mixbench/read-only (v0.03)
---------- Device specifications ----------
Device: Tesla P100-PCIE-12GB
CUDA driver version: 8.0
GPU clock rate: 1328 MHz
Memory clock rate: 357 MHz
Memory bus width: 3072 bits
WarpSize: 32
L2 cache size: 3072 KB
Total global mem: 12225 MB
ECC enabled: Yes
Compute Capability: 6.0
Total SPs: 3584 (56 MPs x 64 SPs/MP)
Compute throughput: 9522.69 GFlops (theoretical single precision FMAs)
Memory bandwidth: 549.12 GB/sec
---
Total GPU memory 12819628032, free 12510298112
Buffer size: 256MB
Trade-off type: compute with global memory (block strided)
Elements per thread: 8
Thread fusion degree: 4

| | Single Precision ops | | | | Double precision ops | | | | Half precision ops | | | | Integer operations | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Compute iters | Flops/byte | ex.time | GFLOPS | GB/sec | Flops/byte | ex.time | GFLOPS | GB/sec | Flops/byte | ex.time | GFLOPS | GB/sec | Iops/byte | ex.time | GIOPS | GB/sec |
| 0 | 0.25 | 0.31 | 109.75 | 439.01 | 0.125 | 0.6 | 56.26 | 450.11 | 0.5 | 0.3 | 220.45 | 440.9 | 0.25 | 0.31 | 109.55 | 438.18 |
| 1 | 0.75 | 0.31 | 329.4 | 439.19 | 0.375 | 0.6 | 168.64 | 449.72 | 1.5 | 0.3 | 661.7 | 441.13 | 0.75 | 0.31 | 329.98 | 439.98 |
| 2 | 1.25 | 0.3 | 550.14 | 440.12 | 0.625 | 0.6 | 281.65 | 450.64 | 2.5 | 0.3 | 1105.86 | 442.34 | 1.25 | 0.3 | 552.29 | 441.83 |
| 3 | 1.75 | 0.3 | 771.9 | 441.09 | 0.875 | 0.6 | 393.74 | 449.98 | 3.5 | 0.3 | 1540.24 | 440.07 | 1.75 | 0.3 | 773.69 | 442.11 |
| 4 | 2.25 | 0.31 | 989.02 | 439.56 | 1.125 | 0.6 | 505.85 | 449.65 | 4.5 | 0.3 | 1988.45 | 441.88 | 2.25 | 0.31 | 985.92 | 438.18 |
| 5 | 2.75 | 0.3 | 1215.55 | 442.02 | 1.375 | 0.6 | 618.07 | 449.5 | 5.5 | 0.31 | 2418.35 | 439.7 | 2.75 | 0.3 | 1212.48 | 440.9 |
| 6 | 3.25 | 0.3 | 1432.63 | 440.81 | 1.625 | 0.6 | 729.19 | 448.73 | 6.5 | 0.31 | 2858.95 | 439.84 | 3.25 | 0.31 | 1428.43 | 439.52 |
| 7 | 3.75 | 0.3 | 1652.86 | 440.76 | 1.875 | 0.6 | 843.72 | 449.98 | 7.5 | 0.3 | 3309.2 | 441.23 | 3.75 | 0.31 | 1640.96 | 437.59 |
| 8 | 4.25 | 0.31 | 1865.21 | 438.87 | 2.125 | 0.6 | 955.86 | 449.82 | 8.5 | 0.3 | 3746.88 | 440.81 | 4.25 | 0.37 | 1553.72 | 365.58 |
| 9 | 4.75 | 0.31 | 2089.45 | 439.89 | 2.375 | 0.6 | 1065.74 | 448.73 | 9.5 | 0.3 | 4182.86 | 440.3 | 4.75 | 0.31 | 2038.36 | 429.13 |
| 10 | 5.25 | 0.31 | 2300.47 | 438.18 | 2.625 | 0.6 | 1180.07 | 449.55 | 10.5 | 0.3 | 4627.53 | 440.72 | 5.25 | 0.32 | 2231.47 | 425.04 |
| 11 | 5.75 | 0.31 | 2517.98 | 437.91 | 2.875 | 0.6 | 1292.94 | 449.72 | 11.5 | 0.31 | 5053.38 | 439.42 | 5.75 | 0.32 | 2422.38 | 421.28 |
| 12 | 6.25 | 0.31 | 2734.37 | 437.5 | 3.125 | 0.6 | 1400.12 | 448.04 | 12.5 | 0.3 | 5514.76 | 441.18 | 6.25 | 0.4 | 2074.58 | 331.93 |
| 13 | 6.75 | 0.31 | 2957.75 | 438.18 | 3.375 | 0.6 | 1513.42 | 448.42 | 13.5 | 0.31 | 5908.09 | 437.64 | 6.75 | 0.34 | 2680.26 | 397.08 |
| 14 | 7.25 | 0.3 | 3190.51 | 440.07 | 3.625 | 0.6 | 1626.57 | 448.71 | 14.5 | 0.31 | 6377.66 | 439.84 | 7.25 | 0.36 | 2729.44 | 376.47 |
| 15 | 7.75 | 0.3 | 3416.63 | 440.86 | 3.875 | 0.6 | 1739.12 | 448.8 | 15.5 | 0.31 | 6803.95 | 438.96 | 7.75 | 0.38 | 2742.65 | 353.89 |
| 16 | 8.25 | 0.31 | 3611.25 | 437.73 | 4.125 | 0.6 | 1846.77 | 447.7 | 16.5 | 0.31 | 7226.27 | 437.96 | 8.25 | 0.5 | 2212.89 | 268.23 |
| 17 | 8.75 | 0.31 | 3830.91 | 437.82 | 4.375 | 0.6 | 1963.42 | 448.78 | 17.5 | 0.31 | 7592.87 | 433.88 | 8.75 | 0.43 | 2739.64 | 313.1 |
| 18 | 9.25 | 0.31 | 4050.25 | 437.86 | 4.625 | 0.6 | 2068.2 | 447.18 | 18.5 | 0.31 | 8072.68 | 436.36 | 9.25 | 0.45 | 2753.73 | 297.7 |
| 20 | 10.25 | 0.31 | 4476.89 | 436.77 | 5.125 | 0.6 | 2291.05 | 447.03 | 20.5 | 0.31 | 8959.39 | 437.04 | 10.25 | 0.61 | 2256.9 | 220.18 |
| 22 | 11.25 | 0.31 | 4900.91 | 435.64 | 5.625 | 0.6 | 2513.23 | 446.8 | 22.5 | 0.31 | 9807.92 | 435.91 | 11.25 | 0.55 | 2747.68 | 244.24 |
| 24 | 12.25 | 0.31 | 5316.66 | 434.01 | 6.125 | 0.6 | 2727.91 | 445.37 | 24.5 | 0.31 | 10659.8 | 435.09 | 12.25 | 0.72 | 2283.77 | 186.43 |
| 28 | 14.25 | 0.31 | 6128.88 | 430.1 | 7.125 | 0.6 | 3168.91 | 444.76 | 28.5 | 0.31 | 12211.43 | 428.47 | 14.25 | 0.83 | 2300.48 | 161.44 |
| 32 | 16.25 | 0.31 | 7003.44 | 430.98 | 8.125 | 0.61 | 3586.48 | 441.41 | 32.5 | 0.31 | 13879.94 | 427.08 | 16.25 | 0.94 | 2312.46 | 142.31 |
| 40 | 20.25 | 0.33 | 8149.55 | 402.45 | 10.125 | 0.62 | 4390.3 | 433.61 | 40.5 | 0.35 | 15410.44 | 380.5 | 20.25 | 1.18 | 2309.51 | 114.05 |
| 48 | 24.25 | 0.39 | 8424.74 | 347.41 | 12.125 | 0.72 | 4498.53 | 371.01 | 48.5 | 0.41 | 15732.69 | 324.39 | 24.25 | 1.39 | 2345.21 | 96.71 |
| 56 | 28.25 | 0.44 | 8691.98 | 307.68 | 14.125 | 0.84 | 4523.52 | 320.25 | 56.5 | 0.47 | 16053.26 | 284.13 | 28.25 | 1.63 | 2320.81 | 82.15 |
| 64 | 32.25 | 0.5 | 8737 | 270.91 | 16.125 | 0.95 | 4560.26 | 282.81 | 64.5 | 0.53 | 16423.79 | 254.63 | 32.25 | 1.83 | 2358.9 | 73.14 |
| 80 | 40.25 | 0.61 | 8899.82 | 221.11 | 20.125 | 1.18 | 4592.39 | 228.19 | 80.5 | 0.64 | 16966.91 | 210.77 | 40.25 | 2.28 | 2367.29 | 58.81 |
| 96 | 48.25 | 0.72 | 8977.69 | 186.07 | 24.125 | 1.41 | 4606.66 | 190.95 | 96.5 | 0.75 | 17297.76 | 179.25 | 48.25 | 2.76 | 2348.2 | 48.67 |
| 128 | 64.25 | 0.95 | 9083.63 | 141.38 | 32.125 | 1.88 | 4576.45 | 142.46 | 128.5 | 0.98 | 17585.75 | 136.85 | 64.25 | 3.71 | 2324 | 36.17 |
| 192 | 96.25 | 1.45 | 8905.84 | 92.53 | 48.125 | 2.81 | 4595.41 | 95.49 | 192.5 | 1.48 | 17493.68 | 90.88 | 96.25 | 5.48 | 2358.25 | 24.5 |
| 256 | 128.25 | 2.18 | 7908.6 | 61.67 | 64.125 | 4.93 | 3493.19 | 54.47 | 256.5 | 2.17 | 15856.84 | 61.82 | 128.25 | 7.29 | 2360.82 | 18.41 |