



# MINERVA

## CB943FA,FB,FC/ST943FD Converter Card

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### Performance & Burn In Test Rev. 1.0

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# CB943FA,FB,FC/ST943FD SATA to Mini PCI-E(PATA)

## 1. Overview

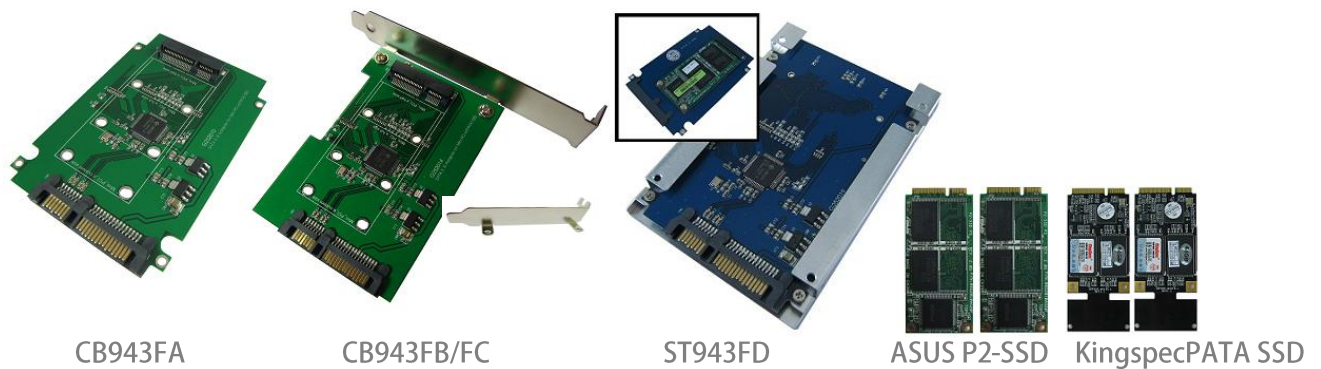
CB943FA,FB,FC/ST943FD series adapter card provides Mini PCI Express connector. These support Mini PCI-E (PATA) SSD into SATA 7+15 pin interface. Built-in JMicron 330B controller IC to achieve the conversion of the IDE signals to SATA signals.

## 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: (943Fx series adapter) and mini PCI-e SSD(PATA)



### 2.3 Install Hardware

Insert mini PCI-e SSD (KingSpec [64GB/KSM-PMP.16-064MS](#) or ASUS [32GB/P2-SSD PS](#)) into 943Fx series converter's mini PCI-e connector, and then with coppers, nuts and screws to fix SSDs. (Please refer to the Installation Notes). Connect 943Fx 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/ KSM-PMP.16-064MS performance as below:



2.5.2 Used ASUS 32GB/P2-SSD PS performance as below:

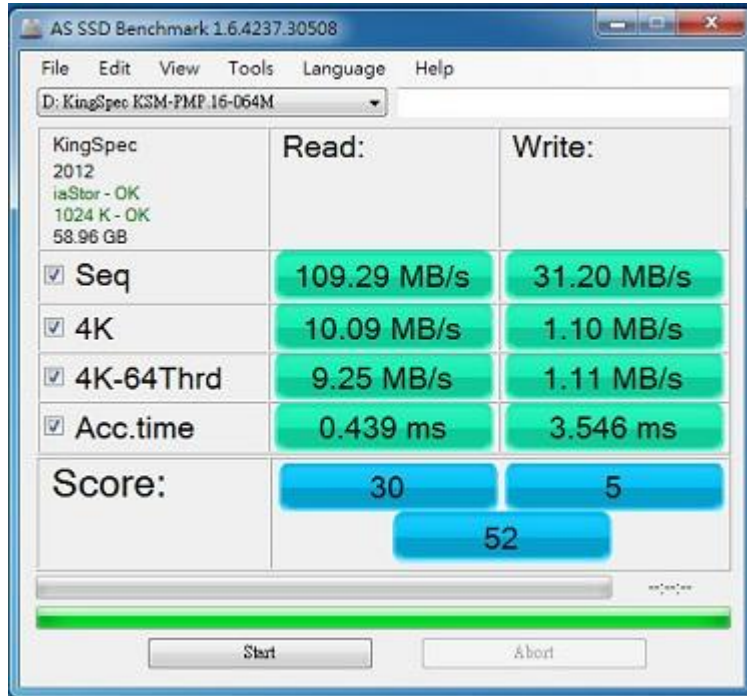


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## 2.6 AS SSD Benchmark 1.6 performance test

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

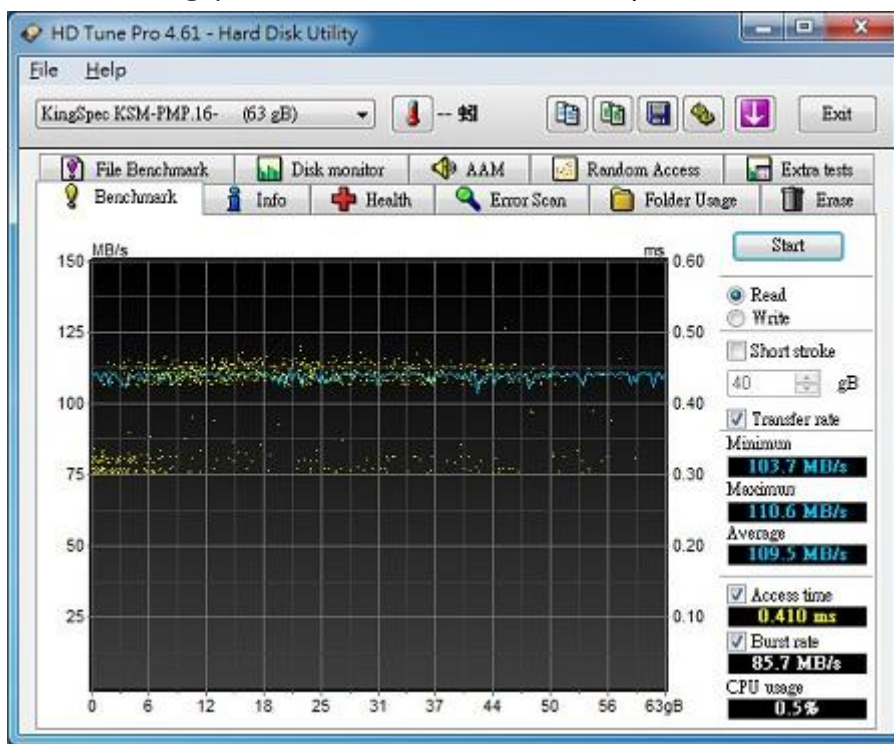
2.6.1 Used KingSpec 64GB/ KSM-PMP.16-064MS performance as below:



## 2.7 HD Tune pro 4.61 performance test

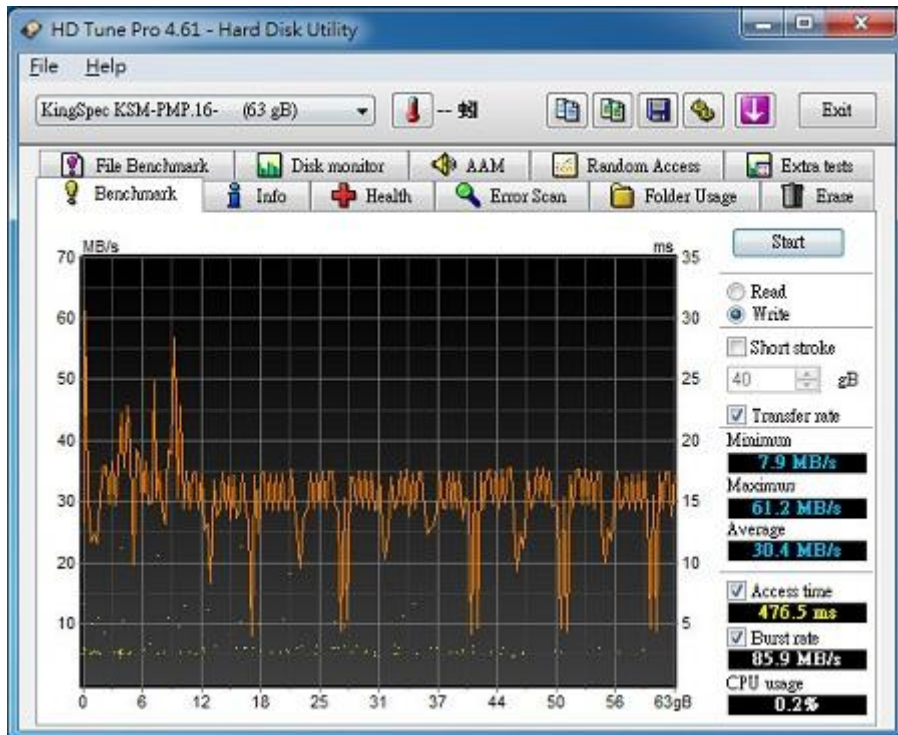
※Benchmark (Sequential Read & Write/ default block size = 64KB)

2.7.1 Used KingSpec 64GB/ KSM-PMP.16-064MS performance as below:

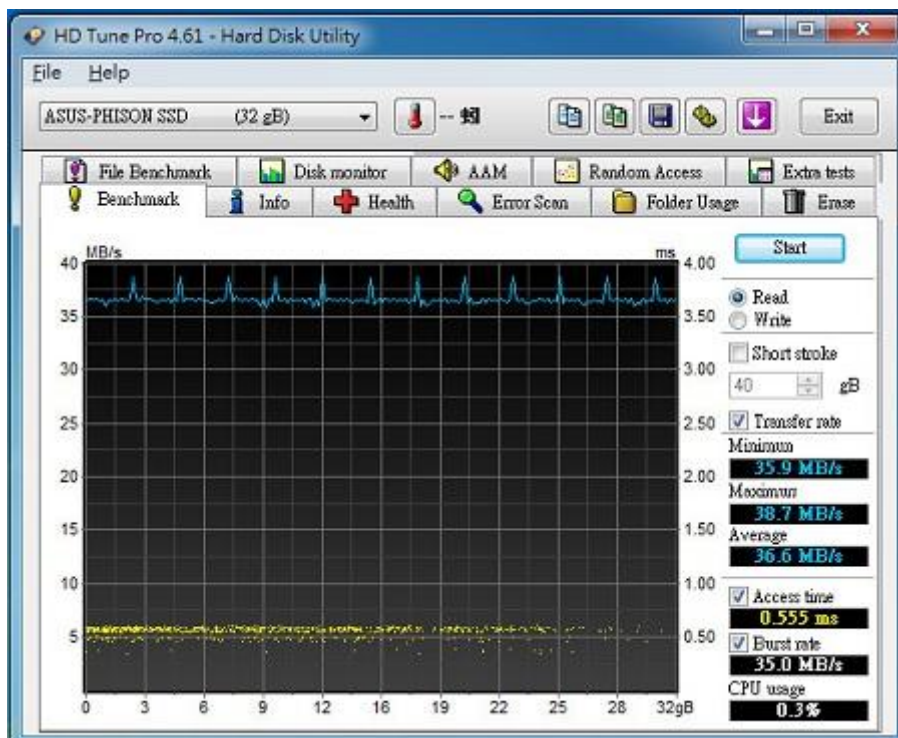


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2.7.2 Used KingSpec 64GB/ KSM-PMP.16-064MS performance as below:

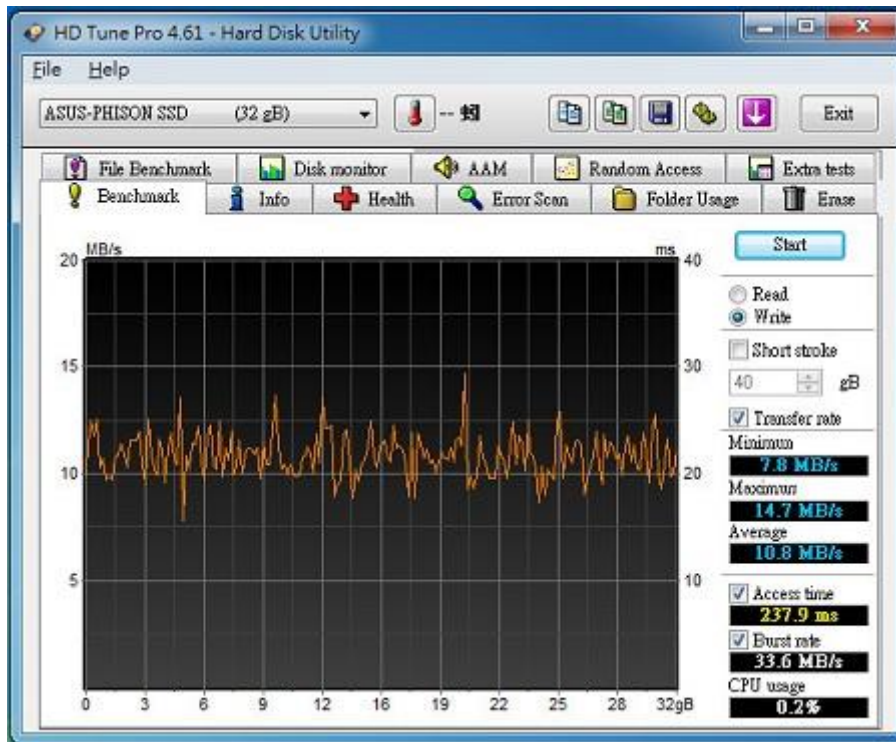


2.7.3 Used ASUS 32GB/P2-SSD PS performance as below:



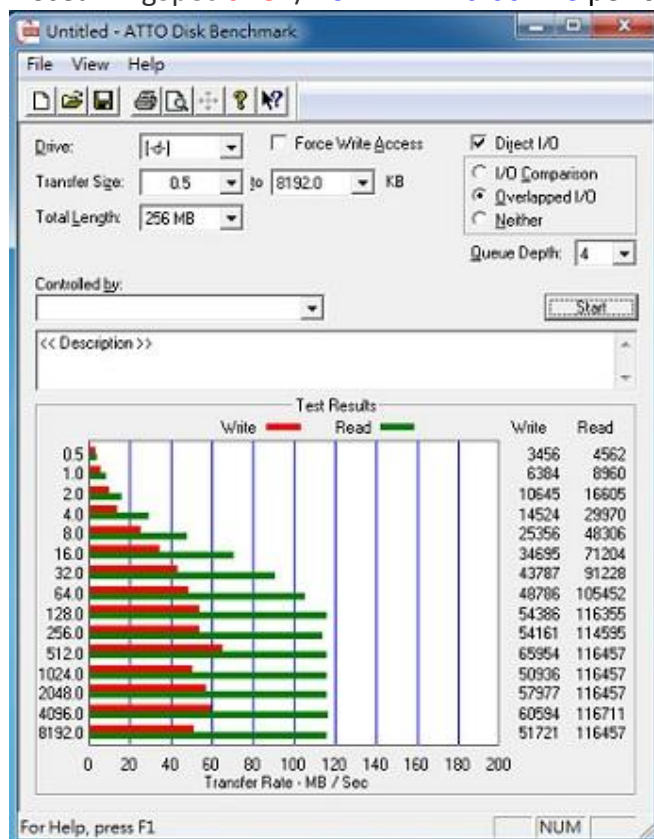
# CB943FA,FB,FC/ST943FD SATA to Mini PCI-E(PATA)

2.7.4 Used ASUS 32GB/P2-SSD PS performance as below:



## 2.8 ATTO Disk Benchmark

2.8.1 Used KingSpec 64GB/ KSM-PMP.16-064MS performance as below:

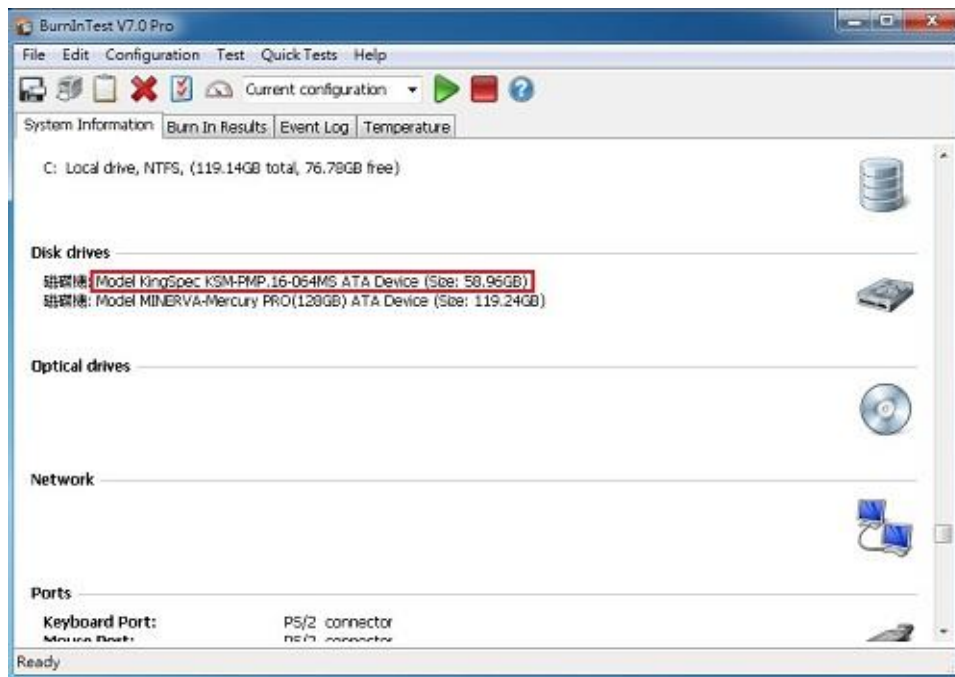


# CB943FA,FB,FC/ST943FD SATA to Mini PCI-E(PATA)

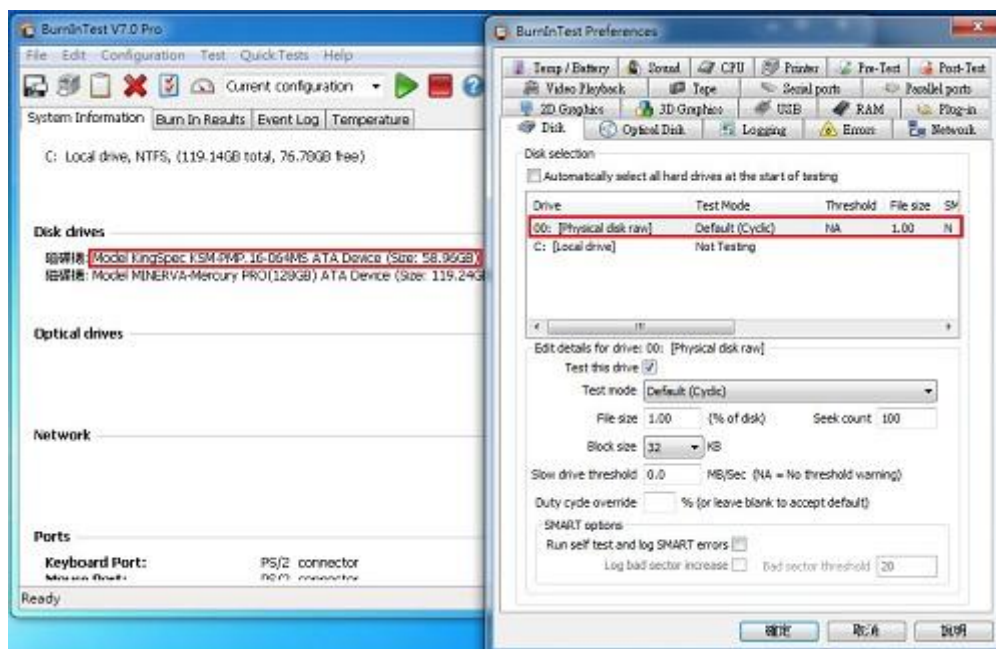
## Burn In Tests and Results

### 3.1 BurnInTest v7.0 Pro

#### 3.1.1 system information for KingSpec 64GB/ KSM-PMP.16-064MS as below:



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



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3.1.3 show KingSpec 64GB/ KSM-PMP.16-064MS 24-hour Burn-in test PASSED



#### 4. Summary

Mini PCI-e SSD is PATA Interface(IDE), Current spec I/O speed, max. to 133MB/s.  
I/O performance of 943Fx adapter is based on mini PCI-e SSD