



MINERVA

PC408A Converter Card

Performance & Burn In Test Rev. 1. 0

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1. Overview

PC408A adapter, providing PCIe Gen 3 4-Lane slot can be PCIe SSD converted into SFF-8654 Slimline SAS.

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 Cable
Cable: Amphenol **SFF-8654 to SFF-8654 Slimline SAS Cable**
OS : Microsoft **Windows 8.1 64bit OS**

2.2 Test target: PC408A adapter & Intel 750 Series PCIe 400GB



SFF-8654 to SFF-8654 Cable



PC408A Adapter



Intel 750 Series SSD

2.3 Install Hardware

Inserts Intel PCIe SSD into PC408A converter's PCIe Gen 3 x4 slot, and then using SFF-8654 to SFF-8654 cable to connect PC408A converter to PE0405 adapter of GIGABYTE **Z170X UD5 TH**.

2.4 BIOS & Windows 8.1 OS environment setup

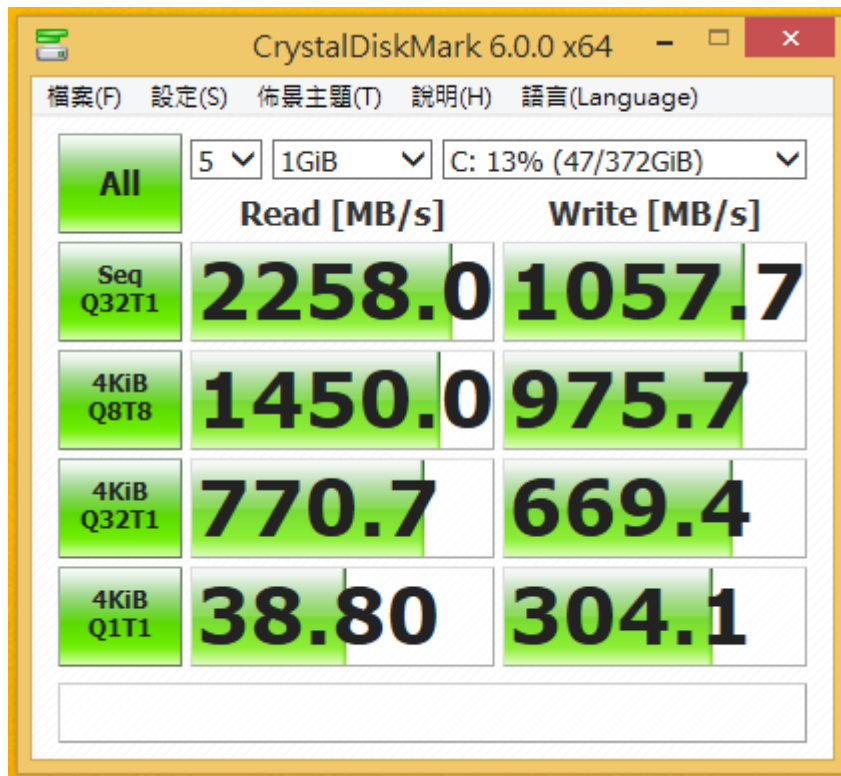
Install Windows 8.1 64bit OS into [Intel 750 U.2 400GB](#) SSD

2.5 CrystalDiskMark 6.0 x64 performance test

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

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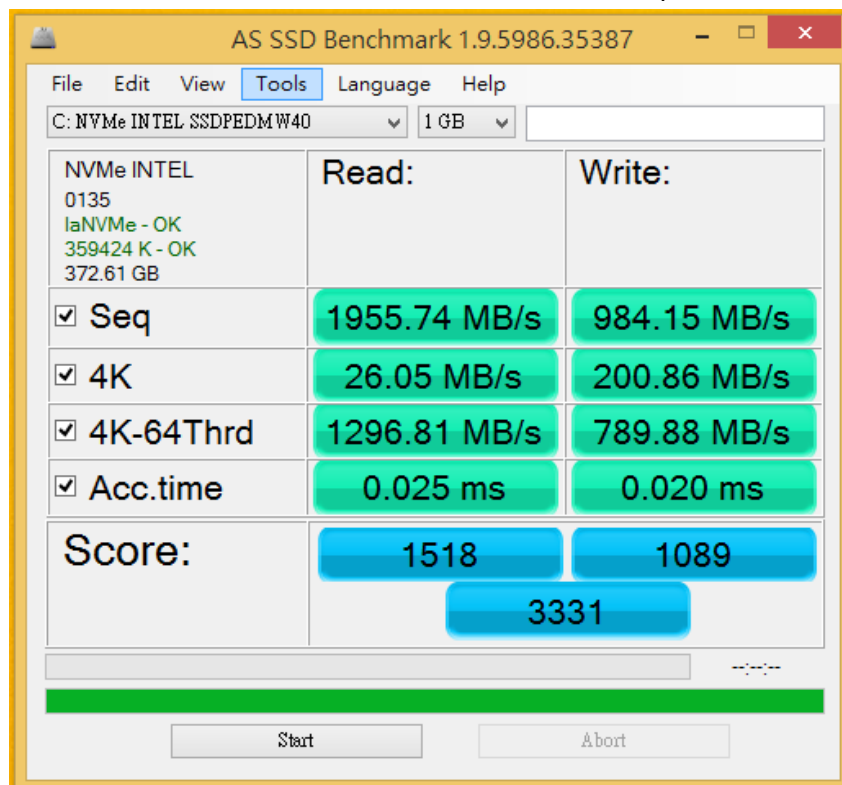
2.5.1 Shows [INTEL 750 SSDPEDMW400G4R5 Add-in Card](#) performance as below:



2.6 AS SSD Benchmark 1.9 performance test

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

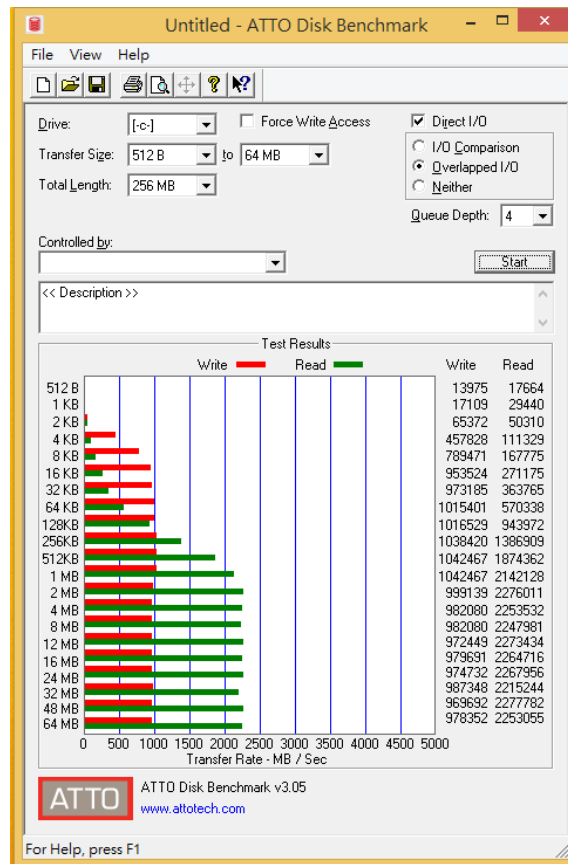
2.6.1 Shows [INTEL 750 SSDPEDMW400G4R5 Add-in Card](#) performance as below:



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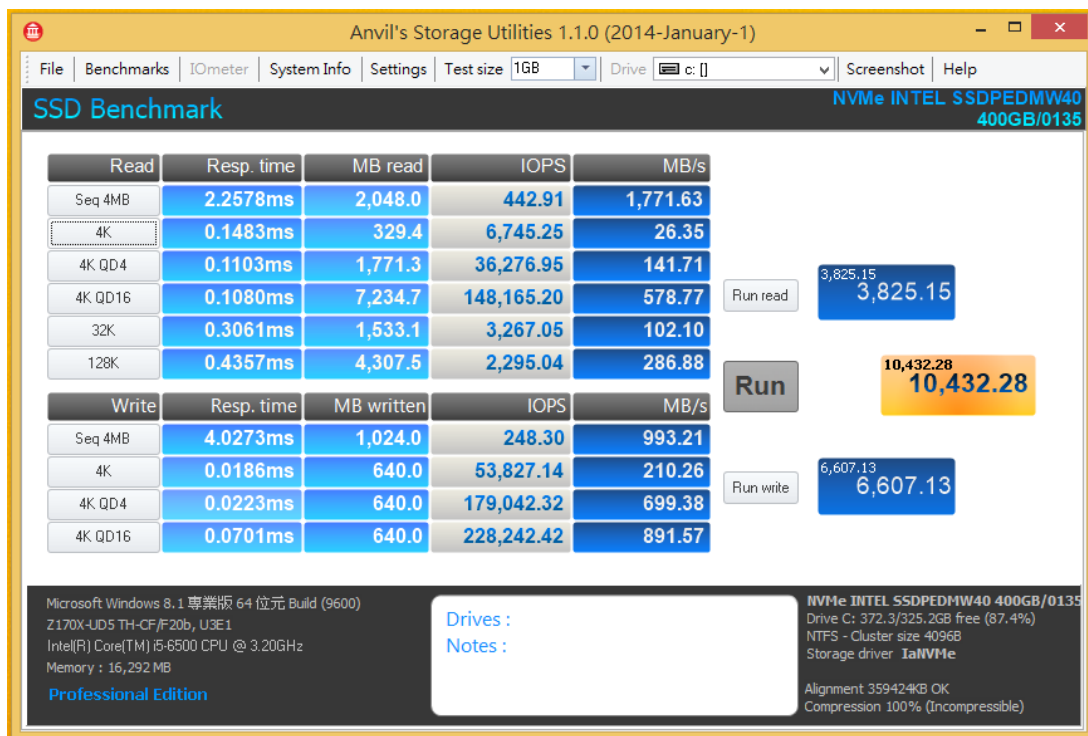
2.7 ATTO Disk Benchmark 3.05 performance test

2.7.1 Shows [INTEL 750 SSDPEDMW400G4R5 Add-in Card](#) performance as below:



2.8 AnvilBenchmark_V110_B337

2.8.1 Shows [INTEL 750 SSDPEDMW400G4R5 Add-in Card](#) performance as below:

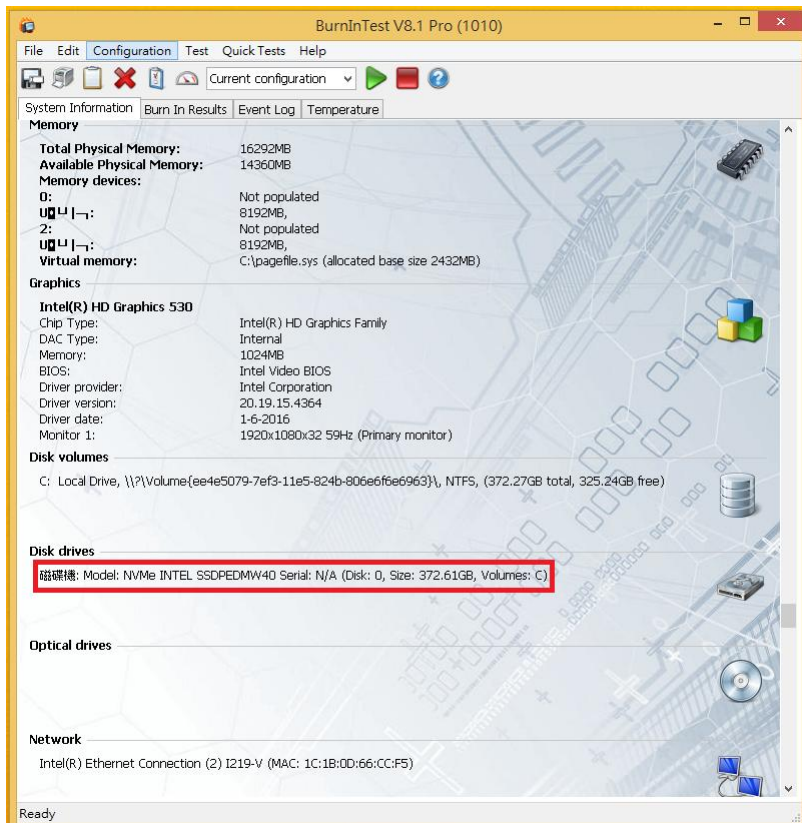
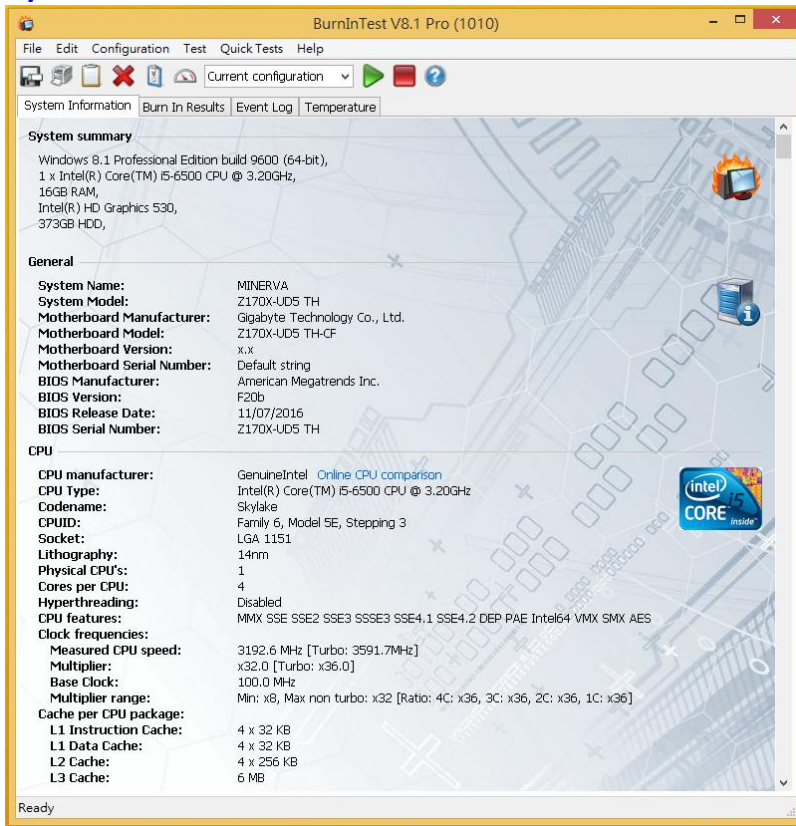


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3. Burn In Tests and Results

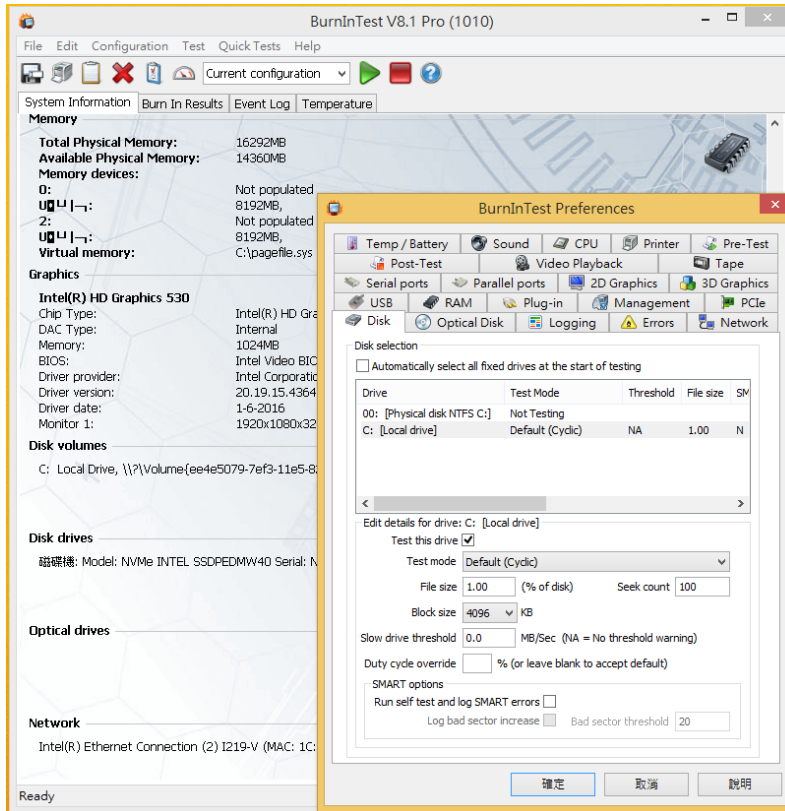
3.1 BurnInTest v8.1 Pro for INTEL 750 SSDPEDMW400G4R5 Add-in Card

3.1.1 system information as below:

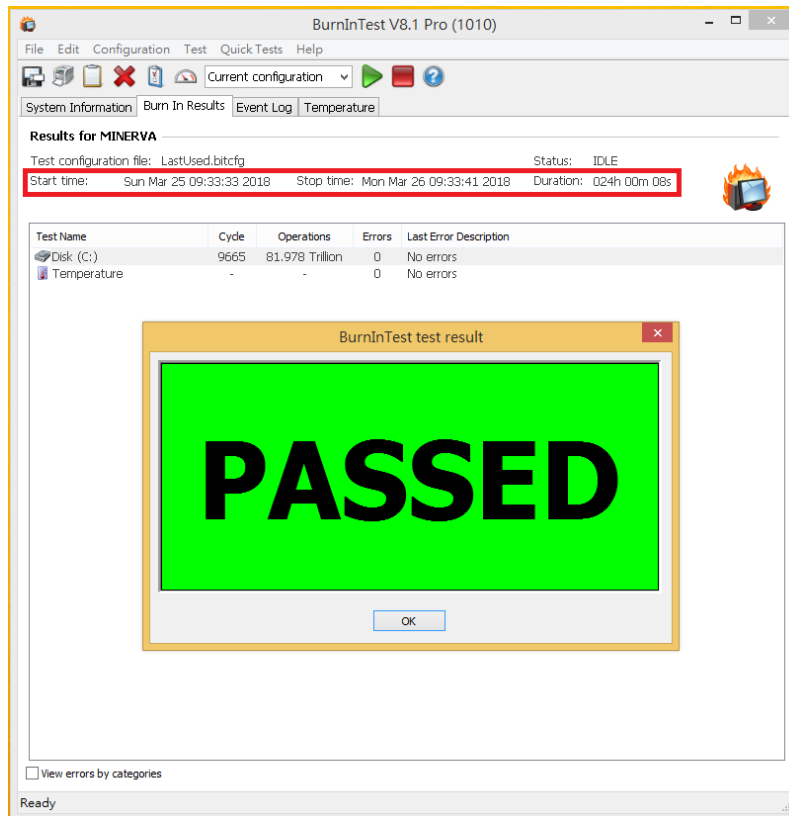


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3.1.2 show Disk test mode (10 ways cycle test)



3.1.3 show 24-hour Burn-in test PASSED



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4. Summary

- 4.1 Intel PCI-e SSD is PCI-e Gen 3 / 4 Lanes Interface, I/O speed, max. to 32Gbps.
- 4.2 PC408A adapter I/O performance is based on Intel PCI-e NVMe 400GB SSD.