roofline

October 31, 2022

```
[1]: #Lösche die alten Ergebnisse (kann auch auskommentiert werden)
     !rm -rf Results.hopper
     #Starte das Toolkit mit der Konfig-Datei Hopper2022!
     ! ~/content_read_only/Aufgaben/EA1/Empirical_Roofline_Tool-1.1.0/ert Hopper2022␣
      ↪--no-gnuplot
     #Stelle die Ergebnisse da!
     from display_roofline import display
     display(threads=1, flops=2, run=1)
```

```
Reading configuration from 'Hopper2022'...
  Making new results directory, Results.hopper...
    Making new run directory, 'Results.hopper/Run.001'...

FLOP count 2...
  Building ERT core code...
  Running ERT core code...
    OpenMP 1
    OpenMP 8
    OpenMP 16
    OpenMP 32
  Processing results...

FLOP count 4...
  Building ERT core code...
  Running ERT core code...
    OpenMP 1
    OpenMP 8
    OpenMP 16
    OpenMP 32
  Processing results...

FLOP count 8...
  Building ERT core code...
  Running ERT core code...
    OpenMP 1
    OpenMP 8
    OpenMP 16
```
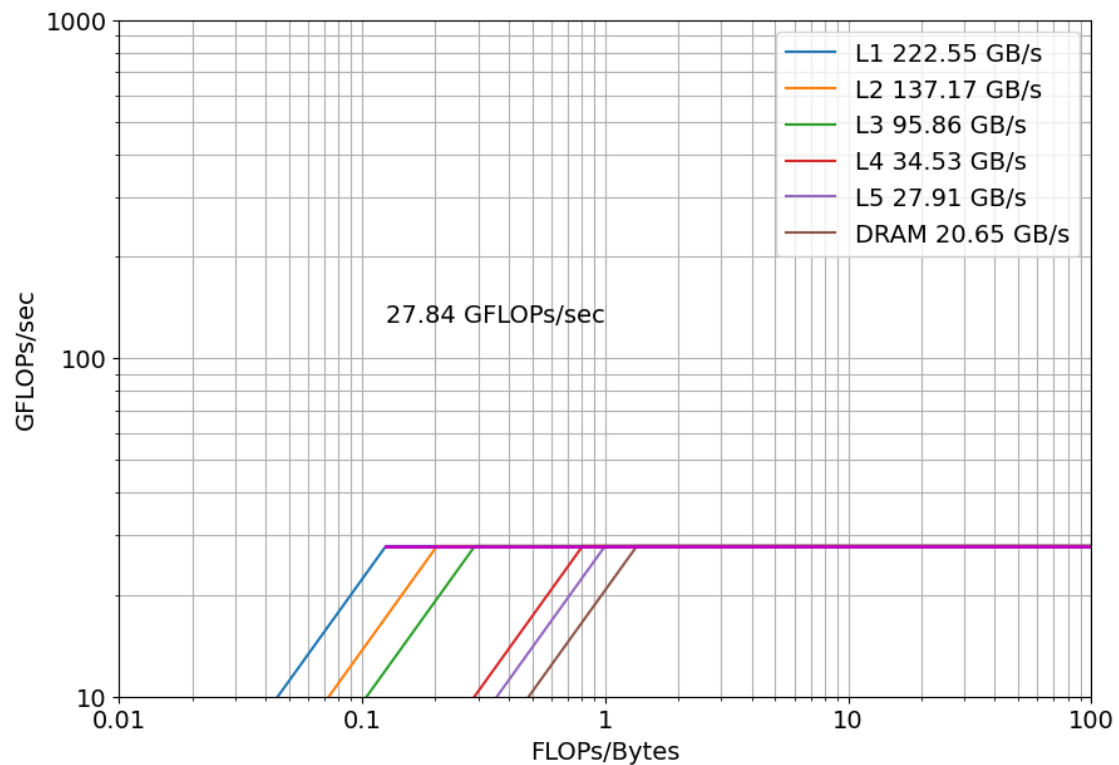
```
   OpenMP 32
 Processing results...
```
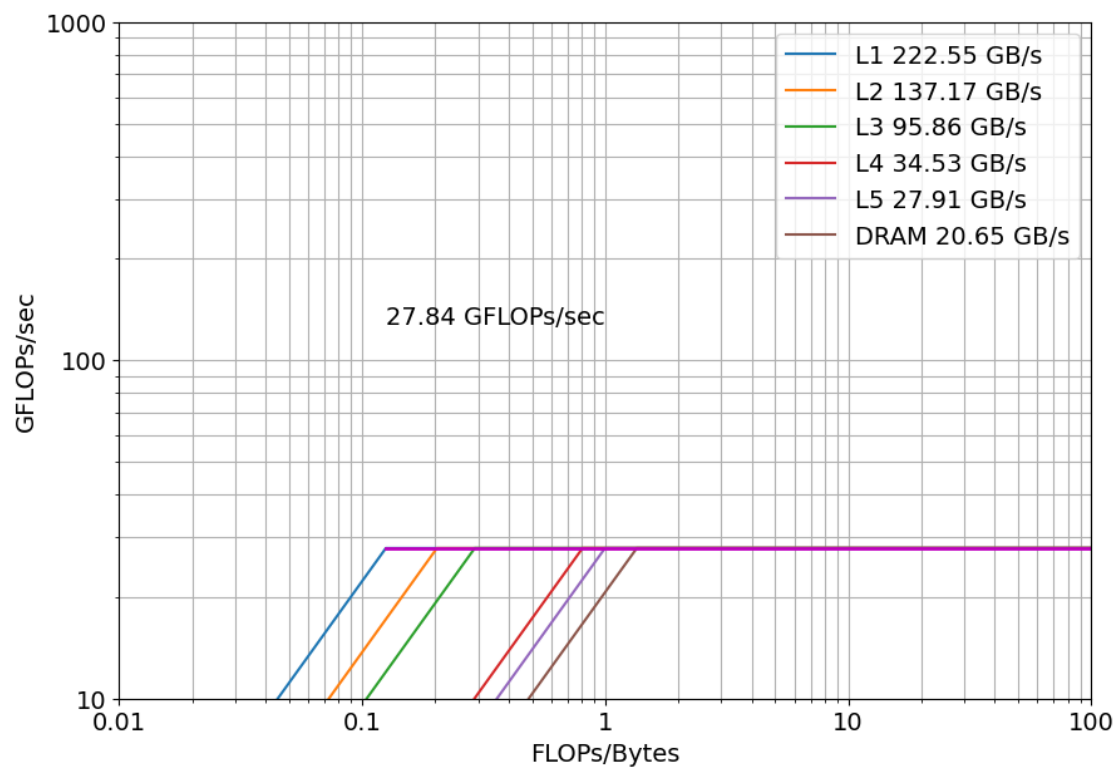
Gathering the final roofline results...

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+----------------------------------------------------
| Empirical roofline database: 'Results.hopper/Run.001/roofline.json'
+----------------------------------------------------
```

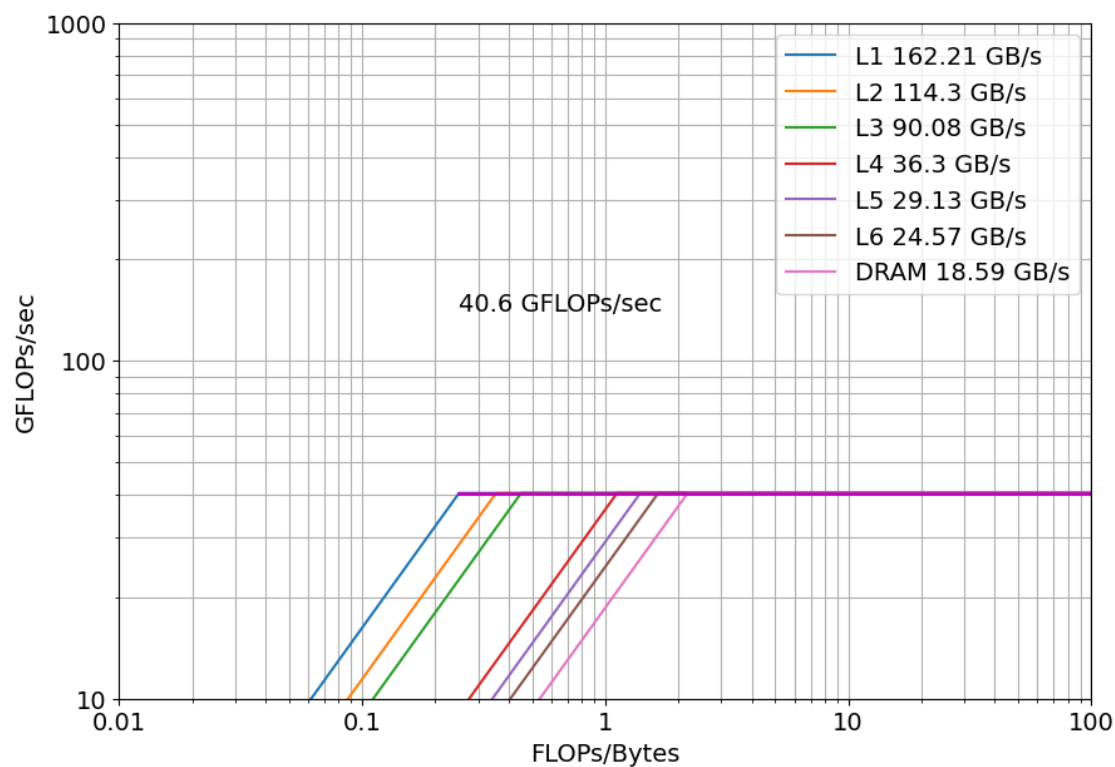Reading Results.hopper/Run.001/FLOPS.002/OpenMP.0001/sum


```
[2]: for t in [1,8,16,32]:
         for f in [2,4,8]:
             display(threads=t, flops=f)
```
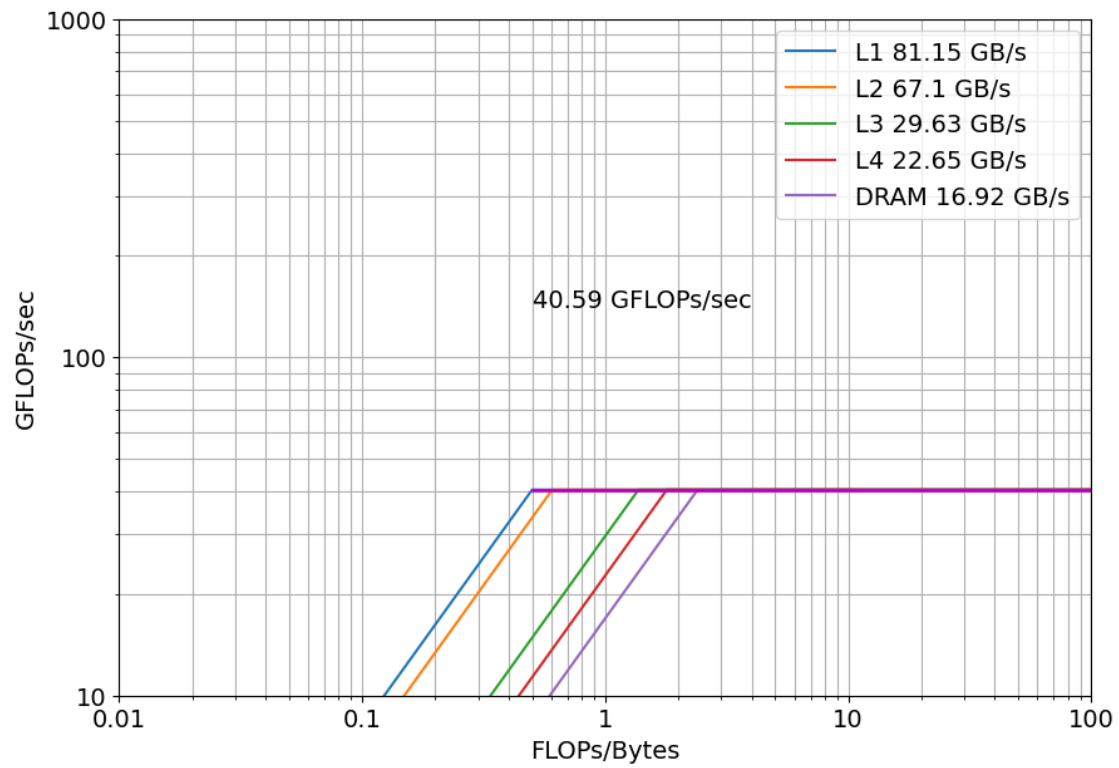
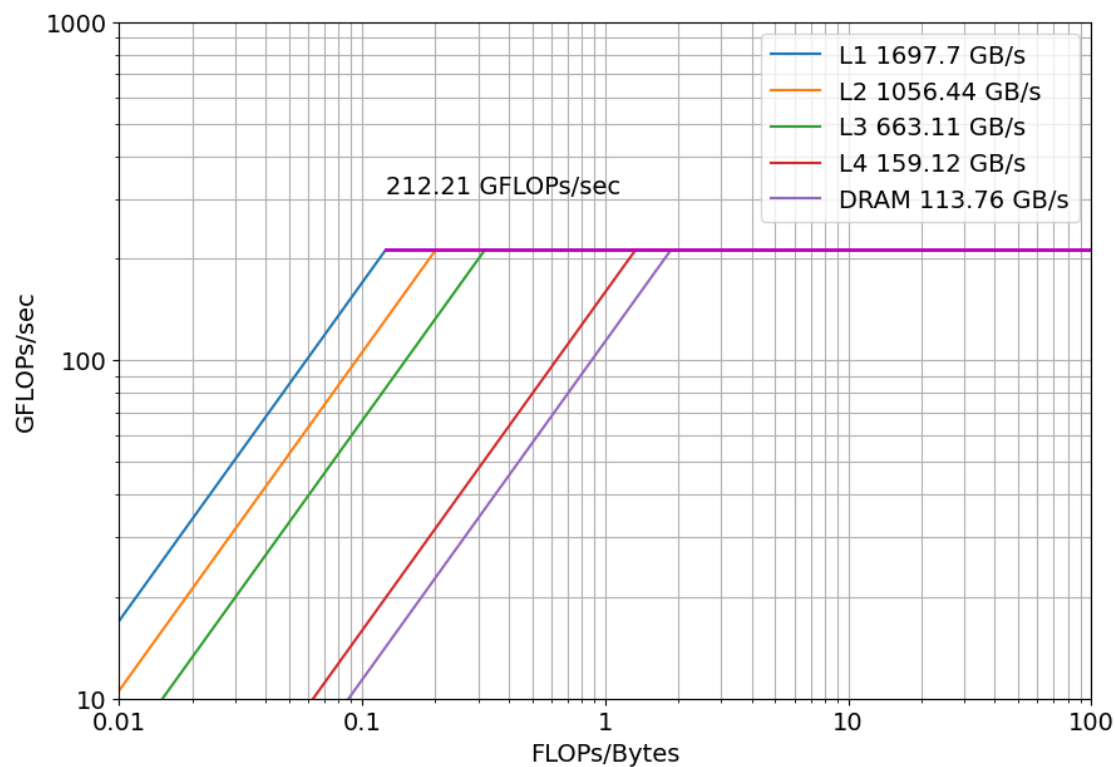Reading Results.hopper/Run.001/FLOPS.002/OpenMP.0001/sum

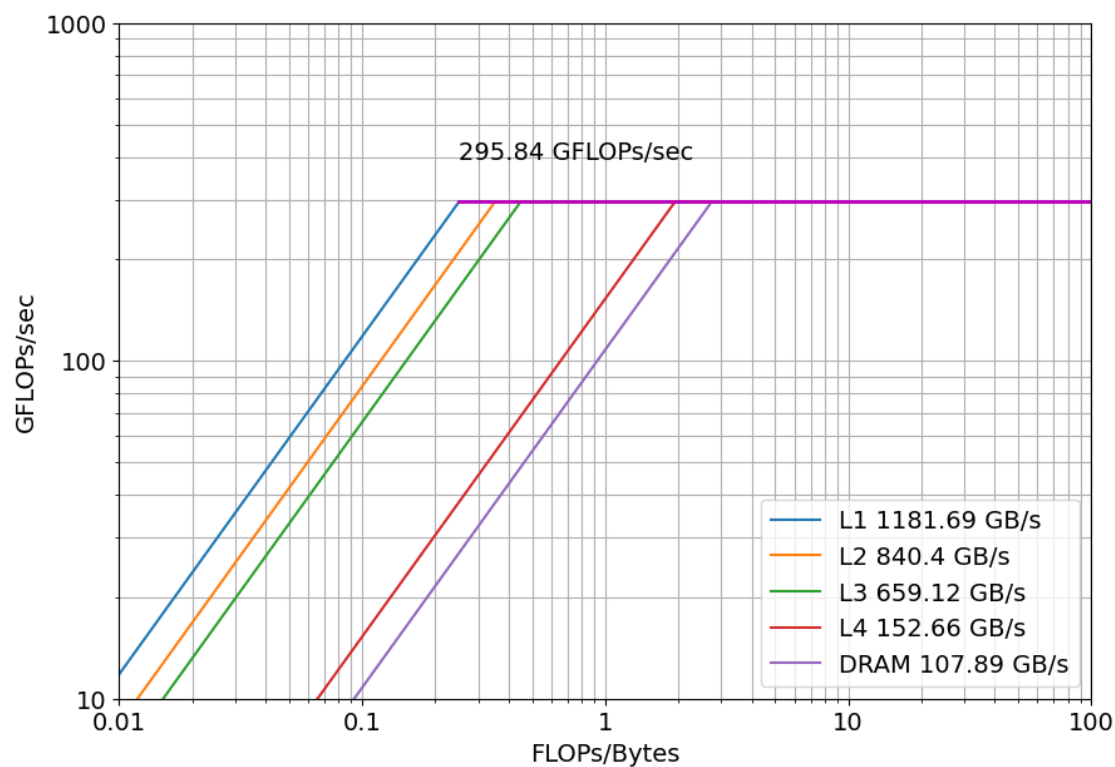Reading Results.hopper/Run.001/FLOPS.004/OpenMP.0001/sum

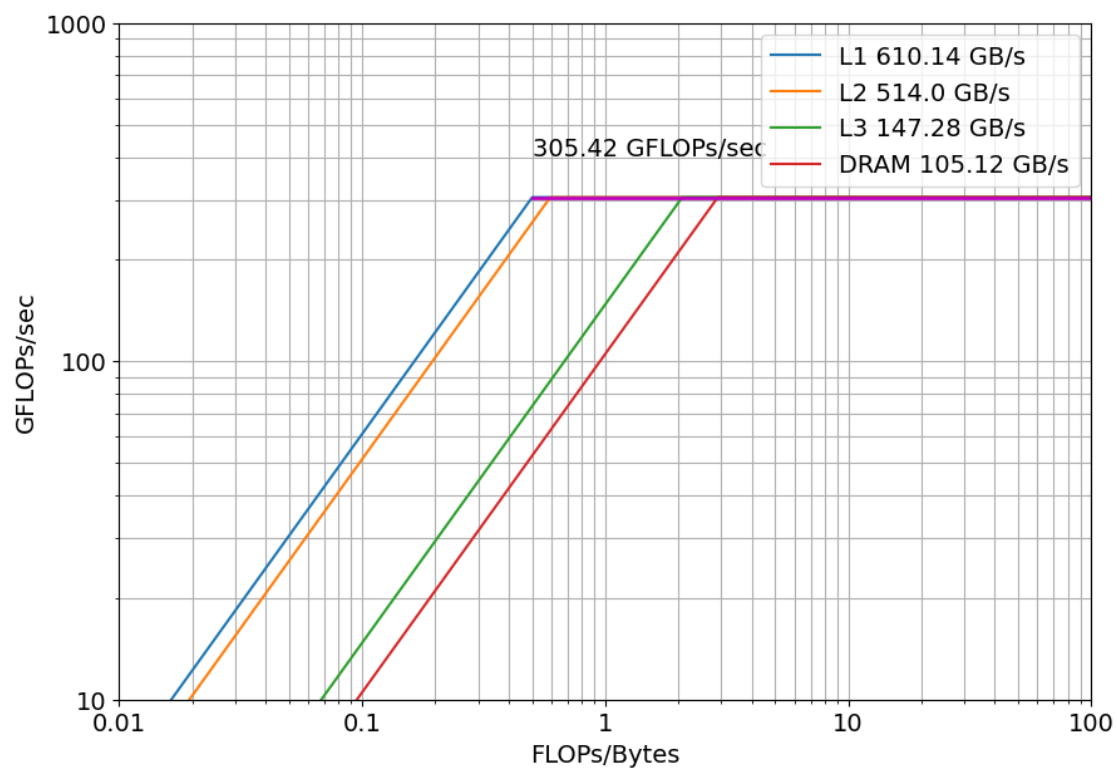Reading Results.hopper/Run.001/FLOPS.008/OpenMP.0001/sum

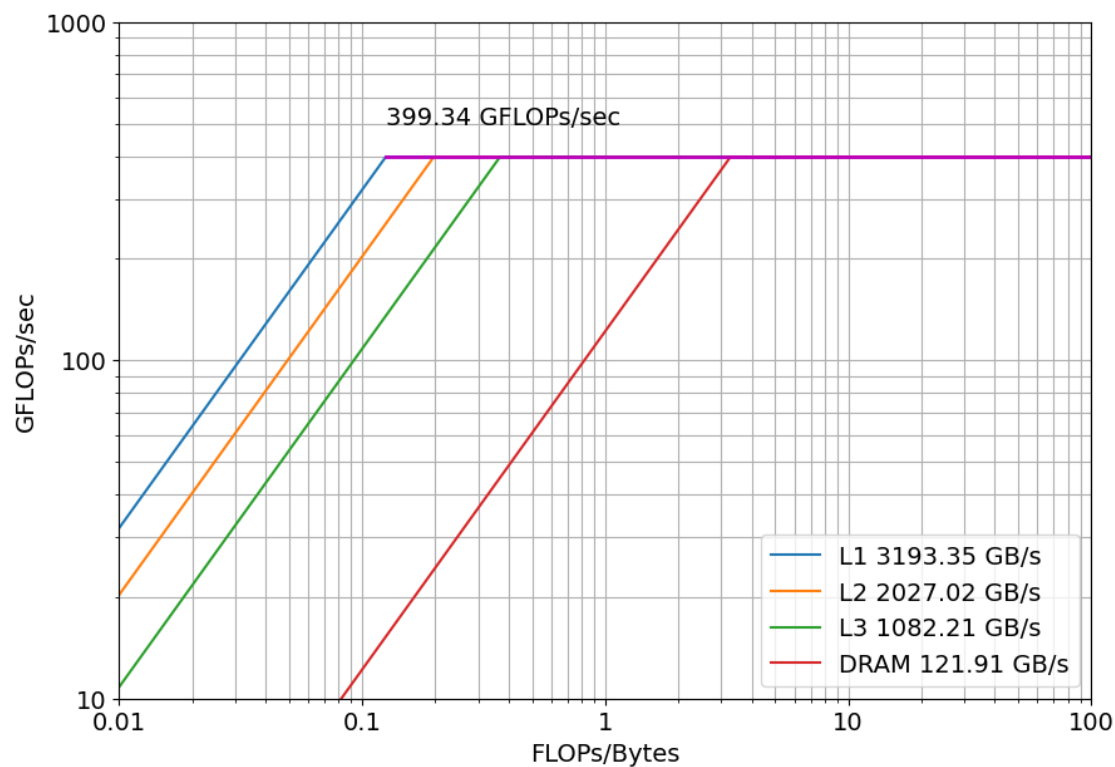Reading Results.hopper/Run.001/FLOPS.002/OpenMP.0008/sum

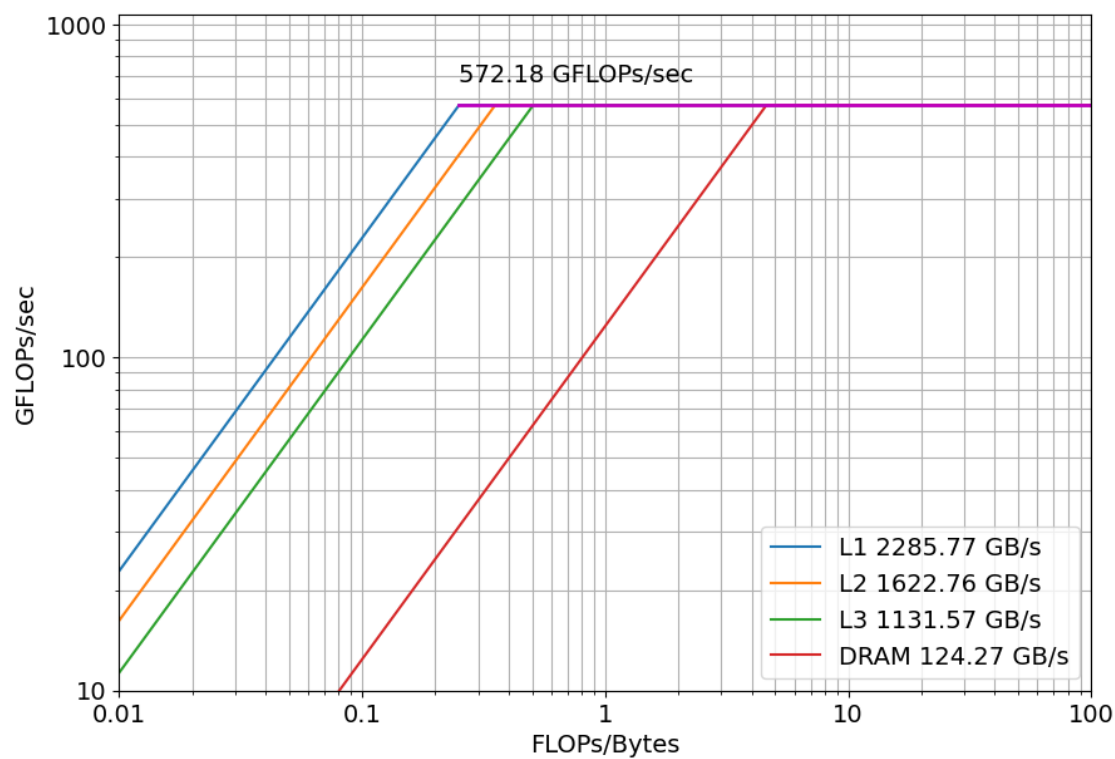Reading Results.hopper/Run.001/FLOPS.004/OpenMP.0008/sum

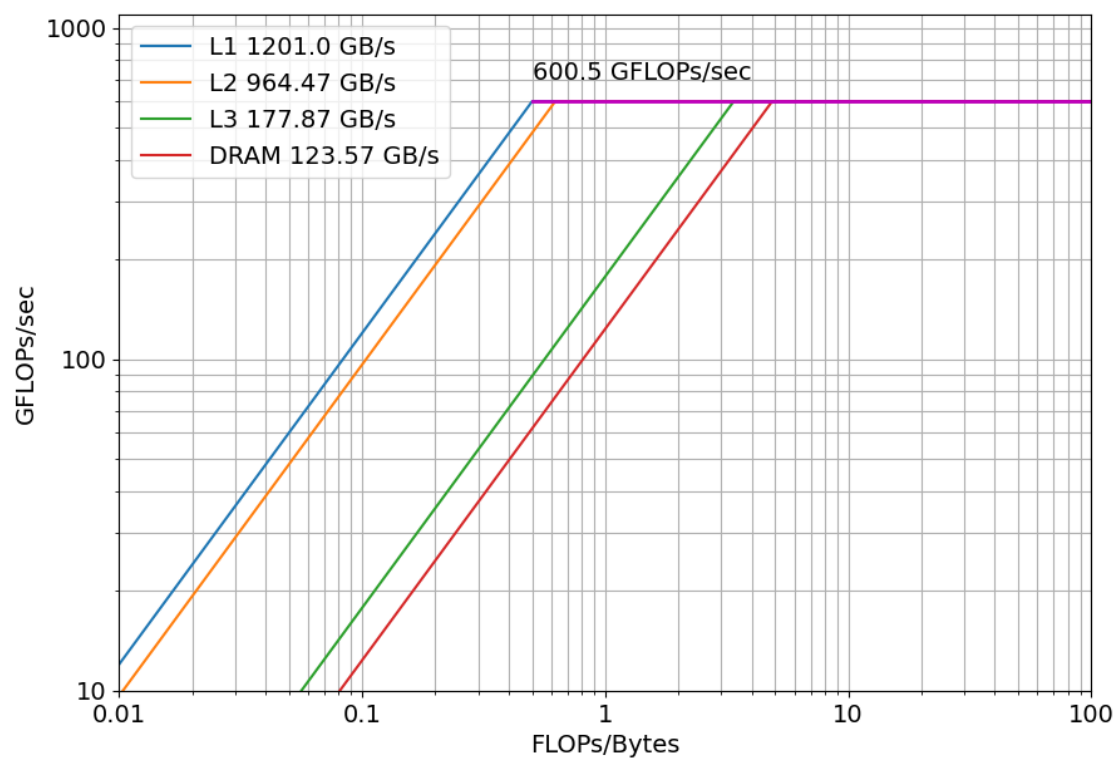Reading Results.hopper/Run.001/FLOPS.008/OpenMP.0008/sum

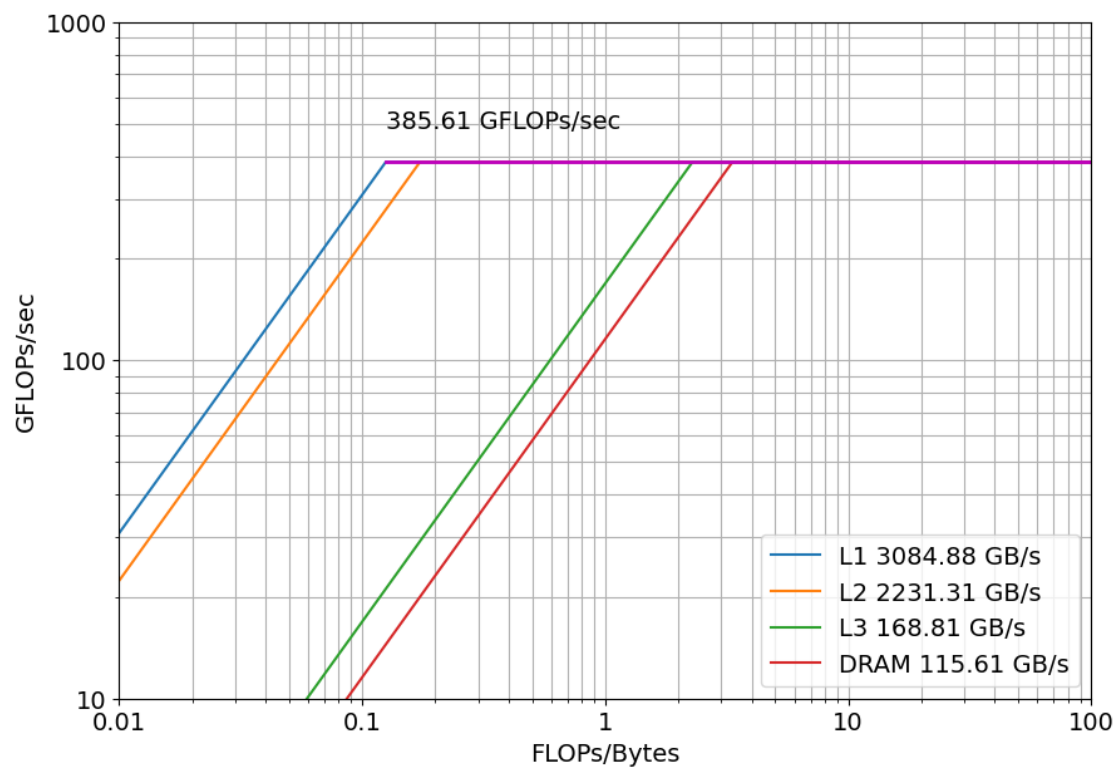Reading Results.hopper/Run.001/FLOPS.002/OpenMP.0016/sum

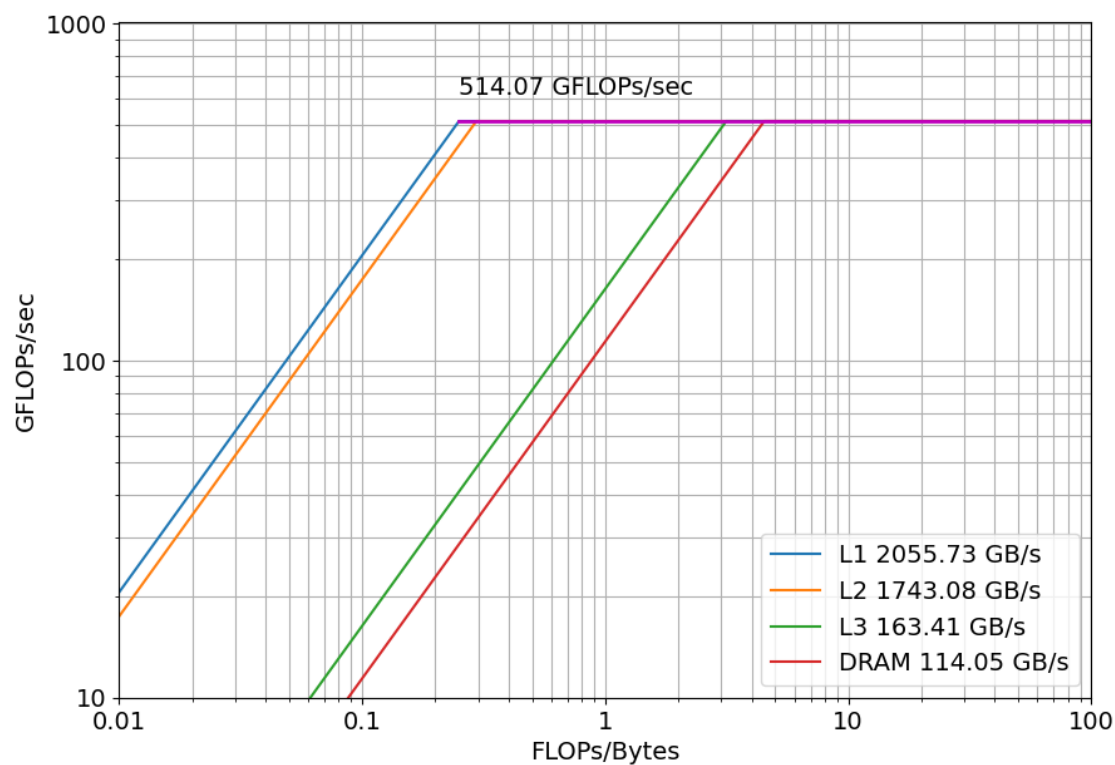Reading Results.hopper/Run.001/FLOPS.004/OpenMP.0016/sum

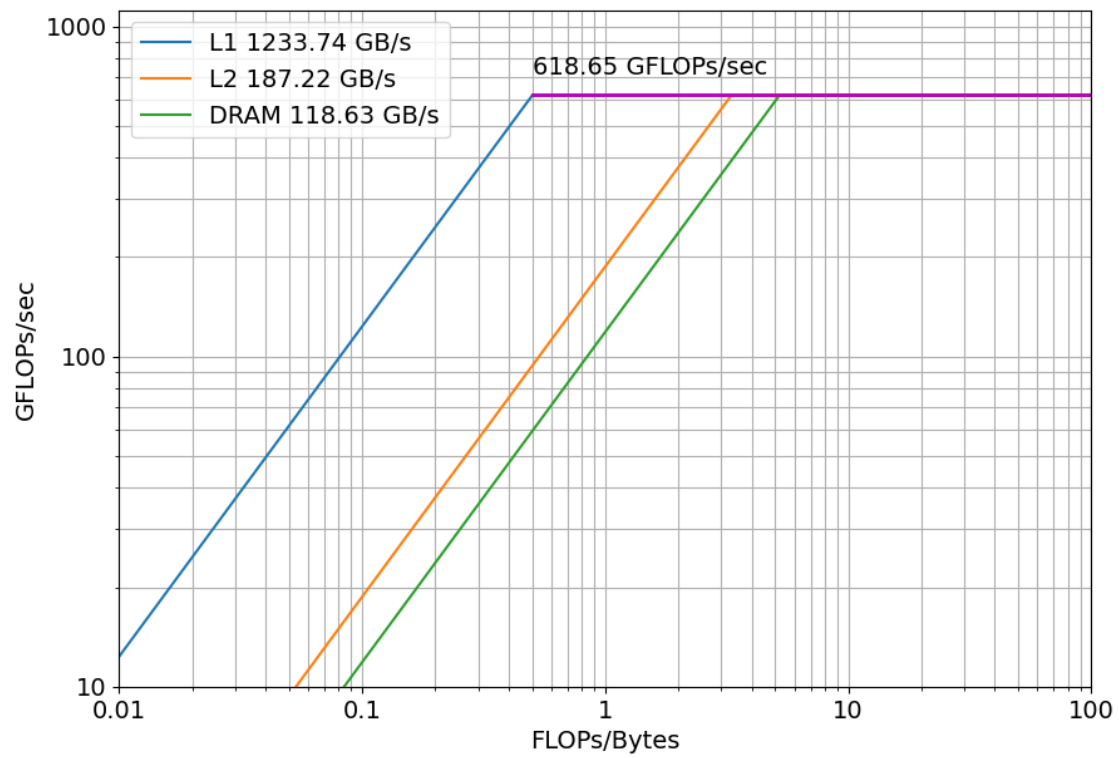Reading Results.hopper/Run.001/FLOPS.008/OpenMP.0016/sum

Reading Results.hopper/Run.001/FLOPS.002/OpenMP.0032/sum

Reading Results.hopper/Run.001/FLOPS.004/OpenMP.0032/sum

Reading Results.hopper/Run.001/FLOPS.008/OpenMP.0032/sum