



USB 3.1 or Thunderbolt ... The Fast and the Furious

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Working in the Cloud Has Its Problems





Business, Creative Challenges

Engineers, Designers, Creatives Cannot:

- **Do Their Work on a Tablet, Smartphone, Wearable**
- **Rely on Insecure, Unreliable, Unsafe Cloud**



Business, Creative Needs

- **Endurance**
- **Performance**
- **Energy efficiency**
- **Speed**
- **Reliable Throughput**

Local Solid State



Connectivity Makes the Difference



Features

- 10Gps data rate
- Improved I/O power efficiency
- Supports 2.0 + devices, hubs
- Large installed base
- Very affordable

Challenge – Hardware must be built for USB 3.1 –
No shortcuts

QuickBench™ 4.0

Selected Volume: OWCMEU3MSSD480
Volume Type: MacOS Extended
Volume Size: 446.811 Gigabytes
Free Space: 446.393 Gigabytes

Asynchronous I/O
 Allow Cache Effects

Read Delay: 30 ms
Write Delay: 20 ms

Extended Test (20–100 MB) – Numeric View

Transfer Size	Read Speed	Write Speed
20 MegaBytes	430.078 MB/Sec	426.026 MB/Sec
30 MegaBytes	431.824 MB/Sec	429.101 MB/Sec
40 MegaBytes	433.082 MB/Sec	430.251 MB/Sec
50 MegaBytes	433.408 MB/Sec	431.246 MB/Sec
60 MegaBytes	433.930 MB/Sec	432.002 MB/Sec
70 MegaBytes	434.296 MB/Sec	432.076 MB/Sec
80 MegaBytes	435.333 MB/Sec	432.852 MB/Sec
90 MegaBytes	435.602 MB/Sec	432.646 MB/Sec
100 MegaBytes	435.585 MB/Sec	432.900 MB/Sec
Extended Test Averages	433.682 MB/Sec	431.011 MB/Sec

Cycles: 10

OWC Mercury Elite Pro mini

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Mercury Elite Pro USB 3-Speed Test
USB 3.1 will be even faster—when it becomes widely available.



Features

- **Fast Read/Write Performance** - Up to 675MB/s read and 618MB/s write RAID 5 performance. Up to 895MB/s read and 862MB/s write RAID 0 performance
 - **Optimum use of devices** – Up to 6 devices/port
 - **Software RAID-Removes Barriers**
- Challenge** – Hardware must be built for Thunderbolt 2 –
No shortcuts

QuickBench™ 4.0.7

Selected Volume: OWCTB2IVSSD480

Volume Type: MacOS Extended
Volume Size: 478.742 Gigabytes
Free Space: 478.305 Gigabytes

Asynchronous I/O
 Allow Cache Effects

Read Delay: 30 ms
Write Delay: 20 ms

Extended Test (20–100 MB) – Numeric View

Transfer Size	Read Speed	Write Speed
20 MegaBytes	1300.592 MB/Sec	1286.552 MB/Sec
30 MegaBytes	1323.541 MB/Sec	1306.237 MB/Sec
40 MegaBytes	1332.502 MB/Sec	1321.876 MB/Sec
50 MegaBytes	1337.734 MB/Sec	1326.456 MB/Sec
60 MegaBytes	1339.426 MB/Sec	1335.571 MB/Sec
70 MegaBytes	1346.986 MB/Sec	1335.053 MB/Sec
80 MegaBytes	1352.377 MB/Sec	1338.642 MB/Sec
90 MegaBytes	1354.390 MB/Sec	1339.172 MB/Sec
100 MegaBytes	1356.041 MB/Sec	1287.172 MB/Sec
Extended Test Averages	1338.177 MB/Sec	1319.637 MB/Sec

Cycles: 10

OWC ThunderBay 4

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Thunderbolt IV Speed Test

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Customer's Best Solution

- **Workload dependent – Online vs. Nearline**
- **Expansion dependant**
- **Profit dependant – Time is Money**