

## DVT06U3 Performance Test Report



Version: 02  
 Date: 2017/6/19  
 DUT: DVT06U3 F/W pec101b.527 (full RAID5 support)  
 HDD: HGST HDN724040ALE640 4TB x 6  
 Host: See configuration table

OS	Windows 10 Pro 64 bit
CPU	Intel Core i7-6700 CPU 3.40GHz 8MB Cache
Memory	Apacer DDR4-2400 4GB x 2 (Total 8GB)
MB	Gigabyte Z170X-UD5 TH
BIOS version	Ver. F20, Date:2016/12/14
BIOS setting	Intel EIST Enhanced speed step technology: Disable CPU C1E: Disable CPU C3 State: Disable CPU C6, C7 State: Disable CPU C8 State: Disable
OS HDD	Micron Crucial BX100 SATAIII SSD
Thunderbolt™ 3 chip	Intel DSL6540
Thunderbolt driver	16.1.47.2, date 2016/4/18
USB3.1 HBA on PCIe Gen3 x16 slot	PCIe Gen2x2/Gen3x1, Asmedia ASM1142 chip
USB3.1 Driver	Asmedia ver.1.16.28.1 date 2015/9/10
USB3.0	Onboard from chipset Z170
USB3.0 Driver	Windows 10 native 10.0.14393.1358 date 2017/6/3
Type C-C Cable	JPC 1M
Type A-C Cable	JPC 1M

### Benchmark Software:

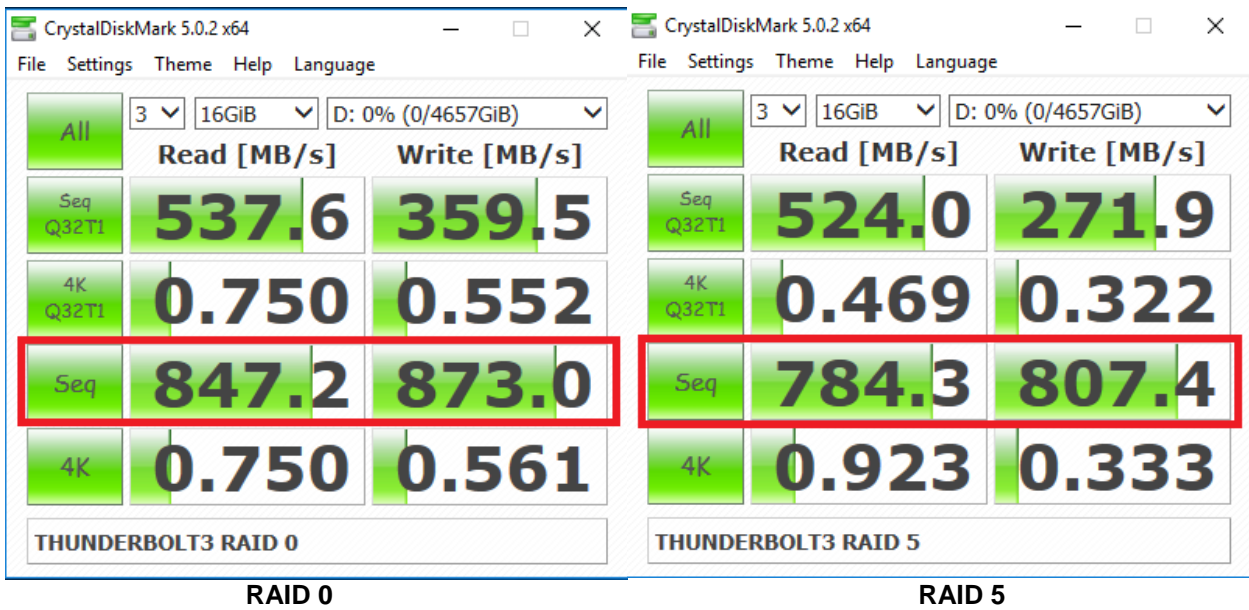
Crystal Disk Mark 5.0.2 x64  
 Use CDM to test sequential data access speed

## Performance Benchmark

### 1. Thunderbolt 3 Host Performance

#### Result

RAID0 Sequential: **847MB/s** READ, **873MB/s** WRITE  
 RAID5 Sequential: **807MB/s** READ, **784MB/s** WRITE

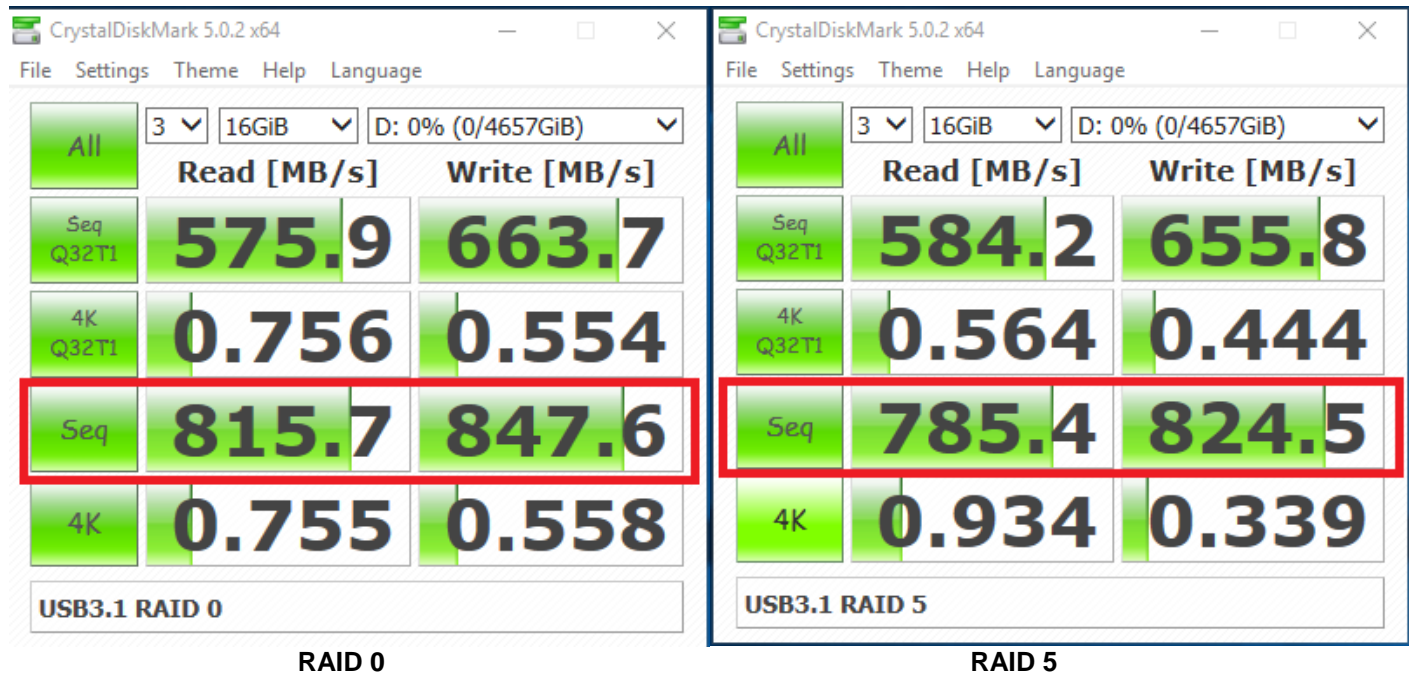


2. USB3.1 Host Interface (Asmedia ASM1142 driver from HBA vendor)

Result

RAID0 Sequential: **815MB/s** READ, **847MB/s** WRITE

RAID5 Sequential: **785MB/s** READ, **824MB/s** WRITE

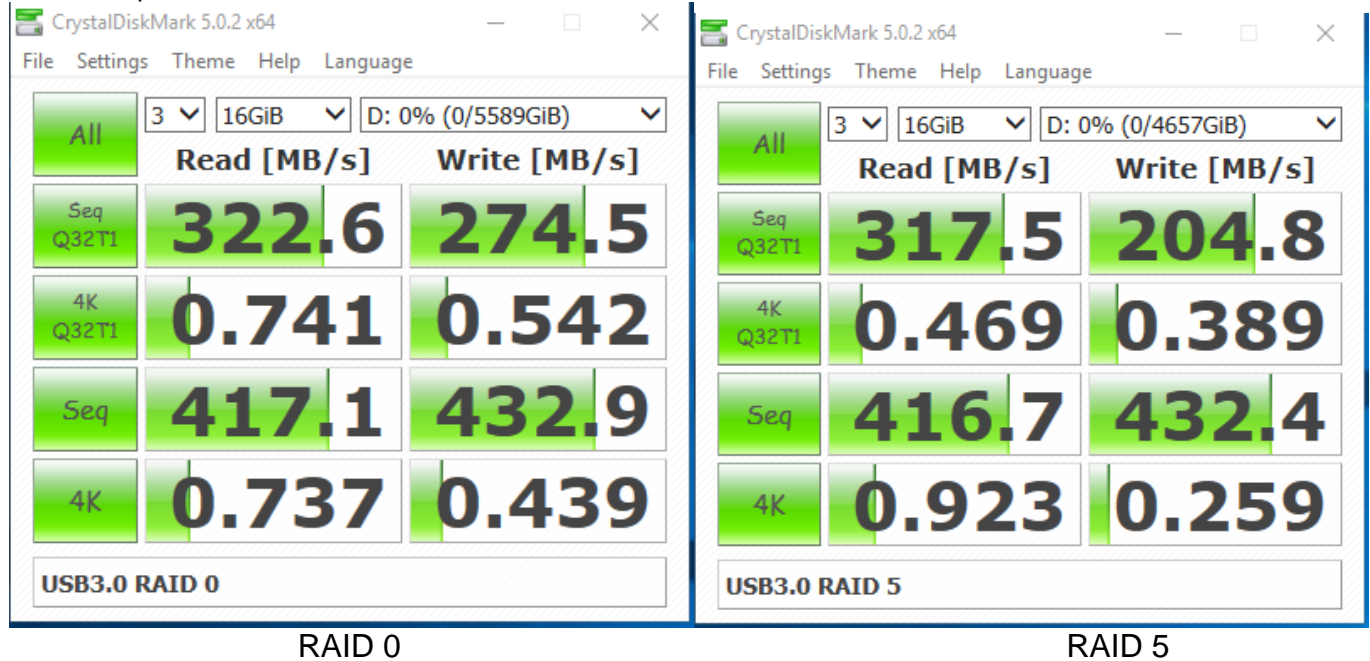


### 3. USB3.0 Host Interface (Native from Intel chipset)

#### Result

RAID0 Sequential: 417MB/s READ, 432MB/s WRITE

RAID5 Sequential: 416MB/s READ, 432MB/s WRITE



### 4. Summary

Under RAID 0 configuration, DVT06 can deliver up to the boundary of host interface. And the low overhead characteristics of RAID 0 also contribute to the stability of continuous video throughput. The latest Thunderbolt 3 which consists of PCIe Gen3 x4 fuels up the performance of DVT06 and over 870MB/s(Write) was observed under RAID 0. Sustainable 800MB/s can be reached without fluctuation.

As for current USB3.0 main streams Desktop or Laptop computers upgraded to Windows 8.x/10 or Max OS X , DVT06U3 can deliver a stable 400MB/s Read/Write throughput no matter RAID configured as 0, 5, or 6.

Note: Use Asmedia ASM1142 driver(usually included from HBA vendor) for better bench mark performance.