



MINERVA

PS0401 / Rev1.1 Converter Card

Performance & Burn In Test Rev. 1. 1

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4. Summary

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1. Overview

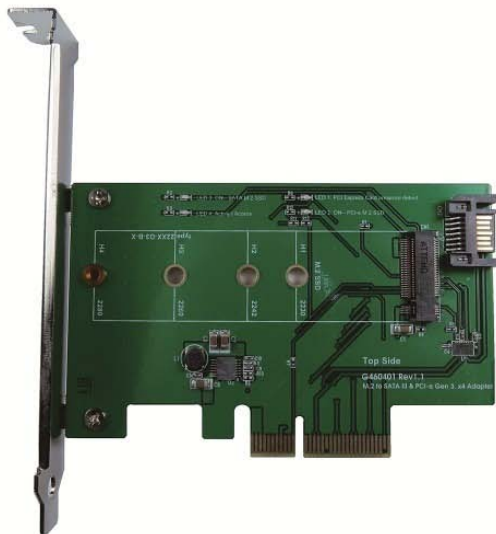
PS0401 adapter, providing M.2 M-key connector can be M.2 (PCI-e I/F) SSD converted into PCI-e Gen 3 / 4 Lanes standard interface.

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**
OS : Microsoft **Windows 8.1 64bit OS**

2.2 Test target: PS0401 adapter and [SM951 256GB AHCI MZHPV256HDGL-00000](#)/M.2(PCI-e)SSD



PCI-e 4 Lane Samsung 256GB SSD (SM951 AHCI)

2.3 Install Hardware

Insert M.2 SSD into PS0401 converter's M.2 M-key connector, and then with coppers, and screws to fix SSDs. (Please refer to the Installation Notes). Connect PS0401 converter to **PCI-e slot**.

2.4 BIOS & Windows 8.1 OS environment setup

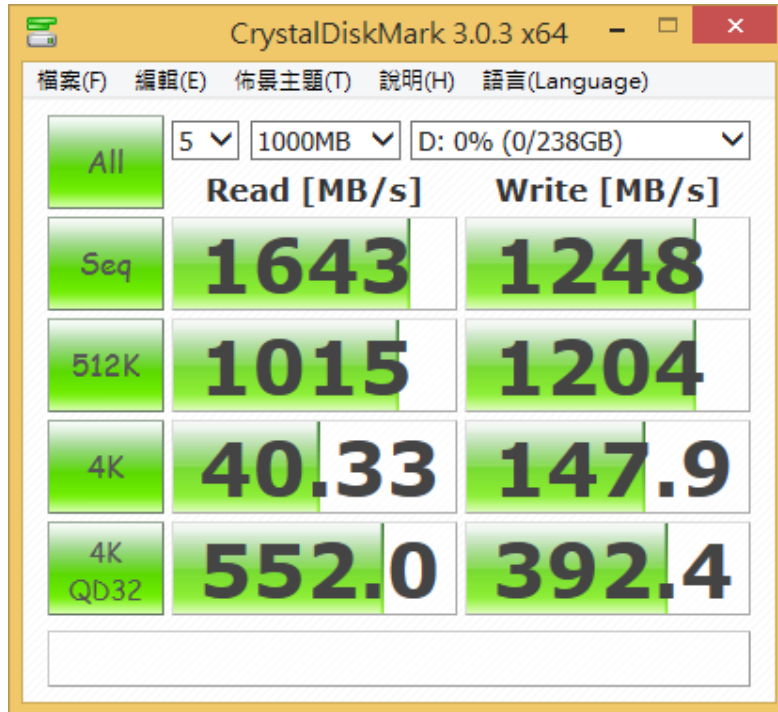
2.4.1 In Windows 8.1, formatted SSD to NTFS Mode. Don't install any program.

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2.5 CrystalDiskMark 3.0.3 x64 performance test

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

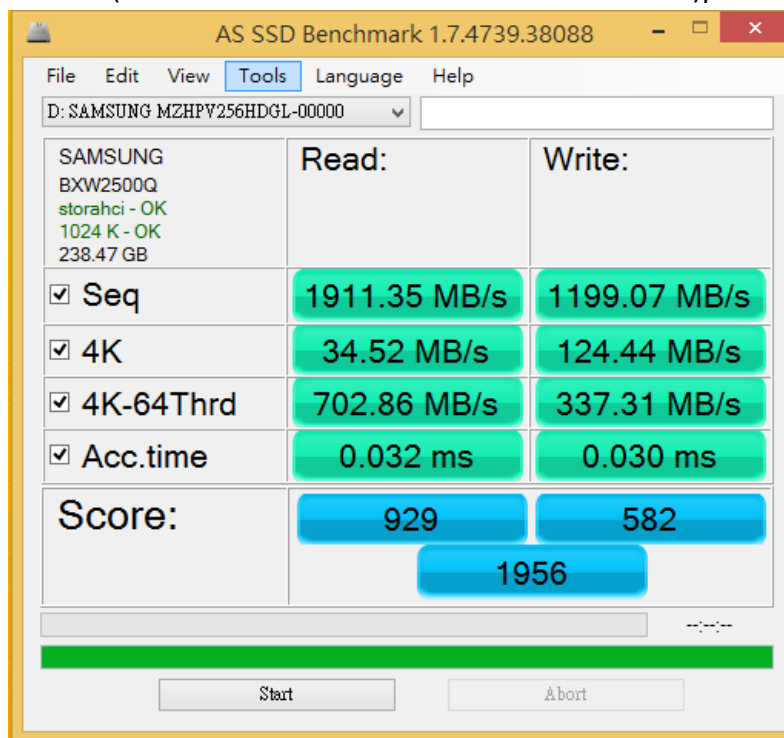
2.5.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-00000)performance as below:



2.6 AS SSD Benchmark 1.7 performance test

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

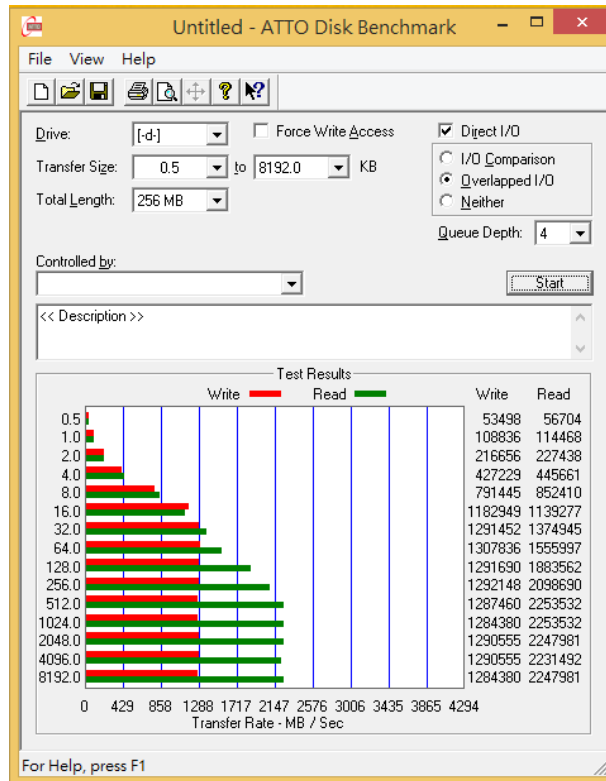
2.6.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-00000)performance as below:



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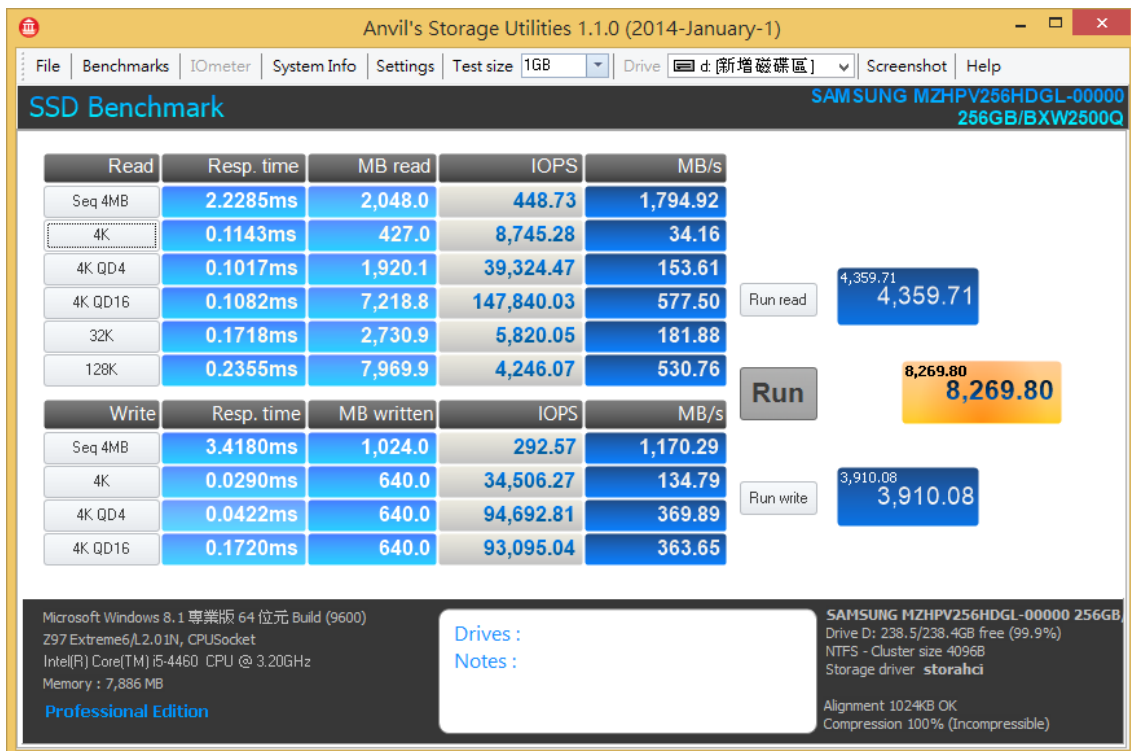
2.7 ATTO Disk Benchmark 2.47 performance test

2.7.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-0000)performance as below:



2.8 AnvilBenchmark_V110_B337

2.8.1 Used SSD(SM951 256GB AHCI MZHPV256HDGL-0000)performance as below:

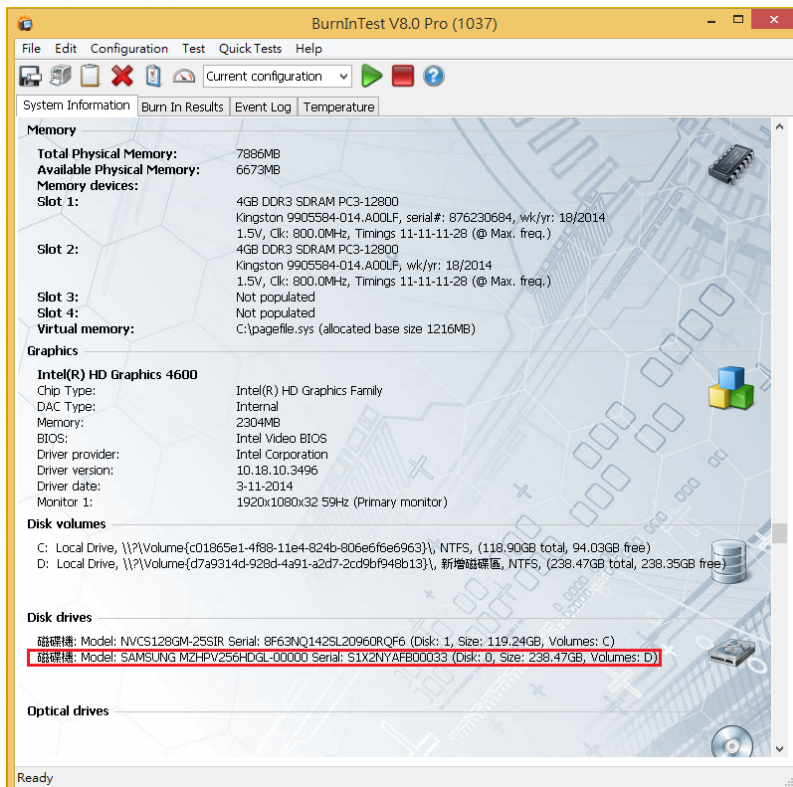
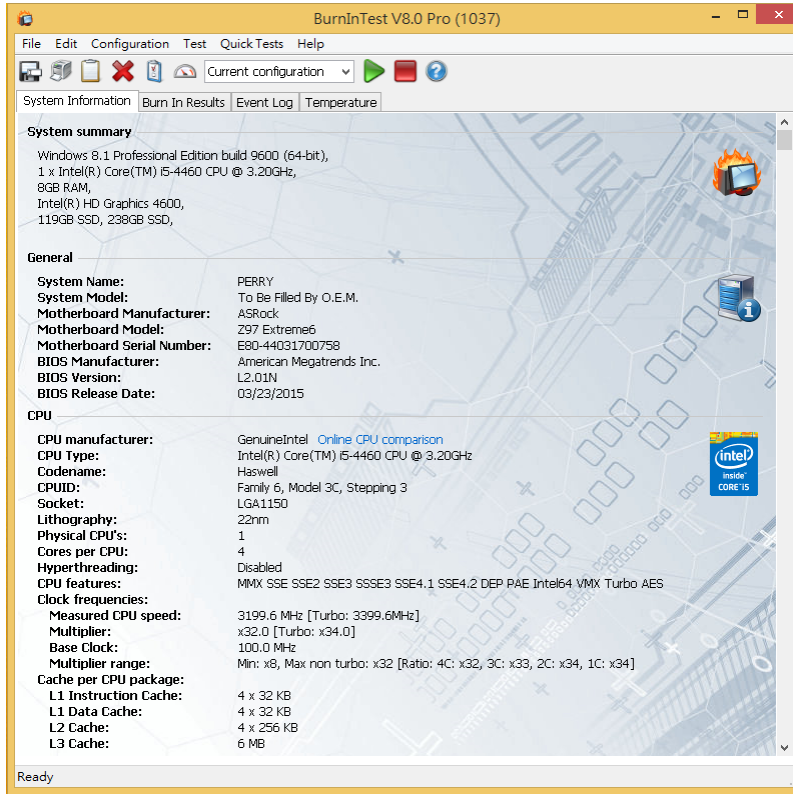


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3. Burn In Tests and Results

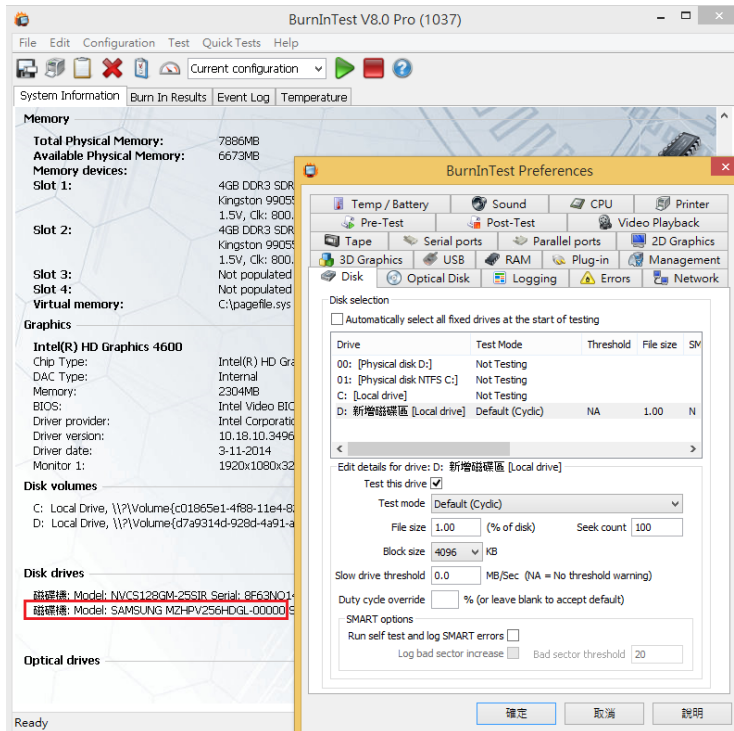
3.1 BurnInTest v8.0 Pro for SSD(SM951 256GB AHCI MZHPV256HDGL-0000)

3.1.1 system information as below:

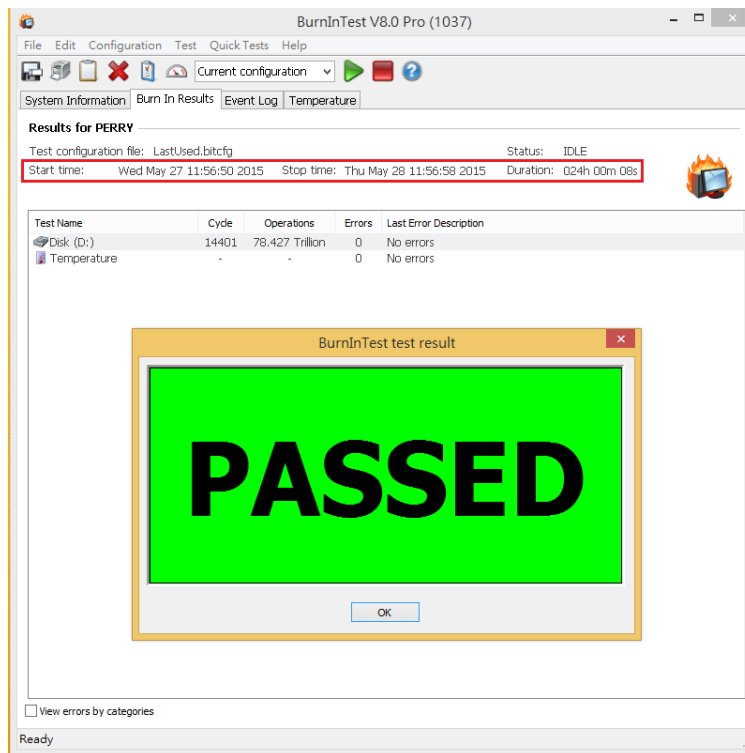


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3.1.2 show Disk test mode(10 ways cycle test)



3.1.3 show 24-hour Burn-in test PASSED



4. Summary

- 4.1 M.2(PCI-e I/F) SSD is PCI-e Gen 3 / 4 Lanes Interface, I/O speed, max. to 32Gbps.
- 4.2 PS0401 adapter I/O performance is based on M.2 PCI-e Gen 3 / 4 Lanes SSD.