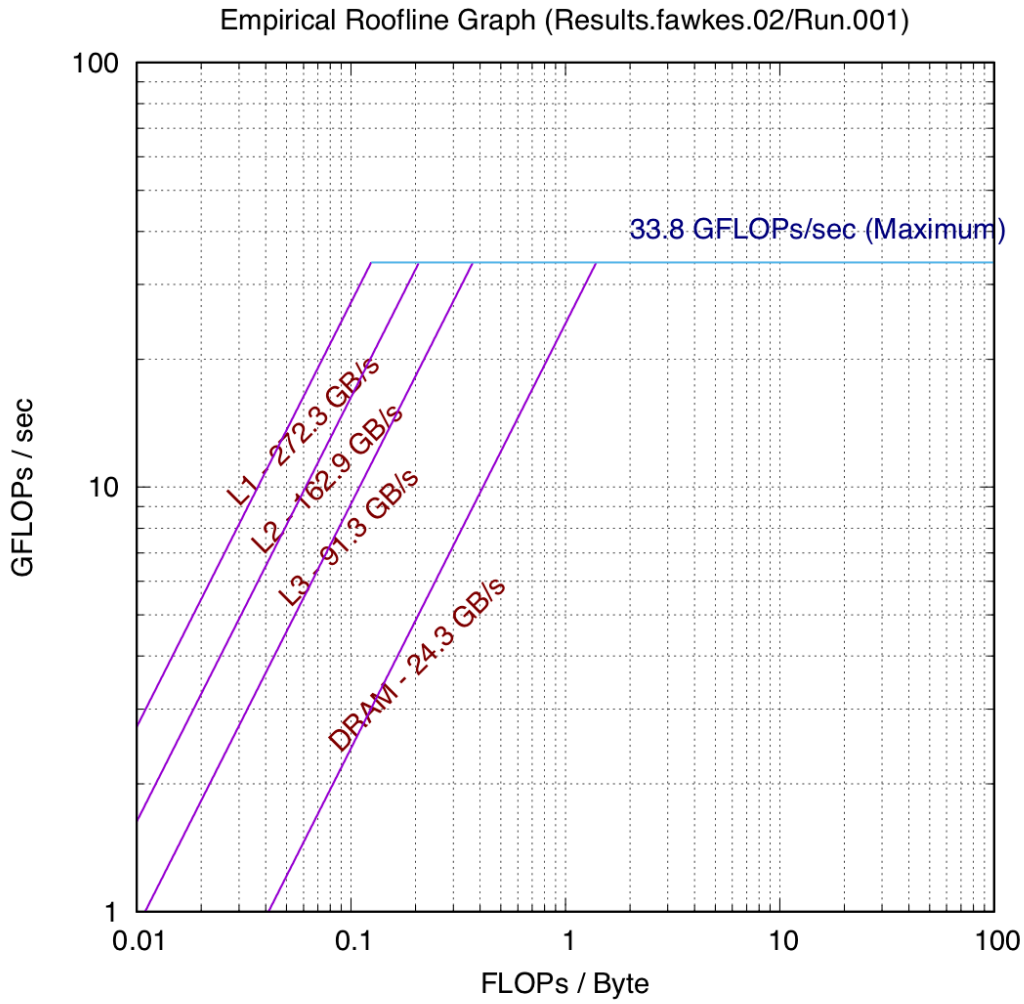

Peaking Performance, 33.8 Gflops/s

Cache	Bandwidth (GB/s)	Ridge Point (FLOPs/Byte)
L1	272.3	0.03
L2	162.9	0.2
L3	91.3	0.38
DRAM	24.3	1.4

Assuming fetch data from DRAM, table below shows the performance of these FP kernels on my local computer.

Name	Operation Intensity (FLOPs/Byte)	Performance (GFLOPS/s)
SpMV	0.25	8
LBMHD	1.07	33.8
Stencil	0.50	12
3-D FFT 128	1.64	33.8

Optimization strategy to increase performance

1. Arrange the operations to keep data in L1, L2 or L3 Cache so that the processor can reuse the data in loops which can save the time fetching data from DRAM.

2. Arrange data addressed in memory consecutively, making code utilize all data in a cacheline.