



MINERVA

AD916F Converter Card

Performance & Burn In Test Rev. 1.0

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4. Summary

AD916F Converter Card

1. Overview

AD916F adapter, build in M.2 67pin B key connector. It used SATA 7-pin cable to connect to M/B SATA III port.

2. Tools and Results of Performance Measurement

2.1 Test Platform

M/B : ASRock **Z97 Extreme 6**
CPU : Intel **i5-4426**, 3.2GHz/ 6M Cache/ LGA1150
Memory : Kingston **KVR16N11S8/4**, DDR3-1600MHz, 8G(4GB DIMM*2)
ATX Power : FSP RAIDER 550, **550W ATX**, 12V V2.2 Power Supply
Graphic : Z97 Chipsets built-in **HD Graphics 4600**
OS : Microsoft **Windows 8.1 64bit OS**

2.2 Test target: AD916F adapter and M.2 NGFF SSD(LITE-ON **LGT-128M6G/128GB**)



AD916F Adapter



AD916F + M.2 SSD



LGT-128M6G

2.3 Install Hardware

2.3.1 Insert M.2 SSD into AD916F converter's B key connector, and then with coppers, and screws to fix SSDs. (Please refer to the Installation Notes). Connect AD916F converter to **SATA III Port of ASRock Z97 Extreme 6**.

2.4 BIOS & Windows 7 OS environment setup

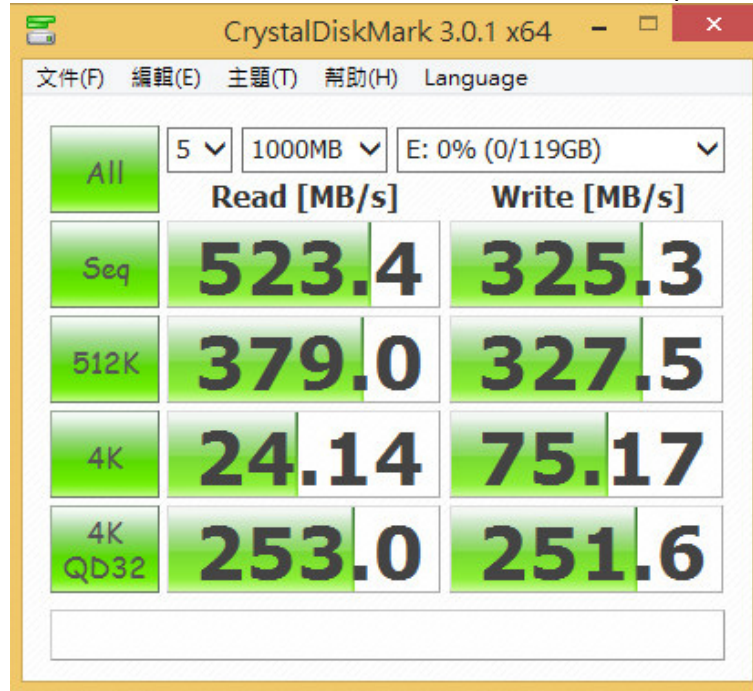
2.4.1 Install Windows 8.1 x64 OS.

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2.5 CrystalDiskMark 3.0.1 x64 performance test

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

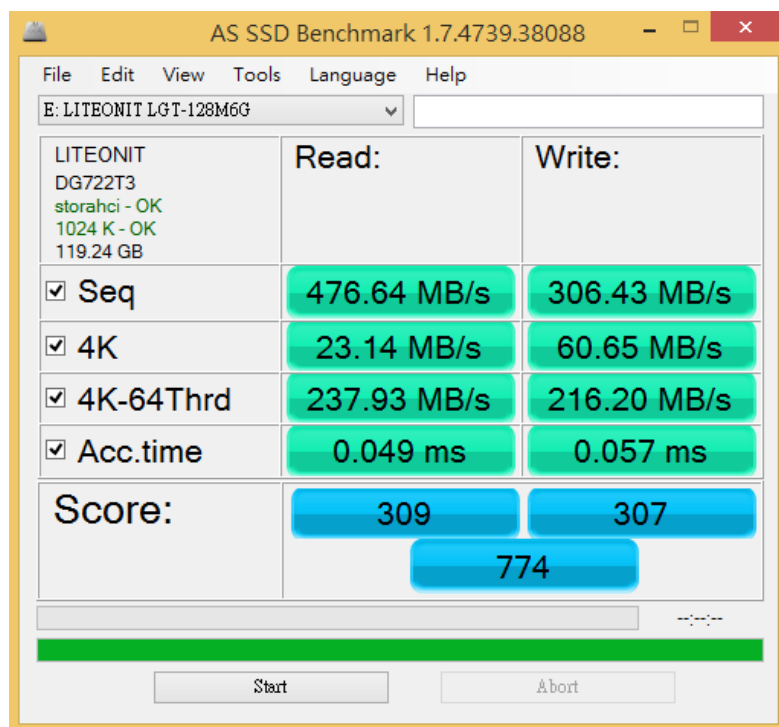
2.5.1 Used LITE-ON **LGT-128M6G** in **ASRock Z97 Extreme 6** performance as below:



2.6 AS SSD Benchmark 1.7 performance test

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

2.6.1 Used LITE-ON **LGT-128M6G** in **ASRock Z97 Extreme 6** performance as below:

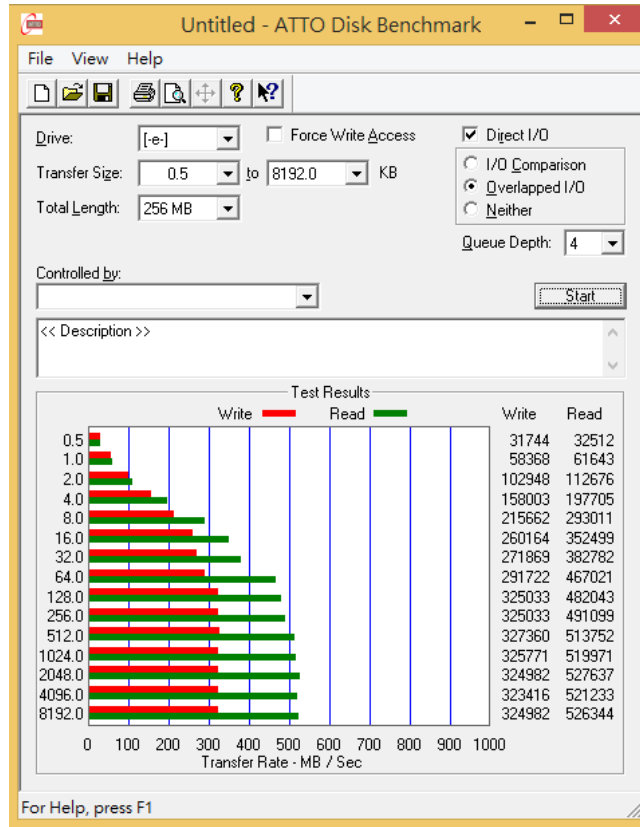


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2.7 ATTO Disk Benchmark performance test

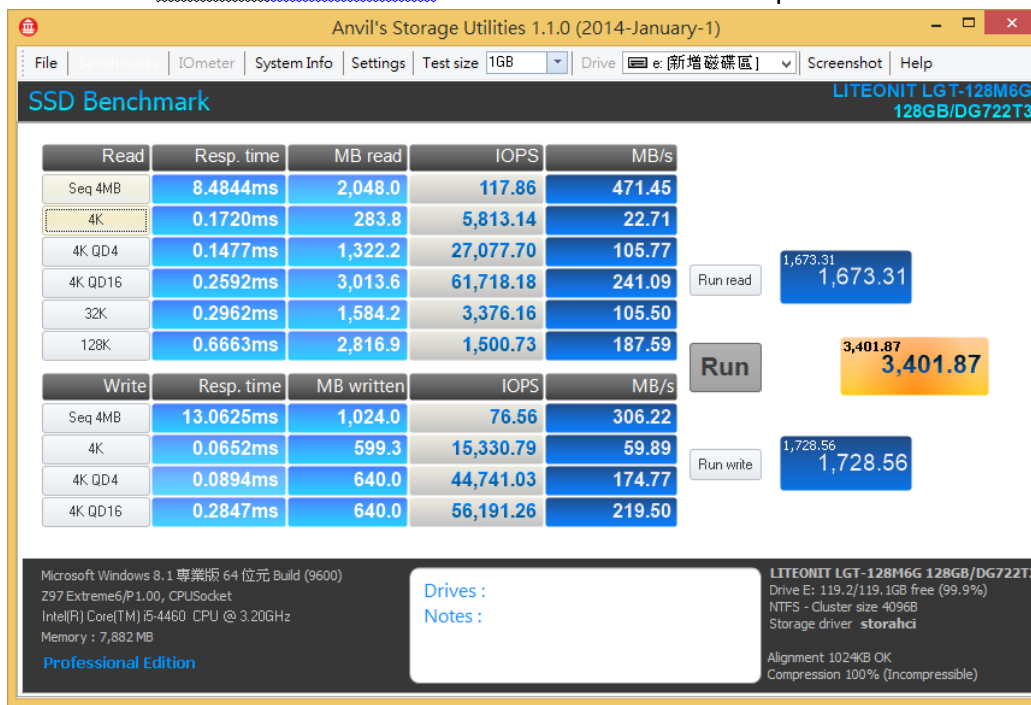
※Benchmark (Sequential Read / default block size = 8MB)

2.7.1 Used LITE-ON LGT-128M6G in ASRock Z97 Extreme 6 performance as below:



2.8 AnvilBenchmark_V110_B337

2.8.1 Used LITE-ON LGT-128M6G in ASRock Z97 Extreme 6 performance as below:

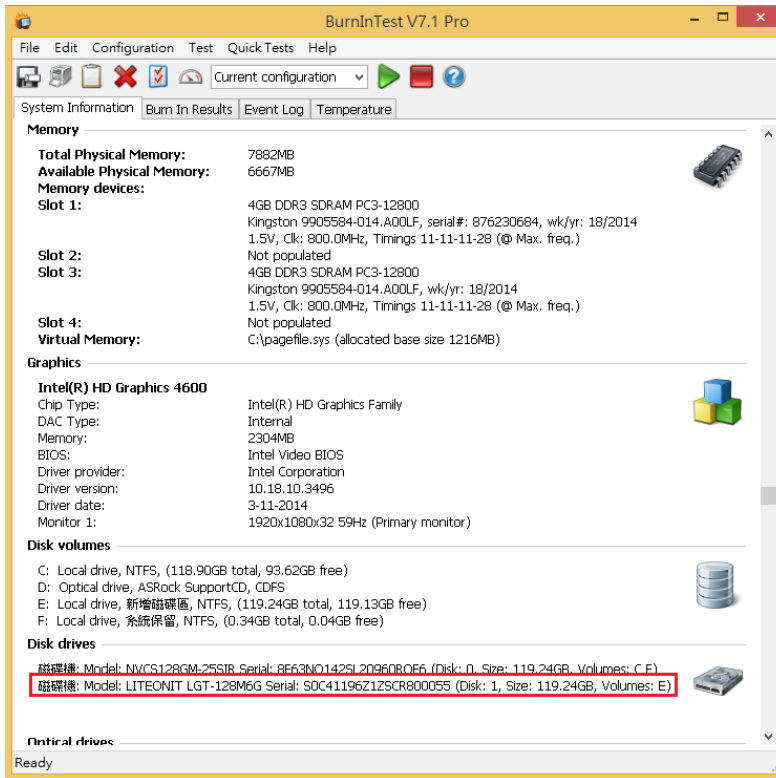
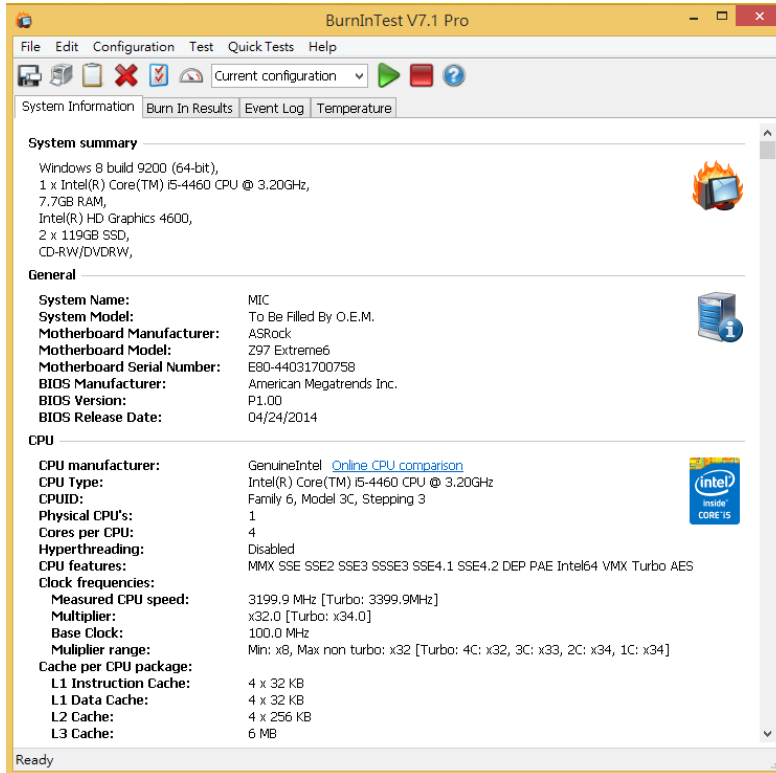


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3. Burn In Tests and Results

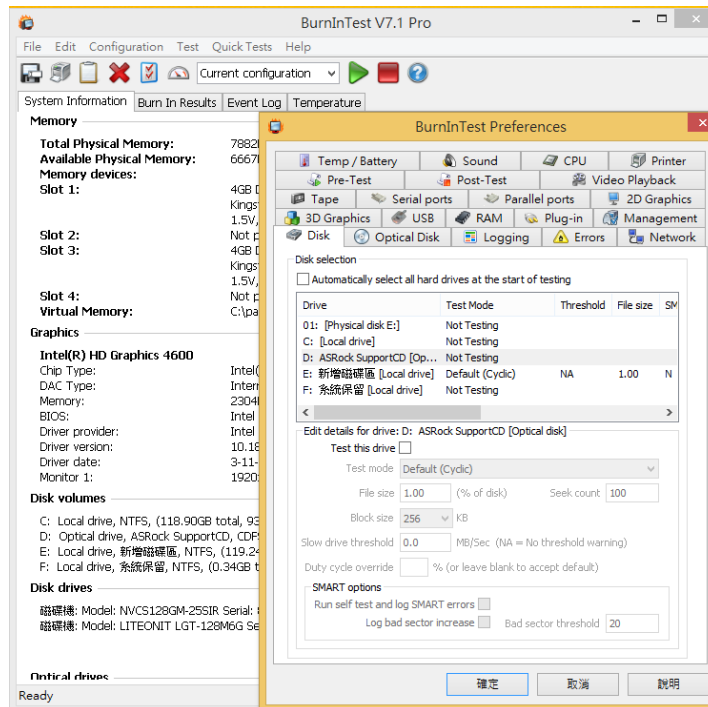
3.1 BurnInTest v7.1 Pro

3.1.1 system information for LITE-ON LGT-128M6G/128G as below:

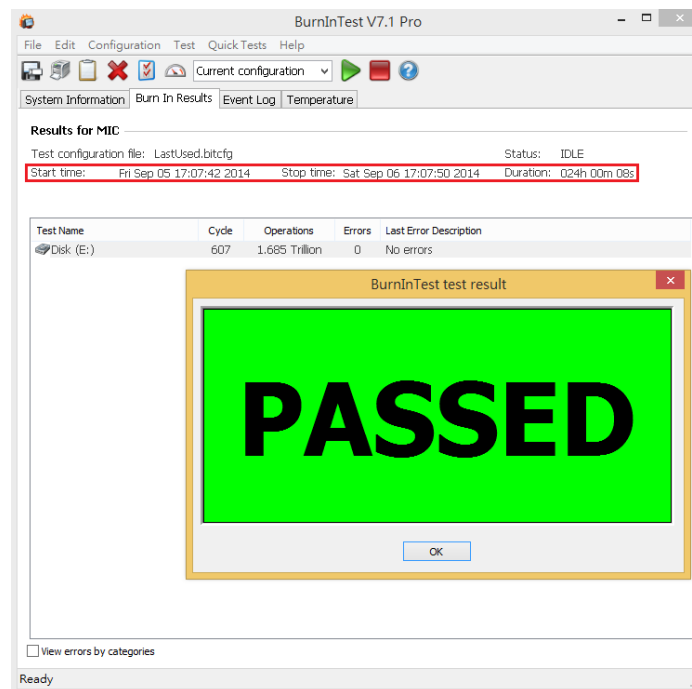


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3.1.2 show [LGT-128M6G/128G](#) Disk test mode(default cyclic -- 10 ways cycle test)



3.1.3 show [LGT-128M6G/128G](#) 24-hour Burn-in test PASSED



4. Summary

- 4.1 M.2 NGFF is SATA III Interface, I/O speed, max. to 600MB/s.
- 4.2 AD916F adapter I/O performance is based on M.2 SSD.