1. **Memory Benchmarking**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Workload** | **Concurrency** | **BlockSize** | **MyRamBench throughput(GB/sec)** | **Pmbw measured throughput(GB/sec)** | **Theoretical Throughput (GB/Sec)** | **MyRamEfficiency (%)** | **Pmbw efficiency(%)** |
| RWS | 1 | 1KB | 4.84 | 180.75 | 248.21 | 1.94 | 72.82 |
| RWS | 1 | 1MB | 4.82 | 196.68 | 248.21 | 1.94 | 79.23 |
| RWS | 1 | 10MB | 8.38 | 201.2 | 248.21 | 3.38 | 81.06 |
| RWS | 2 | 1KB | 5.97 | 286.37 | 496.42 | 1.20 | 57.68 |
| RWS | 2 | 1MB | 6.55 | 372.27 | 496.42 | 1.32 | 74.99 |
| RWS | 2 | 10MB | 10.98 | 372.25 | 496.42 | 2.21 | 74.98 |
| RWS | 4 | 1KB | 4.41 | 265.4 | 992.84 | 0.44 | 26.73 |
| RWS | 4 | 1MB | 4.07 | 429 | 992.84 | 0.40 | 43.20 |
| RWS | 4 | 10MB | 15.86 | 371.79 | 992.84 | 1.5 | 37.44 |
| RWS | 8 | 1KB | 23.94 | 446.24 | 1985.68 | 1.2 | 22.47 |
| RWS | 8 | 1MB | 34.00 | 465.34 | 1985.68 | 1.7 | 23.43 |
| RWS | 8 | 10MB | 36.58 | 469.51 | 1985.68 | 1.8 | 23.64 |
| RWR | 1 | 1KB | 11.49 | 112.52 | 248.21 | 4.6 | 45.21 |
| RWR | 1 | 1MB | 21.0 | 118.25 | 248.21 | 8.4 | 47.64 |
| RWR | 1 | 10MB | 12.16 | 197.25 | 248.21 | 4.9 | 79.46 |
| RWR | 2 | 1KB | 24.07 | 425.2 | 496.42 | 4.8 | 85.72 |
| RWR | 2 | 1MB | 44.12 | 375.1 | 496.42 | 8.8 | 75.56 |
| RWR | 2 | 10MB | 21.68 | 370.15 | 496.42 | 4.37 | 74.62 |
| RWR | 4 | 1KB | 6.24 | 550.12 | 992.84 | 0.6 | 55.39 |
| RWR | 4 | 1MB | 44.26 | 882.12 | 992.84 | 4.4 | 88.84 |
| RWR | 4 | 10MB | 24.84 | 926.95 | 992.84 | 2.5 | 93.44 |
| RWR | 8 | 1KB | 8.40 | 634.27 | 1985.68 | 0.4 | 31.94 |
| RWR | 8 | 1MB | 53.29 | 1137.12 | 1985.68 | 2.6 | 57.28 |
| RWR | 8 | 10MB | 28.26 | 953.25 | 1985.68 | 1.4 | 48.00 |

**Latency:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Workload** | **Concurrency** | **BlockSize** | **MyRamBench latency(ms)** | **Pmbw measured latency(us)** | **Theoretical latency(us)** | **MyRamEfficiency (%)** | **Pmbw efficiency(%)** |
| RWS | 1 | 1B | 0.004 | 4.32 | 7.032 | 0.057 | 61.43 |
| RWS | 2 | 1B | 0.0032 | 1.8 | 3.516 | 0.091 | 51.19 |
| RWS | 4 | 1B | 0.0030 | 0.7 | 1.758 | 0.17 | 39.81 |
| RWS | 8 | 1B | 0.0030 | 0.6 | 0.879 | 0.34 | 68.25 |
| RWR | 1 | 1B | 0.10 | 3.9 | 7.032 | 1.422 | 55.46 |
| RWR | 2 | 1B | 0.26 | 1.9 | 3.516 | 7.39 | 54.03 |
| RWR | 4 | 1B | 0.36 | 0.6 | 1.758 | 20.47 | 34.12 |
| RWR | 8 | 1B | 0.42 | 0.2 | 0.879 | 47.78 | 22.75 |