



# MINERVA

## U4267F USB3.1 Micro-B for dual port M.2 SSD(SATA I/F) RAID

---

### Performance & Burn In Test Rev. 1.0

#### Table of Contents

---

---

1. Overview
  
2. Performance Measurement Tools and Results
  - 2.1 Test Platform
  - 2.2 Test target and Used M.2 NGFF SSD
  - 2.3 Install Hardware
  - 2.4 BIOS & Windows 10 OS environment setup
  - 2.5 CrystalDiskMark 5.1.2 x64 performance test
  - 2.6 AS SSD Benchmark 1.9 performance test
  - 2.7 ATTO Disk Benchamrk 2.47 performance test
  - 2.8 AnvilBenchmark\_V110\_B337 Benchmark performance test
  
3. Burn In Tests and Results
  - 3.1 BurnInTestv8.1 Pro burn in test
  
4. Summary

# U4265F USB3.1 Micro-B for dual port M.2 (SATA I/F)SSD

---

## 1. Overview

U4267F adapter, built-in USB3.1 Micro-B connectors, provides two M.2 B-key connectors. First inserts M.2 SSD into M.2 B-key connector, using USB type-C to Micro-B cable to connect to the host, M.2 SSD dual port would work RAID mode simultaneous.

## 2. Tools and Results of Performance Measurement

### 2.1 Test Platform

M/B : GIGABYTE **Z170X UD5 TH**  
CPU : Intel **i5-6500**, 3.2GHz/ 6M Cache/ LGA1150  
Memory : Kingston **KVR21N15D8/8**, **DDR4-2133MHz**, **16G**(8GB DIMM\*2)  
ATX Power : COOLER MASTER G750M, **750W ATX**, 12V V2.2 Power Supply  
Graphic : Z170 Chipsets built-in **HD Graphics 530**  
Cable: type-C to Micro-B cable  
OS : Microsoft **Windows 10 64bit OS**

### 2.2 Test target: U4267F adapter and M.2(SATA I/F)SSD



U4267F Adapter



C type to micro B cable



Samsung CM871a M.2 SSD / 512GB

### 2.3 Install Hardware

Inserts M.2 SSD 2pcs to U4267F adapter's M.2 connector, and then use the coppers and screws to fix SSDs (please refer to the installation Notes). Then this adapter through USB cable to connect to USB3.1 port of GIGABYTE **Z170X UD5 TH**.

### 2.4 BIOS & Windows 10 OS environment setup

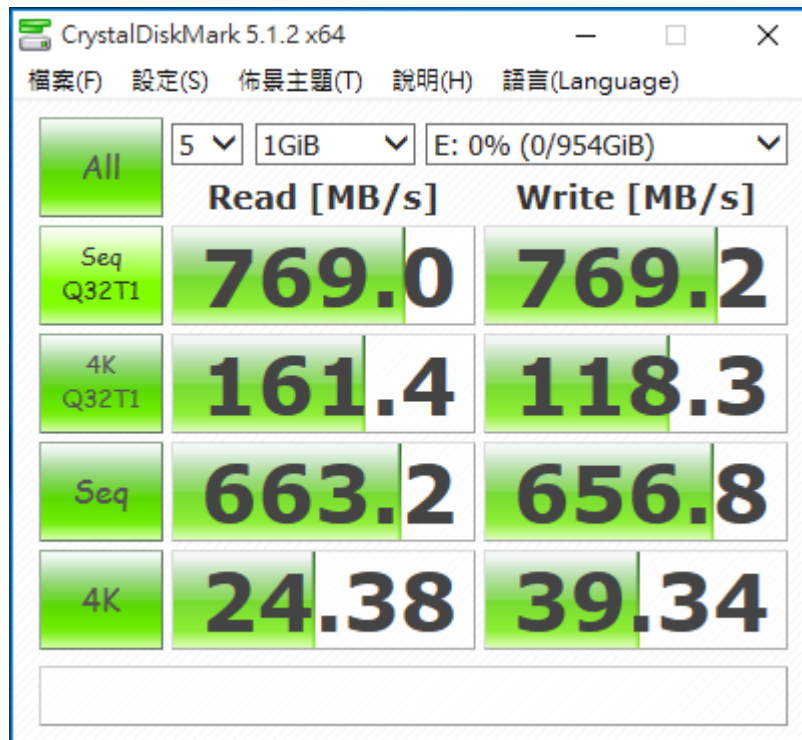
- 2.4.1 installs Windows 10 64bit OS.
- 2.4.2 USB3.1 Enclosure formatted NTFS

# U4265F USB3.1 Micro-B for dual port M.2 (SATA I/F)SSD

## 2.5 CrystalDiskMark 5.1.2 x64 performance test

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

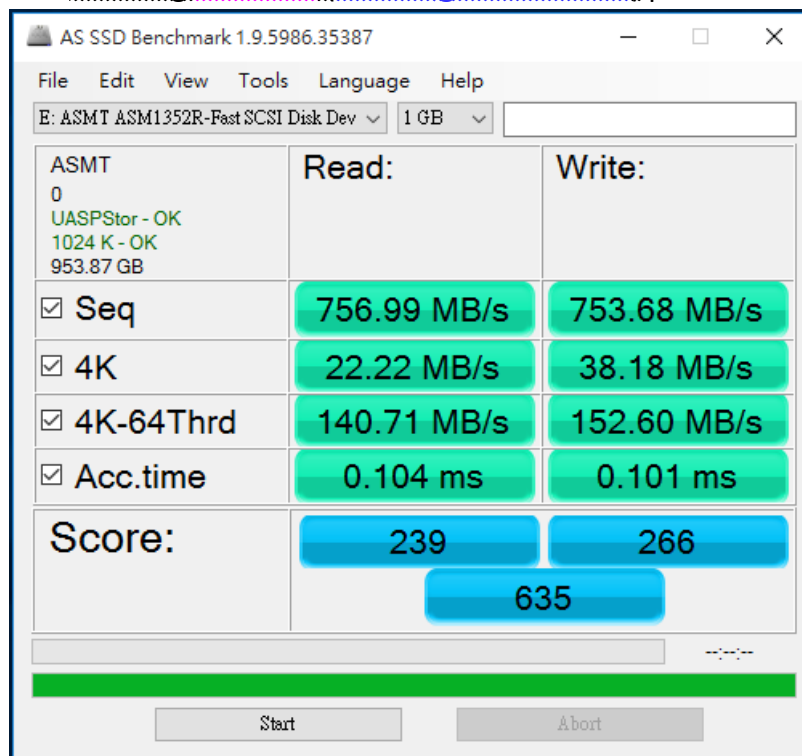
2.5.1 show Samsung **512GB x2**(**Samsung CM871a M.2**) performance as below:



## 2.6 AS SSD Benchmark 1.9 performance test

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

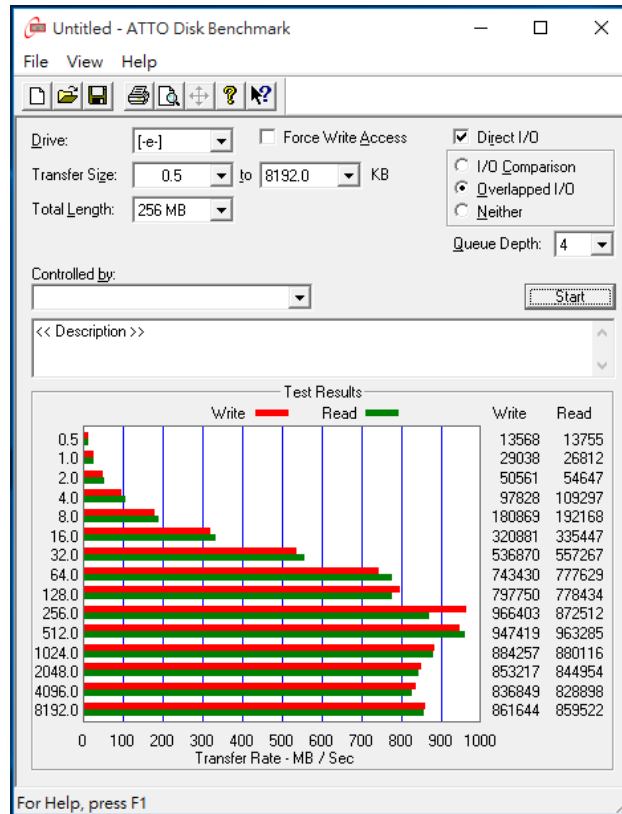
2.6.1 show Samsung **512GB x2**(**Samsung CM871a M.2**) performance as below:



# U4265F USB3.1 Micro-B for dual port M.2 (SATA I/F)SSD

## 2.7 ATTO Disk Benchmark 2.47 performance test

2.7.1 show Samsung 512GB x2 (Samsung CM871a M.2) performance as below:



## 2.8 AnvilBenchmark\_V110\_B337

2.8.1 show Samsung 512GB x2 (Samsung CM871a M.2) performance as below:

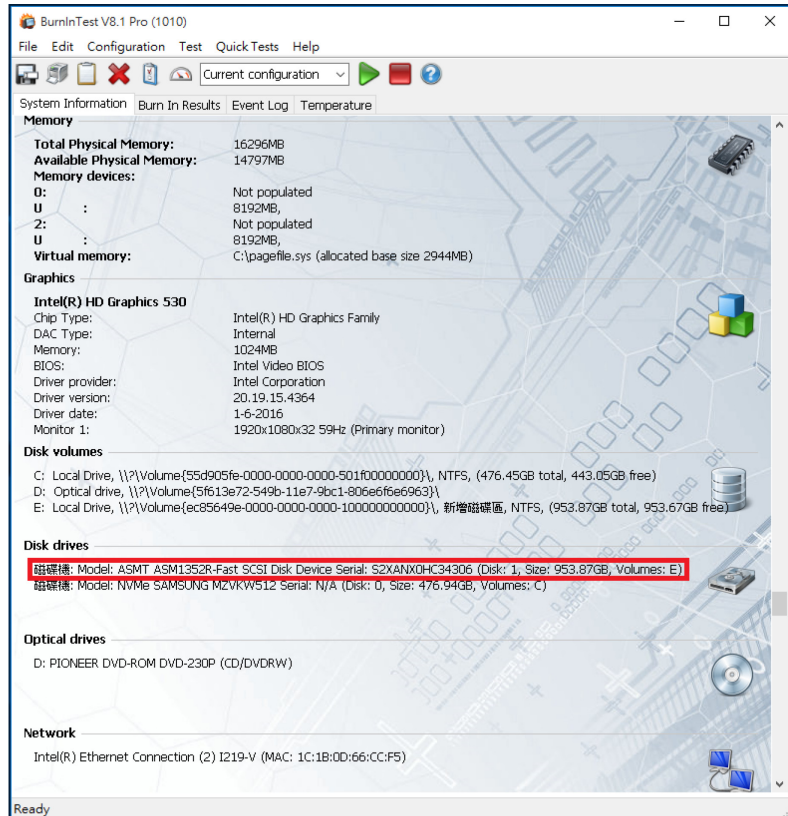
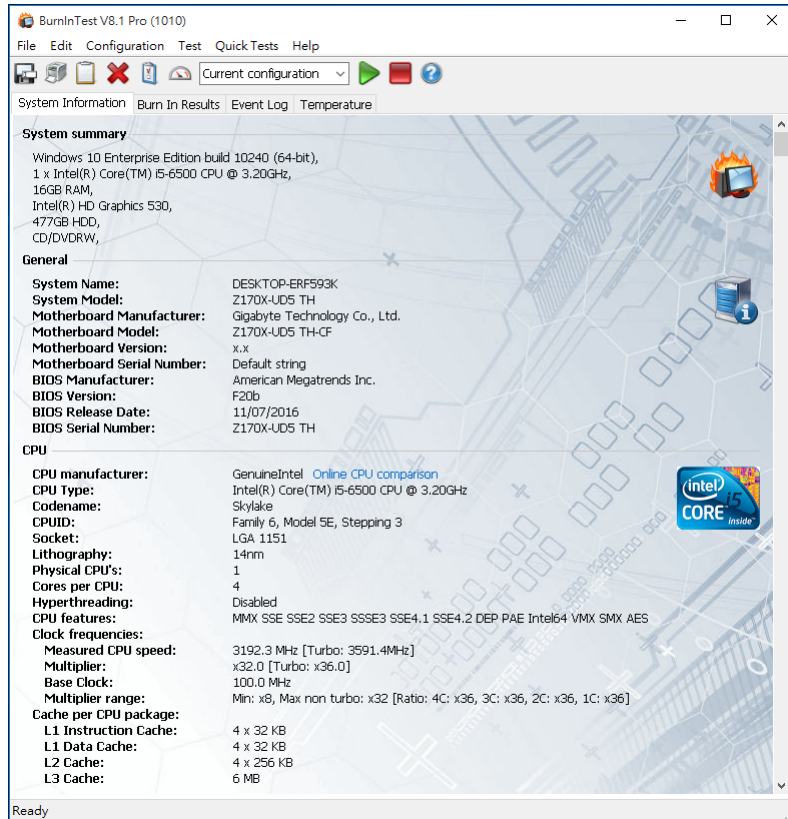


# U4265F USB3.1 Micro-B for dual port M.2 (SATA I/F)SSD

## 3. Burn In Tests and Results

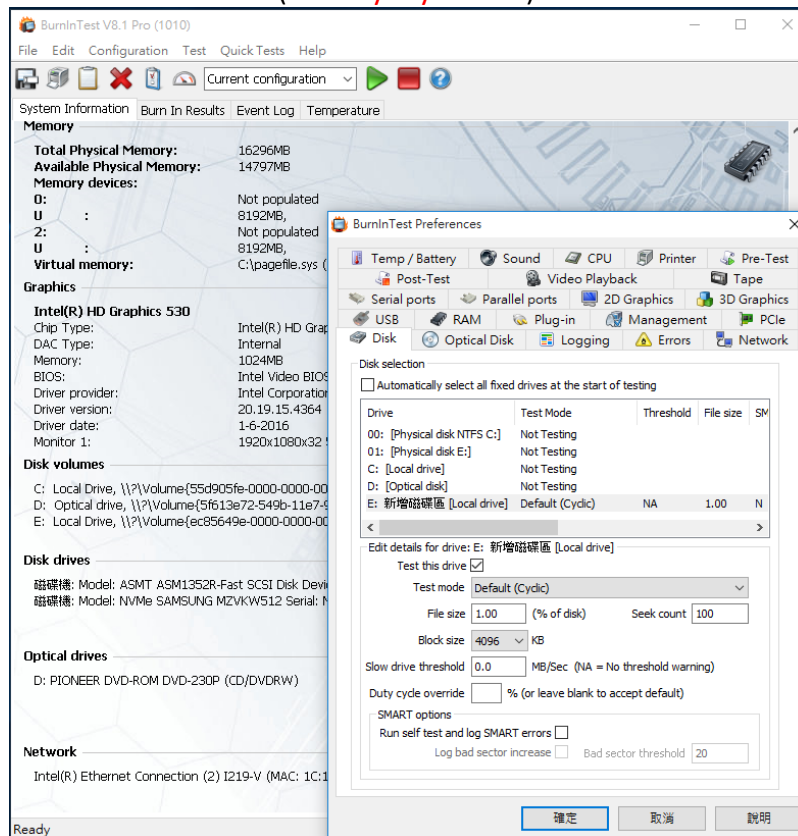
### 3.1 BurnInTest v8.1 Pro

#### 3.1.1 system information as below:

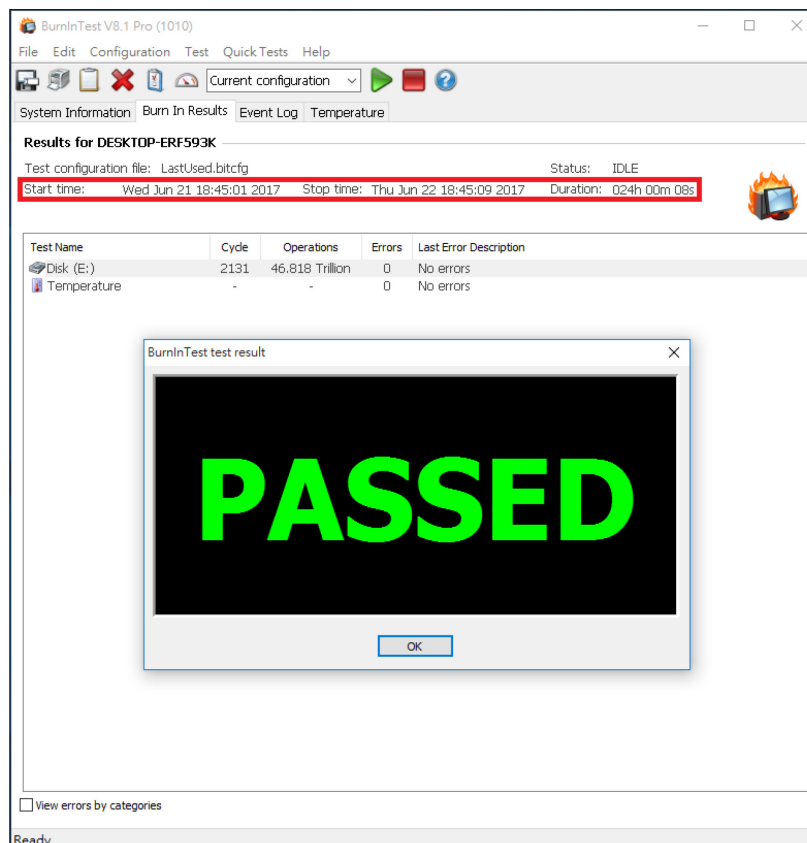


# U4265F USB3.1 Micro-B for dual port M.2 (SATA I/F)SSD

## 3.1.2 show Disk test mode (10 ways cycle test)



## 3.1.3 show 24-hour Burn-in test PASSED



# U4265F USB3.1 Micro-B for dual port M.2 (SATA I/F)SSD

---

## 4. Summary

- 4.1 USB 3.1 is 10Gbps Interface.
- 4.2 SATA III is 6Gbps Interface.
- 4.3 M.2 SSD is SATA III Interface, I/O speed, max. to 600MB/s.
- 4.4 U4267F adapter I/O performance is based on M.2 SSD RAID 0 mode.