MINERVA
PA417G Converter Card

Performance & Burn In Test   Rev. 1. 0

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PA417G   Converter Card

1. Overview

The PA417G Adapters provide a very simple mean for controlling and switching the SATA data trace in the U.3 connection to a SATA SSD. It is possible to isolate & test specific lanes in order to isolate performance issues quickly and easily.

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**
OS :   Microsoft **Windows 10 64bit OS**

2.2 Test target: PA417G adapter & Crucial M550 CT128M550SSD1 2.5" 128GB

PA417G Adapter

Crucial M550 SATA 128GB SSD

2.3   Install Hardware

Insert SATA SSD into PA417G converter's U.2 female connector. Use SATA singal cable to connect PA417G converter to SATA port of **PCI-e slot of Z170X UD5 TH.**

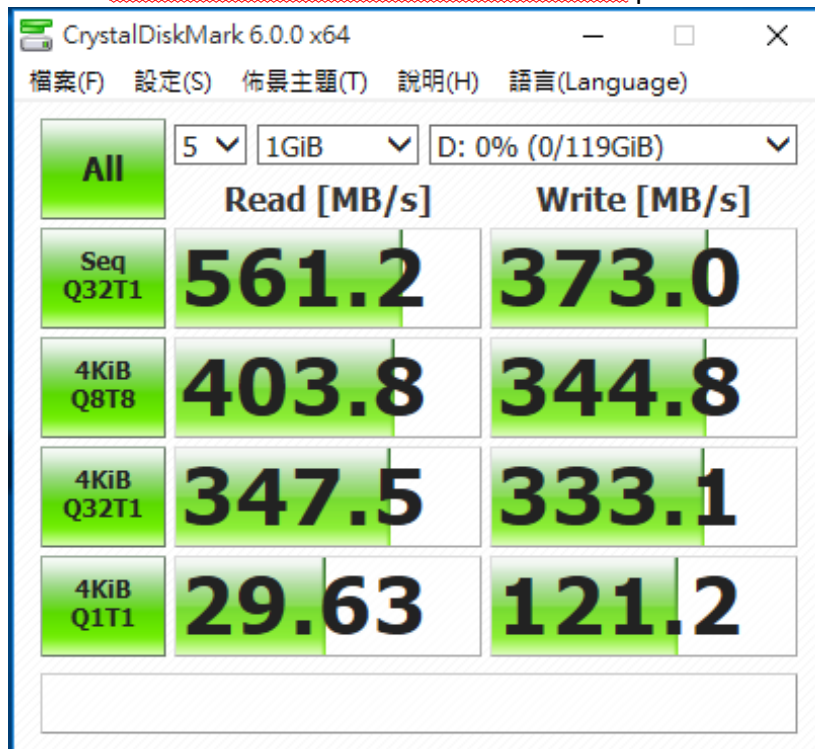### 2.4   BIOS & Windows 10 OS environment setup

2.4.1   One port installs win10 64bit OS
2.4.2   Tested Target SSD is formatted to NTFS Mode. Don't install any program.

PA417G Converter Card

2.5 CrystalDiskMark 6.0.0 x64 performance test

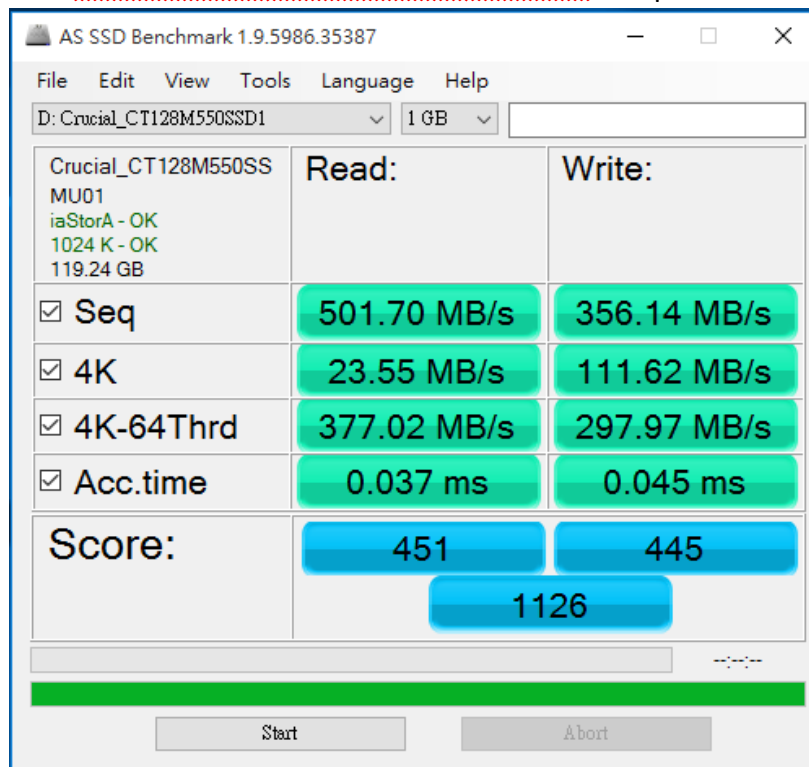※Benchmark (Sequential Read & Write / default = 1MB)

2.5.1   Show **Crucial M550 CT128M550SSD1 2.5" 128GB** performance as below:

2.6 AS SSD Benchmark 1.9 performance test

※Benchmark (Read & Write by MB/s, default block size = 16MB)
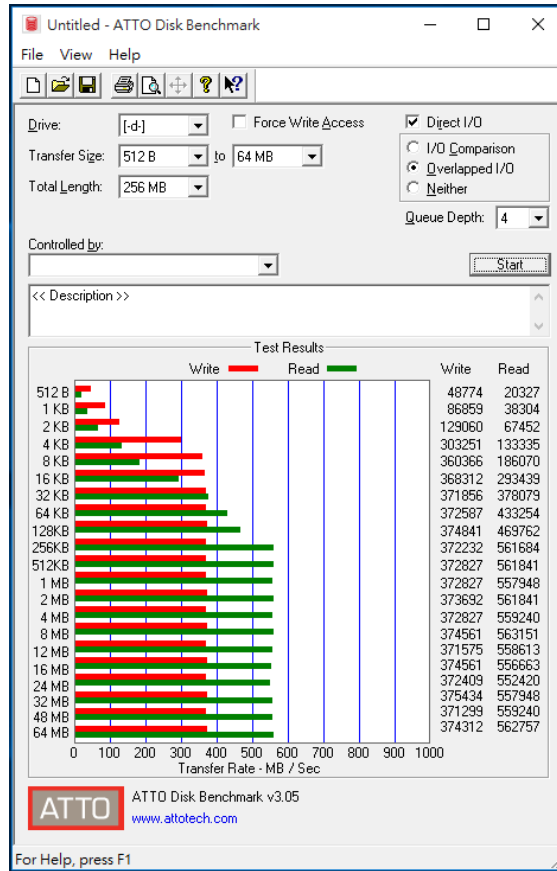
2.6.1   Show **Crucial M550 CT128M550SSD1 2.5" 128GB** SSD performance as below:

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2.7 ATTO Disk Benchamrk 3.05 performance test

    2.7.1　Show **Crucial M550 CT128M550SSD1 2.5" 128GB** SSD performance as below:

2.8 AnvilBenchmark_V110_B337

    2.8.1　Show **Crucial M550 CT128M550SSD1 2.5" 128GB** SSD performance as below:
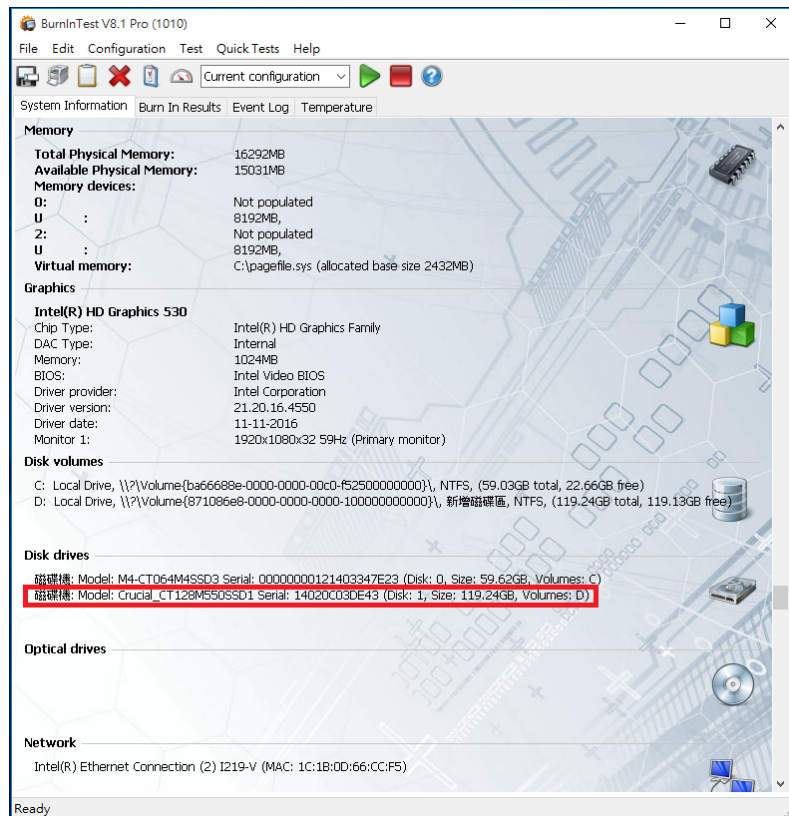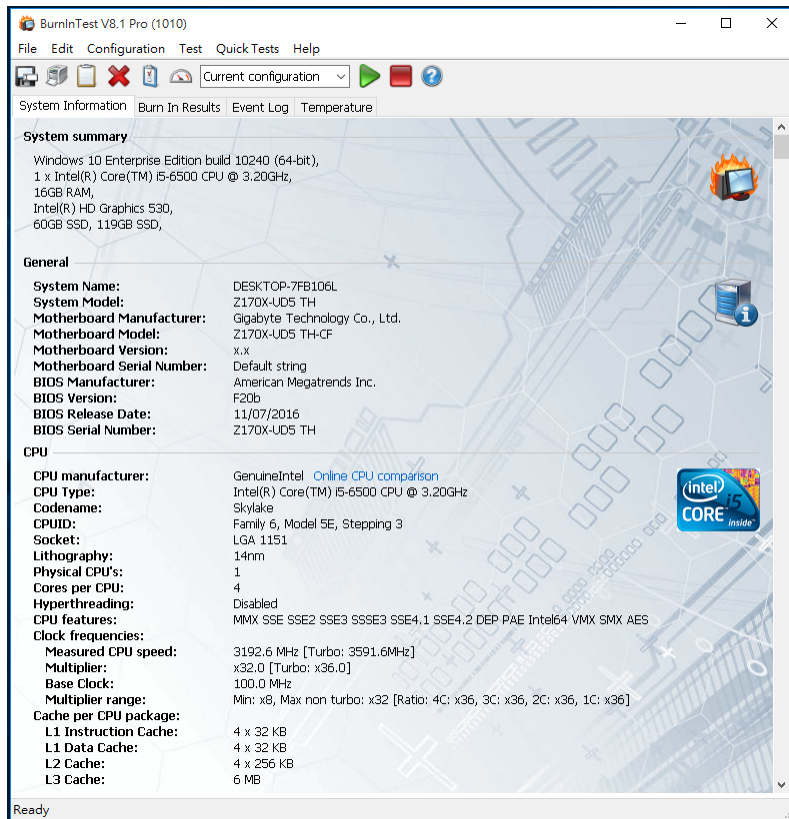
PA417G   Converter Card
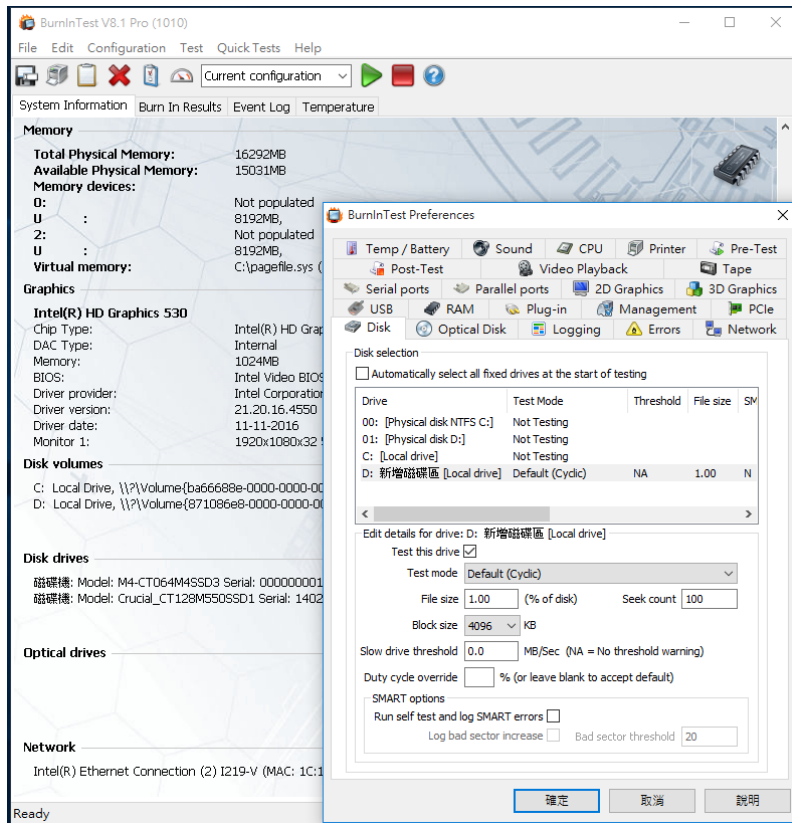
3. Burn In Tests and Results

3.1   BurnInTest v8.1 Pro for Crucial M550 CT128M550SSD1 2.5" 128GB SSD

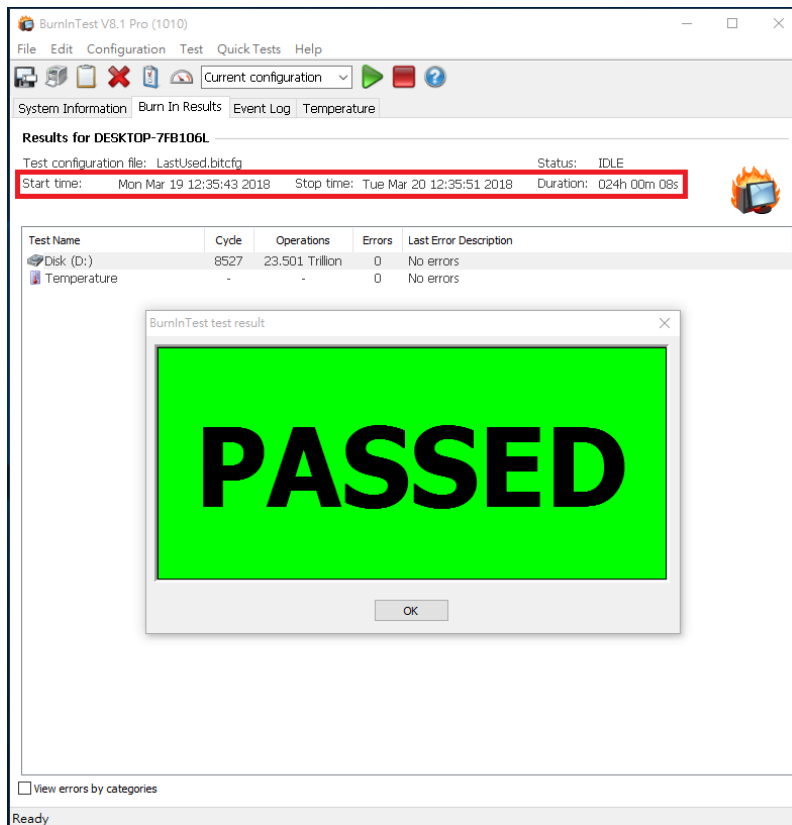3.1.1   **system information** as below:

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   2.5" SSD is SATA 3 Interface, I/O speed, max. to 6Gbps.

    4.2   PA417G adapter I/O performance is based on 2.5" SATA SSD.