

Configuration: config/l1-small_32

Simulation Results

Memory System:

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

Execution Time = 44807002479, Total Traces Read = 10000000109

Flush time = 340182558

Total time (Execution Time + Flush Time) = 45147185037

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	=	13572294637	[30.3%]
Writes	=	5305808961	[11.8%]
Inst.	=	25928898881	[57.9%]
Total	=	44807002479	

Average Cycles for Activities:

Reads = 7.1, Writes = 7.3, Instructions = 6.1

Ideal: Execution Time = 17364538603; CPI = 2.4

Ideal Misaligned Execution Time = 23214492795; CPI = 3.2

Memory Level: L1 Instruction Cache

Hit Count = 12184328795, Miss Count = 368046997
Total Requests = 12552375792
Hit Rate: 97.1%, Miss Rate = 2.9%
Kickouts = 364700838, Dirty-kickouts = 0, Transfers = 368046997
Flush Kickouts = 0

Memory Level: L1 Data Cache

Hit Count = 2972931405, Miss Count = 324647104
Total Requests = 3297578509
Hit Rate: 90.2%, Miss Rate = 9.8%
Kickouts = 199920228, Dirty-kickouts = 121369808, Transfers = 324647104
Flush Kickouts = 1363469

Memory Level: L2 Cache

Hit Count = 637234773, Miss Count = 178192605
Total Requests = 815427378
Hit Rate: 78.1%, Miss Rate = 21.9%
Kickouts = 132010164, Dirty-kickouts = 34543338, Transfers = 178192605
Flush Kickouts = 3498721

System Costs:

L1 Cache Costs (Instruction Cache \$100 + Data Cache \$100) = \$200
L2 Cache Costs: \$50
Main Memory Costs: \$175
Total Memory Cost: \$425

Flushes = 26315, Invalidates = 18341642
