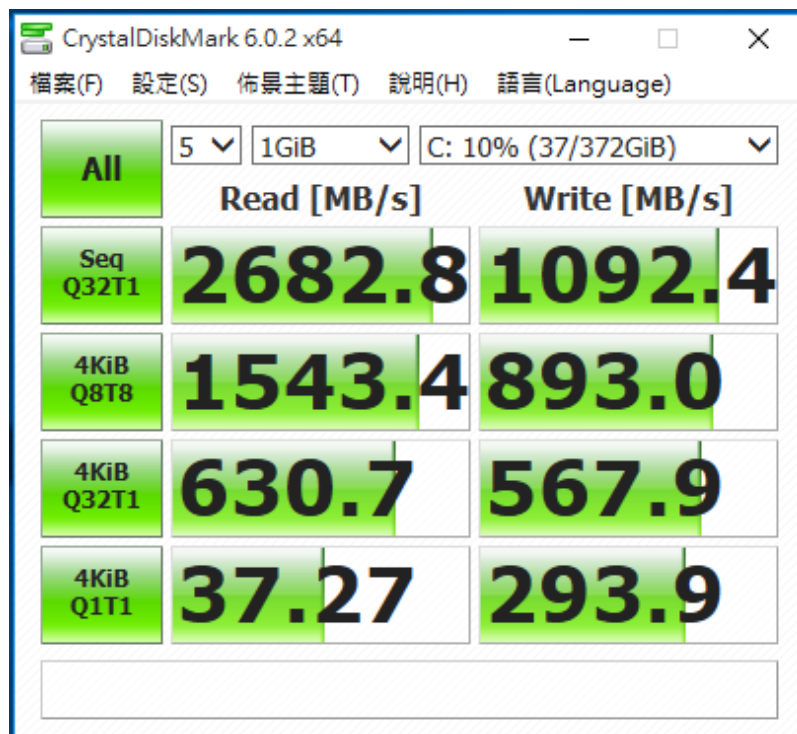
2.4.1 Install Windows 10 64bit OS into **Intel P3700 U.2(SFF-8639) 400GB SSD**

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2.5 CrystalDiskMark 6.0.2 x64 performance test

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

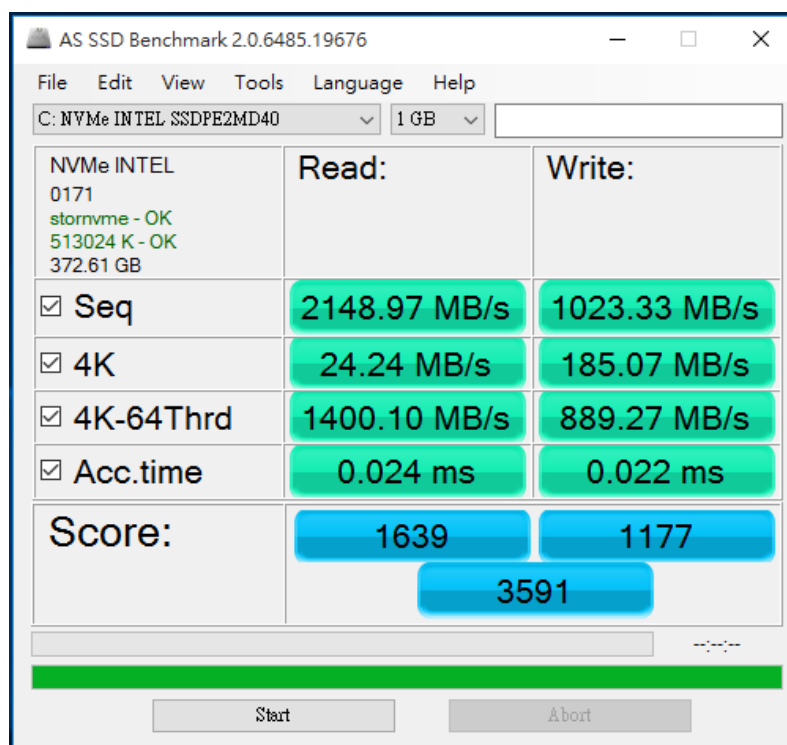
2.5.1 Show [Intel P3700 U.2\(SFF-8639\)](#) **400GB** SSD performance as below:



2.6 AS SSD Benchmark 2.0 performance test

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

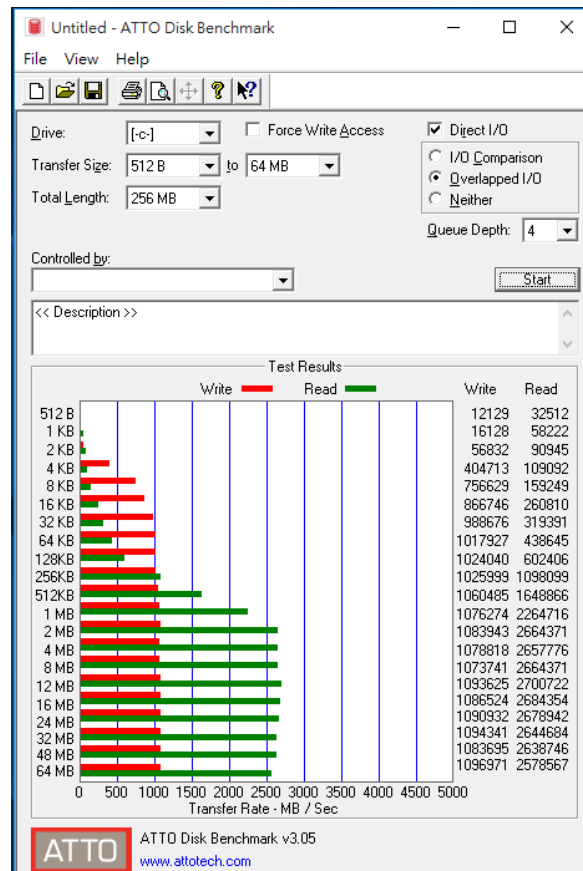
2.6.1 Show [Intel P3700 U.2\(SFF-8639\)](#) **400GB** SSD performance as below:



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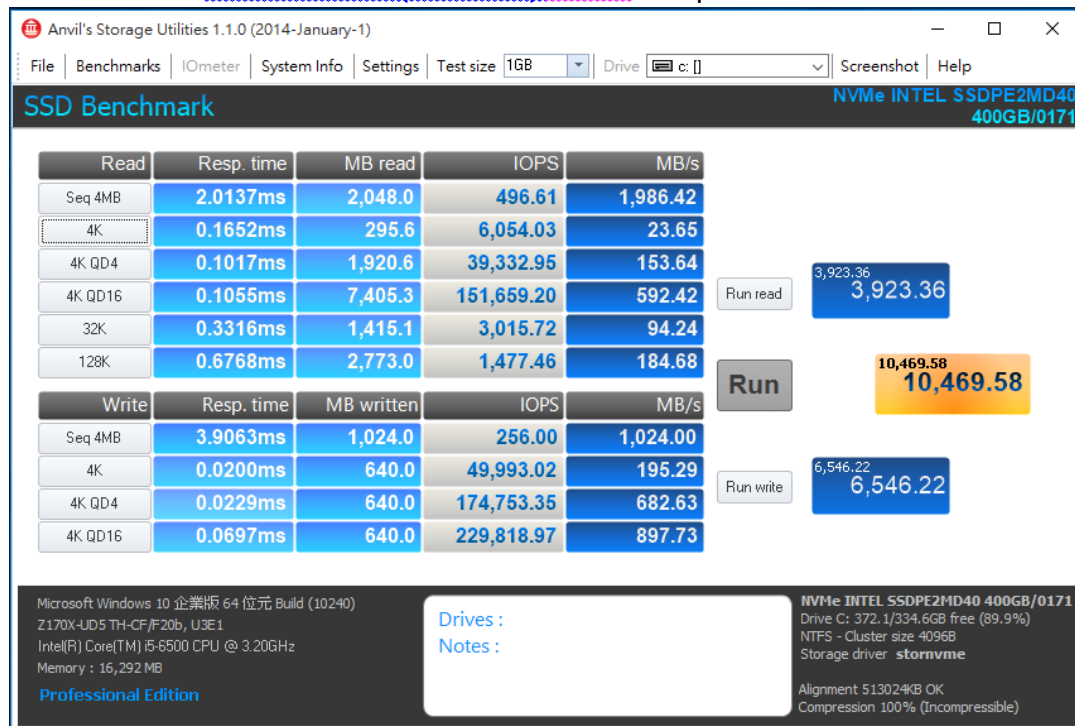
2.7 ATTO Disk Benchmark 3.05 performance test

2.7.1 Show [Intel P3700 U.2\(SFF-8639\)](#) 400GB SSD performance as below:



2.8 AnvilBenchmark_V110_B337

2.8.1 Show [Intel P3700 U.2\(SFF-8639\)](#) 400GB SSD performance as below:

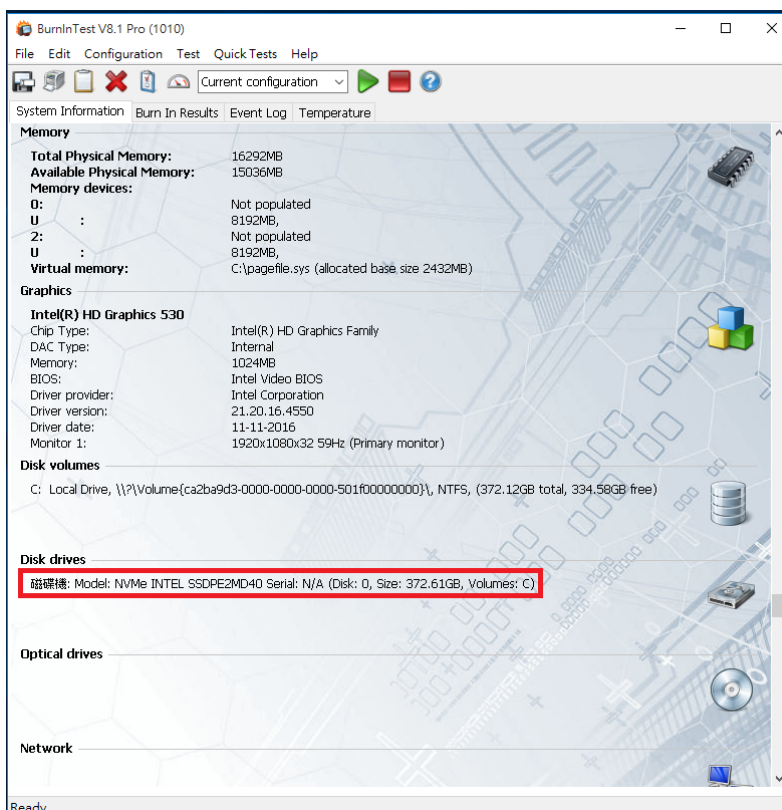
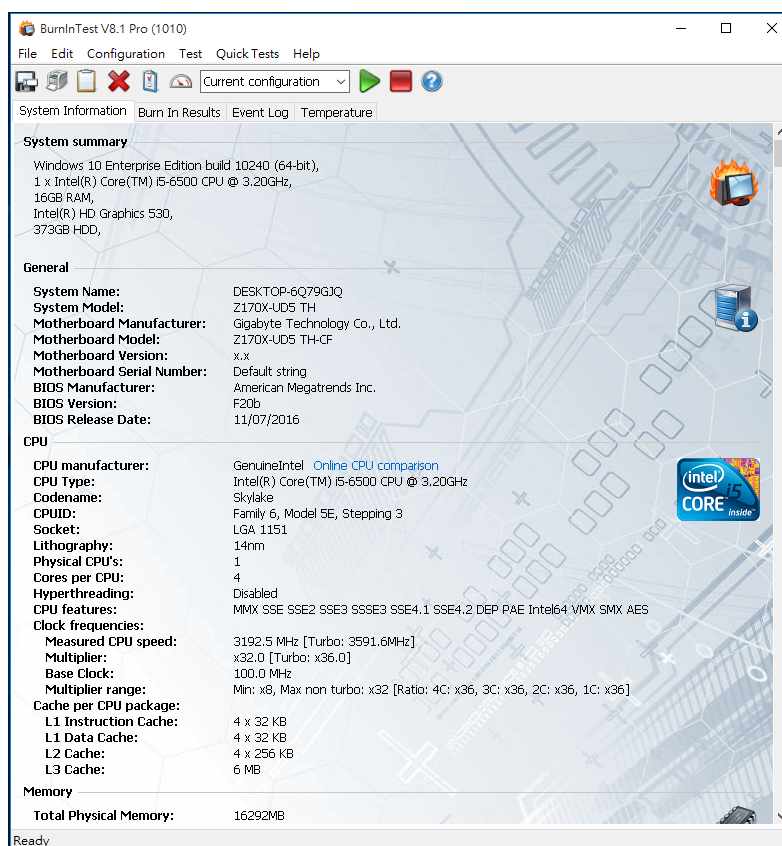


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3. Burn In Tests and Results

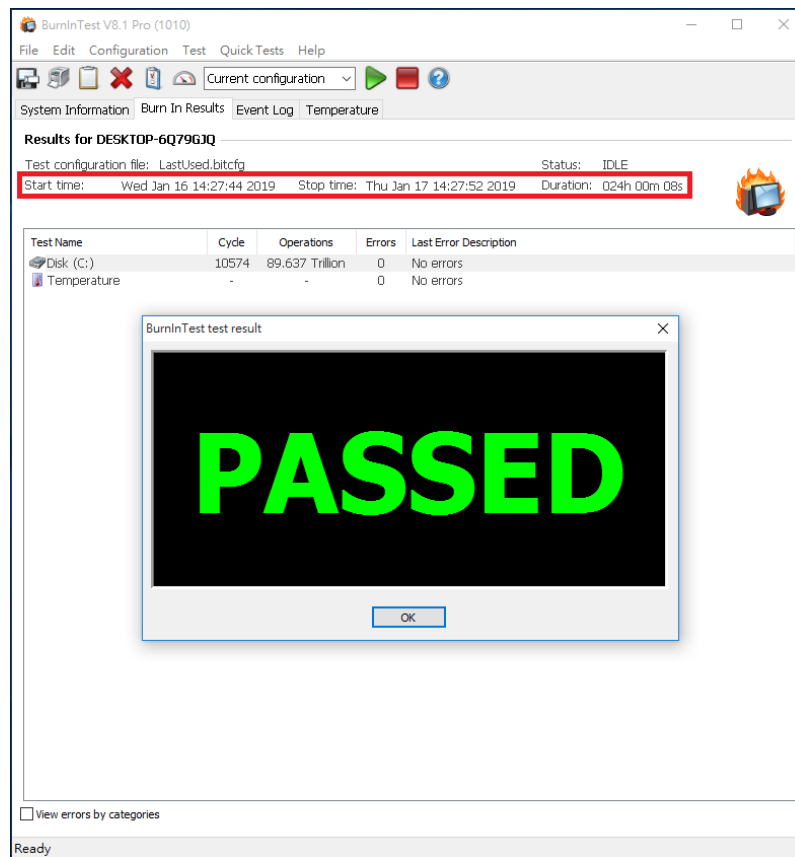
3.1 BurnInTest v8.1 Pro for [Intel P3700 U.2\(SFF-8639\) 400GB](#) SSD

3.1.1 system information as below:



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3.1.2 show 24-hour Burn-in test **PASSED**



4. Summary

- 4.1 U.2 SSD is PCI-e Gen 3 / 4 Lanes Interface, I/O speed, max. to 32Gbps.
- 4.2 IR4265 Interposer I/O performance is based on U.2 NVMe PCI-e Gen 3 / 4 Lanes SSD.