MINERVA

USB 3.1 Gen 2 for 2.5" SATA, mSATA SSD & M.2 SSD with type-C

Performance & Burn In Test   Rev. 1.0 for 2.5" SATA SSD

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USB 3.1 type-C for 2.5" SATA, mSATA SSD & M.2 SSD adapter

1. Overview

U6335A adapter, built-in USB3.1 type-C connectors, provides one SATA connector, one M.2 B-key connector and one Mini PCI-e connector. First inserts 2.5" SATA SSD, using USB A-type to type-C cable to connect to the host, 2.5" SATA SSD can work.

2. Tools and Results of Performance Measurement

2.1   Test Platform

M/B :   ASUS **X99-PRO/USB3.1**
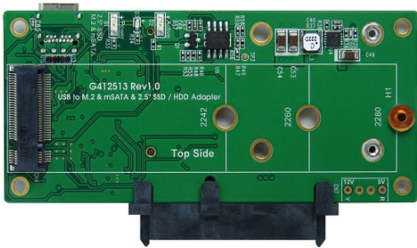CPU :   Intel **i7-5820K,** 3.3GHz/ 15M Cache/ LGA2013-v3
Memory :   ADATA DDR4 PC4-1700MHz, **8GB**(4GB DIMM*2)
ATX Power : COOLER MASTER G750M, **750W ATX**, 12V V2.31 Power Supply
Graphic :   ATI Radeon **HD Graphics 5450** Graphics Processor
OS :   Microsoft **Windows 10 64bit OS**

2.2   Test target: U6335A adapter and Crucial **2.5" 128GB**(CT128M550SSD1)

| U6335A Adapter | USB 3.1 A to C type Cable | Crucial M550 128GB SSD |

2.3   Install Hardware

Inserts 2.5" SATA SSD into U6335A adapter, Then this adapter through USB cable to connect to USB3.1 port of ASUS **X99-PRO/USB3.1**

2.4   BIOS & Windows 10 OS environment setup
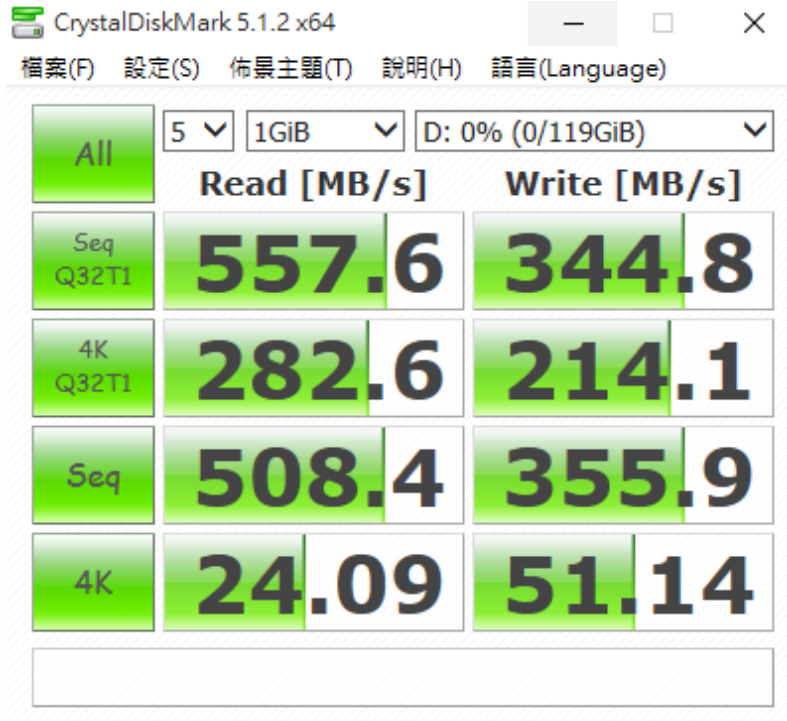
2.4.1   Install Windows 10 64bit OS.

2.4.2   In Windows 10, U6335A enclosure is formatted to NTFS Mode. Don't install any program.

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2.5 CrystalDiskMark 5.1.2 x64 performance test
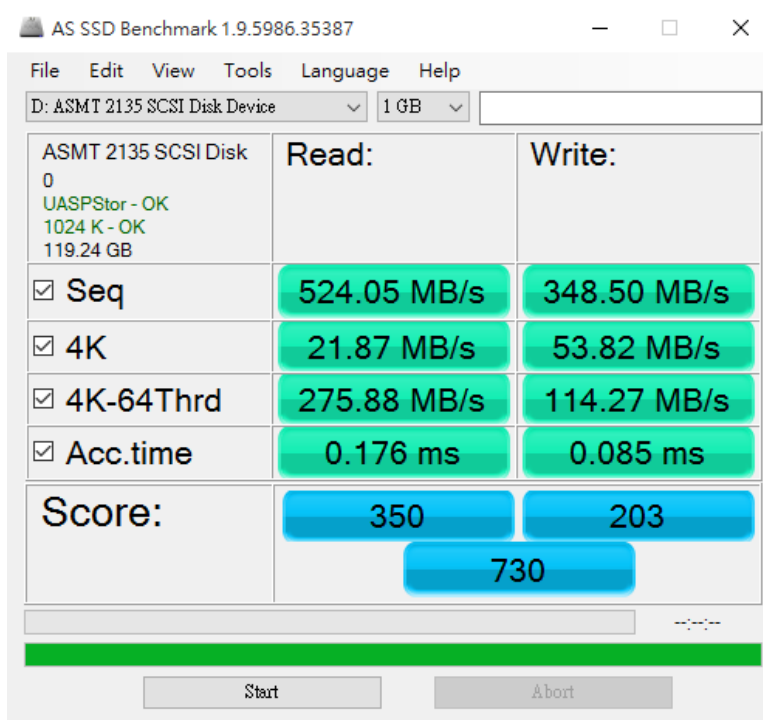
　　※Benchmark (Sequential Read & Write / default = 1MB)

　　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)

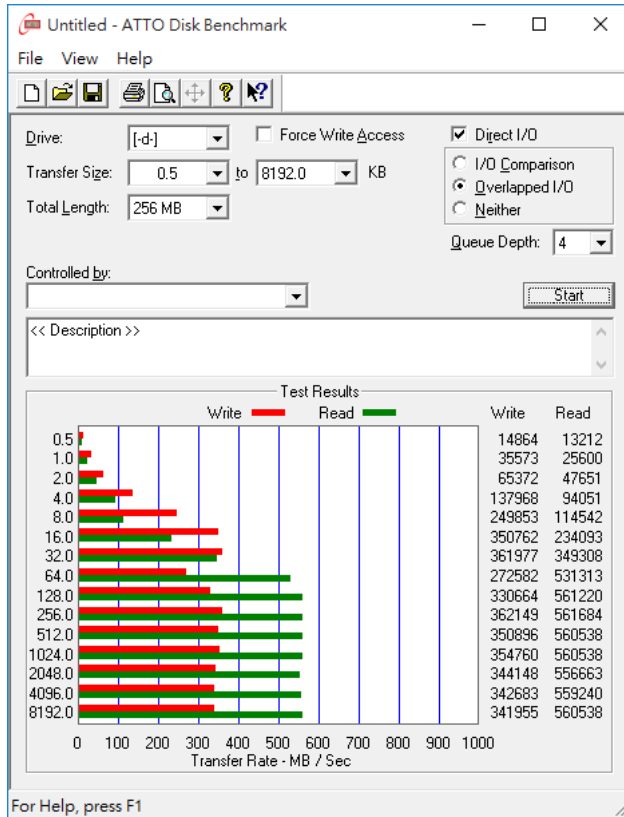　　2.6.1　show Crucial M550 CT128M550SSD1 2.5" 128GB performance as below:

USB 3.1 type-C for 2.5" SATA, mSATA SSD & M.2 SSD adapter

2.7 ATTO Disk Benchamrk 2.47 performance test

2.7.1 show Crucial M550 CT128M550SSD1 2.5" 128GB performance as below:

2.8 AnvilBenchmark_V110_B337

2.8.1 show Crucial M550 CT128M550SSD1 2.5" 128GB performance as below:

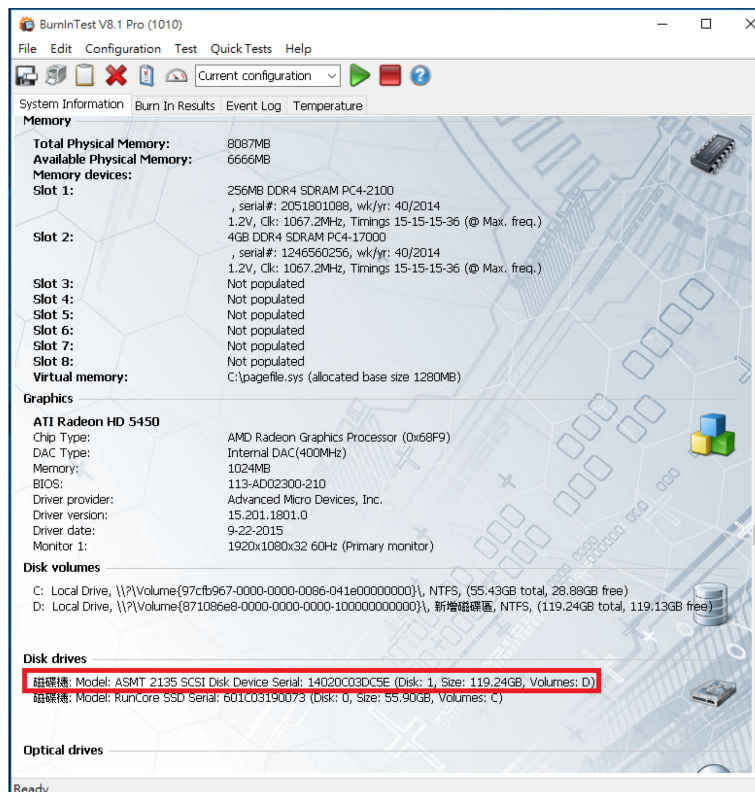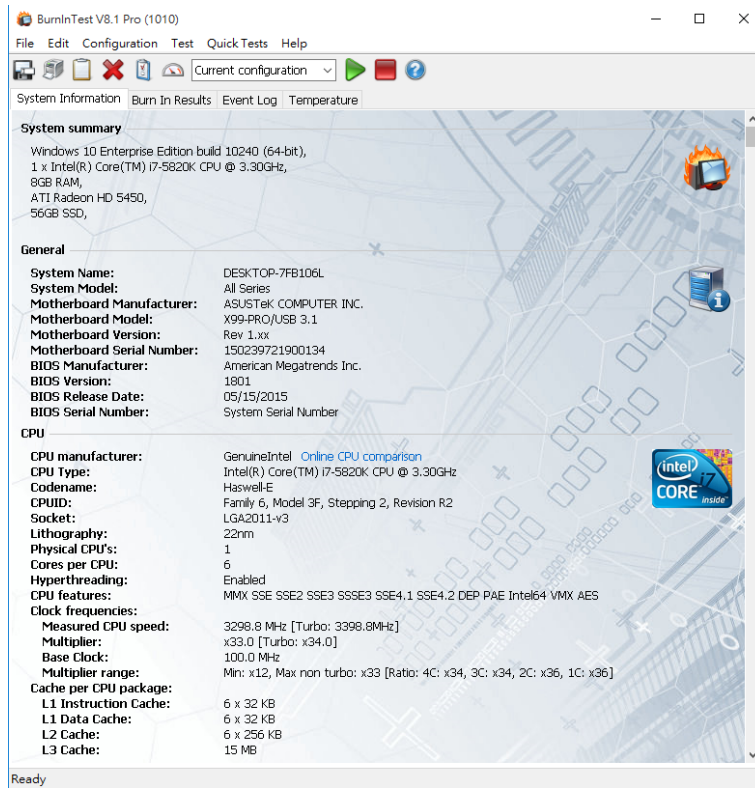# USB 3.1 type-C for 2.5" SATA, mSATA SSD & M.2 SSD adapter
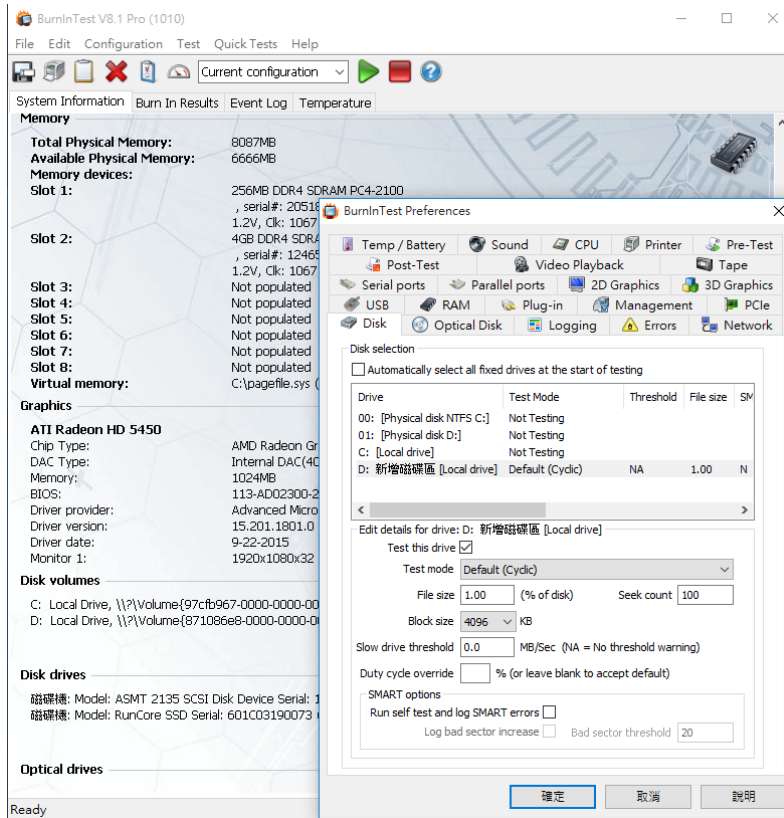
3. Burn In Tests and Results

3.1 BurnInTest v8.1 Pro

3.1.1 **system information** for Crucial M550 CT128M550SSD1 2.5" 128GB as below:
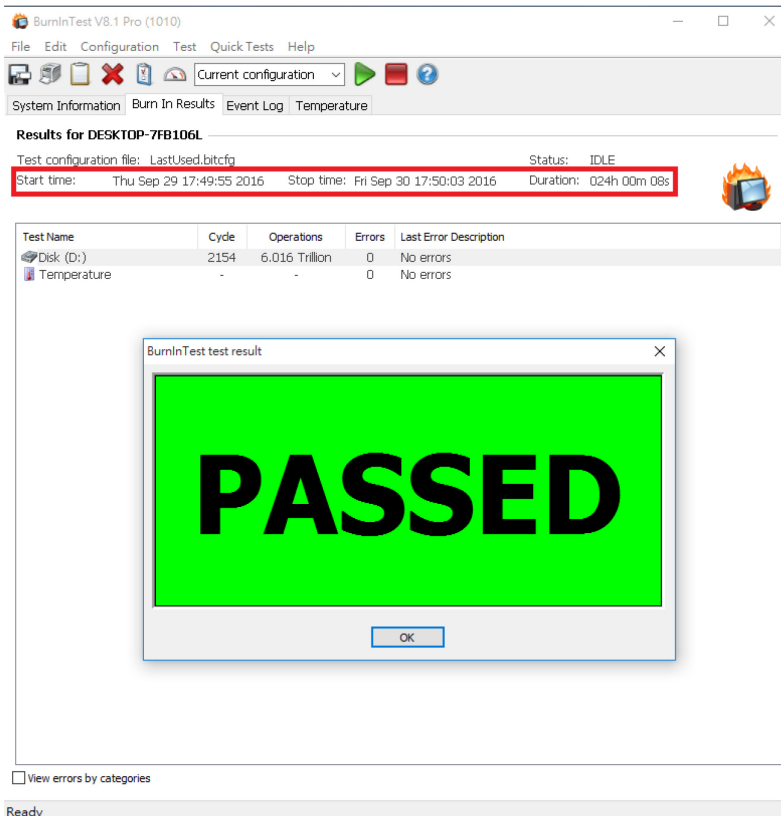
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3.1.2   show Disk test mode(10 ways cycle test)

3.1.3   show 24-hour Burn-in test PASSED

4. Summary

    4.1   USB 3.1 is 10Gbps Interface.

    4.2   SATA III is 6Gbps Interface.

    4.3   U6335A enclosure I/O performance is based on 2.5" SATA.