



# MINERVA

## CB946FB / CB946FE Converter Card

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### Performance & Burn In Test Rev. 1.0

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# CB946FB / CB946FE SATA to ZIF SSD/HDD(PATA)

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## 1. Overview

CB946FB / CB946FE series adapter card provides ZIF 40 connector. These support ZIF SSD/HDD(PATA) into SATA 7+15 pin interface. Built-in JMicron 330B controller IC to achieve the conversion of the IDE signals to SATA 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: (946Fx series adapter) and ZIF SSD/HDD(PATA)



### 2.3 Install Hardware

Insert ZIF SSD/HDD (KingSpec [64GB/KSD-ZF16.1-064MJ](#) or TOSHIBA [80GB/MK8009GAH](#)) into 946Fx series converter's ZIF connector, and then with fixed cover, coppers, nuts and screws to fix SSDs. (Please refer to the Installation Notes). Connect 946Fx 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 IDE Mode into AHCI Mode
- 2.4.2 In Windows 7, formatted SSD to NTFS Mode. Don't install any program.

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## 2.5 CrystalDiskMark 3.0.1 x64 performance test

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

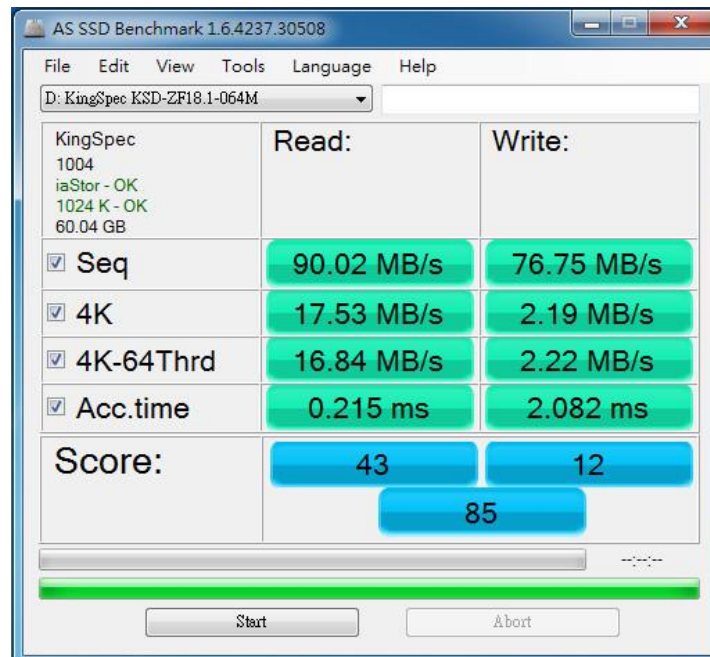
2.5.1 Used KingSpec **64GB/ KSD-ZF16.1-064MJ** performance as below:



## 2.6 AS SSD Benchmark 1.6 performance test

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

2.6.1 Used KingSpec **64GB/ KSD-ZF18.1-064MJ** performance as below:

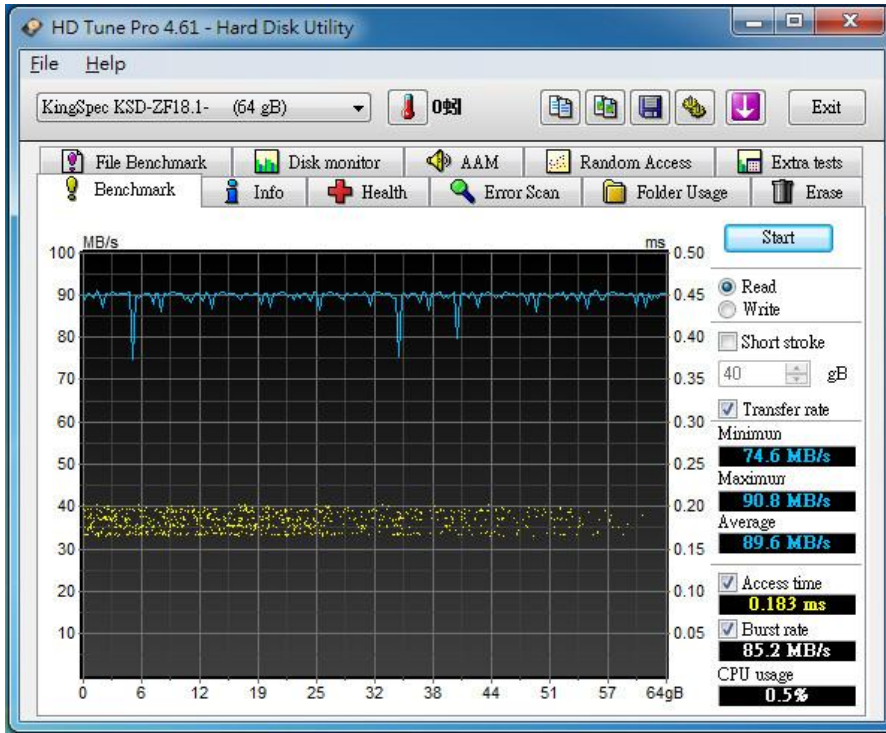


# CB946FB / CB946FE SATA to ZIF SSD/HDD(PATA)

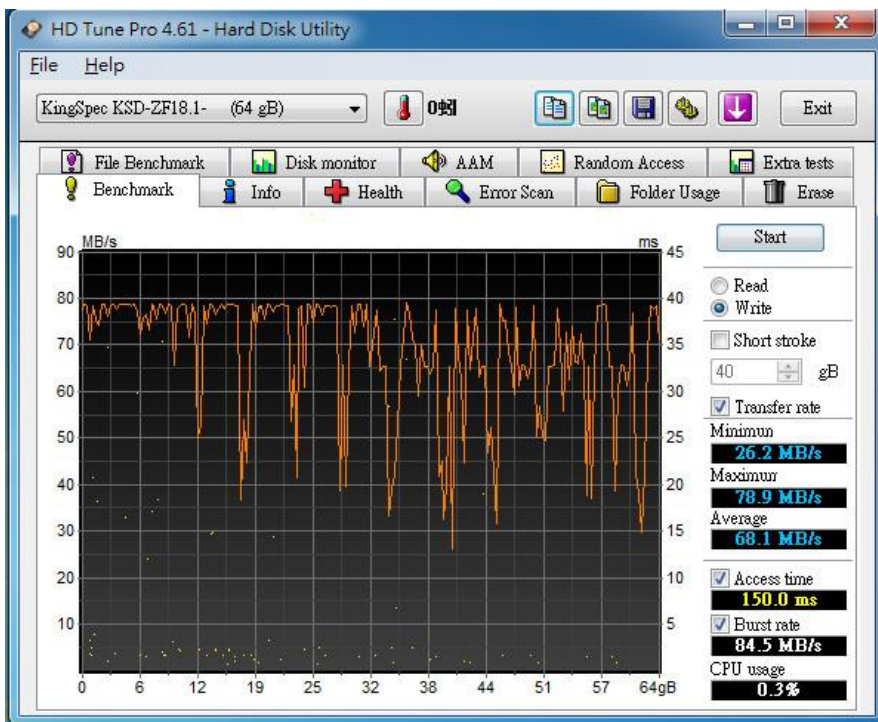
## 2.7 HD Tune pro 4.61 performance test

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

2.7.1 Used KingSpec 64GB/ KSD-ZF18.1-064MJ performance as below:



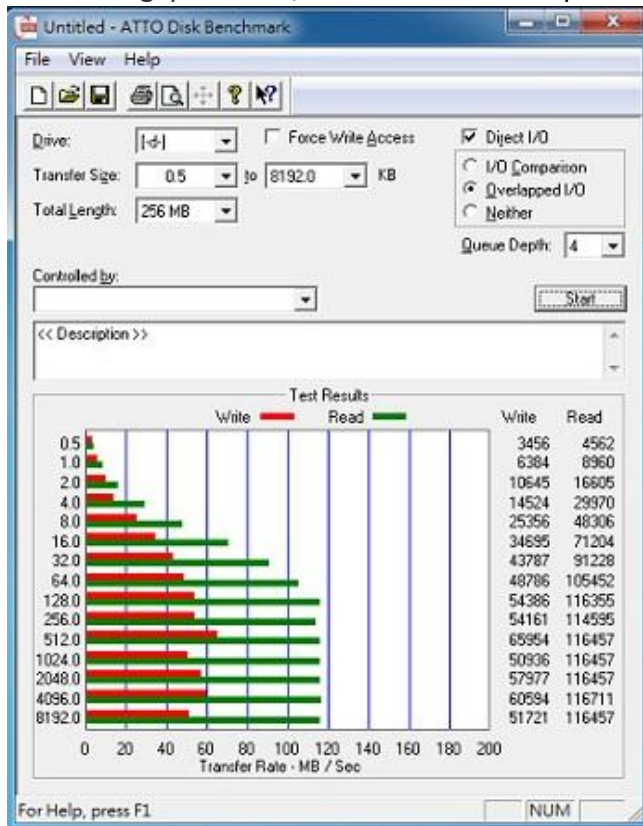
2.7.2 Used KingSpec 64GB/ KSD-ZF18.1-064MJ performance as below:



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## 2.8 ATTO Disk BenchMark

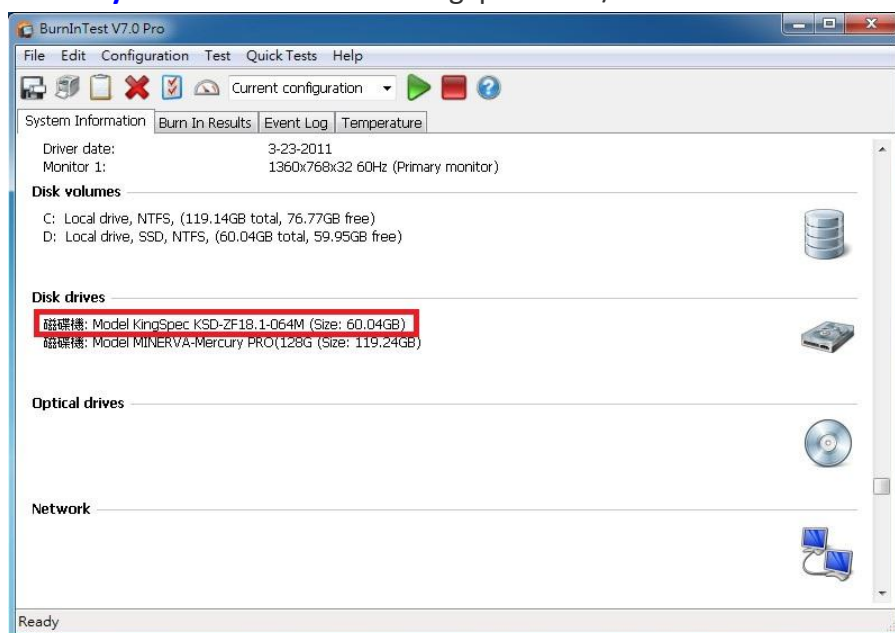
2.8.1 Used KingSpec 64GB/ KSD-ZF18.1-064MJ performance as below:



## Burn In Tests and Results

### 3.1 BurnInTest v7.0 Pro

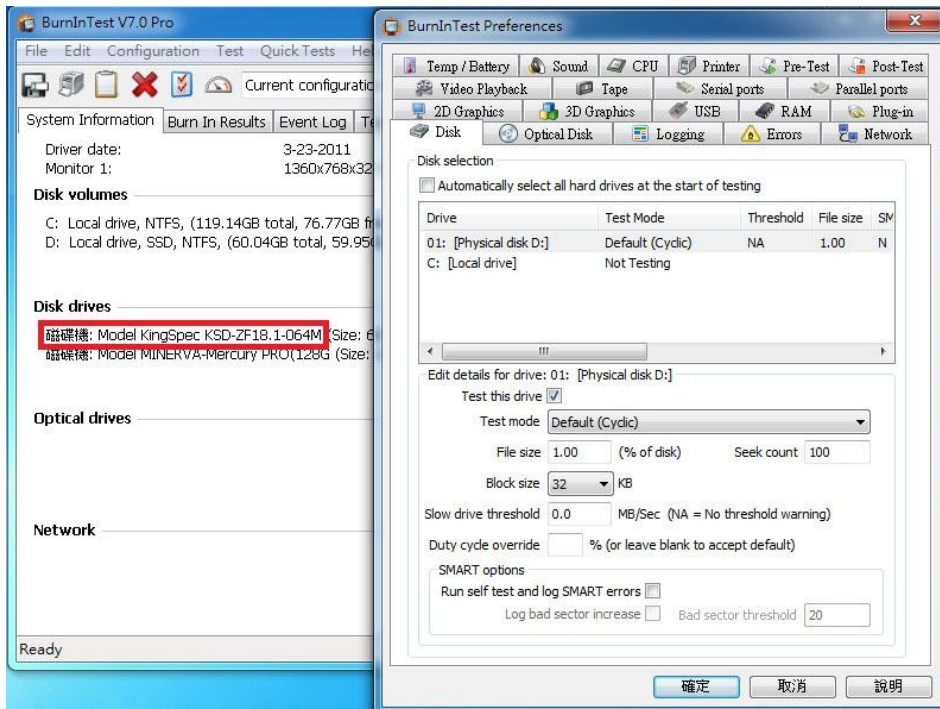
3.1.1 system information for KingSpec 64GB/ KSD-ZF18.1-064MJ as below:



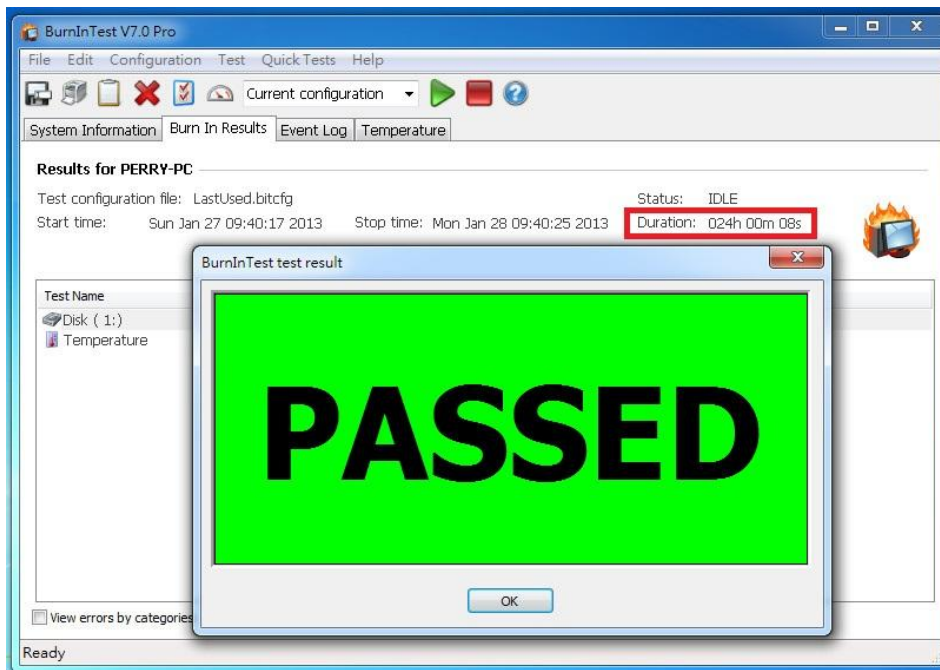


# CB946FB / CB946FE SATA to ZIF SSD/HDD(PATA)

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



## 3.1.3 show KingSpec 64GB/ KSD-ZF18.1-064MJ 24-hour Burn-in test PASSED



## 4. Summary

ZIF SSD is PATA Interface(IDE), Current spec I/O speed, max. to 133MB/s.  
I/O performance of 946Fx adapter is based on ZIF SSD