

Configuration: config/l1-small-4way_32

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 = 32, Chunktime = 15,

Execution Time = 39955487889, Total Traces Read = 10000000109

Flush time = 261663924

Total time (Execution Time + Flush Time) = 40217151813

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	=	10347517766	[25.9%]
Writes	=	4541888231	[11.4%]
Inst.	=	25066081892	[62.7%]
Total	=	39955487889	

Average Cycles for Activities:

Reads = 5.4, Writes = 6.2, Instructions = 5.4

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: \$175
Total Memory Cost: \$825

Flushes = 26315, Invalidates = 18375570
