

Configuration: config/l1-small-4way_64

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 = 64, Chunktime = 15,

Execution Time = 37035993714, Total Traces Read = 10000000109

Flush time = 211245174

Total time (Execution Time + Flush Time) = 37247238888

Number of Reference Types: [Percentage]

Reads = 1907768017 [19.1%]
Writes = 727693598 [7.3%]
Inst. = 7364538494 [73.6%]
Total = 10000000109

Total Cycles for Activities: [Percentage]

Reads = 9291080291 [25.1%]
Writes = 4067720636 [11.0%]
Inst. = 23677192787 [63.9%]
Total = 37035993714

Average Cycles for Activities:

Reads = 4.9, Writes = 5.6, Instructions = 5.0

Ideal: Execution Time = 17364538603; CPI = 2.4

Ideal Misaligned Execution Time = 23214492795; CPI = 3.2

Memory Level: L1 Instruction Cache

Hit Count = 12210284847, Miss Count = 342090945
Total Requests = 12552375792
Hit Rate: 97.3%, Miss Rate = 2.7%
Kickouts = 338744116, Dirty-kickouts = 0, Transfers = 342090945
Flush Kickouts = 0

Memory Level: L1 Data Cache

Hit Count = 3121536340, Miss Count = 176042169
Total Requests = 3297578509
Hit Rate: 94.7%, Miss Rate = 5.3%
Kickouts = 103231082, Dirty-kickouts = 69442645, Transfers = 176042169
Flush Kickouts = 1564889

Memory Level: L2 Cache

Hit Count = 424517644, Miss Count = 164623004
Total Requests = 589140648
Hit Rate: 72.1%, Miss Rate = 27.9%
Kickouts = 122466714, Dirty-kickouts = 30495303, Transfers = 164623004
Flush Kickouts = 2946523

System Costs:

L1 Cache Costs (Instruction Cache \$300 + Data Cache \$300) = \$600
L2 Cache Costs: \$50
Main Memory Costs: \$275
Total Memory Cost: \$925

Flushes = 26315, Invalidates = 18375570
