

Configuration: config/all-4way_16

Simulation Results

Memory System:

D Cache: Size = 8192, Associativity = 4, Block size = 32
I Cache: Size = 8192, Associativity = 4, Block size = 32
L2 Unified Cache: Size = 32768, Associativity = 4, Block size = 64
Main Memory: Ready time = 30, Chunksize = 16, Chunktime = 15,

Execution Time = 32991515006, Total Traces Read = 10000000109

Flush time = 469469908

Total time (Execution Time + Flush Time) = 33460984914

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 = 7443947612 [22.6%]
Writes = 4550477558 [13.8%]
Inst. = 20997089836 [63.6%]
Total = 32991515006

Average Cycles for Activities:

Reads = 3.9, Writes = 6.3, Instructions = 4.5

Ideal: Execution Time = 17364538603; CPI = 2.4

Ideal Misaligned Execution Time = 23214492795; CPI = 3.2

Memory Level: L1 Instruction Cache

Hit Count = 12332139420, Miss Count = 220236372
Total Requests = 12552375792
Hit Rate: 98.2%, Miss Rate = 1.8%
Kickouts = 213543772, Dirty-kickouts = 0, Transfers = 220236372
Flush Kickouts = 0

Memory Level: L1 Data Cache

Hit Count = 3199943661, Miss Count = 97634848
Total Requests = 3297578509
Hit Rate: 97.0%, Miss Rate = 3.0%
Kickouts = 47750742, Dirty-kickouts = 43156900, Transfers = 97634848
Flush Kickouts = 3306205

Memory Level: L2 Cache

Hit Count = 274945451, Miss Count = 89388874
Total Requests = 364334325
Hit Rate: 75.5%, Miss Rate = 24.5%
Kickouts = 56622716, Dirty-kickouts = 19531139, Transfers = 89388874
Flush Kickouts = 3310541

System Costs:

L1 Cache Costs (Instruction Cache \$600 + Data Cache \$600) = \$1200
L2 Cache Costs: \$150
Main Memory Costs: \$75
Total Memory Cost: \$1425

Flushes = 26315, Invalidates = 26653811
