Performance & Burn In Test   Rev. 1.0

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U423D / USB 3.0&SATA to mSATA SSD with 2.5" Housing

1. Overview

The ST664MD riser card contains 1-Port CFast connector, and SATA 22-pin standard connector, built-in JMicron 330H bridge controller IC. Provide SATA II interface to IDE (PATA interface) conversion. Purpose of this test is to show ST664MD IDE performance and Read/Write stability.

2. Performance Measurement Tools and Results

2.1   Test Platform

M/B :	GIGABYTE **GA-X58A-UD3R**
CPU :	Intel **i7-930,** 2.8MHz/ 8G Cache/ 4.8GT
Memory :	Kingston **KVR1333D3N9/2G,** 1333MHz,2G Byte DIMM*2
ATX Power :	TC START W500, **500W ATX**,12V V2.2 Power Supplier
Graphic :	Asus NVIDIA**, Geforce 210**
OS :	Microsoft **Windows 7 64bit OS**

2.2   Test target(ST664MD Conveter) and Using CFast Card SSD

ST664MD Adapter   Bottom Side + CFast Card   CFast Card

2.3   Install Hardware

insert Apacer 16GB(APCFA016GT6HS-T) into ST664MD's CFast connectors, and then connected to the GA-X58A-UD3R motherboard SATA II Port.

2.4   BIOS & Windows 7 OS environment setup

2.4.1   input BIOS(Basic Input/Output Setup) – Change IDE Mode into AHCI Mode

Notice: IDE don't support SATA Interface instructions - TRIM,NCQ

2.4.2   Windows 7 formatted raid card NTFF Mode and don't install any program

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2.5   CrystalDiskMark 3.0.1 x64

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

2.5.1   Used Apacer 16GB(APCFA016GT6HS-T) performance as below:
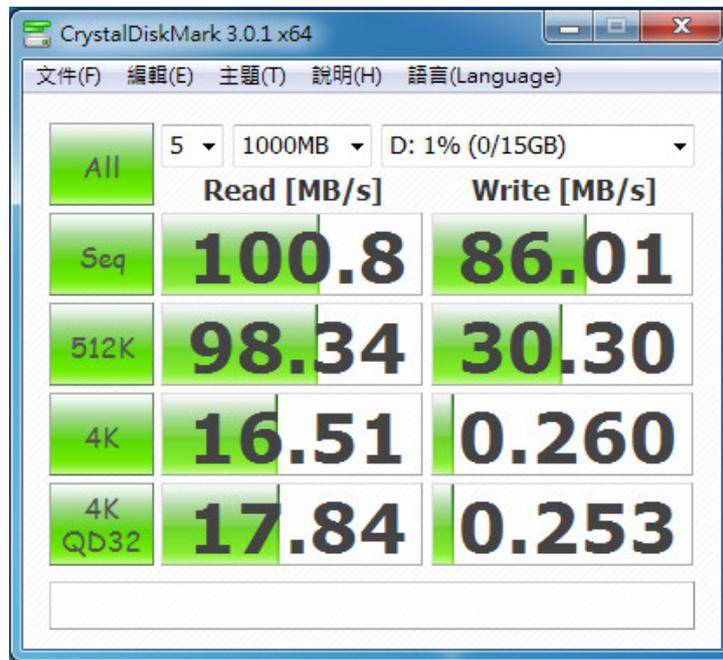
2.6   AS SSD Benchmark 1.6

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

2.6.1   Used Apacer 16GB(APCFA016GT6HS-T) performance as below:
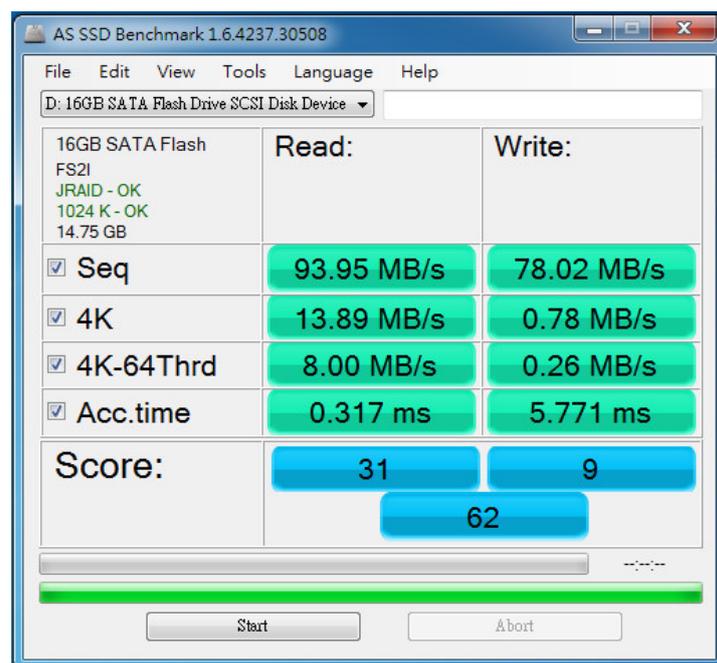
2.7 HD Tune pro 5.0

※Benchmark (Sequential Read / default block size = 64KB)

2.7.1 Used Apacer 16GB(APCFA016GT6HS-T) performance as below:
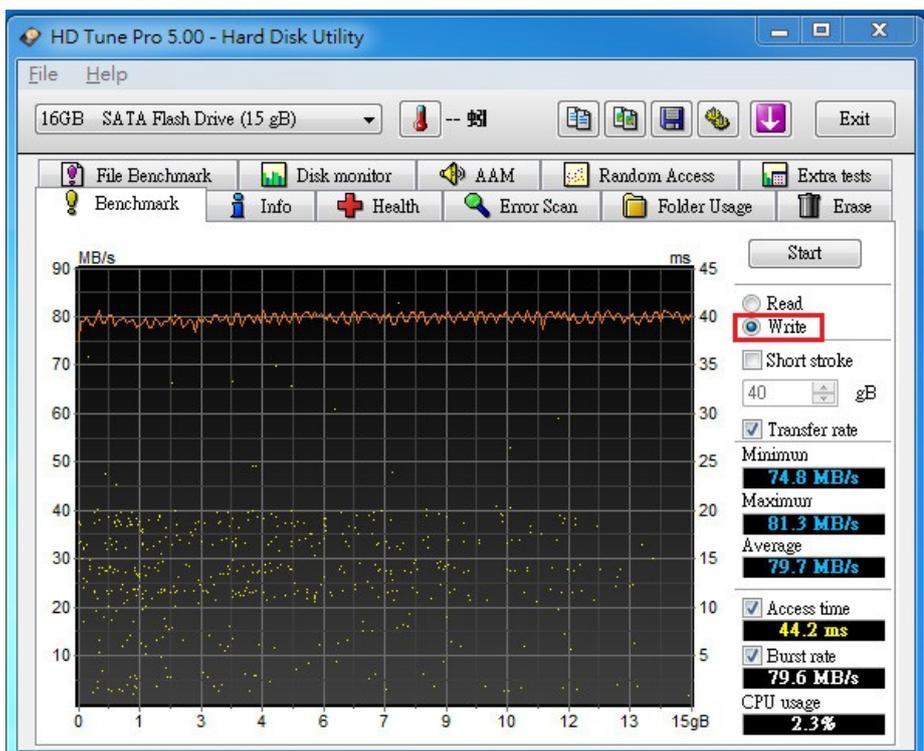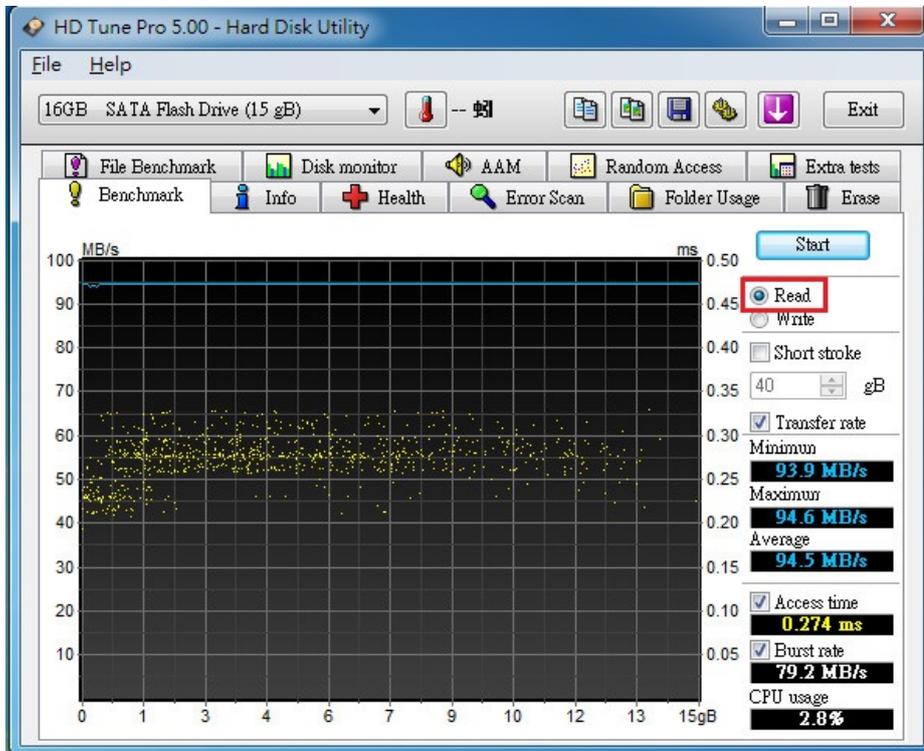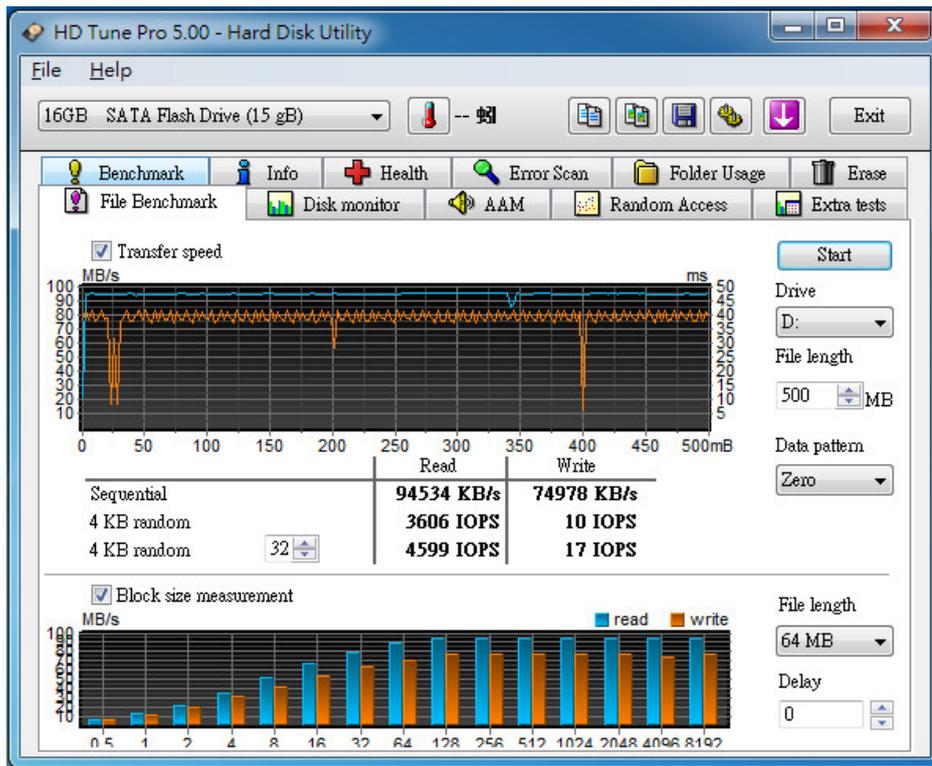
### 2.8 ATTO Disk BenchMark

   2.8.1 Used Apacer 16GB(APCFA016GT6HS-T) performance as below:
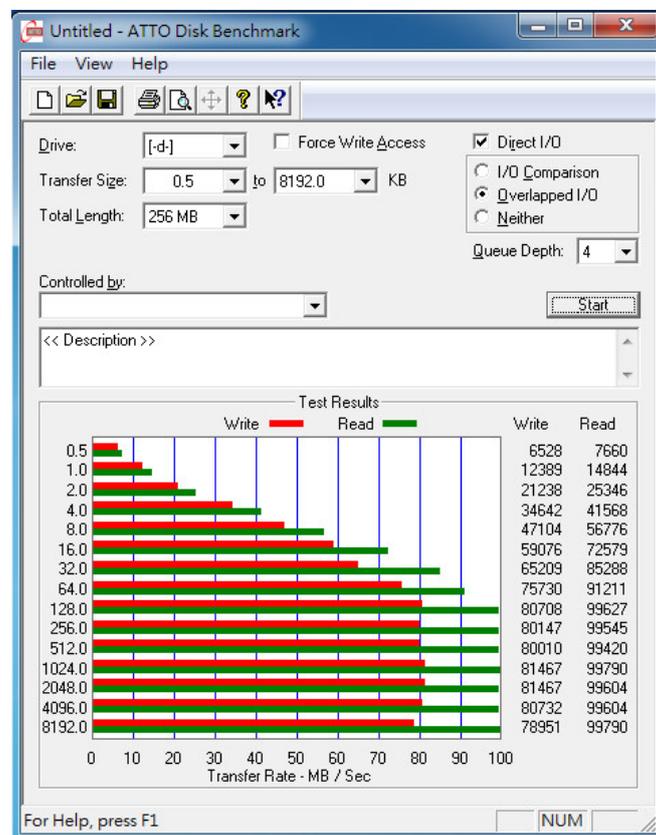
3. Burn In Tests and Results

3.1 BurnInTest v7.0 Pro

3.1.1 **system information** as below:
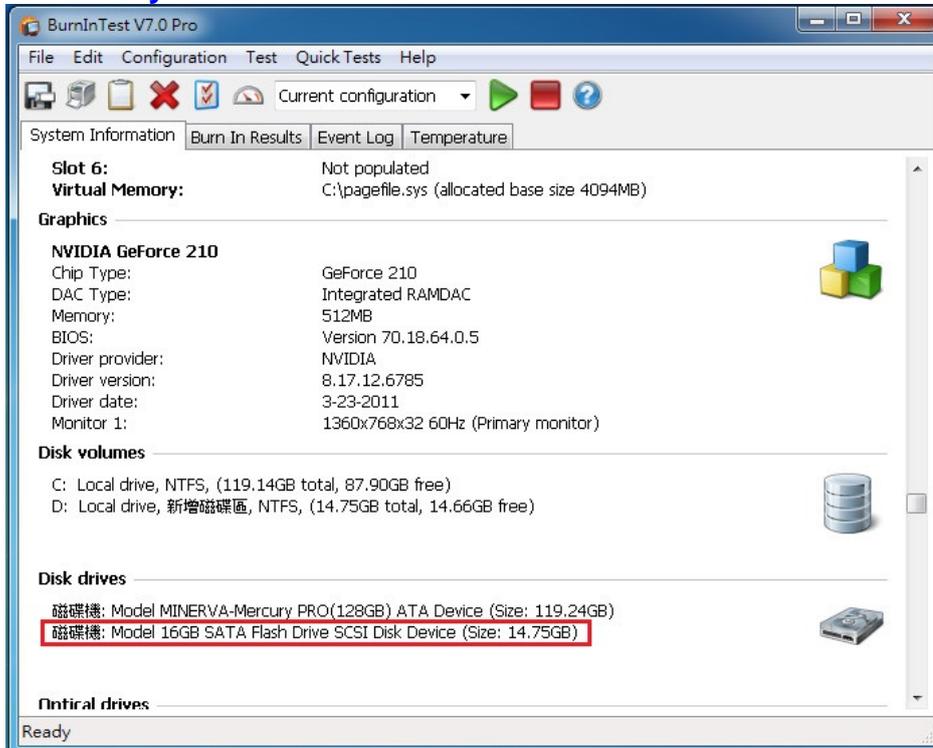
3.1.2 show Disk test mode(default cyclic -- 10 ways cycle test)
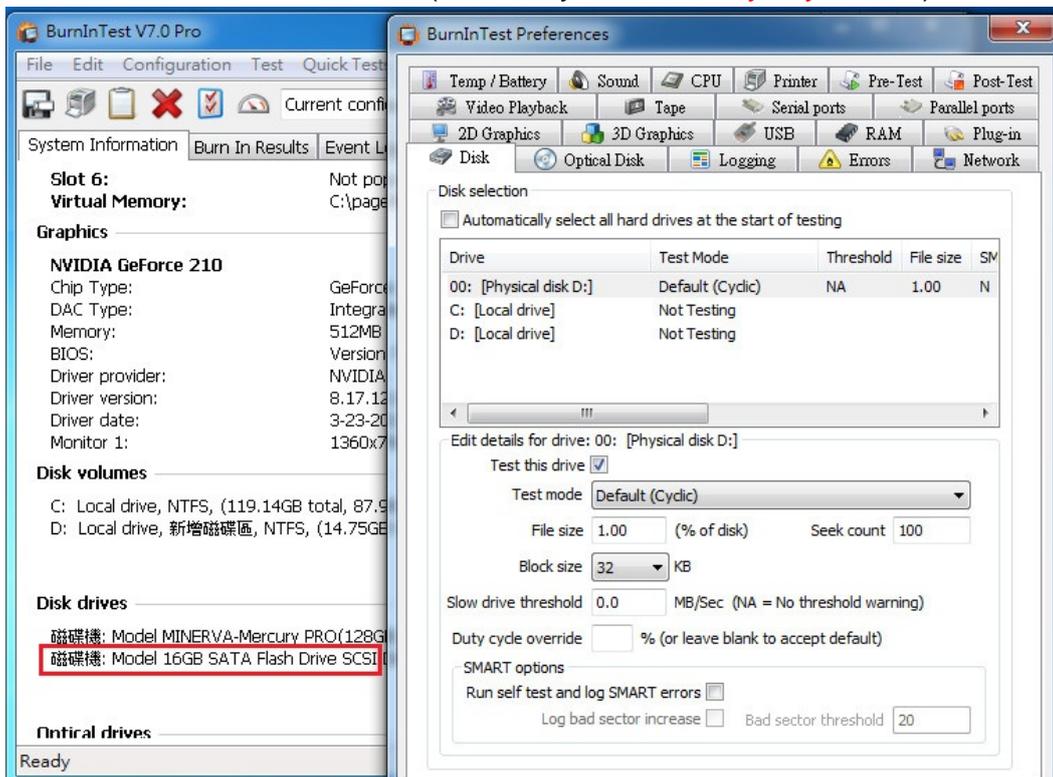
3.1.3   show ST664MD with Apacer 16GB(APCFA016GT6HS-T) 24-hour
Burn-in test PASSED
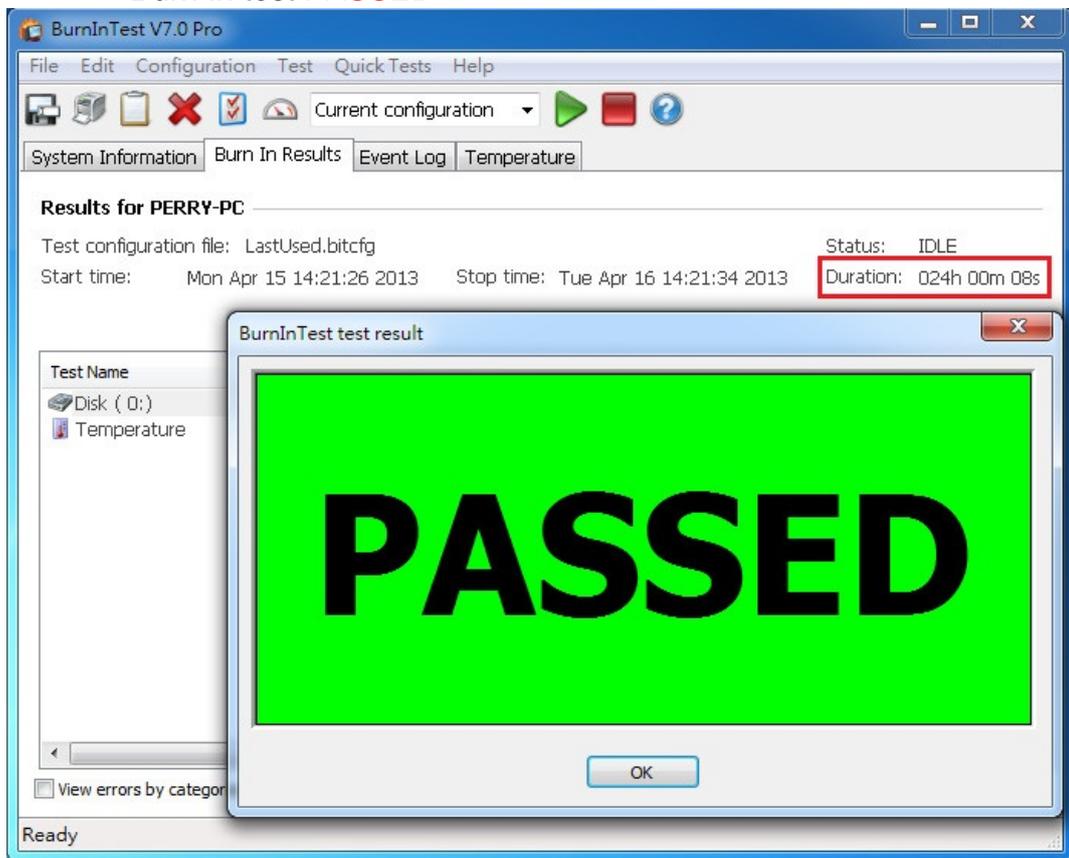
4. Summary

- SATA to IDE convert, following ATA/ATAPI-7, Current spec I/O speed, max. to 133MB/s.
- ST664MD can be used a Master drive only in primary or secondary (can't configure with slave drive)
- I/O performance of ST664MD adapter is based on CFast Card SSD