

Configuration: config/l1-small-4way\_16

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Simulation Results  
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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 = 16, Chunktime = 15,

Execution Time = 45794476239, Total Traces Read = 10000000109

Flush time = 362501424

Total time (Execution Time + Flush Time) = 46156977663

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	=	12460392716	[27.2%]
Writes	=	5490223421	[12.0%]
Inst.	=	27843860102	[60.8%]
Total	=	45794476239	

Average Cycles for Activities:

Reads = 6.5, Writes = 7.5, Instructions = 6.2

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: \$75  
Total Memory Cost: \$725

Flushes = 26315, Invalidates = 18375570

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