MINERVA

PU3402A Converter Card

Performance & Burn In Test Rev. 1. 0

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PU3402A Converter Card

1. Overview

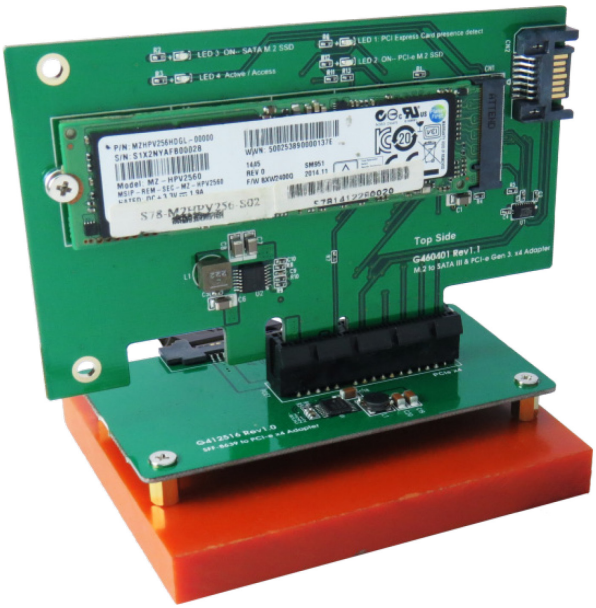
PU3402A adapter, providing PCIe Gen 3 x4 slot can be PCI-e SSD converted into U.2(SFF-8639) PCI-e Gen 3 / 4 Lanes interface.

2. Tools and Results of Performance Measurement

2.1 Test Platform

M/B : ASRock **Z97 Extreme 6**
CPU : Intel **i5-4426,** 3.2GHz/ 6M Cache/ LGA1150
Memory : Kingston **KVR16N11S8/4,** DDR3-1600MHz, 8G(4GB DIMM*2)
ATX Power : FSP RAIDER 550, **550W ATX**, 12V V2.2 Power Supply
Graphic : Z97 Chipsets built-in **HD Graphics 4600**
PCIe adapter: PCIe Gen 3/4 Lanes to SFF-8639 adapter(Model: PE0401)
PCIe adapter: PCIe Gen 3/4 Lanes to M.2 adapter(Model: PU3402A)
Cable: Amphenol SFF-8643 to SFF-8639 cable
OS : Microsoft **Windows 8.1 64bit OS**

2.2 Test target: PU3402A adapter & **SM951 256GB AHCI MZHPV256HDGL-00000**



SM951 256GB M.2 SSD
+ PS0401 Adapter

PU3402A Adapter

2.3 Install Hardware

Insert M.2(PCIe I/F) SSD into PS0401 converter's M.2 M-key connector, and then Plug PS0401 adapter in PCIe x4 slot of PU3402A converter. Use SFF-8643 to SFF-8639 cable to connect PU3402A converter to **PCI-e to SFF-8643 adapter of Z97 Extreme 6 M/B.**

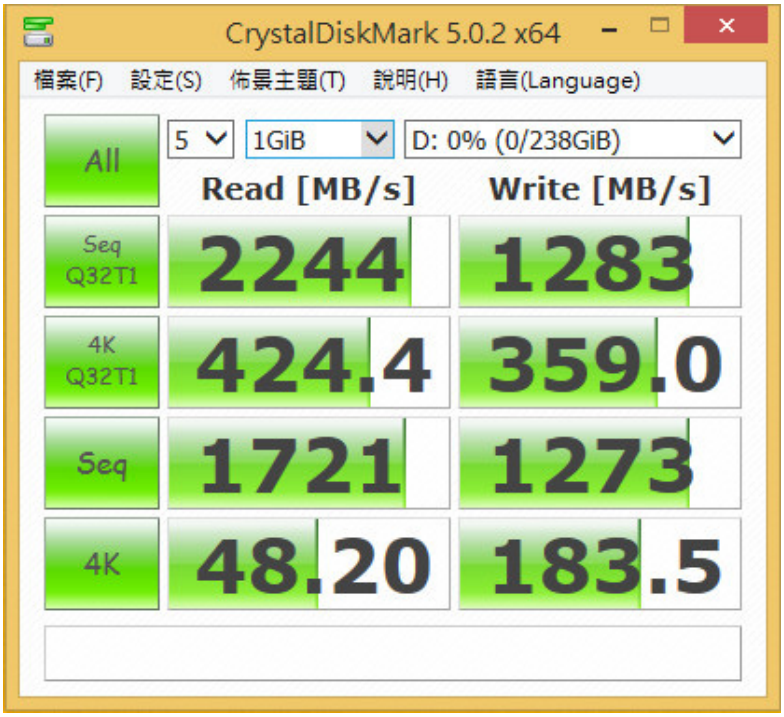
2.4 BIOS & Windows 8.1 OS environment setup

2.4.1 In Windows 8.1, formatted SSD to NTFS Mode. Don't install any program.

2.5 CrystalDiskMark 5.0.2 x64 performance test

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

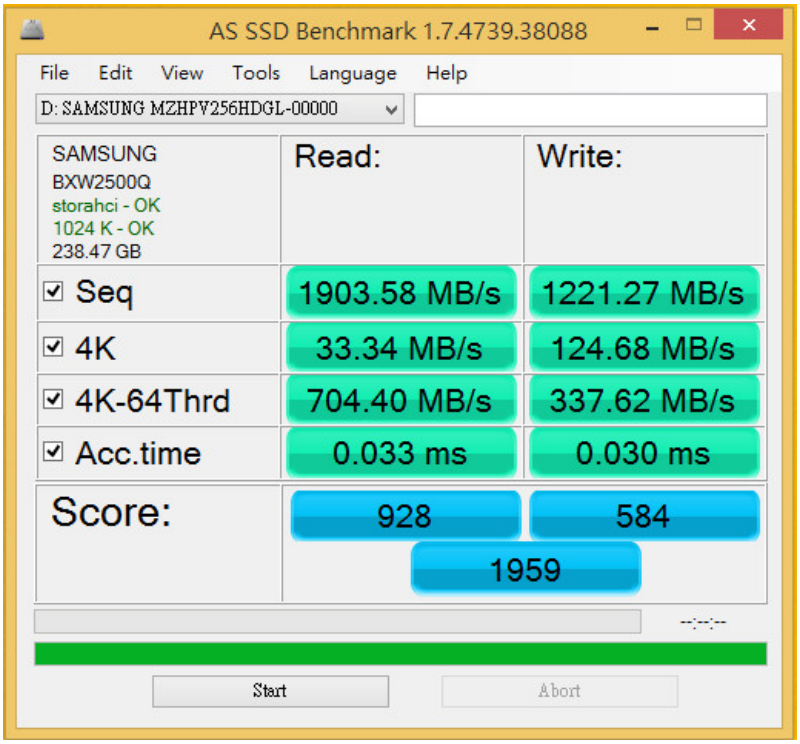
2.5.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-00000)performance as below:



2.6 AS SSD Benchmark 1.8 performance test

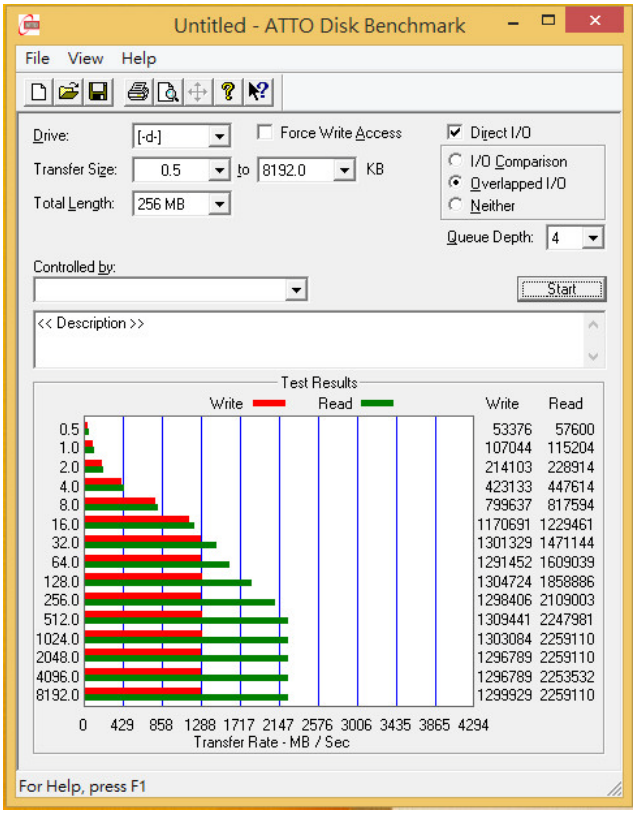
※Benchmark (Read & Write by MB/s, default block size = 16MB)

2.6.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-00000)performance as below:



2.7 ATTO Disk Benchamrk 2.47 performance test

2.7.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-00000)performance as below:



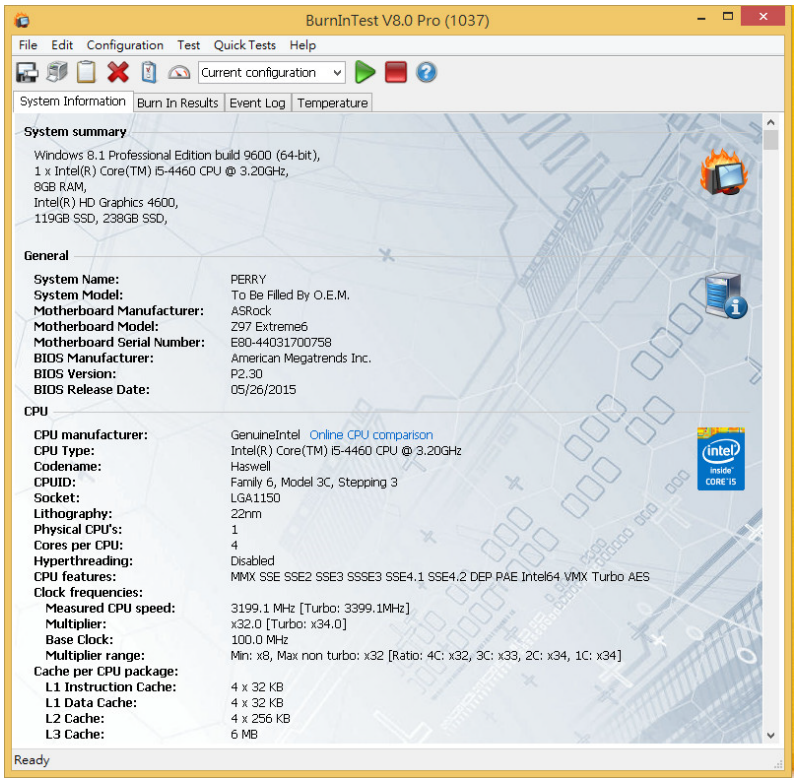
2.8 AnvilBenchmark_V110_B337

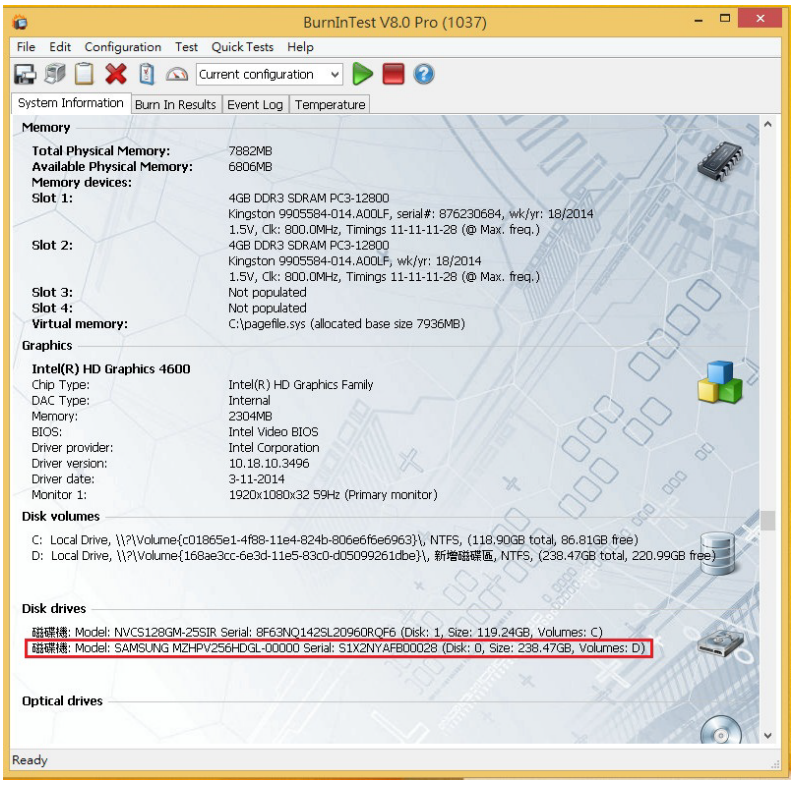
2.8.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-00000)performance as below:

3. Burn In Tests and Results

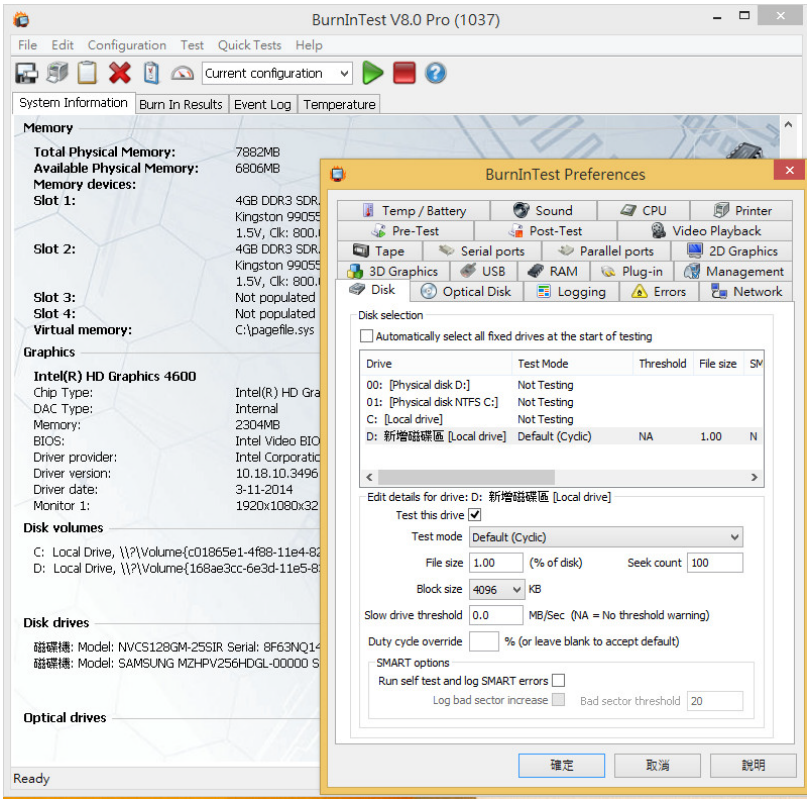
3.1 BurnInTest v8.0 Pro for SSD(SM951 256GB AHCI MZHPV256HDGL-00000)

3.1.1 system information as below:

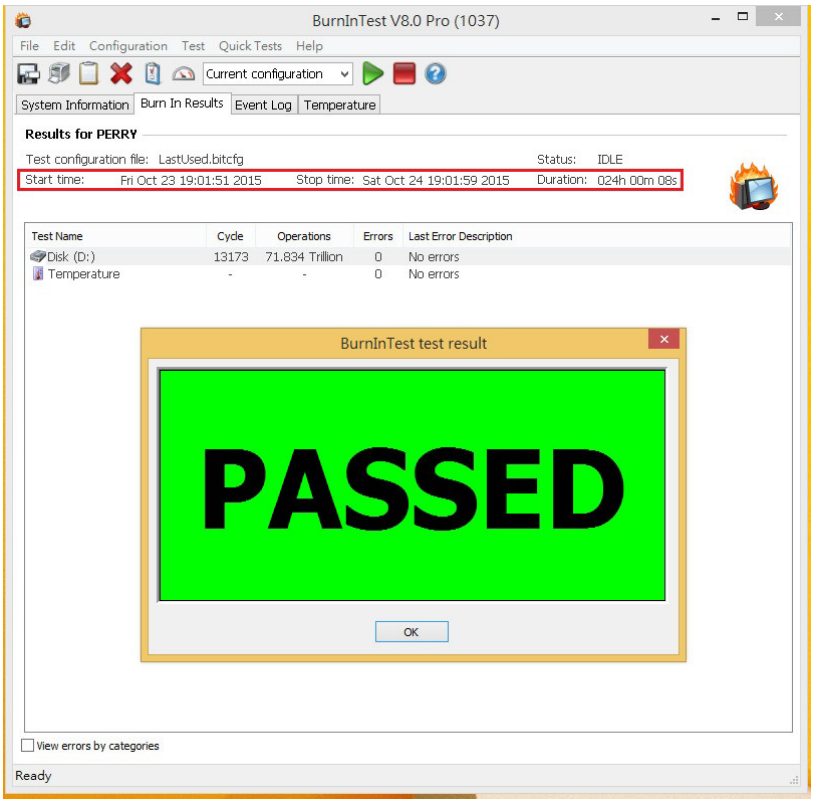




3.1.2 show Disk test mode(10 ways cycle test)



3.1.3 show 24-hour Burn-in test PASSED



4. Summary

4.1 Samsung M.2 SSD is PCI-e Gen 3 / 4 Lanes Interface, I/O speed, max. to 32Gbps.

4.2 PU3402A adapter I/O performance is based on Samsung M.2 SSD.