Configuration: config/l1-small_16

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                 Simulation Results
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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 = 16,     Chunktime = 15,

Execution Time = 51155366349,   Total Traces Read = 10000000109
Flush time = 474294858
Total time (Execution Time + Flush Time) = 51629661207

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   =    15927471997         [31.1%]
     Writes  =     6345744171         [12.4%]
     Inst.   =    28882150181         [56.5%]
     Total   =    51155366349

Average Cycles for Activities:
     Reads = 8.3,     Writes = 8.7,    Instructions = 6.9

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: $75
     Total Memory Cost: $325

Flushes = 26315, Invalidates = 18341642

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