Configuration: config/l1-small-4way_8

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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 = 8, Chunktime = 15,

Execution Time = 51822676441,   Total Traces Read = 10000000073
Flush time = 418154358
Total time (Execution Time + Flush Time) = 52240830799

Number of Reference Types: [Percentage]
     Reads   =   1882275327   [18.8%]
     Writes =   552506959   [5.5%]
     Inst.   =   7565217787   [75.7%]
     Total   =   10000000073

Total Cycles for Activities: [Percentage]
     Reads   =   20423666545   [39.4%]
     Writes =   19217508167   [37.1%]
     Inst.   =   12181501729   [23.5%]
     Total   =   51822676441

Average Cycles for Activities:
     Reads = 10.9,   Writes = 34.8, Instructions = 6.9

Ideal: Execution Time = 17565217860;   CPI = 2.3
Ideal Misaligned Execution Time = 22199500705; CPI = 2.9

Memory Level: L1 Instruction Cache
     Hit Count = 12095347339,   Miss Count = 735183
     Total Requests = 12096082522
     Hit Rate: 100.0%,   Miss Rate = 0.0%
     Kickouts = 14262,   Dirty-kickouts = 0,   Transfers = 735183
     Flush Kickouts = 0

Memory Level: L1 Data Cache
     Hit Count = 2371428857,   Miss Count = 166771539
     Total Requests = 2538200396
     Hit Rate: 93.4%,   Miss Rate = 6.6%
     Kickouts = 98391979,   Dirty-kickouts = 65011112,   Transfers = 166771539
     Flush Kickouts = 869637

Memory Level: L2 Cache
     Hit Count = 85226309,   Miss Count = 148161162
     Total Requests = 233387471
     Hit Rate: 36.5%,   Miss Rate = 63.5%
     Kickouts = 80392862,   Dirty-kickouts = 55304108,   Transfers = 148161162
     Flush Kickouts = 2252515

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 = 16552858

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