Benchmark Report

The brand of CPU: Apple The model of CPU: Apple M2

The number of cores on CPU: 8 cores with 4 performance cores and 4 efficiency cores

The clock rate of CPU in GHz: 3.49 Ghz The amount of memory in GB: 8 GB

The speed of memory: 128-bit memory bus with 100 GB/s for the M2

The capacity of hard drive: 256 GB

The type of hard drive: SSD

Max sequential read speed: 2.8 GB/s Max sequential write speed: 3.5 GB/s Max random read speed: 1 GB/s Max random write speed: 800 MB/s

Screenshots:

fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro Integer-benchmark % g++ integer-benchmark.o
 fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro Integer-benchmark % ./a.out
 0 m 12.294 s

Integer Benchmark

fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro floating-point-benchmark % g++ float-point-benchmark.o
 fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro floating-point-benchmark % ./a.out
 0 m 12.305 s

Floating Point Benchmark

- J warnings generated.
- fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro memory-benchmark % g++ memory.o
- fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro memory-benchmark % /a.out
 0 m 23.64 s

Memory Benchmark

- fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro hard-drive1-benchmark % g++ harddrive1.o
 fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro hard-drive1-benchmark % ./a.out
- 0 m 2.417 s

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Hard Drive 1 Benchmark

- fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro hard-drive2-benchmark % g++ harddrive2.o
- fiyinfoluwaafolayan@Fiyinfoluwas-MacBook-Pro hard-drive2-benchmark % ./a.out
- 0 m 4.452 s

Hard Drive 2 Benchmark

Benchmark	Integer	Floating Point	Memory	Hard Drive 1	Hard Drive 2
Time	12.294 s	12.305 s	23.64 s	2.417 s	4.452 s

Geometric Mean =
$$\sqrt[5]{\frac{12.294 \times 12.305 \times 23.64 \times 2.417 \times 4.452}{5}}$$