

1. What does FLOPs/Byte mean?
  - a. FLOPs stands for “floating point operations per second” which is used as a measurement for computational performance. FLOPs/Byte is then that measurement metric per byte of data being used as a computational element. It is the bandwidth needed as part of computing the roofline characterization of the machine.
2. Why are there two purple lines and what are the values?
  - a. The first line is the bandwidth for the L# cache on the machine that is being tested. The second line is the bandwidth for the DRAM on the machine that is being tested.
  - b. The values are:
    - L1 - 746.8 GB/s
    - L2 - 502.9 GB/s
    - L3 - 316.1 GB/s
    - DRAM - 20.8 GB/s
3. What is the blue line? Why is it flat?
  - a. The blue line is the theoretical maximum computation rate in GFLOPs per second for the machine and is the roofline result. It is computed using plateaus in the maximum bandwidth and gflop rate data along with the absolute maximum. It is flat since it is the peak rate that is theoretically reachable on the machine.
4. In simple terms, what does this graph tell us about the machine you ran the program on?
  - a. The graph gives a good idea of the computation speed of the machine. How fast it can be in comparison to other machines.