

DRAM

The sum in mb is the total amount of MB the program loads for arrays before it ends
sum in mb 4802492.82

Speed column are the speed result using the stream benchmark

Predicted time is sum in MB divided by speed.

Measured time is the the result given by running the program.

Speed res. Are calculated by taking "sum in MB" divided by Total time

1 Data generation per analysing

| DRAM Cores | Measured times | | | | | |
|---------------|----------------|----------------|------------|----------------|--------------|------------|
| | Speed | Predicted time | Total time | Iteration time | Analyze time | Speed Res. |
| 1 | 11038 | 435.09 | 449.906961 | 388.983972 | 60.922989 | 10674.4 |
| 2 | 21202 | 226.51 | 246.030796 | 212.383993 | 33.646803 | 19519.9 |
| 3 | 34326 | 139.91 | 173.816023 | 151.697367 | 22.118656 | 27629.7 |
| 4 | 43983 | 109.19 | 137.741346 | 121.18954 | 16.551806 | 34866.0 |
| 5 | 48136 | 99.77 | 115.889799 | 102.478273 | 13.411526 | 41440.2 |
| 6 | 50571 | 94.97 | 101.826506 | 90.493629 | 11.332877 | 47163.5 |
| 7 | 52636 | 91.24 | 92.47383 | 82.510421 | 9.963409 | 51933.5 |
| 8 | 55609 | 86.36 | 86.601156 | 77.53447 | 9.066686 | 55455.3 |
| 9 | 58007 | 82.79 | 80.762937 | 72.623232 | 8.139705 | 59464.1 |
| 10 | 61089 | 78.61 | 76.268689 | 68.863472 | 7.405217 | 62968.1 |
| 11 | 61309 | 78.33 | 72.861529 | 66.029367 | 6.832162 | 65912.6 |
| 12 | 63383 | 75.77 | 71.826794 | 65.339453 | 6.487341 | 66862.1 |
| 13 | 64146 | 74.87 | 70.487576 | 64.315046 | 6.17253 | 68132.5 |
| 14 | 64456 | 74.51 | 68.916222 | 63.121421 | 5.794801 | 69686.0 |
| 15 | 64806 | 74.11 | 67.58736 | 62.1002 | 5.48716 | 71056.1 |
| 16 | 65477 | 73.35 | 66.200909 | 60.969203 | 5.231706 | 72544.2 |

3 Data generation per analysing

| | | | | | | | |
|-----------|----------------|----------------|------------|----------------|--------------|-------------|------|
| sum in mb | 3202139.618 | | | | | | |
| DRAM | Measured times | | | | | | |
| Cores | Speed | Predicted time | Total time | Iteration time | Analyze time | Speed | Res. |
| 1 | 11038 | 290.101433023 | 398.237288 | 377.634811 | 20.602477 | 8040.783006 | |
| 2 | 21202 | 151.03007347 | 217.824526 | 206.769962 | 11.054564 | 14700.5467 | |
| 3 | 34326 | 93.2861276499 | 156.946011 | 149.538931 | 7.40708 | 20402.80984 | |
| 4 | 43983 | 72.804029232 | 125.474982 | 119.779017 | 5.695965 | 25520.14407 | |
| 5 | 48136 | 66.5227608798 | 106.148341 | 101.578109 | 4.570232 | 30166.6478 | |
| 6 | 50571 | 63.3196815905 | 93.889318 | 89.977062 | 3.912256 | 34105.47319 | |
| 7 | 52636 | 60.835542551 | 85.934773 | 82.521694 | 3.413079 | 37262.44343 | |
| 8 | 55609 | 57.5831181591 | 80.255693 | 77.157553 | 3.09814 | 39899.22083 | |
| 9 | 58007 | 55.2026413659 | 75.834243 | 73.034914 | 2.79933 | 42225.51042 | |
| 10 | 61089 | 52.4176139356 | 71.809044 | 69.262434 | 2.54661 | 44592.42791 | |
| 11 | 61309 | 52.2295196091 | 69.242235 | 66.886007 | 2.356228 | 46245.46879 | |
| 12 | 63383 | 50.5204805344 | 68.794495 | 66.540433 | 2.254061 | 46546.45139 | |
| 13 | 64146 | 49.9195525475 | 67.484528 | 65.345116 | 2.139412 | 47449.98169 | |
| 14 | 64456 | 49.6794653362 | 65.913741 | 63.900197 | 2.013544 | 48580.75978 | |
| 15 | 64806 | 49.4111597339 | 64.21881 | 62.304362 | 1.914448 | 49862.95476 | |
| 16 | 65477 | 48.9048004293 | 63.170036 | 61.34703 | 1.823006 | 50690.79932 | |

DRAM

| | |
|-------------|---------|
| n | 50000 |
| dwp_size | 1001106 |
| nodes | 1001107 |
| crs_row_ptr | 4000883 |
| bytes | 8 |

$(nodes + n * (dwp_size + crs_row_ptr + nodes)) * bytes * 2 * 0.000001$
sum in mb 4802492.82