MINERVA

GD3404G PCIe 4.0 SFF-8612 4i OCulink for U.2 NVMe SSD Adapter

Performance & Burn In Test   Rev. 1. 0

Table of Contents

# GD3404G Converter Card

1. Overview

This adapter supports PCIe 4.0, 16GT / s high-speed transmission, and provides U.2 NVMe SSD to OCulink 4i conversion. It may put 2.5" SSD into 3.5" standard H.D.D. enclosure.

2. Tools and Results of Performance Measurement

2.1   Test Platform

M/B :   GIGABYTE **X570S AORUS MASTER**
CPU :   AMD **Ryzen 7, 3700X 8-Core**
Memory :   Kingston **KVR26N19D8/16**, DDR4-2666MHz, **32GB**(16GB DIMM*2)
ATX Power : COOLER MASTER G750M, **750W ATX**, 12V V2.2 Power Supply
Host: DP6303 M.2 PCIe 4.0 with ReDriver to OCulink 4i
Adapter: GD3404G SFF-8612 4i to U.2 Storage Adapter
Cable: SFF-8611 4i to SFF-8611 4i, 50cm Cable
OS :   Microsoft **Windows 10 64bit OS**

2.2 Test target: GD3404G adapter and Samsung PM1733 U.2 NVMe **4TB** SSD
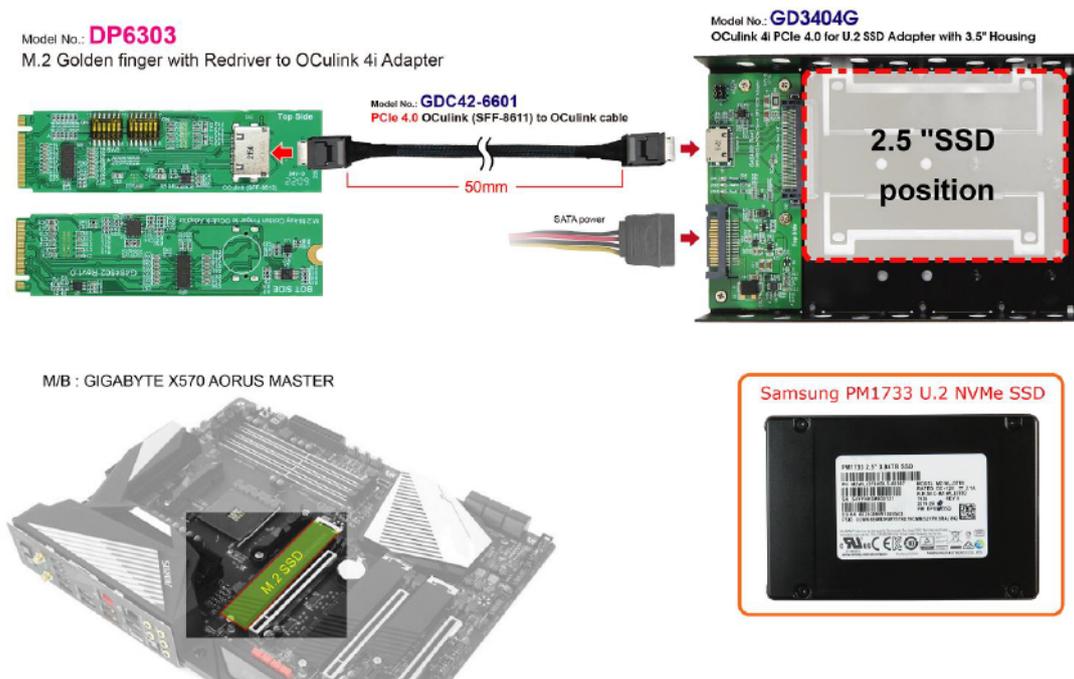
GD3404G Converter Card

2.3　Install Hardware

Insert U.2 SSD into GD3404G converter's U.2 female connector. Connect GD3404G to DP6303 adapter(**M.2 PCIe 4.0 with ReDriver to OCulink 4i**), using SFF-8611 to SFF-8611 cable, plugs DP6303 adapter into **PCI-e slot of** GIGABYTE **X570S AORUS MASTER.**

2.4　BIOS & Windows 10 OS environment setup

2.4.1　Primary SATA SSD installed Windows 10 OS.

2.4.2　U.2 NVMe SSD, formatted to NTFS Mode. Don't install any program.

GD3404G Converter Card

2.5   CrystalDiskMark 8.0.0 x64 performance test

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

　　　　2.5.1　　Samsung PM1733 U.2 NVMe 4TB SSD performance as below:

2.6   AS SSD Benchmark 2.0.7 performance test

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

　　　　2.6.1　　Samsung PM1733 U.2 NVMe 4TB SSD performance as below:

2.7   ATTO Disk Benchamrk 4.0.1 performance test

    2.7.1   Samsung PM1733 U.2 NVMe **4TB** SSD performance as below:
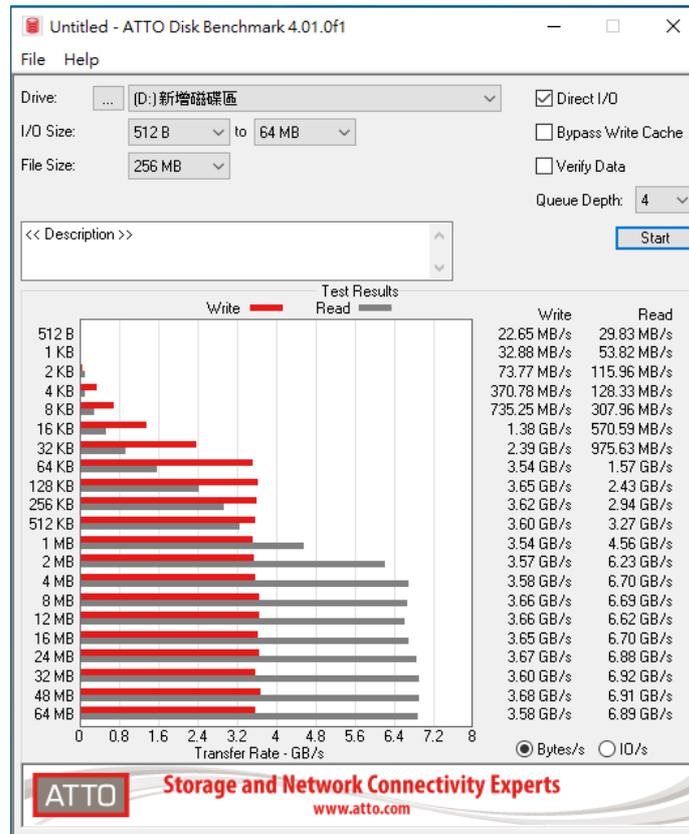
2.8   AnvilBenchmark_V110_B337

   2.8.1   Samsung PM1733 U.2 NVMe **4TB** SSD performance as below:

3. Burn In Tests and Results

3.1   BurnInTest v8.1 Pro for Samsung PM1733 U.2 NVMe **4TB** SSD

3.1.1   24-hour Burn-in test PASSED
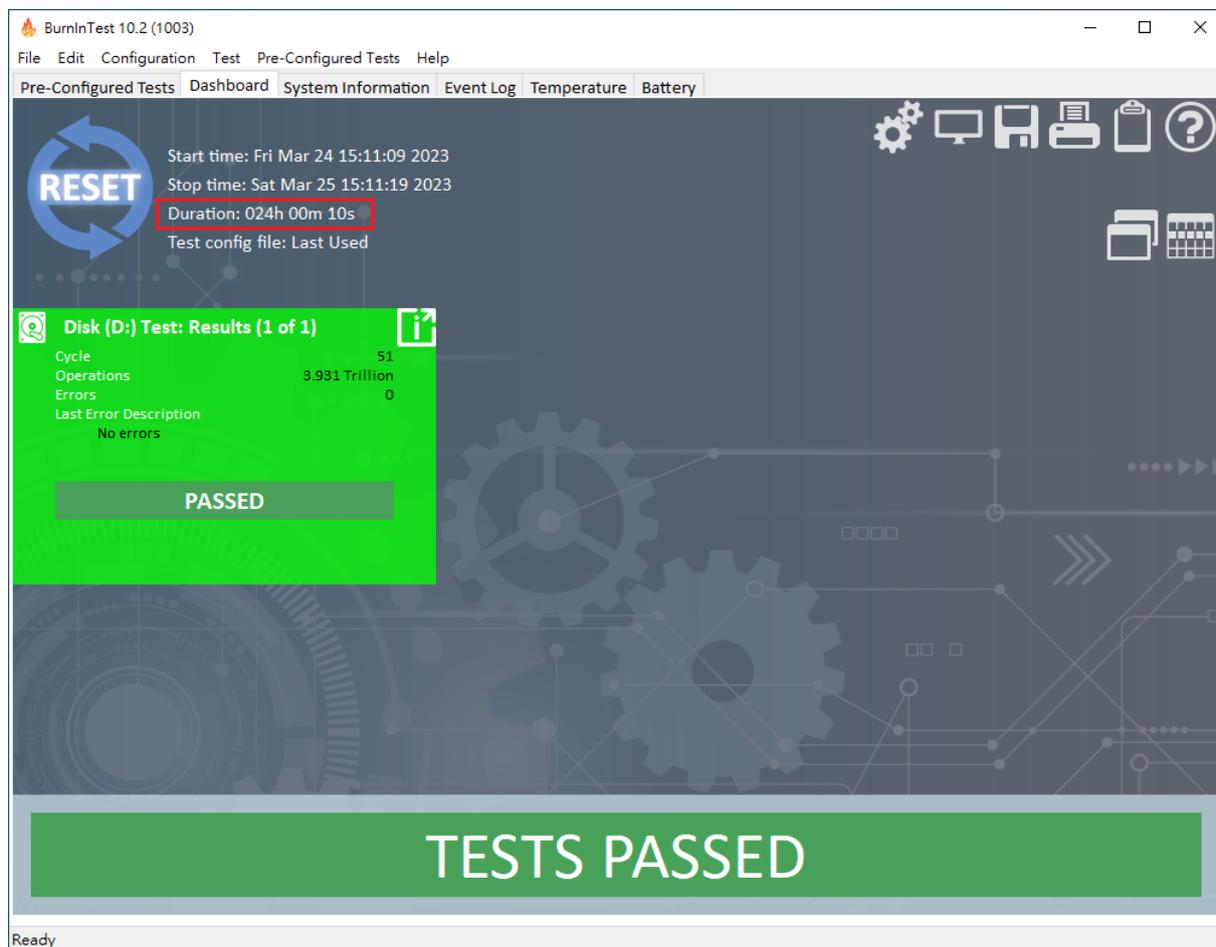
4. Summary

4.1   U.2 SSD is PCIe 4.0 / 4 Lanes Interface, I/O speed, max. to 64Gbps.

4.2   GD3404G adapter I/O performance is based on PCIe 4.0 U.2 NVMe SSD.