



AD601D / M.2(NGFF) to IDE 44-pin Converter Performance & Burn in Test Rev 1.0

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4. Summary

1. Overview

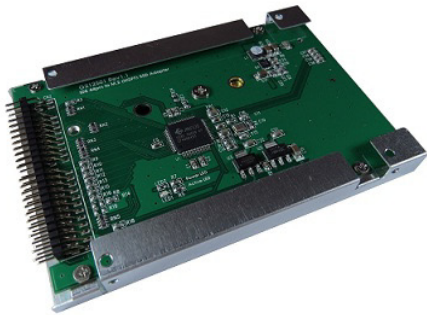
The AD601D riser card contains M.2 B-key connector, and IDE 44-pin standard connector, built-in JMicron 330H bridge controller IC. Provide SATA interface to IDE (PATA interface) conversion. Purpose of this test is to show AD601D adapter IDE performance and Read/Write stability.

2. Performance Measurement Tools and Results

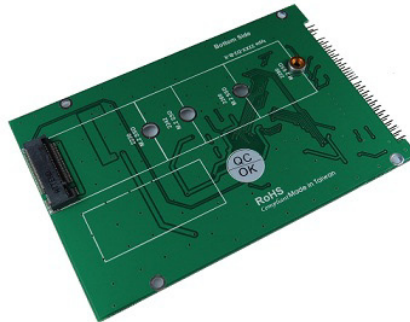
2.1 Test Platform

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(AD601D Converter) and Using M.2 NGFF SSD



AD601D 转接卡



AD601D 背面



LGT-128M6G

2.3 Install Hardware

Insert LITE-ON **LGT-128M6G** into AD601D's M.2(MGFF) connectors, and then connected to the **GA-X58A-UD3R** motherboard IDE Port.

2.4 BIOS & Windows 7 OS environment setup

2.4.1 input BIOS(Basic Input/Output Setup) – Change AHCI Mode into IDE Mode

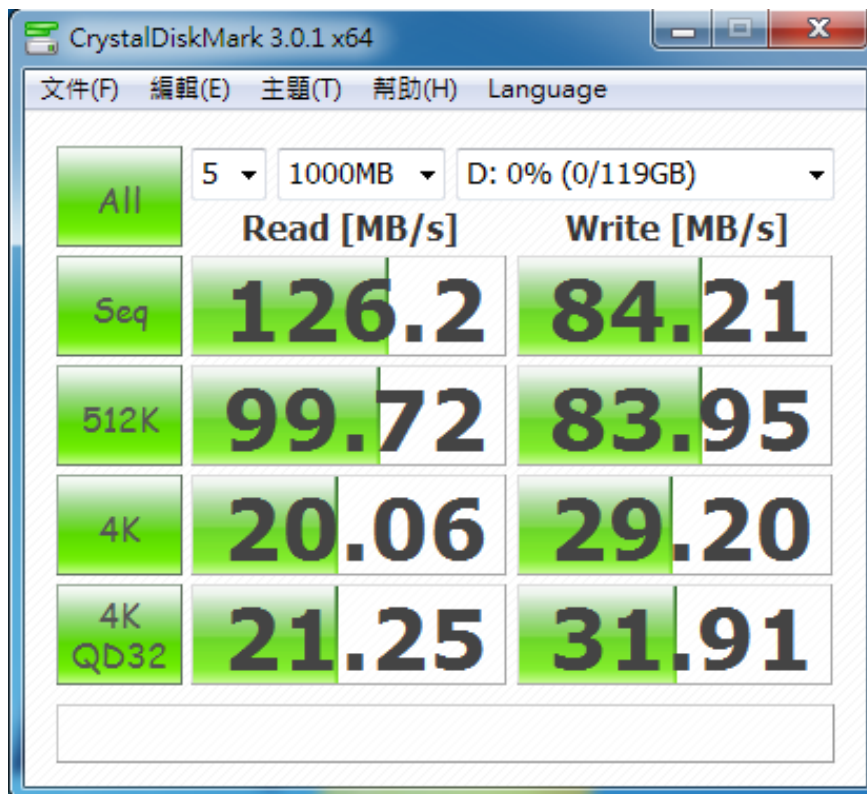
Notice: IDE **don't support SATA Interface instructions - TRIM,NCQ**

2.4.2 Windows 7 formatted raid card NTFF Mode and don't install any program

2.5 CrystalDiskMark 3.0.1 x64

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

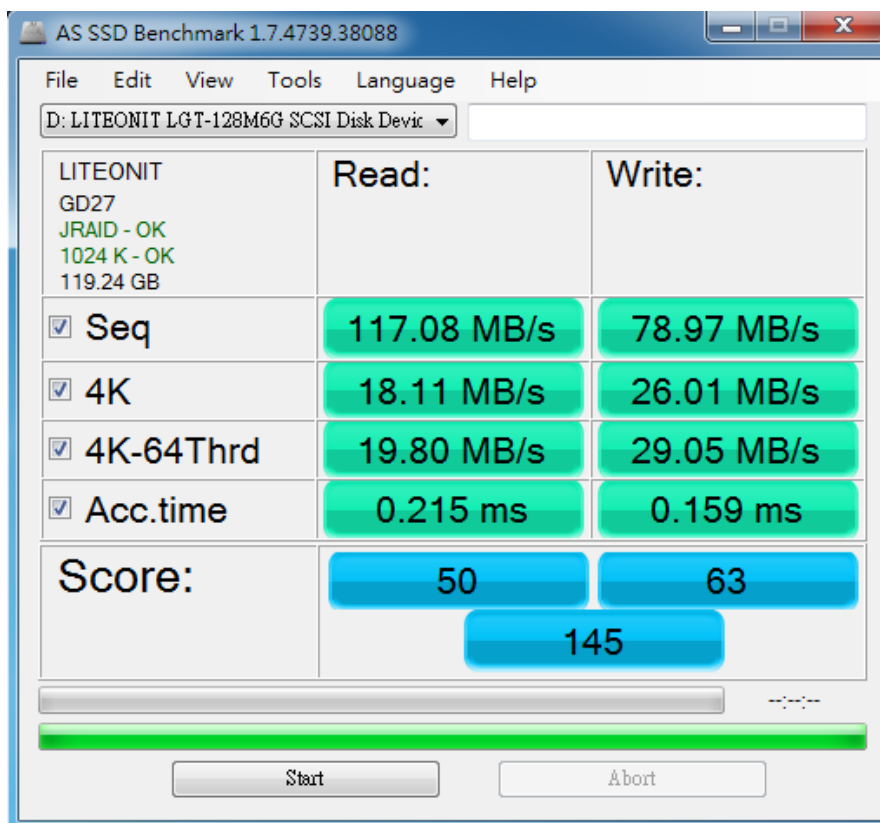
2.5.1 Used LITE-ON **LGT-128M6G** performance as below:



2.6 AS SSD Benchmark 1.6

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

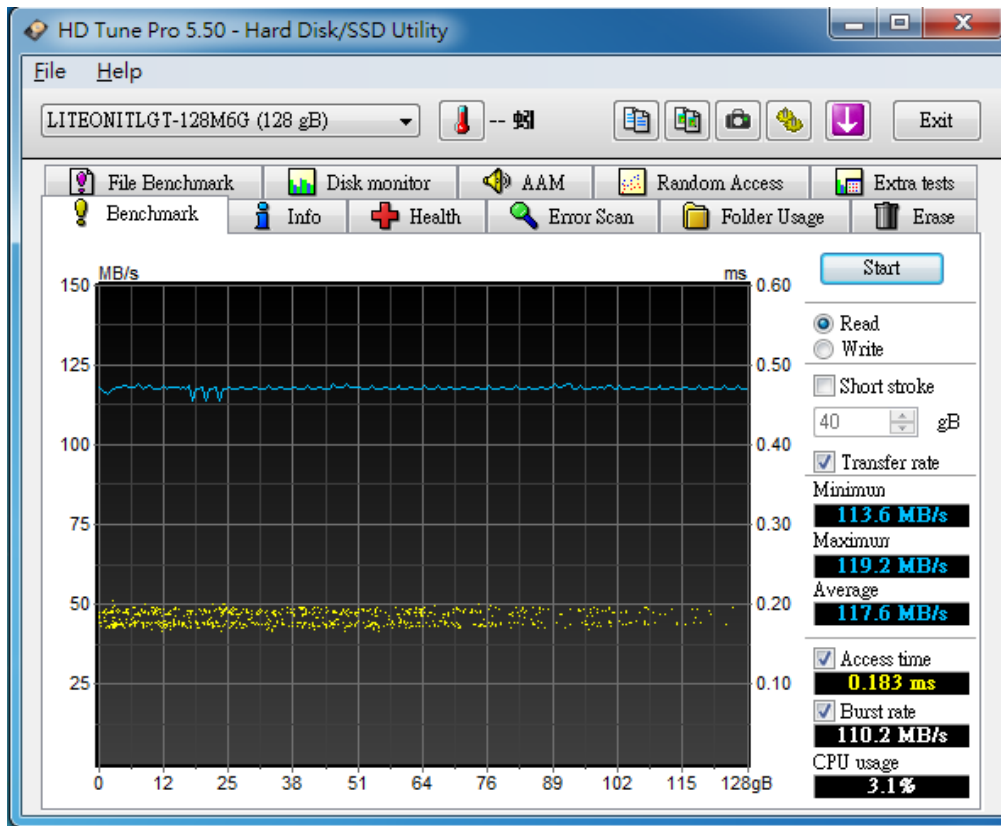
2.6.1 Used LITE-ON **LGT-128M6G** performance as below:



2.7 HD Tune pro 5.5

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

2.7.1 Used LITE-ON LGT-128M6G performance as below:



2.8 AnvilBenchmark_V110_B337

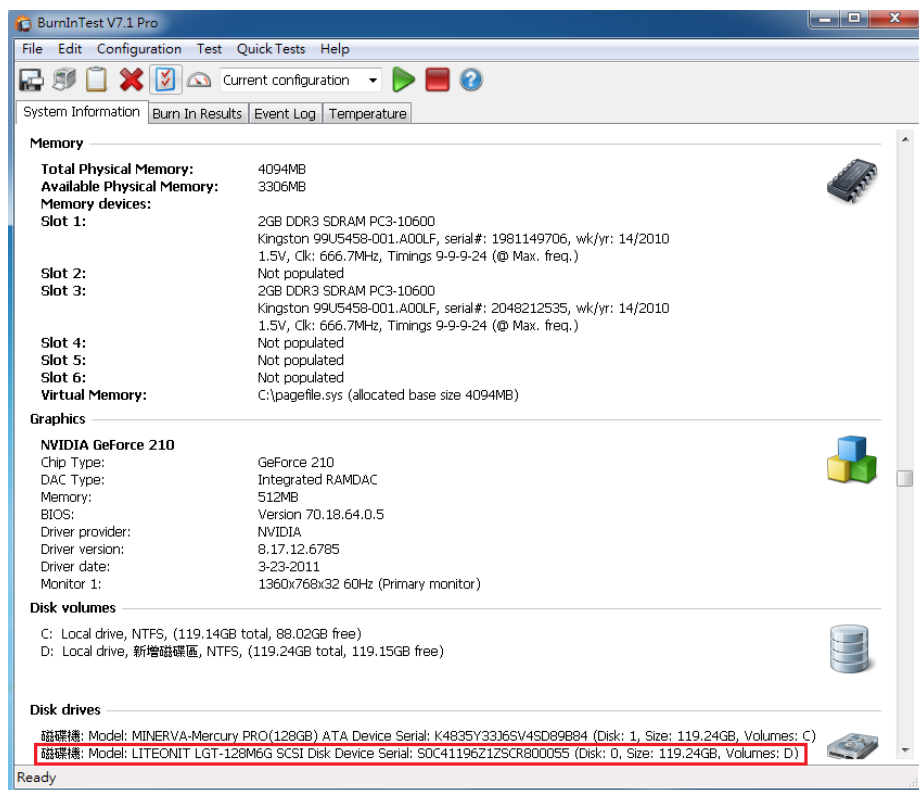
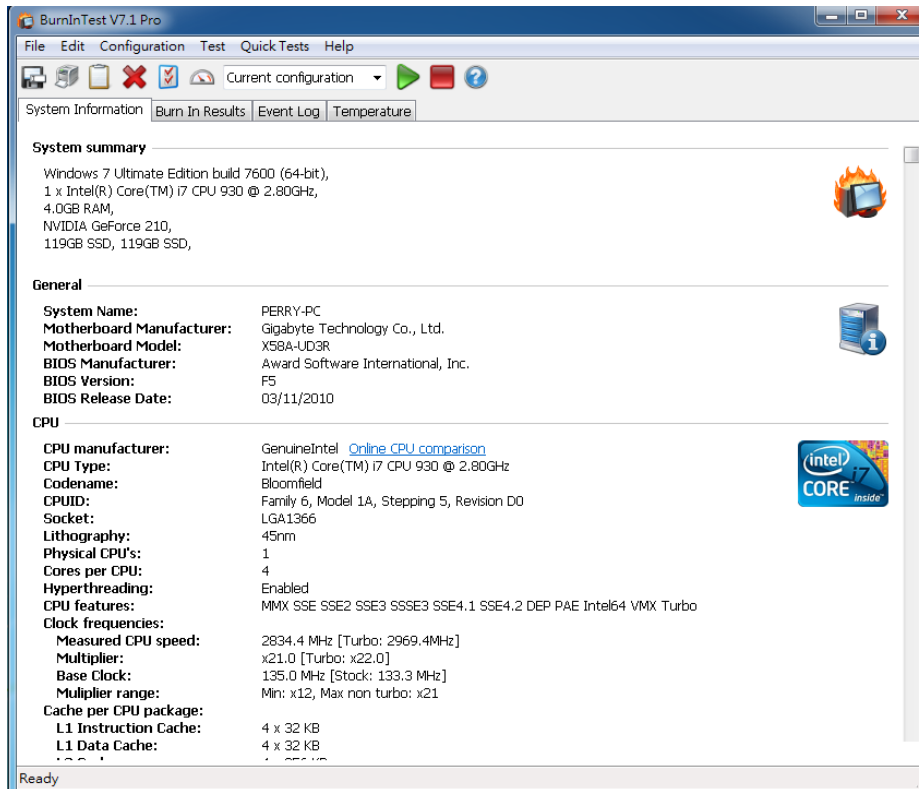
2.8.1 Used LITE-ON LGT-128M6G performance as below:



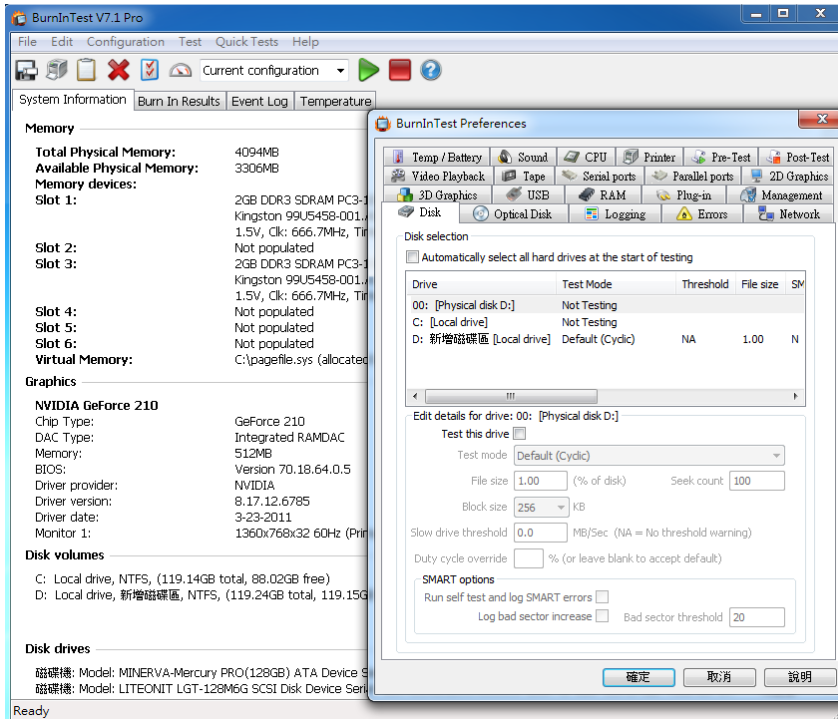
3. Burn In Tests and Results

3.1 BurnInTest v7.1 Pro

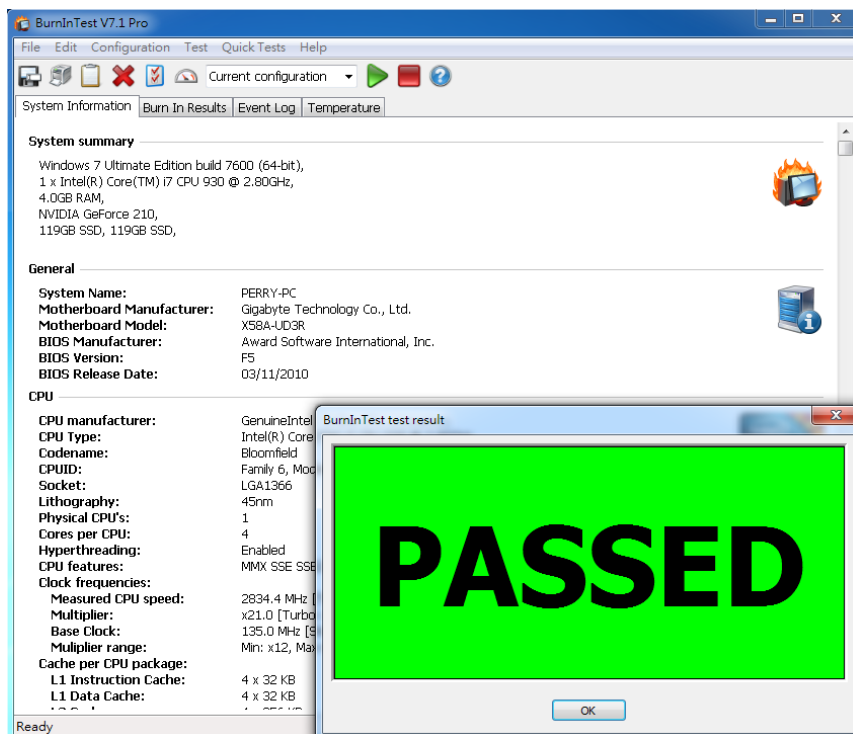
3.1.1 system information as below:



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



3.1.3 show LITE-ON LGT-128M6G 24-hour Burn-in test PASSED



Summary

- SATA to IDE convert, following ATA/ATAPI-7, Current spec I/O speed, max. to 133MB/s.
- AD601D can be used a **Master drive** only in primary or secondary (can't configure with slave drive).
- I/O performance of AD601D adapter is based on M.2(NGFF) SSD.