



MINERVA

AD263FB9 / AD263FE9 Converter Card

Performance & Burn In Test Rev. 1.0

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4. Summary

AD263FB9 / AD263FE9 mSATA SSD to IDE 40pin Adapter

1. Overview

AD263FB9 / AD263FE9 series adapter card provides mini PCI-e 52pin connector. These support mSATA SSD into IDE 40pin interface. Built-in JMicron JMH330 controller IC to achieve the conversion of the SATA signals to IDE signals.

2. Tools and Results of Performance Measurement

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: (AD263Fx series adapter) and mSATA SSD



2.3 Install Hardware

Insert Intel mSATA SSD([80GB/ SSDMAEMC080G2](#))or Sandisk([64GB/ SDSA5FK-064G](#)) into AD263Fx9 series converter's mini PCI-e connector, and then with coppers, nuts and screws to fix mSATA SSDs. (Please refer to the Installation Notes). Connect AD263Fx series converter to SATA Port of GA-X58A-UD3R motherboard.

2.4 BIOS & Windows 7 OS environment setup

2.4.1 In BIOS(Basic Input/Output Setup) – Change [AHCI Mode](#) into [IDE Mode](#)

[Notice] **IDE don't support SATA AHCI Instructions – TRIM and NCQ**

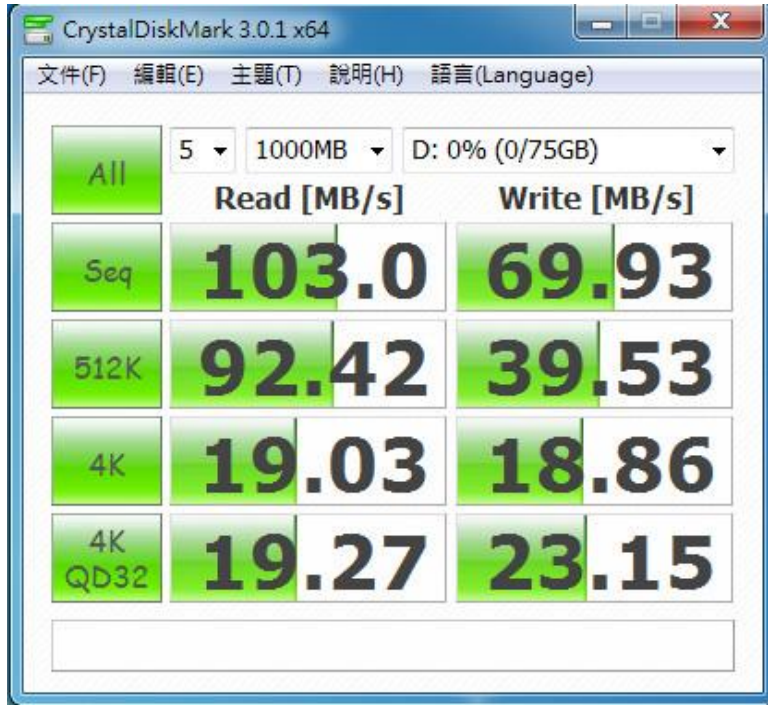
2.4.2 In Windows 7, formatted SSD to NTFS Mode. Don't install any program.

AD263FB9 / AD263FE9 mSATA SSD to IDE 40pin Adapter

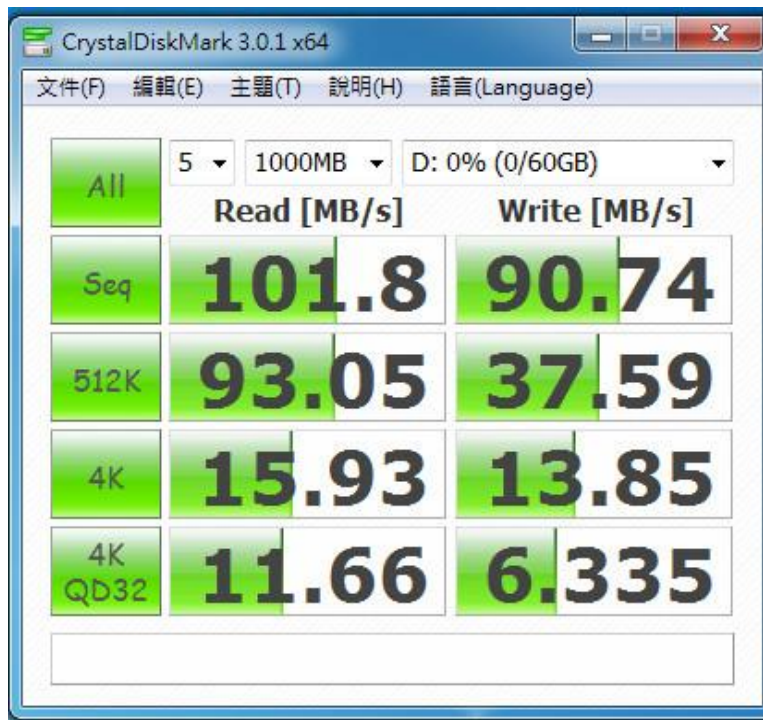
2.5 CrystalDiskMark 3.0.1 x64 performance test

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

2.5.1 Used Intel mSATA SSD(**80GB/SSDMAEMC080G2**) performance as below:



2.5.2 Used Sandisk(**64GB/SDSA5FK-064G**) performance as below:

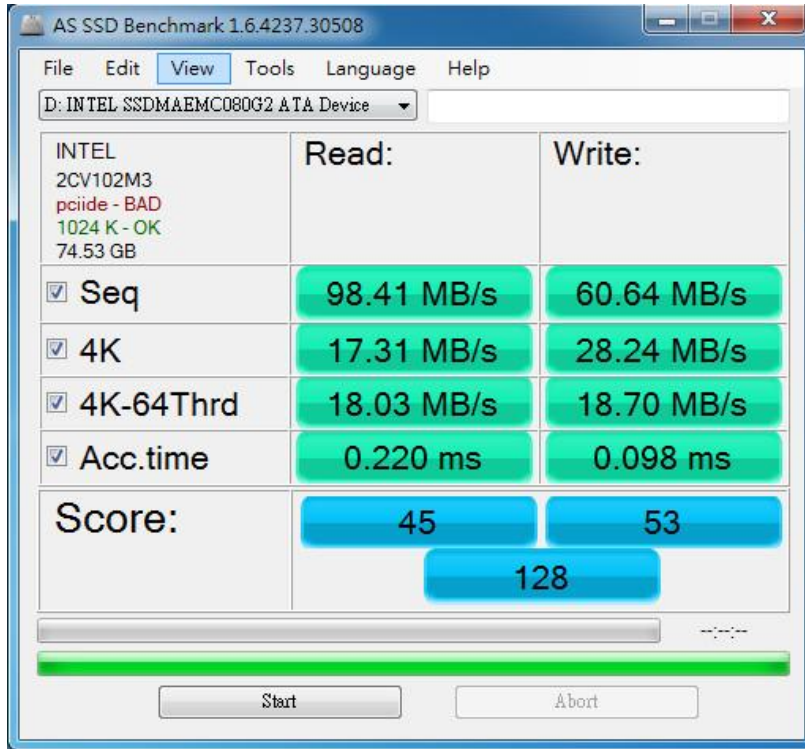


AD263FB9 / AD263FE9 mSATA SSD to IDE 40pin Adapter

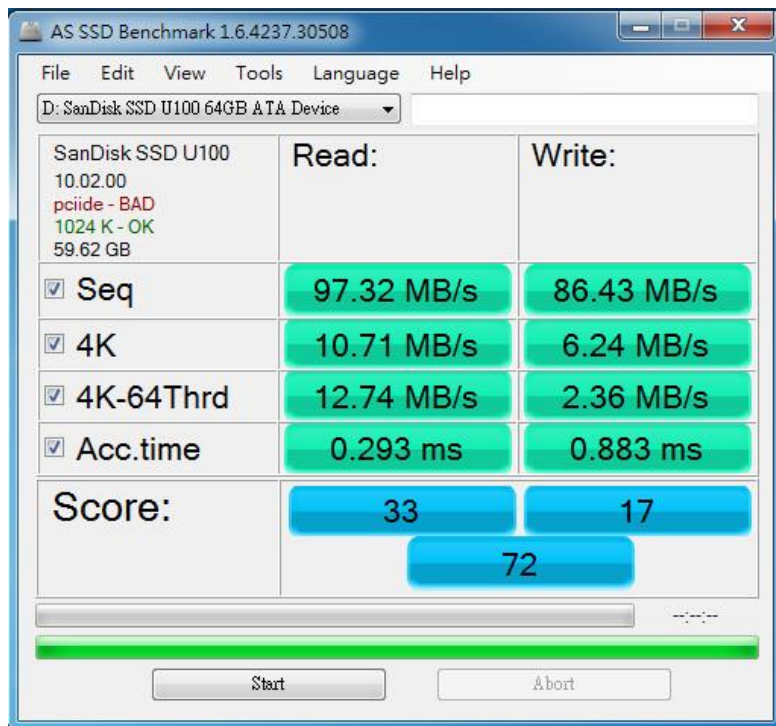
2.6 AS SSD Benchmark 1.6 performance test

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

2.6.1 Used Intel mSATA SSD(80GB/SSDMAEMC080G2) performance as below:



2.6.2 Used Sandisk(64GB/SDSA5FK-064G) performance as below:

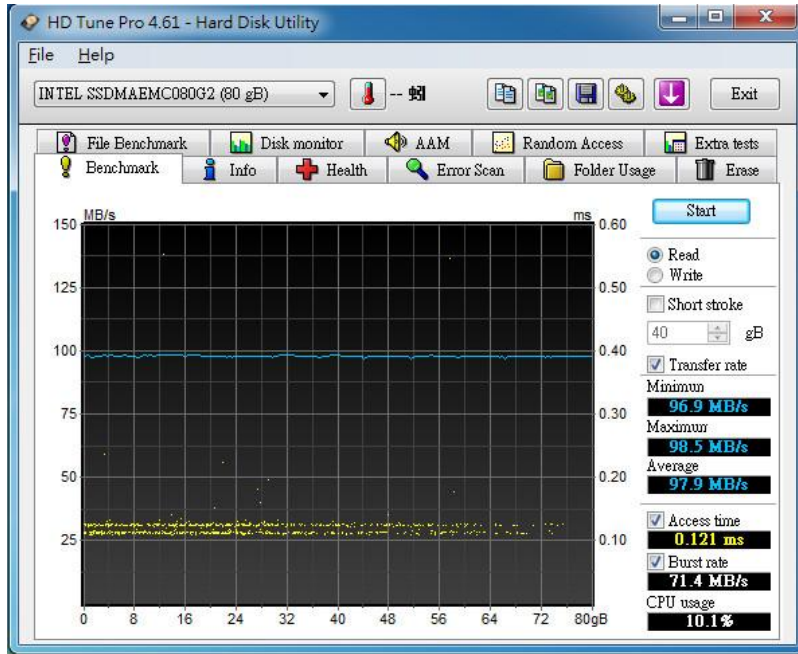


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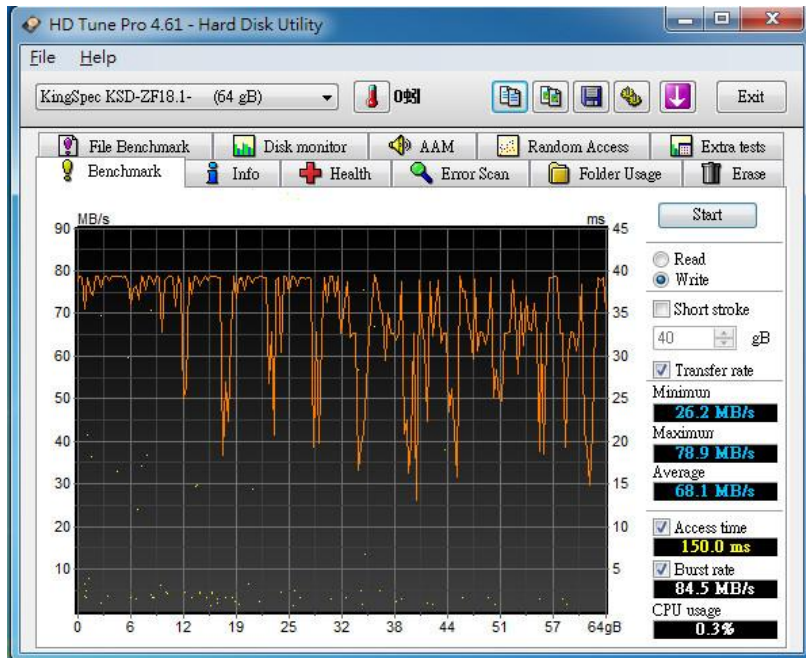
2.7 HD Tune pro 4.61 performance test

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

2.7.1 Used Intel mSATA SSD(80GB/SSDMAEMC080G2) performance as below:



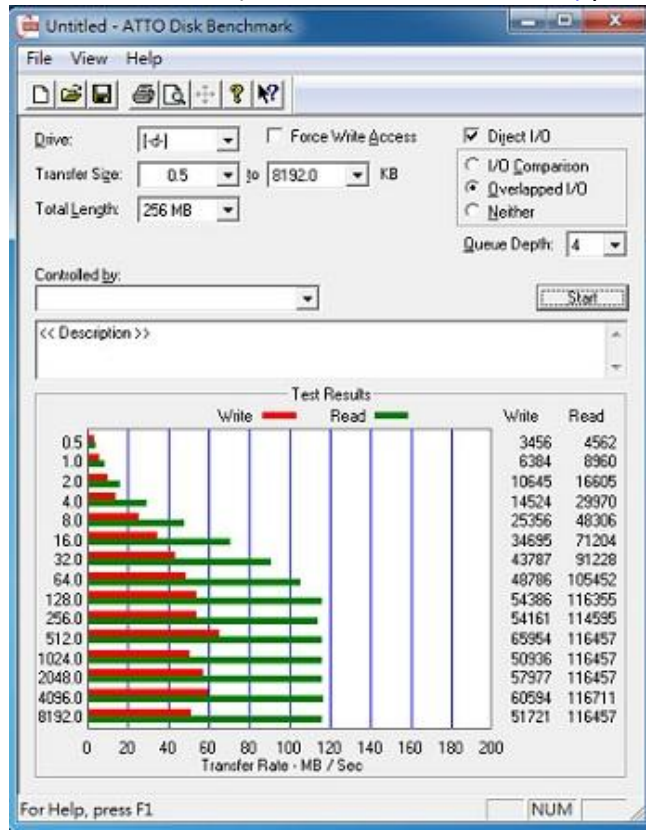
2.7.2 Used Intel mSATA SSD(80GB/SSDMAEMC080G2) performance as below:



2.8 ATTO.Disk BenchMark

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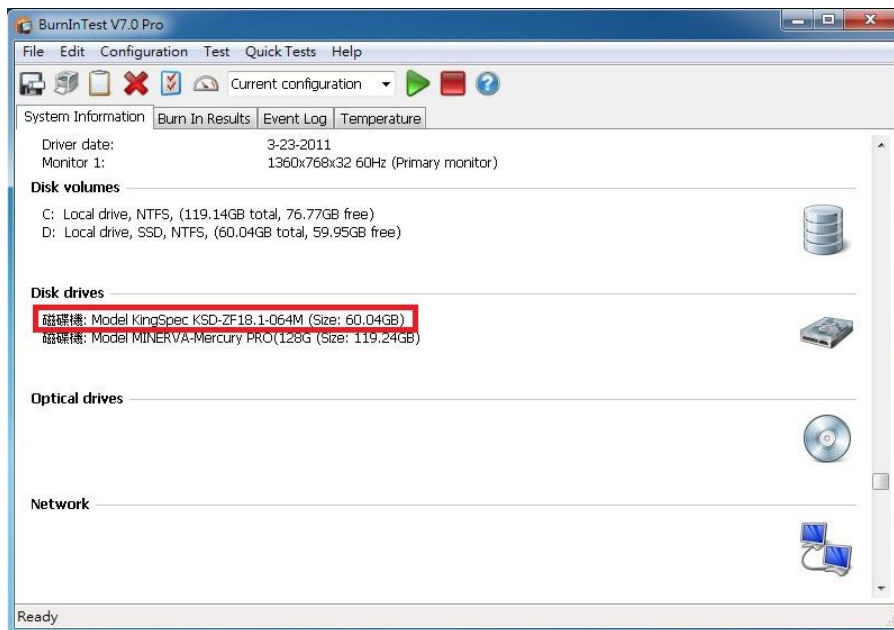
2.8.1 Used Intel mSATA SSD(80GB/SSDMAEMC080G2) performance as below:



Burn In Tests and Results

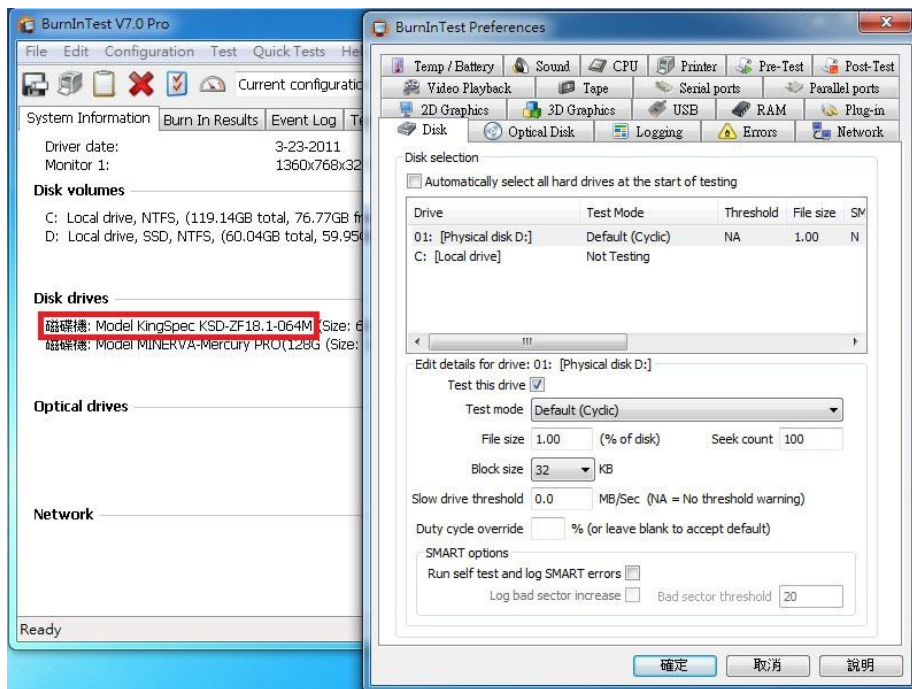
3.1 BurnInTest v7.0 Pro

3.1.1 **system information** for Intel mSATA SSD(80GB/SSDMAEMC080G2) as below:

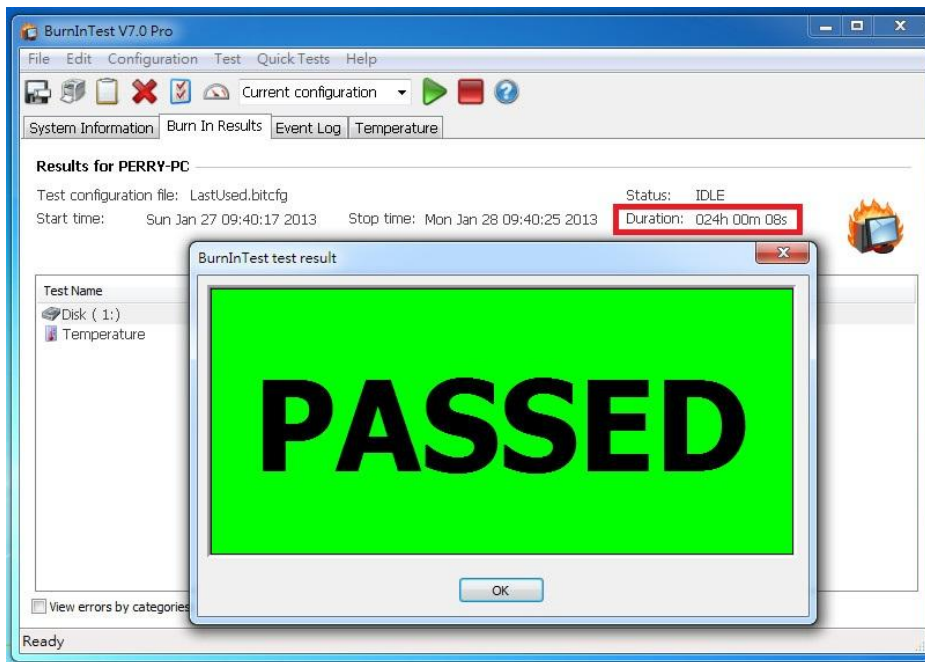


3.1.2 show Disk test mode(default cyclic -- 10 ways cycle test)

AD263FB9 / AD263FE9 mSATA SSD to IDE 40pin Adapter



3.1.3 show Intel mSATA SSD(80GB/ SSDMAEMC080G2) 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.
AD263Fx9 Adapter **only support IDE Master Mode, don't support Slave Mode**
I/O performance of AD263Fx9 adapter is based on mSATA SSD