

Configuration: config/l1-small-4way_8

Simulation Results

Memory System:

D Cache: Size = 4096, Associativity = 4, Block size = 32
I Cache: Size = 4096, Associativity = 4, Block size = 32
L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,

Execution Time = 111757442321, Total Traces Read = 10000000076

Flush time = 736462625

Total time (Execution Time + Flush Time) = 112493904946

Number of Reference Types: [Percentage]

| | | | |
|--------|---|-------------|---------|
| Reads | = | 2011922989 | [20.1%] |
| Writes | = | 1239405364 | [12.4%] |
| Inst. | = | 6748671723 | [67.5%] |
| Total | = | 10000000076 | |

Total Cycles for Activities: [Percentage]

| | | | |
|--------|---|--------------|---------|
| Reads | = | 47445623289 | [42.5%] |
| Writes | = | 9493955411 | [8.5%] |
| Inst. | = | 54817863621 | [49.1%] |
| Total | = | 111757442321 | |

Average Cycles for Activities:

Reads = 23.6, Writes = 7.7, Instructions = 16.6

Ideal: Execution Time = 16748671799; CPI = 2.5

Ideal Misaligned Execution Time = 24145770580; CPI = 3.6

Memory Level: L1 Instruction Cache

Hit Count = 10797093037, Miss Count = 662392036
Total Requests = 11459485073
Hit Rate: 94.2%, Miss Rate = 5.8%
Kickouts = 659023646, Dirty-kickouts = 0, Transfers = 662392036
Flush Kickouts = 0

Memory Level: L1 Data Cache

Hit Count = 5576696304, Miss Count = 360917480
Total Requests = 5937613784
Hit Rate: 93.9%, Miss Rate = 6.1%
Kickouts = 218905542, Dirty-kickouts = 138643490, Transfers = 360917480
Flush Kickouts = 1580844

Memory Level: L2 Cache

Hit Count = 779570601, Miss Count = 383963249
Total Requests = 1163533850
Hit Rate: 67.0%, Miss Rate = 33.0%
Kickouts = 296412085, Dirty-kickouts = 74204748, Transfers = 383963249
Flush Kickouts = 4018906

System Costs:

L1 Cache Costs (Instruction Cache \$300 + Data Cache \$300) = \$600
L2 Cache Costs: \$50
Main Memory Costs: \$75
Total Memory Cost: \$725

Flushes = 26315, Invalidates = 20082494
